FACULTY OF ENTREPRENEURSHIP AND BUSINESS

IMPACT OF THE COVID-19 PANDEMIC ON ONLINE PURCHASING BEHAVIOR AMONG UNIVERSITY STUDENTS.

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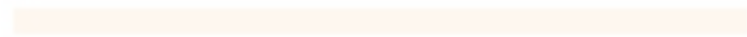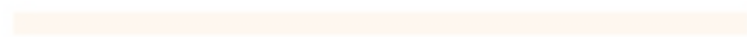DEGREE OF ENTREPRENEURSHIP (COMMERCE) WITH HONORS

2023

FACULTY OF ENTREPRENEURSHIP AND BUSINESS

UNIVERSITI
MALAYSIA
KELANTAN

Impact of The Covid-19 Pandemic on Online Purchasing Behavior Among University Students.

by

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A thesis submitted in fulfillment of the requirements for the degree of entrepreneurship (commerce) with honors.

Faculty of Entrepreneurship and Business
UNIVERSITI MALAYSIA KELANTAN

2023

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ACKNOWLEDGEMENT

First, we would like to thank the Almighty God, Allah SWT, for His favour and protection, which have allowed us to fight until the end of time. We'd like to thank our research supervisors, especially Dr. Nor Hafiza Binti Othman. We appreciate your patience in providing our group with complete assistance, direction, and information throughout the production of this report and until the project was completed. Its guidance, as well as its ongoing support and interest in the process, would be impossible to achieve without it. This study would not have been completed without her assistance. We would like to thank you for your patience and assistance in completing this study. Remember that our panel will judge and support our group both before and after our presentation. Thank you again for your assistance and support, both of our wonderful lecturers. Thank you very much to our coworkers who have frequently offered their opinions, comments, suggestions, and cooperation throughout the course of this project, and who have also invested their time in discussion as well as assisting and sharing a positive attitude with others in order to complete this thesis on time. Finally, we'd like to thank our family members and anyone else who assisted us in finishing this study, whether directly or indirectly.

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ASSESSMENT FORM FOR FINAL YEAR RESEARCH PROJECT: RESEARCH REPORT (Weight 50%)
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Research Topic: IMPACT OF THE COVID-19 PANDEMIC ON ONLINE PURCHASING BEHAVIOR AMONG UNIVERSITY STUDENTS

NO.	CRITERIA	PERFORMANCE LEVEL				WEIGHT	TOTAL
		POOR (1 MARK)	FAIR (2 MARKS)	GOOD (3 MARKS)	EXCELLENT (4 MARKS)		
1.	**Content (10 MARKS)** (Research objective and Research Methodology in accordance to comprehensive literature review) Content of report is systematic and scientific (Systematic includes Background of study, Problem Statement, Research Objective, Research Question) (Scientific refers to researchable topic)	Poorly clarified and not focused on Research objective and Research Methodology in accordance to comprehensive literature review.	Fairly defined and fairly focused on Research objective and Research Methodology in accordance to comprehensive literature review.	Good and clear of Research objective and Research Methodology in accordance to comprehensive literature review with good facts.	Strong and very clear of Research objective and Research Methodology in accordance to comprehensive literature review with very good facts.	____ x 1.25 (Max: 5)	
		Content of report is written unsystematic that not include Background of study, Problem Statement, Research Objective, Research Question and unscientific with unsearchable topic.	Content of report is written less systematic with include fairly Background of study, Problem Statement, Research Objective, Research Question and less scientific	Content of report is written systematic with include good Background of study, Problem Statement, Research Objective, Research Question and scientific with	Content of report is written very systematic with excellent Background of study, Problem Statement, Research Objective, Research Question and scientific with	____ x 1.25 (Max: 5)	

				with fairly researchable topic.	good researchable topic.	very good researchable topic.		
2.	**Overall report format (5 MARKS)**	*Submit according to acquired format*	The report is not produced according to the specified time and/ or according to the format	The report is produced according to the specified time but fails to adhere to the format.	The report is produced on time, adheres to the format but with few weaknesses.	The report is produced on time, adheres to the format without any weaknesses.	____ x 0.25 (Max: 1)	
		Writing styles (clarity, expression of ideas and coherence)	The report is poorly written and difficult to read. Many points are not explained well. Flow of ideas is incoherent.	The report is adequately written; Some points lack clarity. Flow of ideas is less coherent.	The report is well written and easy to read; Majority of the points is well explained, and flow of ideas is coherent.	The report is written in an excellent manner and easy to read. All of the points made are crystal clear with coherent argument.	____ x 0.25 (Max: 1)	
		Technicality (Grammar, theory, logic and reasoning)	The report is grammatically, theoretically, technically and logically incorrect.	There are many errors in the report, grammatically, theoretically, technically and logically.	The report is grammatically, theoretically, technically and logically correct in most of the chapters with few weaknesses.	The report is grammatically, theoretically, technically, and logically perfect in all chapters without any weaknesses.	____ x 0.25 (Max: 1)	
		Reference list (APA Format)	No or incomplete reference list.	Incomplete reference list and/ or is not according to the format.	Complete reference list with few mistakes in format adherence.	Complete reference list according to format.	____ x 0.25 (Max: 1)	
		Format organizing (cover page, spacing, alignment, format structure, etc.)	Writing is disorganized and underdeveloped with no transitions or closure.	Writing is confused and loosely organized. Transitions are weak and closure is ineffective.	Uses correct writing format. Incorporates a coherent closure.	Writing include a strong beginning, middle, and end with clear transitions and a focused closure.	____ x 0.25 (Max: 1)	

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3.	Research Findings and Discussion (20 MARKS)	Data is not adequate and irrelevant.	Data is fairly adequate and irrelevant.	Data is adequate and relevant.	Data is adequate and very relevant.	____ x 1 (Max: 4)	
		Measurement is wrong and irrelevant	Measurement is suitable and relevant but need major adjustment.	Measurement is suitable and relevant but need minor adjustment.	Measurement is excellent and very relevant.	____ x 1 (Max: 4)	
		Data analysis is inaccurate	Data analysis is fairly done but needs major modification.	Data analysis is satisfactory but needs minor modification.	Data analysis is correct and accurate.	____ x 1 (Max: 4)	
		Data analysis is not supported with relevant output/figures/tables and etc.	Data analysis is fairly supported with relevant output/figures/tables and etc.	Data analysis is adequately supported with relevant output/figures/table and etc.	Data analysis is strongly supported with relevant output/figures/table and etc.	____ x 1 (Max: 4)	
		Interpretation on analyzed data is wrong.	Interpretation on analyzed data is weak.	Interpretation on analyzed data is satisfactory.	Interpretation on analyzed data is excellent	____ x 1 (Max: 4)	
4.	Conclusion and Recommendations (15 MARKS)	Implication of study is not stated.	Implication of study is weak.	Implication of study is good.	Implication of study is excellent	____ x 1.25 (Max: 5)	
		Conclusion is not stated	Conclusion is weakly explained.	Conclusion is satisfactorily explained.	Conclusion is well explained.	____ x 1.25 (Max:5)	
		Recommendation is not adequate and irrelevant.	Recommendation is fairly adequate and irrelevant.	Recommendation is adequate and relevant.	Recommendation is adequate and very relevant.	____ x 1.25 (Max:5)	
						TOTAL (50 MARKS)	

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ASSESSMENT FORM FOR FINAL YEAR RESEARCH PROJECT (PPTAII): TOTAL MARKING SCHEME
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Research Topic: <u>IMPACT OF THE COVID-19 PANDEMIC ON ONLINE PURCHASING BEHAVIOR AMONG UNIVERSITY STUDENTS</u>

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Assessment	Marks Given By Supervisor	Marks Given By Examiner	Total
Effort (20%) - *Reflective Note*			
Presentation (20%)			/ 2 =
Research Paper (10%)			/ 2 =
Research Report (50%)			/ 2 =
GRAND TOTAL (100%)			

Name of Supervisor: _____ **Signature:** _____ **Date:** _____

Name of Examiner : _____ **Signature:** _____ **Date:** _____

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ABSTRACT

The Covid-19 pandemic has created a new reality for consumers around the world. In response to this situation, digital technology users are faced with the need to adopt and use certain technologies almost overnight. Therefore, the growing demand for purchases through internet-based platforms should continue to increase. The purpose of this research is to see the impact of the Covid-19 pandemic on online purchasing behavior among university students. Therefore, the objective of this study is to examine the differences and relationship between attitude, subjective norms, perceived behavioral control, trust, perceived risk, online purchasing behaviour. A quantitative research approach has been adopted in this study and a total of 384 sample questionnaires have been distributed among university students. This study uses an approach based on a quantitative method consisting of a questionnaire which is given online, through google form to the respondents. The results of this study have shown that there is a significant difference and weak effect of subjective norms and perceived risk during and after Covid-19. While the other 4 variables of attitude, perceived behavioral control, trust and online purchasing behavior have no differences of online shopping in Covid-19 pandemic among university students. The relationship between attitudes, subjective norms, perceived behavioral control and trust have shown there is a significant relationship but the perceived risk have no significant relationship on online purchasing behaviour. Limitations of this study and recommendations are included in this paper to ease understanding and give better idea for future researchers which related to studies involving online purchasing behaviour.

Keywords: attitude, subjective norms, perceived behavioral control, trust, perceived risk, online purchasing behavior

CHAPTER 1

INTRODUCTION

1.1 Background of the study

Electronic commerce is the use of the Internet to buy and sell goods or services, and to transfer funds and data to carry out these transactions. The term "electronic commerce" is frequently used to refer to the online sale of tangible goods, but it can also refer to any kind of business deal carried out via the Internet (Sanyala & Hisamb, 2019). Due to rising client demand, new e-commerce trends have made it possible for a variety of stores to constantly arise online (Hong and Kim 2012). Over 26 million eCommerce sites exist worldwide, and new ones are being launched every single day.

Figure 1.1: Global growth of e-commerce sites by year.

Sources: 9 Ecommerce Statistics, Facts, & Trends (2022).

In 2021 and 2022, the growth of global e-commerce websites will experience an incredible explosion. In 2021 alone, the number of e-commerce sites worldwide will double (204% growth) due to the COVID-19 pandemic. By 2021, there will already be more than

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19.8 million e-commerce sites in existence, even if there are only 9.7 million now. As a result, just in 2021, the number of e-commerce websites will treble globally.

Consumers all around the world now live in a new reality as a result of the COVID-19 pandemic. Users of digital technologies are forced to accept and employ particular technologies almost immediately as a result of this predicament. Advances in technology and the convenience and variety of products available for online shopping brought this method into the spotlight long before the COVID-19 pandemic emerged, but the COVID-19 outbreak is what has made this technique more popular. Shopping online is amazing (Lashgari & Shahab, 2022). In other words, the need to reduce social interaction has made e-commerce and contactless store concepts more valuable during the pandemic. The fear of getting infected in crowded city centers, combined with lockdowns and social distancing rules, has made more people prefer online shopping to the in-store experience (Lashgari & Shahab, 2022).

The increasing use of e-commerce is affecting traditional retailing in many ways. According to research on the substitution effect, when people adapt to one shopping channel, they may leave others (Lashgari & Shahab, 2022). Therefore, a shift from brick-and-mortar retailers to online stores may be caused by the rising trend of online buying in the wake of the COVID-19 epidemic. As e-commerce increases, downtown sales decrease. In this case, some traditional retail stores, especially those not equipped with online services, are in danger of going out of business (Lashgari & Shahab, 2022). In the longer term, this trend could lead to increased closures of high street level retail activity.

Figure 1.2: How Many People Shop Online?

Sources: 9 Ecommerce Statistics, Facts, & Trends (2022).

There will be 2.14 billion digital consumers in 2021. This represents 27.6% of the 7.74 billion people on the planet. Over the past few years, there has been an increase in the number of internet shoppers. 2.05 billion people were online shoppers in 2020, and this number climbed to 2.14 billion in 2020, a rise of 4.4% from the previous year. This number is not only increasing quickly, but it is also anticipated to keep increasing in the years to come.

Students today belong to the digital generation, and they have a variety of experiences, values, attitudes, and preferences that have a big impact on their buying habits. They favour using an internet connection for shopping online because it can make transaction processes simpler (Odilia, Sulistiobudi, & Fitriana, 2022). In fact, Farah et al. (2018) discovered that university students between the ages of 18 and 30 are the most likely to use the internet and engage in online shopping, despite the fact that they lack the financial means to do so. Despite this, university students were found to be among the most frequent users of the internet and to have strong intentions for engaging in online shopping. Undergraduate students' discretionary income primarily comes from two sources, either money sponsored

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by parents or money they have earned themselves, in contrast to the income possessed by financially independent people (Zou, 2016). University students are a distinct demographic of consumers because of their need on outside funding. Graduate students are at the stage of emerging adulthood where they gradually integrate into society and develop into self-sufficient young adults (Arnett, 2007).

When Van Boven and Gilovich (2003) proposed the idea of experiential purchasing, they hoped to influence those with significant discretionary means to spend more on having experiences than material possessions. Only consumers who are relatively wealthy can benefit from experience purchasing (Gilovich & Gallo, 2020). College students are, however, the most frequently used samples in research on experiential shopping. 58% of the research examined by Gilovich et al. (2015a) relied on student samples, as noted by Dunn and Weidman (2015). Therefore, the survey objects of this study are university students.

Despite the fact that several publications mention the great growth potential of online shopping during the COVID-19 epidemic, few of them go into detail about the aspects that affect consumers' decisions to continue making purchases online during this time. (Al-Hattami, 2021). The goal of this study is to look into how the Covid-19 epidemic has affected students' internet shopping habits.

1.2 Problem Statement

Disease outbreaks and epidemics have altered politics, societies, relationships, and global paradigms throughout history (Snowden, 2019). The COVID-19 coronavirus pandemic has had a significant negative influence on our way of life. Some lockdown limitations have been put in place as part of the government's efforts to stop the pandemic, which have a direct impact on how people and businesses function.

Students are increasingly turning to online shopping platforms as a substitute for traditional retail outlets due to unprecedented issues and limitations on buying daily essentials in the wake of COVID-19 (Hashem, 2020). Students prefer to shop online due to social exclusion, lockdowns, and remaining at home for safety reasons (Malik et al., 2020; Rehman et al., 2020). It turns out that COVID-19 increased the country's online commerce economy in addition to shifting pupils to online media by providing digital tools. Information gathered from respondents at Lahore University to investigate how COVID-19 has altered online shopping behaviour patterns (Areeba, 2021). The findings showed that students thought shopping during the COVID-19 situation was a simple, quick, and reliable approach to get what they needed (Areeba, 2021). As young adapters, students love online shopping because it links to their interests and hobbies, is interesting, safe, and a good medium for purchasing based on their attitudes and views, and allows them to freely search for and associate the items they want.

The COVID-19 pandemic has altered many people's goals and lifestyles to the point that their purchasing habits have also transformed. This study's objective is to assess the impact of the COVID-19 pandemic on university students' online shopping behaviours. This makes it easier to spot patterns and trends in internet shopping. As a result, it can be a part of a comprehensive toolset utilised by both states and individual businesses to create their e-commerce strategies. Gu and others (2012). Graduate students are at the stage of emerging adulthood where they gradually integrate into society and develop into self-sufficient young adults (Arnett, 2007). Therefore, the company can know the consumption habits and consumption patterns of future consumers, and make corresponding sales strategies.

1.3 Research Questions

The research questions are:

1. Is there a significance difference between attitude, subjective norms, perceived behavioral control, trust, perceived risk and online purchasing behavior in COVID-19 pandemic among university students?

2. What is the relationship between attitude and online purchasing behavior among university students?

3. What is the relationship between subjective norms and online purchasing behavior among university students?

4. What is the relationship between perceived behavioral control and online purchasing behavior among university students?

5. What is the relationship between trust and online purchasing behavior among university students?

6. What is the relationship between perceived risk and online purchasing behavior among university students?

1.4 Research Objectives

1. To identify a significance difference between attitude, subjective norms, perceived behavioral control, trust, perceived risk and online purchasing behavior in COVID-19 pandemic among university students.

2. To determine a relationship between attitude and online purchasing behavior among university students.

3. To determine a relationship between subjective norms and online purchasing behavior among university students.

4. To determine a relationship between perceived behavioral control and online purchasing behavior among university students.

5. To determine a relationship between trust and online purchasing behavior among university students.

6. To determine a relationship between perceived risk and online purchasing behavior among university students.

1.5 Scope of the Study

This study focuses on student's reliance on e-commerce during and post covid-19 in Malaysia. This study will on how university student using online purchasing as their main shopping platform and how to study their online purchasing behaviour during and post covid-19 outbreak. Online surveys will be adopted for the data collection these per perspectives provided in this study are not comprehensive and the result of the study cannot be generalized on students' reliance on e-commerce after Covid-19 in Malaysia until the next review. This study measured a few selected variables only, with attitude, subjective nouns and perceived behavioural control as the independent variable and online purchasing behaviour as the dependent variable.

1.6 Significant of the Study

Consumers in developed countries have become accustomed to using the Internet and have been benefited from e-commerce, changing their lifestyles. In contrast, consumers in developing countries are used to face-to-face transactions, do not trust in electronic processes, and cannot afford the risk involved (Uwemi and Fournier-Bonilla, 2016). The reason for this

researcher to pursue this topic is the occurrence of student's reliance on online purchasing during and after Covid-19 in Malaysia. The result of this research is expected to provide awareness and continuation of the student's reliance on online purchasing after covid-19.

Research approaches can be emulated by other researchers in examining the impact of covid-19 on online purchasing behaviour among university students. This will help increase the understanding of the other researchers who are interested in researching student's influence on online purchasing. Evidence and theoretical contribution can be practical for further investigation.

1.7 Definition of Term

In this study, there are a few key terms:

Attitude

A person's attitude is how they feel about a certain behaviour, whether they think it's good or bad. (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Although attitudes are frequently hard to change and are learned over time, they can be affected by satisfying psychological drive. In this study, students' attitudes on using internet shopping are referred to as their positive or negative feelings.

Subjective Norms

A subjective norm is a person's personal assessment of behaviour that is impacted by others (Fishbein & Ajzen, 1975). People are more likely to engage in the conduct if they believe that people who are important to them approve of it. In this study, subjective norms refer to a person's perception or view of the beliefs of others that will influence the interest to do or not do the behavior that is being considered.

Perceived Behavioral Control

An individual's assessment of his or her capacity to carry out an activity is referred to as perceived behavioural control (Ahn et al., 2004). In this study, perceived behavioral

control refer to the functional intention to perform behavior, and perceived risk is the customer's weakness when purchasing something.

Trust

Trust is what drives consumers to transact online because they believe the seller can be trusted (Putra et al., 2017). Trust is a key aspect in developing relationships with others (Alaaraj et al, 2018; 2016; Alkhawaldeh et al , 2015; 2016). Consumers' expectation of sellers' appropriate behaviour in keeping their promises to customers is known as trust (Gefen, Karahanna, & Straub, 2003). In this study, trust is something important consumers expect from sellers when dealing with online shopping.

Perceived Risk

When engaging in a private (secret personal identity) activity, a customer's feelings of doubt and unintended consequences are described as perceived risk (Sulastini, 2013). The unpredictability and seriousness of an outcome are related to perceived risk. In other words, it is about raising consumer knowledge of the negative effects of specific behaviours (Xie et al., 2017). In this study, perceived risk refer to the negative view of unexpected results and can change from products purchased online.

Online Purchasing Behavior

It is used to purchase products or services for consumers' personal or household use through the online environment. The actions people do when making purchases online, including the items they purchase, the locations and times they shop, and the amount they spend (Cambridge, 2021). In this study, online purchasing behavior refer to the behavior of students show when shopping online whether they like it or not.

Online Shopping

Using a web browser or a mobile application, consumers can purchase goods and services through online shopping. Online shopping is well-liked since it offers customers a

vast number of products and services (Kripesh et al., 2020). Additionally, more alternatives and information are provided to consumers, allowing them to compare products and pricing and make it simpler to find anything online. (Katawetawaraks & Wang, 2011). In this study, online shopping is a channel for students to buy whatever they want because the websites or applications available offer a variety of goods and services.

E-Commerce

The buying and selling of goods and services, or the transmission of money or data over an electronic network, usually the internet, is referred to as e-commerce (or electronic commerce). This commercial exchange may either be in the form of B2B which is (business-to-business), B2C is (business-to-consumer), C2B is (consumer-to-business), or C2C (consumer-to-consumer). In addition, e-commerce is an instrument to reduce streaming business processes, cycle time, and administrative costs and improve relationships with buyers and business partners (Jahangir Alam, 2020). In this study, E-commerce refers to the process of students purchasing online that uses electronic equipment such as mobile applications.

Coronavirus disease (Covid-19)

Coronavirus disease (COVID-19) is an extremely contagious respiratory illness brought on by a coronavirus that was just recently discovered. The majority of COVID-19 virus carriers will experience mild to severe respiratory illness. Some infected persons will recover without needing special care nevertheless, some will die. Because of the city's lockdown and closure of retail malls and business hubs during the coronavirus illness pandemic, human normal life, transportation, and business have been disrupted (Alam, 2020). In this study, Covid-19 is a disease that threatens students causing them to switch their purchasing behavior to online.

1.8 Organization of the Proposal

First chapter discusses the background of the study, the problem statement, the research questions, the research objectives, the scope of the study, the significance of the study, the definition of the term, and the organization of the proposal. The background of the study discusses the main issue to be studied by the researchers. The problem statement describes the problem of the research topic. The research questions are actually the research objectives stated in question form. The research objectives explain what is to be studied.

With this literature review analysis from another journal, the second chapter is discussed. An introduction, underpinning theory, a description of independent variables and dependent variables, a hypotheses statement, and the conceptual framework are included in this chapter.

In Chapter 3, the researcher describes about the methodology used in the present research. This chapter discusses the process of doing research which includes an introduction, research design, data collection method, population of the study, sample size, sampling technique, research instrument development, measurement of the variables, data analysis procedure, and review of chapters.

Chapter 4 discusses data analysis using various tests. This chapter presents the analysis and interpretation of the descriptive data and the demographic profile of the respondents. Descriptive analysis and a measure of central tendencies are used to create the demographic profile. Then, the results for each measurement scale are compiled and a reliability test must be performed to determine the results of the hypothesis tests. Finally, inferential analysis is performed and interpreted to draw conclusions from the data collected.

The statistical analysis conducted in chapter four is reviewed and discussed in detail in chapter five. In addition, this chapter covers the major findings, implications, limitations,

and recommendations of the study. The final section of this chapter contains the overall

conclusion of this study.
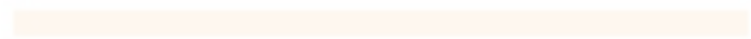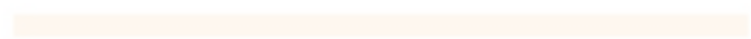
CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this chapter, we covered the independent variable, which has five components: attitude, subjective norms, perceived behavioral control, trust, and perceived risk. The dependent variable is student online purchasing behavior. Besides that, this chapter also discovered about underpinning theory, which is Theory of Planned behavior (TPB). This chapter also discussed about the difference and relationship between dependent variables with independent variable. Next, explained about conceptual framework and hypothesis. Lastly, the discussion was concluded in summary.

2.2 Underpinning Theory

Based on The Theory of Planned Behaviour (TPB) The stronger the intention to engage in a given behavior, the more likely it is to perform that behavior. The second construct is attitude towards the behavior which is the extent to which a person has a favorable or unfavorable appraisal of a given behavior. Attitude consists of behavioral beliefs and outcome evaluations. Subjective norm is the third construct which is a social pressure to perform or not to perform a given behavior. Combination of normative beliefs and motivation to comply constitute subjective norm. Perceived behavioral control also plays a key role in the TPB and it refers to people's perception of the ease or difficulty of performing the behavior of interest (Ajzen 1, 1991). Some researcher explores whether social identity acts as a driver of existing TPB constructs and may help to explain how abstract group processes impact student binge purchasing behavior (Willis, Lee, Reynolds, & Klik, 2020). The authors shed light on perceived behavioral control (PBC) as a moderator of attitude (ATT) and subjective norm (SN). In three studies dealing with different behaviors (voting, reducing household waste, and energy consumption) the authors show that greater PBC tends to strengthen the relative importance of

ATT in the prediction of intention, whereas strong PBC tends to weaken the relative importance of SN. The latter pattern was observed in relation to injunctive as well as descriptive subjective norms, and it may help explain the relatively weak direct relation between SN and INT frequently observed in TPB studies (La Barbera & Ajzen, 2020a). Based on this theory, social influence has a hard effect on students when carrying online shopping because of their surrounding has changed during a covid-19 outbreak. When other people influenced other about online shopping, social impact is guaranteed to happen. Some of the university students during the Covid-19 outbreak haven't heard or any experience on using online purchasing. It all happens during covid-19 when most university student has relied on online purchasing as the daily necessities this trend kept going even post covid-1and some of the student has changed their opinion and views toward online purchasing which to them that lift some of their burden during buying their necessity. The theory was proposed as a descriptive model, or metatheory, as opposed to an explanatory one.

2.3 Previous study

2.3.1 Attitude

The degree to which a person has a favorable or unfavorable judgement of the in-question conduct is referred to as attitude (Lashgari & Shahab, 2022; Nguyen et al., 2022). In the context of online purchasing, a person's attitudes are their favorable or negative beliefs and assessments about the practice. Consumer views and their behavioral intentions to continue pandemic-related actions are significantly correlated, according to the empirical investigations that have been done (Lashgari & Shahab, 2022; Nguyen et al., 2022).

The attitude can be described as the degree to which a person views interest activity favorably or unfavorably (382 E. AKAR) (Azjen 1991; Akar, 2021). Either a favorable or negative conclusion can be drawn from this appraisal. An individual tends to have a stronger

attitude to engage in this conduct if they positively appraise the outcome (Azjen 1991; Akar, 2021). People's opinions regarding a specific activity are influenced by their past experiences and certain beliefs. As a result, a person's attitude affects their ability to make decisions (Rehman et al. 2019). According to the literature, attitudes and customers' intentions to make online purchases are positively correlated (Chin and Goh 2017; Dutta and Bhat 2016; Ha et al. 2019; Rehman et al. 2019). Customers are more likely to engage in online shopping behavior if they feel good about it.

The TPB model states that a person's attitude is their assessment of whether their behavior is good or negative (Ajzen, 1991; Aizen et al., 2020). Consumers' perceptions toward online shopping are dependent on how they perceive the process of purchasing goods and services via retail websites, such as the convenience or compatibility of online services; incentives and benefits to consumers (Chang et al., 2005; Kao & André L'Huillier, 2022; H. T. Nguyen et al., 2022). In the study by Hans et al. (2020) state that, in addition to incentive programs, the increasingly complex epidemic also assisted in changing customer attitudes about online buying in a specific environment like the Covid-19 pandemic. Consumers' e-shopping intentions and activities are positively connected with attitudes regarding e-retailers and e-shopping (Kao & André L'Huillier, 2022; H. T. Nguyen et al., 2022).

Regarding the study's setting, all consumers worldwide saw a change in their shopping habits as a result of health issues, worry, and lockdown (Ozt € urk € 2020). Consumers' sentiments about online shopping affected their intentions to make purchases both during and after the pandemic.

2.3.2 Subjective Norms

According to Ajzen (1991) and Laohapensang (2009), subjective norms is that individual behavior is influenced by several external factors such as the pressure felt by family,

friends, and relatives to make a decision to buy something to purchase items from online merchants. Subjective norms are divided into external and internal components. Tight social networks, such as family and friends, form internal subjective norms, while external subjective norms are influenced by external forces such as media, advertising and others (Lim, 2012). The customer impressions of using online shopping in line with the opinions of the referent group are regarded as the subjective norm in the context of online purchasing (such as friends or colleagues) (Islam, Anjum, & Ahmed, 2021). Consumer purchasing decisions are heavily influenced by social pressure (Islam et al., 2021). Sample size from the study done by Islam (2021), include 157 academics from various universities in Sylhet, Bangladesh. The outcomes of this study reported that subjective norms have a positive and significant impact on consumers' online purchase behavioral intention in the covid-19 situation. On the other hand, The results of these research are comparable to those of numerous earlier investigations conducted in developed countries (Troise et al., 2020; Dharmesti et al., 2019; Chiu et al., 2018).

Consumers' subjective norms from friends, family, and co-workers have a positive influence on their decision to make an online purchase. If consumers believe that their peers favour online purchases, their intention to make an online purchase will be higher (Nor & Pearson, 2008; Garcia, 2020). According to certain studies, the opinions of the referent group have a beneficial impact on consumers' inclinations to make online purchases (Ha, 2020; Ha et al., 2019; Lin, 2007). The study by Thang and Huong (2021) stated subjective norms of consumers have positive impact on their online shopping intention. In this research, 64% of the samples are between the ages of 18 and 25 and 70% of the samples have academic levels that are equal to and higher than college. The findings of the study indicate a favourable association between internet shoppers' purchase intentions and the opinions of their reference group. Additionally, it implies that customers are more likely to shop online and vice versa the more the reference group supports online shopping (Thang, 2021).

During the covid-19 pandemic, strong peer pressure to conform to social norms such as social distancing can provide barriers to health and safety risks in the community (Salma, 2021). Subjective norms are an important mediator between consumer risk perception and behavioral intention. During a pandemic, the main driver for maintaining a low level of mass infection is public compliance with protective behaviors such as face-wearing and social distancing. (Ashraf, 2021). Preventive behavior mostly develops from peer pressure because people who defy the normative behavior receive blame and odium from those around them. The perception of risk certainly affects the subjective norms of students in purchasing intentions (Bae & Chang, 2020). Therefore, they are attempting to transition to using online shopping as a mode of purchase during and post covid-19 (Salma, 2021). According to a study conducted on French people before and after the Covid-19 crisis, the Covid-19 crises found that most of the online buying behavior during the shutdown was driven by the pressures and constraints caused by the Covid-19 crisis (Guthrie, 2021). After the covid-19 pandemic, internal and external influences caused consumer to shop online because the current situation of covid-19 has caused a change in their behavior to use online shopping.

2.3.3 Perceived Behavioral Control

Performance of a behavior is influenced by the presence of adequate resources and ability to control barriers to behaviors. The more resources and fewer obstacles' individuals perceive, the greater their perceived behavioral control and the stronger their intention to perform behaviors (Ajzen 1, Madden Tj, 1991). Individuals may have the intention to change and sustain certain health behaviors, but their daily environment may not be conducive to those behaviors. During covid-19 outbreak, most individuals were prohibited from leaving their house due to minimize the spread of the contagious disease even further hence the only way to provide their way of living is to buy most of their daily necessities on online shopping and purchasing without ever step out of their homes and this is how perceived behavioral control

took place. Individuals were trying to avoid bringing harm toward their loved one no matter in their own comfort homes or workplace and most of them already acknowledge how dangerous Covid-19 is and decided to shift their attention to online purchasing instead of using the traditional brick-and-mortar concepts.

Based on the previous study of the Theory of Planned behaviour (Ajzen 1, 2005), individuals tend to change their way of usual behavior to something more secure and safe. This way of living not only affects a working adult but also affect most university students. Most students were also prohibited from going out from their homes and hostel to buy their goods and change their way of buying goods which is by using online purchasing some of them even being the one who sells inside their hostel so that they could get their goods even easier. This case was also affected after the covid-19 outbreak or post covid which some of them still prefer online purchasing. Limited availability and fear of infection, post-lockdown, has led to a shift in consumer behavior and a subsequent rush of online customers (Komal Sharma, 2021).

2.3.4 Trust

According to Beldad (2010), Trust is described as one's attitude toward accepting online hazards or vulnerabilities that won't be exploited when considering the online context explicitly. Trust itself has the meaning of believe in the reliability, truth, or ability. Based on Beldad (2010), one misconception of online behaviour will lead the downturn of e-commerce due to people trust has been decline to use the same way or concept. Therefore, trust in online stores can be thought of as the perceived credibility in the eyes of customers (Ganguy, 2010). The better how seller treat their customer, the better people trust on e-commerce platform.

Based on the previous study by (Choi and Mai, 2018; Nguyen, 2019; Rehman, 2019) it emphasised the value of trust in the interactions between customers and sellers during both offline and online purchasing. During the earlier introduction for online shopping and online

payment or internet banking, most people still doesn't have the amount of trust whether this kind of method is safe to use or is their banking account were protected by their banking institutions. Many believes, at that time, using a manual transaction such as drawing money out of the Automated Teller Machine (ATM) were much safer rather than online banking. At that time, trust level wasn't as great as nowadays.

Based on Pantano and Priporas (2016), trust is the level of belief a person has in technology or procedures used during an online purchasing trip, particularly when it comes to online payment or internet banking. Technologies nowadays allows people to do their daily work or necessity easier rather than in the past. Online shopping and online payment are also included in the technologies revolution for e-commerce to evolve but not all things that make people days easier only holds advantages, some of them were also holds disadvantages such as online scam, fraud and etc.

According to the previous study by (Hsu, 2013; Rehman, 2019; Nghia, 2020), a key element in influencing and improving actual consumer behaviour is trust. Promoting client trust is essential for e-vendors in long-term evolution in order to convert potential usage into real usage and transactional customers into devoted customers.

2.3.5 Perceived Risk

According to Ariff (2014), the perceived risk that consumers identify with online transactions have emerged as a crucial research area since these perceptions will directly affect customers' attitudes toward these purchases and have a significant impact on consumers' online shopping behaviours.

According to Suleman (2018), perceived risk is a significant aspect that consumers evaluate while shopping online. This claim is in accordance with research by (Masoud, 2013; Bashir, 2015; Esyeria, 2017) which found that perceived risk affects people's decisions to make

online transactions. According to a study by Suhir (2014), the perception of risk significantly affects consumers' decisions to make purchases online while Yusnidar (2014), argued that perceived risk has a negative influence on online purchase decisions. According to Wai (2019), perceived risk in the context of financial risk has a negative and minor influence on online shopping behaviour, whereas product risk has a positive and considerable influence on online purchasing decisions.

Pham and Awan (2020) discovered that COVID-19 acted as a moderator in consumer utility awareness, encouraging buyers to shop online. However, customers' hesitation to shop online may be influenced by society's affection. Meanwhile, contrary to earlier study, awareness of the COVID-19 pandemic and marketing restrictions had no substantial impact on COVID-19 pandemic internet purchase. Previous studies have shown that perceived risk is a key factor in influencing customer behaviour. Consumer purchasing intention and behaviour are instances of risk-taking, as previously stated, because every action taken by consumers will have consequences that they cannot reasonably predict, at least in part, and at least some of which are likely to be unpleasant. If perceived risk is a reliable indicator of consumer behaviour, then customers' reluctance to make online purchases, especially in emerging economies, may be a direct result of perceived risk.

Bianchi and Andrews (2021) investigated the impact of trust and risk on Latin American customers' purchasing behaviour. According to the findings, perceived risk and trust characteristics had a positive effect on the desire to continue purchasing online. Consumer attitude increases their proclivity to purchase online, and perceived danger has an inverse relationship with attitude.

2.3.6 Online Purchasing Behavior

The COVID-19 pandemic has had a major impact on consumers' online purchasing behavior (Pandey & Parmar, 2019). This is because the various infection control measures taken during the covid-19 outbreak such as social distancing, quarantine and closures were taken around the world (Andrienko, 2020). People are asked to stay at home to prevent the covid-19 epidemic from spreading widely (Hasanat et al., 2020). During the shutdown, online buying and selling of goods or services became the main choice of people to meet their daily needs and also other goods (Lufkin, 2020). Online shopping is considered an easy place to shop that eliminates the risk of getting infected in public. Therefore, e-commerce businesses have gained greater profits during the COVID-19 outbreak (Yao, 2020; Jones, 2020). During the pandemic, the effect of the COVID-19 outbreaks on customers' willingness to make online purchases has escalated and resulted in new consumer behaviour when selecting purchasing patterns (Lufkin, 2020).

According to a previous study by Gregory (2013), consumer purchase intention is an important predictor of online purchasing behavior, which ultimately leads to actual consumer behavior. In this aspect, the COVID-19 pandemic is the main trigger to encourage people who are reluctant to shop online to change their purchasing methods during the COVID-19 outbreak. This is because it is one of the relatively safe ways to shop during an epidemic and is one of the alternatives when asked to quarantine at home (Pandey & Parmar, 2019). However, according to research Goldsmith & Flynn (2004), consumers with different characteristics may react differently to online purchasing. Users' personalities and demographics play an important role in their online purchasing behaviour (Cheung & Lee, 2003; Al Maghrabi et al., 2011).

According to a previous study by Rehman et al. (2019), online purchases play an important role in the purchasing behaviour of people all over the world during and after

COVID-19 occurs. People believe internet shopping to be more convenient, time-saving, and cost-effective than traditional shopping, which is why it is becoming more and more popular (Bhatti et al., 2020; Alagoz & Hekimoglu, 2012; Hartono et al., 2014). Furthermore, online purchasing enables consumers to purchase their necessities from the comfort of their own homes or wherever they are, at any time (Liu et al., 2012). Online purchasing also provides consumers with more information about products with a high degree of transparency, allowing them to compare prices or product quality across many online retailers (Delafrooz et al., 2011).

2.4 Hypotheses Statement

H1: There are significant difference between attitude, subjective norms, perceived behavioral control, trust, perceived risk and online purchasing behavior in COVID-19 pandemic among university students.

H2: There is significant relationship between attitude and online purchasing behavior among university students**.**

H3: There is significant relationship between subjective norms and online purchasing behavior among university students.

H4: There is significant relationship between perceived behavioral control and online purchasing behavior among university students.

H5: There is significant relationship between trust and online purchasing behavior among university students.

H6: There is significant relationship between perceived risk and online purchasing behavior among university students.

.2.5 Conceptual Framework

Figure 2.1 shows the research framework which consists of the dependent variable, the Online Purchasing Behavior. According to George (2019), online purchasing behavior is defined as the frequency with which consumers make online purchases. The COVID-19 pandemic has had a significant impact on online purchasing behaviour (Pandey & Parmar, 2019). The independent variables namely Attitude, Subjective Norms, Perceived Behavioral Control, Trust, Perceived Risk and Online Purchase Intention. The first independent variable is attitude. In this research, attitude is considered as a consumer's evaluation of online purchases (Andrews and Bianchi, 2013). According to Allport (2016), an individual's propensity to be uncertain has a positive relationship with online purchasing behavior. The second independent variable is subjective norms. In this study, subjective norms are understood as user perceptions related to the use of online purchases in line with the opinions of reference groups such as friends or colleagues (Dharmesti et al., 2019). The third independent variable is perceived behavioral control. In this context, perceived behavioral control is the first factor to consider in order to comprehend the formation of online purchasing behaviour (Dabholkar and Sheng, 2009). An individual's ability to do something will be influenced by behavioral control (Ahn et al., 2014). Next, is trust. Trust is defined as one's attitude of accepting online risks or vulnerabilities that will not be exploited. Trust itself has the meaning of believe in the reliability, truth, or ability (Beldad et., al 2010). Lastly, perceived risk. According to Ariff (2014), the perceived risk that consumers associate with online transactions has emerged as a critical research area because these perceptions have a direct impact on customers' attitudes toward these purchases and have a significant impact on consumers' online shopping behaviours.
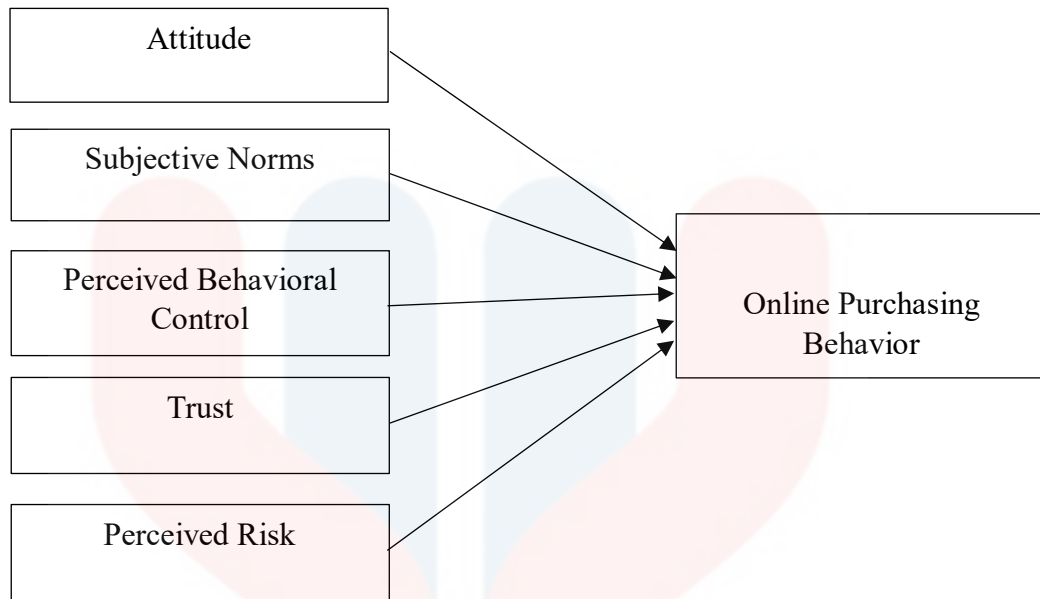
Figure 2.1: Conceptual Framework

2.6 Summary/Conclusion

To summarise, this chapter gives a brief introduction and mention about the previous study in the literature review. Appropriate theory is also discussed in this study. The underpinning theory which explains all the variables are also discussed in this chapter. The proposed theoretical framework has been developed based on a review of the literature. The researcher examined the relationship between the independent variables of attitude, subjective norms, perceived behavioral control, trust and perceived risk to the dependent variable, which is online purchasing behaviour. Next, the types of methods are discussed in the following chapter to find out the results of this study.

CHAPTER 3

RESEARCH METHODS

3.1 Introduction

Described in this chapter are the analysis techniques that were employed. This study's methodology, a quantitative one based on a questionnaire, was used. The analysis conducted revealed information about the variables affecting students' online shopping habits. Additionally covered in this chapter were research design, data collection methods, study population, sample size, sampling strategies, research equipment creation, variable measurement, and data analysis procedures.

3.2 Research Design

A methodical structure for gathering and interpreting data is known as research design. Its purpose is to make sure that any evidence derived from the data can address the research topic. Exploratory, descriptive, and causal research are three fundamental research designs that can provide primary data (Bell et al., 2022). The study's methodology is descriptive. The process of descriptive study design involves gathering raw data and building data structures that describe the current traits of a specified target population.

The purpose of the research was to examine the variables that affect students' online purchasing decisions. This study followed a quantitative methodology, and the respondents' information will be gathered by questionnaires. The association between attitude, subjective norms, perceived behavioral control, trust, and perceived risk with student online purchasing behavior was the topic of a descriptive study. Someone was able to respond to the research questions and achieve the research goals thanks to the descriptive study.

3.3 Data Collection Methods

Participant observation, interviews, and focus groups were included as data collection techniques. Primary data were gathered for this study via a questionnaire given to participants. The questionnaire focuses exclusively on the variables that affect students' online purchasing habits. The questionnaire uses an online survey that used google forms. The questions are displayed on google forms, and then respondents will provide an answer by choosing the option or clicking the icon. The reasons why researchers use this technology tool platform are because it is free and friendly to users (Pyae & Joelsson, 2018). It also makes it easier for researchers to collect all data from students.

3.4 Study Population

The term "population" refers to the full or entire group of the studied or explored persons, events, or items of interest. (Sekaran & Bougie, 2009). At the same time, the population is also the whole subject of research while the sample is part of that. Researchers may choose to include a sample of the population of interest in their research. In such situation, the goal of the research study is to generalise the results of a study from the sample to the population of interest. The population of interest for this study is public university undergraduate students in Malaysia. The total student's population in Malaysia is approximately 181,901 students (Statistics of Higher Education, 2021). We choose the east coast region for our study namely Kelantan, Pahang and Terengganu. We want to know the trends of students in this area during and after covid-19 towards online shopping. Public universities in Kelantan are Universiti Malaysia Kelantan (UMK 6850) students, Universiti Sains Malaysia (USM 3206) and Universiti Teknologi Mara (UITM 7729). In Pahang, there are Universiti Malaysia Pahang (UMP 3474), University Islam Antarabangsa (UIAM 2248) and Universiti Teknologi Mara (UITM 5821). Then, Universities in Terengganu are University

Malaysia Terengganu (UMT 3244), University Sultan Zainal Abidin (UniSZA 4571) and University Teknologi Mara (UITM 6179) of students.

3.5 Sample Size

The count of a sample of individuals or observations in any statistical situation, such as a scientific experiment or a public opinion survey, is referred to as the sample size (Zamboni, 2018). Although a relatively simple concept, the choice of sample size is a critical determination for the project. A sample that is too small give unreliable results, while a sample that is too large requires a lot of resources and time. In general, a sample can be described as an element of a population. According to Malhotra (2010), the number of elements should be included in the study so that it will explain the required size. The sample size for this study is based on the table created by Krejcie and Morgan (1970) to help researchers get a proper sample size. The table indicates that the minimal sample size for a population of 181,901 students is 384 respondents. The objective of the study is to see and obtain accurate data about the impact of the covid-19 pandemic on online purchasing behavior. The data collected belongs to different age, gender and other things. The sample is rather selective and it is difficult to establish that the data collected is reliable. The researcher distributed all the questionnaires through google form which is easier for the university students to answer in order to get balanced respondents.

Table 3.1: Table for Determining Sample Size of a Know Population (Krejcie and Morgan 1970)

Table for Determining Sample Size of a Known Population									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384
Note: N is Population Size; S is Sample Size						Source: Krejcie & Morgan, 1970			

3.6 Sampling Techniques

Sampling is a technique or process of choosing a sub - group to participate in a study from the entire population. The process includes selecting a number of individuals or respondents for a study to represent the entire population (Ogula, 2005). Therefore, we can either generalise the sample's properties or characteristics to the population element by studying the sample and knowing its properties or qualities. Sampling techniques can be divided into two which are probability sampling and non-probability sampling (Sekaran & Bougic, 2010). Each of these categories consists of several sampling techniques. According to Battaglia (2008); Etikan, Musa and Alkassim (2016), probability sampling is defined as every member in population have a chance of participating in the study while the non - probability sampling is a sampling technique where not all member population has a chance to be included.

The sampling technique to be used in a study depends on type, purpose and nature of the study. So, this research will use cluster sampling and purposive sampling. Cluster sampling will involve dividing the population into as many clusters as possible with each cluster reflecting the study population and can be done by the researcher. So we choose cluster based on east coast region. A collection of non-probability sampling strategies known as "purposive sampling" involve choosing units for your sample based on their possession of specific qualities. In other words, in purposive sampling, units are chosen "on purpose." So, in this study, the researcher has its own target, which is to select public university students in the east coast region, namely Kelantan, Pahang and Terengganu, who have online shopping experience during the Covid-19 pandemic.

3.7 Research Instrument Development

In this study, the primary data will be collected by questionnaire method. So, the questionnaire will be distributed to the respondent. The research structures are the questionnaire in the form of scale questions. The researcher will also use secondary data which is data from the previous researcher through their journals and articles that relate to the topic that had been researched. Furthermore, the online questionnaire will be distributed to the students of various university and also public people. The questionnaire is self-administrative to the respondent and that they are going to be given a period of time to finish the questionnaire. The questionnaire is going to be used for the evaluation and interpretation of result and collection of data. The researcher develops closed-ended queries because it's convenient to fill and save time.

The questionnaire is divided into sections: Section A, Section B, and Section C. Section A will use a nominal scale because researchers addressed the demographic profile focused on the respondent's age, gender, race, year of study, and semester. Researchers will use the 7-

points Likert scale in Section B and Section C. Section B address the independent variable questions: attitude, subjective norms, perceived behaviour control, trust, and perceived risk. Section C concentrated on all the dependent variables, which is the online purchasing behaviour. This research contained 34 questions for three sections, as shown in the table below.

Table 3. 2: Number of questions for each section

Section	Variables	Number of questions	Sources
Section A	Demographic	14	Ha Thu Nguyen, Thuy Dam Luang Hoang, Huy Khanh Nguyen et al., (2022)
Section B	Attitude	5	Ha Thu Nguyen, Thuy Dam Luang Hoang, Huy Khanh Nguyen et al., (2022)
	Subjective norms	6	
	Perceived behaviour control	4	
	Trust	5	
	Perceived Risk	5	
Section C	Online purchasing behaviour	4	Ha Thu Nguyen, Thuy Dam Luang Hoang, Huy Khanh Nguyen et al., (2022)

Sources: Developed for this research.

3.8 Measurement of the Variables

Data collection is a procedure of accumulating data from all the relevant sources to discover answers to the lookup problem, test the hypothesis and evaluate the outcomes. Data collection methods can be divided into two categories: secondary methods of data series and primary methods of records collection (John Dudovskiy, 2018). In this part, will rely entirely on data from primary sources and secondary. Besides that, secondary data is collected through investigation the library is mainly a study of past research literature and case study. Another information is also collected from academic journals, publications books and internet resources in the field of social media that support changes to this merger. Primary data will be collected using the questionnaire self-administered because the feedback can be evaluated and formulated easily, data can be collected quickly, effectively, and cheaply also a large number of participants can be achieved within a short period of time. In addition, the questionnaire is a well-established tool in social science research for gathering data on participant social characteristics, existing and previous behaviour, standard of behaviour or attitudes, and their beliefs as well as reasons for action regarding the subject matter under investigation. (Bulmer, 2004).

The same goes for the nominal scale; the ordinal scale is qualitative data. The ordinal scale describes non-mathematical concepts such as frequency, contentment, happiness, and pain degree. According to the Research Method book, the ordinal scale categorizes variables in such a way as to denote differences among various categories and rank-orders categories in some meaningful way. It can be like level education, rankings or orders (Sekaran and Bougie, 2016).

In this case, researchers will use the Likert scale. Likert scales are commonly used to measure attitudes and opinions. The respondent's reaction is calculated using a 7-point Likert Scale that ranges from Strongly Disagree (1) to Strongly Agree (7). The number of response points suggested by the Weksi (2013) is 7 based on the preference of the respondent who likes the number of responses the most. Besides that, the number of response points 7 also has good reliability, validity, discrimination power, and stability.

Table 3. 3: Likert scale

Point of Scale	Level
1	Strongly Disagree
2	Disagree
3	Somewhat Disagree
4	Neutral
5	Somewhat Agree
6	Agree
7	Strongly Agree

Source: McLeod, S. A. (2019). Likert Scale Definition, Examples and Analysis

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3.8.1 Pilot Study

Before the main study begins, a pilot test is a "small-scale study" that takes 30 or more samples from the study population. A pilot test is used to identify any problematic items and to assess the reliability value of an item or construct. This means that the pilot test must be repeated if there is a problem with multiple items that require repetition.

The intended respondents for the pilot test were given thirty (30) questionnaire sets. Following data collection, the information will be entered into the Statistical Package for the Social Sciences (SPSS) software and tested for reliability. Finally, the questionnaire survey will be revised if any problems are found and distributed for the main study based on the pilot test results.

Table 3.4: Reliability Coefficient alpha from Overall Reliability (Pilot Test)

Variable	Numbers of Items	Cronbach's Alpha
Attitudes	5	0.896
Subjective Norms	6	0.720
Perceived Behavioral Control	4	0.731
Trust	5	0.814
Perceived Risk	5	0.721
Online Purchasing Behavior	4	0.888

The researcher had to run a pilot test with 30 respondents before distributing the official questionnaire, and the reliability test of this pilot test is used to establish the validity of variables. The examples of overall consistency (pilot test) for the dependent and independent variables are shown in Table 3.2 above. We concluded that Cronbach's alpha for overall

reliability was adequate according to the rule of thumb for Cronbach's alpha coefficient. The study's findings were valid and reliable.

The reliability of the pilot test analysis for dependent and independent variables from 30 questionnaires was shown in Table 3.2. The independent variables in this study were convenience, attitudes, subjective norms, perceived behavioural control, trust, and perceived risk, with Cronbach's alpha coefficient values of 0.896, 0.720, 0.731, 0.814, and 0.721, respectively, that were acceptable and good. The dependent variable in the study was the online purchasing behaviour shown in the table above, and its Cronbach alpha coefficient value was 0.888, which is acceptable and reliable.

The fact that the Cronbach's alpha charge for the variables exceeded 0.7 demonstrated that the questionnaires were highly reliable, allowing the study to proceed. Furthermore, this means that the questionnaires were approved for use in this study, and the reliability demonstrated that the respondents understood the questions well.

3.9 Procedure for Data Analysis

Data analysis is a process by a researcher to analyze the information that has been collected from respondents to find the desired answer and answer the research question to see the results (Lester et al., 2020). The researcher will analyze the data obtained to determine whether or not it achieves the objectives of the study and the questions stated in Chapter 1. Furthermore, data analysis is a technical component of research and related to the deepest layers of research methodology (Mohajan, 2018). This is because analyzing data aims to find meaning from the data and can be done by organizing and entering information systematically.

3.9.1 Data Analysis Process

This research will use primary data to collect data by giving questionnaires to respondents. A questionnaire is used to collect all of the necessary information. The current research study employs a seven-category scale option. A good questionnaire is made up of correct sentences. A question is typically 20 words long, but it can be as long as one sentence (Oppenheim, 1992). To answer the research question, we analyse a sample of online shoppers among university students, who are increasingly becoming an important potential market for electronic commerce (Lian and Yen, 2014). We outsourced data collection to university students in line with the recommendations in Schoenherr et al. (2015). Data was collected through the distribution of questionnaires to university students. We provided a complete questionnaire to university students to obtain information about this study.

3.9.2 Quantitative Data Analysis

In this study, we use a quantitative research approach as an inquiry method. Because one of its additional functions is to determine the relationship and its strength between dependent variables and independent variables, the quantitative research approach allows researchers to collect and analyse data as well as apply additional hypothesis tests (Madrigal, 2012). Quantitative methods were found to be most effective for data collection in studies conducted under the aspect of positivist philosophy. A survey questionnaire in two languages which is Malay and English was used to assess and collect all the necessary information about the preferences, feelings, opinion and attitudes of the respondents. Following the data collection process via the questionnaire, which was distributed to 384 university students, the researcher uses Statistical Package for Social Science (SPSS) software to store all the records that have been collected and analyse them for an accurate result. SPSS is a statistical package designed by the IBM Corporation and widely used by researchers and academicians worldwide.

The questionnaire that was already collected included reliability tests, Pearson's correlation, and Manova tests.

3.9.3 Reliability Test

The second stage of research analysis is reliability test. The instrument's consistency was assessed using the reliability analysis procedure. The reliability test is critical in the research study because it improves assessment and research evaluation accuracy. As a result, a reliability test from Cronbach's Alpha was used in this study to determine the consistency and stability of the research outcome. A high coefficient of reliability (closer to 1), according to Sekran and Bougie, indicates high consistency in the reliability test. Cronbach's alpha reliability test is commonly used to assess internal consistency and determine whether or not each variable item in the question is inter-correlated (Sekran and Bougie 2013).

Table 3.5 Cronbach Alpha Coefficient Sizes Range (Glen 2014)

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

3.9.4 Pearson's Correlation Analysis

Pearson's correlation analysis is the third stages of analysis in the statistical procedure. Researchers can evaluate the strength of a relationship between two quantitative and continuous variables using the Pearson correlation approach. If the relationship between the variables is not linear, the correlation coefficient should not be calculated. The coefficient of correlation between the two variables can be either positive or negative (Sekran and Bougie et al., 2013). A positive correlation indicates that increasing X will affect increasing Y, and vice versa. According to Sekran and Bougie et al. (2013), when the scatter of points is close to a straight line, the strength of the relationship between the variables increases. Correlation is a method used to investigate the relationship between two quantitative and continuous variables. Pearson's correlation coefficient (r) measures the strength of the relationship between two variables. The Pearson's correlation coefficient (r) for data at the interval level ranges from -1 to +1. In other words, the relationship between two variables is stronger the closer the scatter points are to the straight line.

Table 3.6: Rule of Thumb (Hinkle, Wiersma et al 2003)

Coefficient Correlation Size	The Strength of The Relationship
(0.91 to 1.00) or (-0.91 to -1.00)	Very Strong
(0.71 to 0.90) or (-0.71 to -0.90)	Strong
(0.51 to 0.70) or (-0.51 to -0.70)	Moderate
(0.31 to 0.50) or (-0.31 to -0.50)	Weak
(0.01 to 0.30) or (-0.01 to -0.30)	Very Weak

3.9.5 Multivariate analysis of Variance (MANOVA)

The last analysis we will use is multivariate analysis of variance (MANOVA). MANOVA is the multivariate equivalent of univariate analysis of variance (ANOVA). ANOVA employs MANOVA to discover statistical differences between a continuous dependent variable and an independent group variable. MANOVA takes this analysis a step further by combining multiple continuous dependent variables into a weighted linear combination, also known as a composite variable. MANOVA will determine whether the newly formed combinations differ from the groups or levels of the independent variable. MANOVA determines whether the independent-group variables explain a statistically significant amount of variance in the dependent variable at the same time (Tabachnick, B. G. & Fidell, L. S. (2012).

3.10 Summary

This chapter concludes by describing the methodology used in the study, including the paradigmatic approach, research design, and data collection methods. In this chapter, the researcher can determine the population, sample size, sampling method, data collection method, and so on. The researchers will discuss the results of all research in great detail in the chapter that follows an engaging explanation of the information presented in this chapter. They will also demonstrate the pattern of the results-based data analysis, which will also be related to research issues and research objectives.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter discusses how to obtain and analyze research results. The Statistical Package for Social Science (SPSS) version 26 was used to evaluate the acquired data, and the results were then employed in additional analysis. These questionnaires were prepared and distributed to university students from Malaysia East Coast. According to the questionnaire distributed through Google Form, there were 384 respondents. The data provided by the target respondents is analyzed by the researchers to address the research objectives of the study and test the hypotheses after the questionnaires have been collected and sorted. This study employs three different forms of analysis, including reliability analysis using Cronbach's alpha, and Pearson correlation analysis.

4.2 Preliminary Analysis

Saunders (2007) states that pilot tests should be used and tested before collecting actual data. He pointed out that the pilot test was crucial for improving the questionnaire so that respondents had no trouble answering the questions, for identifying any questions that respondents found uncomfortable, and for determining the approximate time it would take for respondents to finish the survey in practice. Combining these, this study conducted a pilot test to evaluate the validity and accuracy of the questionnaire using a sample of 30 students from University Malaysia Kelantan (UMK). The information collected during this pre-test provided enough information to produce the final questionnaire, to ensure that it could be used as required with new respondents, and to identify possible misconceptions, questions about the tool, and correct them. Because the Cronbach's Alpha is more than 0.7, the outcome is acceptable for all variables.

Table 4.1: Cronbach's Alpha Coefficient Value

Alpha Coefficient Range	Strength
0.0 - <0.5	Unacceptable
0.5 - <0.6	Poor
0.6 - <0.7	Questionable
0.7 - <0.8	Acceptable
0.8 - <0.9	Good
0.9 - <1.0	Excellent

Source: Salkind, N. (2015)

Table 4.2: Reliability Analysis for Each Variable (n=30)

Construct	No of Items	Cronbach's Alpha	Relationship
Attitude (IV 1)	5	0.896	Good
Subjective norm (IV 2)	6	0.720	Acceptable
Behavioral control (IV 3)	4	0.731	Acceptable
Trust (IV 4)	5	0.814	Good
Perceived Risks (IV 5)	5	0.721	Acceptable
Online purchase behavioral (DV)	4	0.888	Good

Sources: Developed from research

Table 4.2. shows the results of reliability test for pilot test. High internal consistency was demonstrated for all questionnaires used in this study.

Determining the stability of the acquired data is the primary goal of reliability testing. The accuracy of the data analysis for the independent and dependent variables is displayed in Table 4.2.2. When Cronbach's Alpha is more than 0.7, these data are considered to be valid. As shown in the table above, the first intependent variable, Attitude, gets 0.896, which is good. The second independent variable, Subjective norm (0.720) is acceptable. The third independent

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variable is Behavioral control, with 0.731 also acceptable. The fourth independent variable is Trust, gets 0.814, which is good. The last independent variable, Perceived Risks (0.721) is acceptable. The dependent variable, Online purchase behavioral, gets 0.888, which is good. All variables are above 0.7.

4.3 Demographic Profile of Respondents

This section will discuss in detail respondents' profiles. In this section, demographics profile of respondents who have experienced the online shopping. The demographic data in this part includes the respondents' age, gender, race, universities, courses of study, and years of study. A table and pie chart will be used to illustrate the demographic profile results of the respondents.

4.3.1 Age

Table 4.3: Respondent's Age

Age	Frequency	Percent
<21 years old	93	24.2
22 years old	80	20.8
23 years old	80	20.8
>24 years old	131	34.1

Source: Developed from research
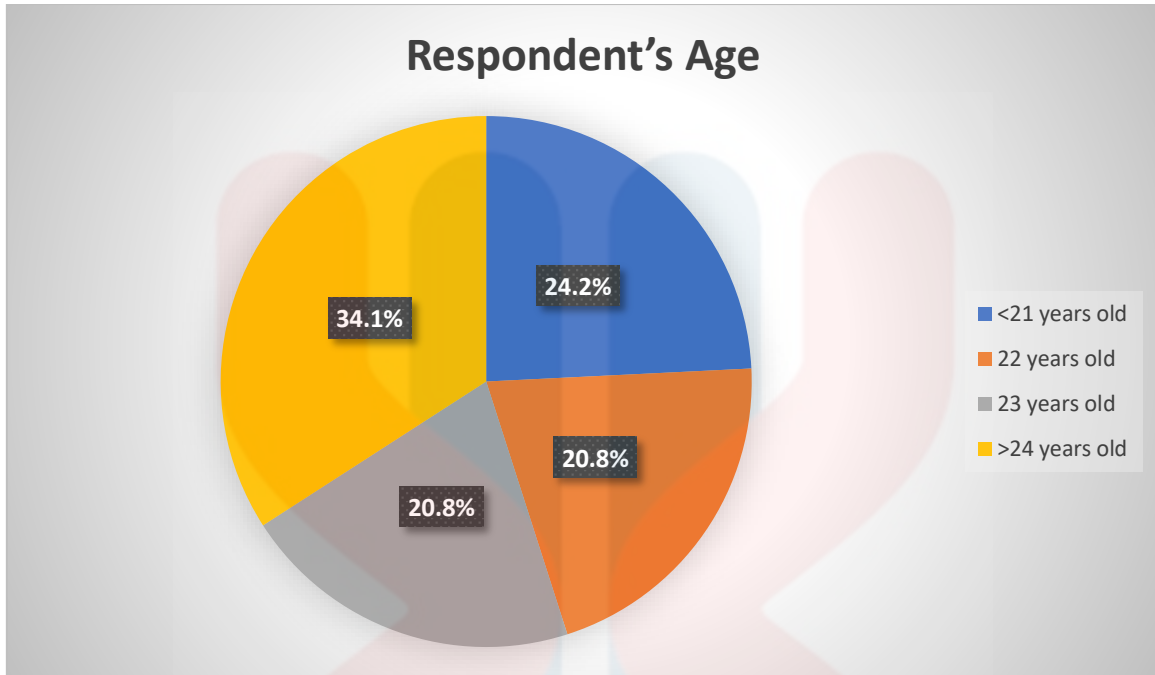
Figure 4.1: Respondent's Age

The various age groups of the survey respondents are depicted in Table 4.3 and Figure 4.1. 93 respondents (24.2%) of the 384 respondents were under the age of 21. The age group of 22 years old is next, with a total of 80 responders (20.8%). Then, the age 23 years old also have 80 respondents (20.8%). Lastly, the age 24 years old and above is the highest proportion among 384 respondents, consists of 131 respondents (34.1%).

4.3.2 Gender

Table 4.4: Respondent's Gender

Gender	Frequency	Percent
Male	168	43.8
Female	216	56.3

Source: Developed from research
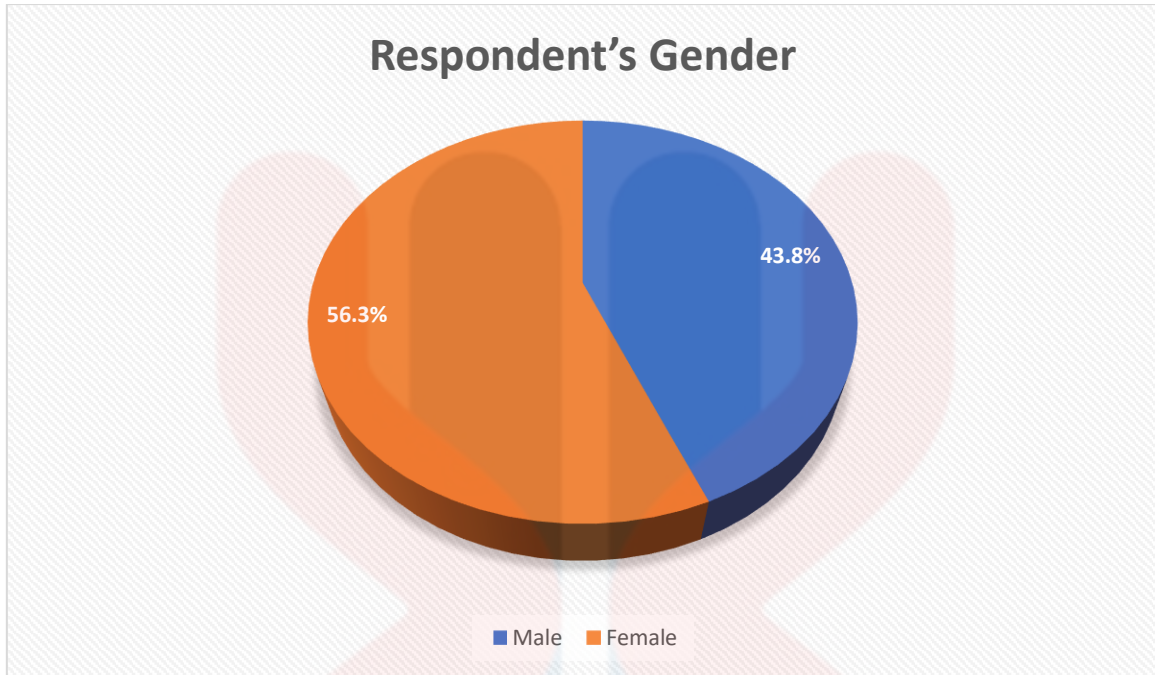
Figure 4.2: Respondent's Gender

According to the Table 4.4 and Figure 4.2, it indicates that 168 (43.8%) male respondents and 216 (56.3%) female respondents participated in this research study, according to Table 4.4 and Figure 4.2. There are 384 responders in all.

4.3.3 Race

Table 4.5: Respondent's Race

Race	Frequency	Percent
Malay	201	52.3
Chinese	136	35.4
Indian	47	12.2

Source: Developed from research
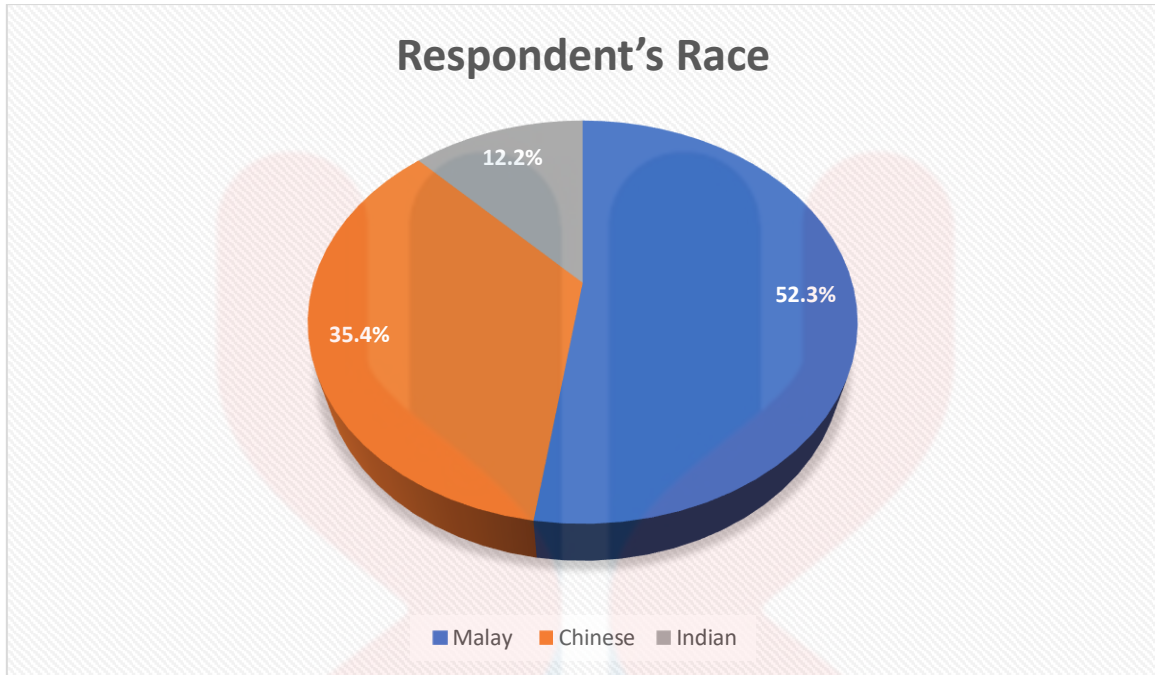
Figure 4.3: Respondent's Race

Based on Table 4.5 and Figure 4.3, it has been determined that the majority of respondents 52.3% (n=201) come from the Malay racial group. Chinese people make up the second-highest race group, with 35.4% (n=136). The lowest percentage of respondents overall, or 12.2% (n=47), are of Indian descent.

4.3.4 University

Table 4.6: Respondent's University

University	Frequency	Percent
UMK	139	36.2
USM	48	12.5
UITM	20	5.2
UMP	74	19.3
UIAM	29	7.6
UMT	60	15.6
UNISZA	14	3.6

Source: Developed from research
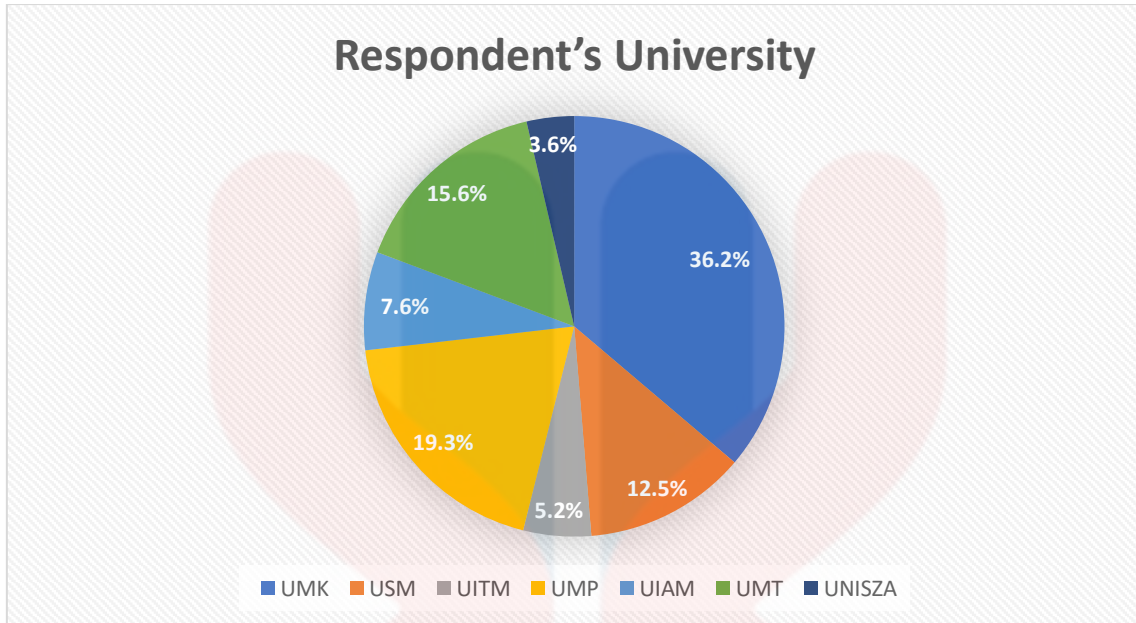
Figure 4.4: Respondent's University

According to Table 4.6 and Figure 4.4, the largest percentage of respondents about 36.2% (n=139) come from UMK. While the second highest number of respondent's University are from UMP with 19.3% (n=74). Follow with USM, which has a total of 48 respondents (12.5%). Then, the total number of respondents from UITM also has 20 respondents (5.2%). Next, the total number of respondents from UIAM is 7.6% (n=29). Follow with UMT, which has a total number of respondent's university is 15.6% (n=60). The next lowest percentage of respondents' universities, at 3.6% (n=14), is from UNISZA.

4.3.5 Course of Study

Table 4.7: Respondent's Course of Study

Course of Study	Frequency	Percent
Sciences	59	15.4
Engineering and Technical	79	20.6
Social Sciences	246	64.1

Source: Developed from research

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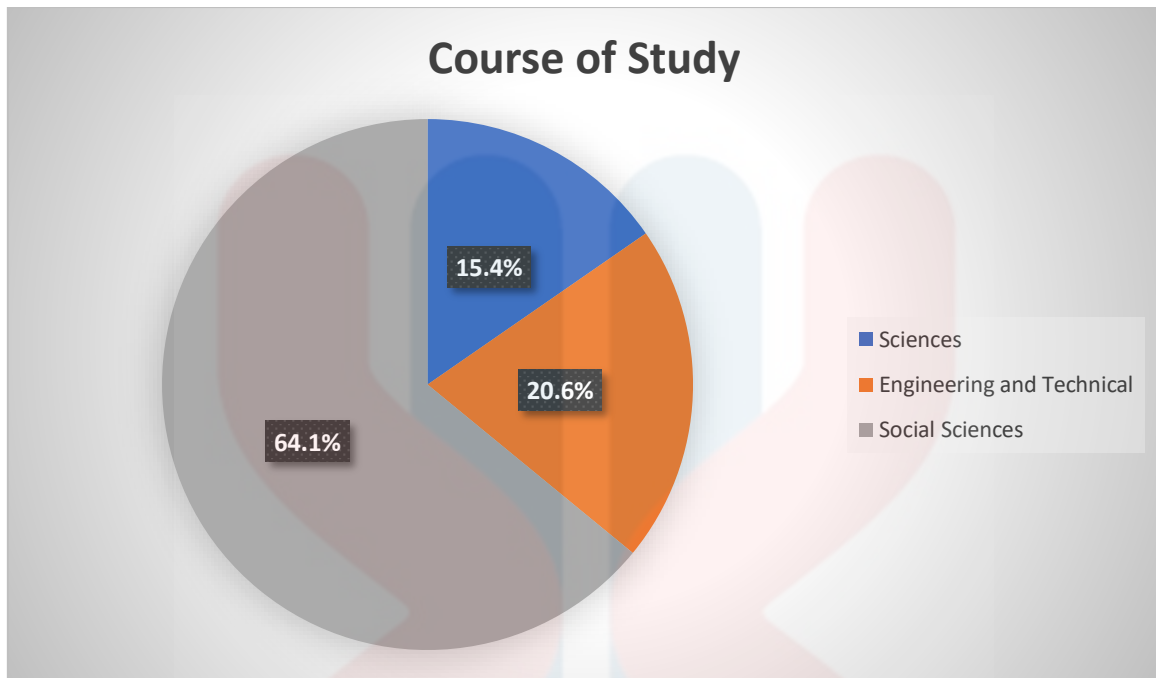
Figure 4.5: Respondent's Course of Study

The respondents to this survey's course of study are displayed in Table 4.7 and Figure 4.5. The sciences have 59 respondents (15.4%) out of 384 respondents. Follow with the engineering and Technical, which have a total of 79 respondents (20.6%). Lastly, the social sciences is the highest proportion among 384 respondents, consists of 246 respondents (64.1%).

4.3.6 Year of Study

Table 4.8: Respondent's Year of Study

Year of Study	Frequency	Percent
Year 1	63	16.4
Year 2	85	22.1
Year 3	100	26.0
Year 4	136	35.4

Source: Developed from research
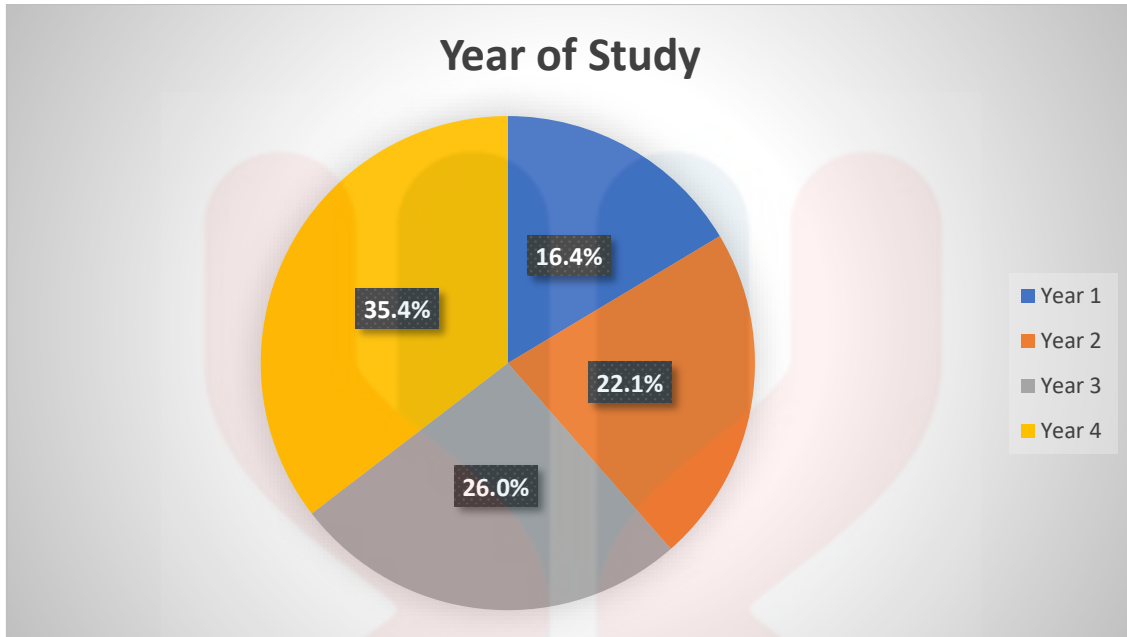
Figure 4.6: Respondent's Year of Study

The total number of survey respondents by year of study is displayed in Table 4.8 and Figure 4.6. The biggest percentage of respondents, 136 (35.4%) of the 384 total respondents, came from year 4, it has been reported. Follow with Year 3, which have a total of 100 respondents (26.0%). Then, year 2 students also have 85 respondents (22.1%). Lastly, the lowest number of respondents is from year 1 which is about 16.4% (n=63).

4.3.7 Have Experience Online Shopping

Table 4.9: Respondent Have Experience Online Shopping

Have Experience Online Shopping	Frequency	Percent
Yes	384	100.0

Source: Developed from research

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Figure 4.7: Respondent Have Experience Online Shopping

Table 4.9 and Figure 4.7 shows that the students have experience online shopping. The survey indicates 100% people have experience online shopping.

4.3.8 Online Platform Use for Shopping

Table 4.10: Respondent's Online Platform Use for Shopping

Online Platform Use for Shopping	Frequency	Percent
Lazada	313	81.5
Shopee	346	90.1
Grab	189	49.2
Mudah.my	58	15.1
Carousell	36	9.4
Other	20	5.2

Source: Developed from research
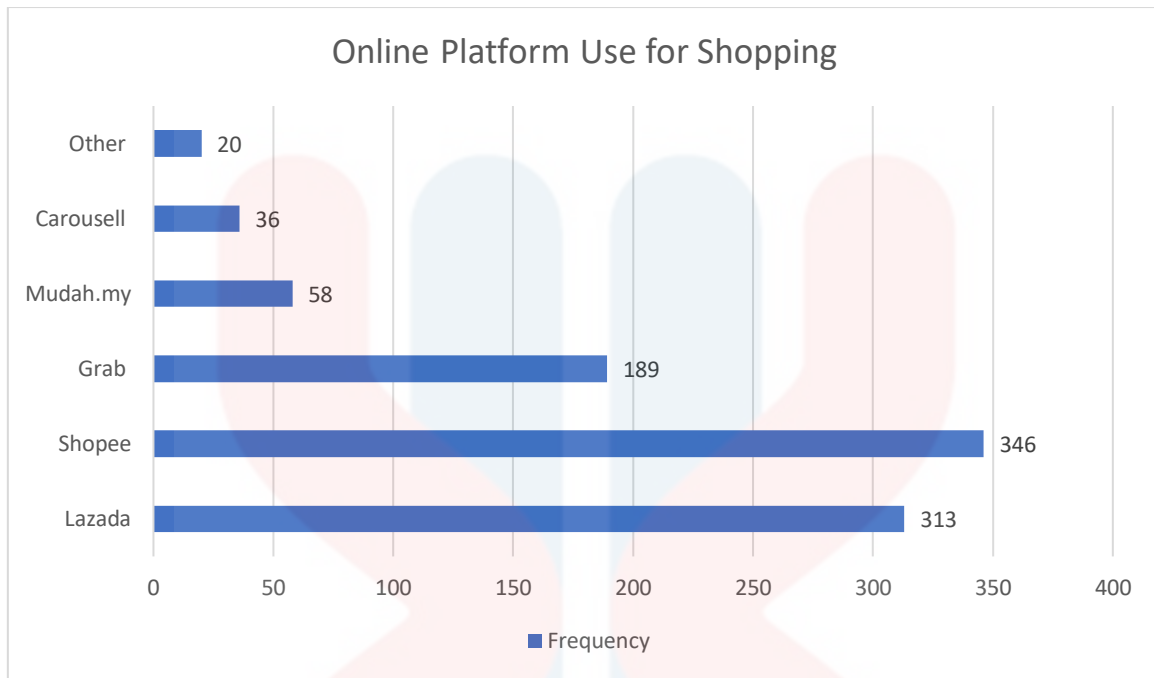
Figure 4.8: Respondent's Online Platform Use for Shopping

According to Table 4.10 and Figure 4.8, Shoppe accounts for approximately 90.1% (n=346) of the respondents on the online platform. Lazada received 81.5% (n=313) of the respondents, which is the second-highest percentage. Follow with Grab, which has a total of 189 respondents (49.2%). Then, the total number of respondents from Mudah.my also have 58 respondents (15.1%). Next, the total number of respondents from Carousell is 9.4% (n=36). This is followed by the lowest number of respondents in platform from other which is about 5.2% (n=20).

4.3.9 Products Always Purchase Online

Table 4.11: Respondent's Products Always Purchase Online

Products Always Purchase Online	Frequency	Percent
Clothes	256	66.7
Shoes	193	50.3

Electronics	92	24.0
Groceries	73	19.0
Health and Beauty	173	45.1
Food	162	42.2
Other	6	1.6

Source: Developed from research
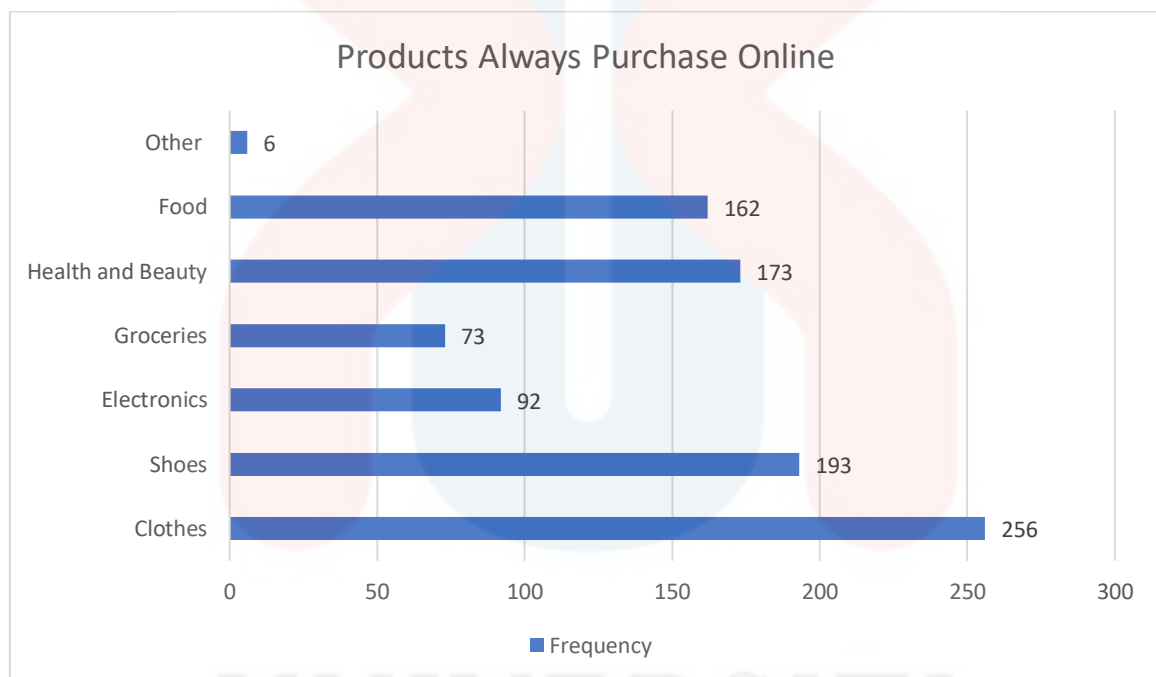
Figure 4.9: Respondent's Products Always Purchase Online

Based on Table 4.11 and Figure 4.9, it has been determined that the majority of respondents roughly 66.7% (n=256) come from the clothing industry. While shoes have the second-highest proportion of responders (50.3%, n=193). Follow with Health and Beauty, which has a total of 173 respondents (45.1%). Then, the total number of respondents from Food also have 162 respondents (42.2%). Next, the total number of respondents from electronic is 24% (n=92). Next, the total number of respondents from groceries is 73 respondents (19%). This is followed by the lowest number of respondents from other which is about 1.6% (n=6).

4.3.10 Frequency Online Shopping Still The Same During Covid and After Covid?

Table 4.12: Respondent's Frequency Online Shopping Still The Same During Covid and

After Covid?

Frequency Online Shopping Still The Same During Covid and After Covid?	Frequency	Percent
No	319	83.1
Yes	65	16.9

Source: Developed from research
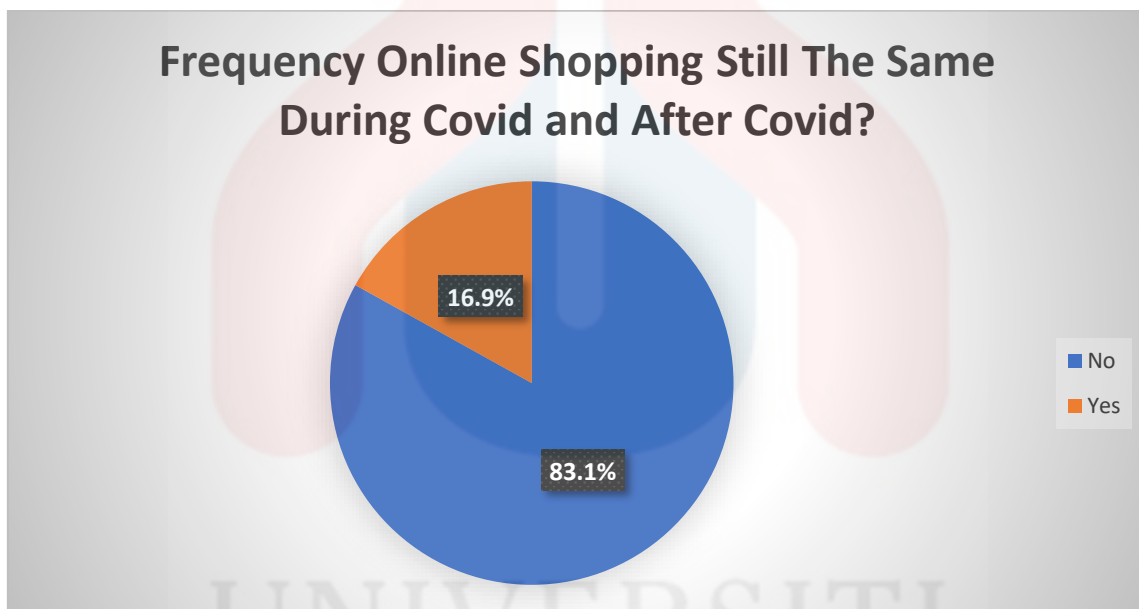
Figure 4.10: Respondent's Frequency Online Shopping Still the Same During Covid and

After Covid?

Table 4.12 and Figure 4.10 showed the total number of respondent's frequency online shopping still same during covid and after Covid? There were 83.1 % which is 319 respondents who are still the frequency not same online shopping during covid and after covid had responded to the questionnaire and followed by 16.9% which is 65 respondents are frequency same use online shopping during covid and after covid.

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4.3.11 Frequency of Online Shopping Before The Covid-19 Pandemic.

Table 4.13: Respondent's Frequency of Online Shopping Before The Covid-19 Pandemic.

Frequency of Online Shopping Before The Covid-19 Pandemic.	Frequency	Percent
Less than once a week	235	61.2
Once a week	68	17.7
2 - 5 times a week	40	10.4
6 - 9 times a week	24	6.3
More than 10 times a week	17	4.4

Source: Developed from research
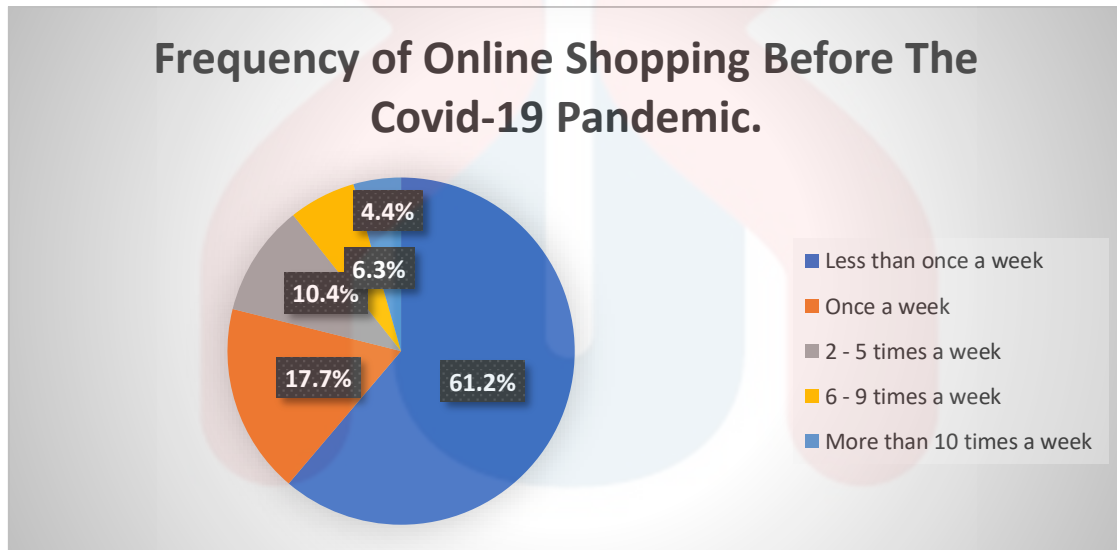
Figure 4.11: Respondent's Frequency of Online Shopping Before The Covid-19 Pandemic

The overall number of respondents' frequency of online shopping prior to the Covid-19 Pandemic is shown in Table 4.13 and Figure 4.11. We can observe that 61.2% of the 235 respondents, or people, purchase online less than once each week. 17.7% of the 68 respondents overall reported doing internet shopping once each week. A total of 40 respondents, or 10.4%, said they purchase online 2–5 times per week. The overall percentage of 24 respondents that shop online 6–9 times each week is 6.3%. The overall percentage of 17 respondents that purchase online more than ten times each week is 4.4%.

4.3.12 Frequency of Online Shopping During The Covid-19 Pandemic.

Table 4.14: Respondent's Frequency of Online Shopping During The Covid-19 Pandemic.

Frequency of Online Shopping During The Covid-19 Pandemic.	Frequency	Percent
Less than once a week	57	14.8
Once a week	48	12.5
2 - 5 times a week	198	51.6
6 - 9 times a week	55	14.3
More than 10 times a week	26	6.8

Source: Developed from research
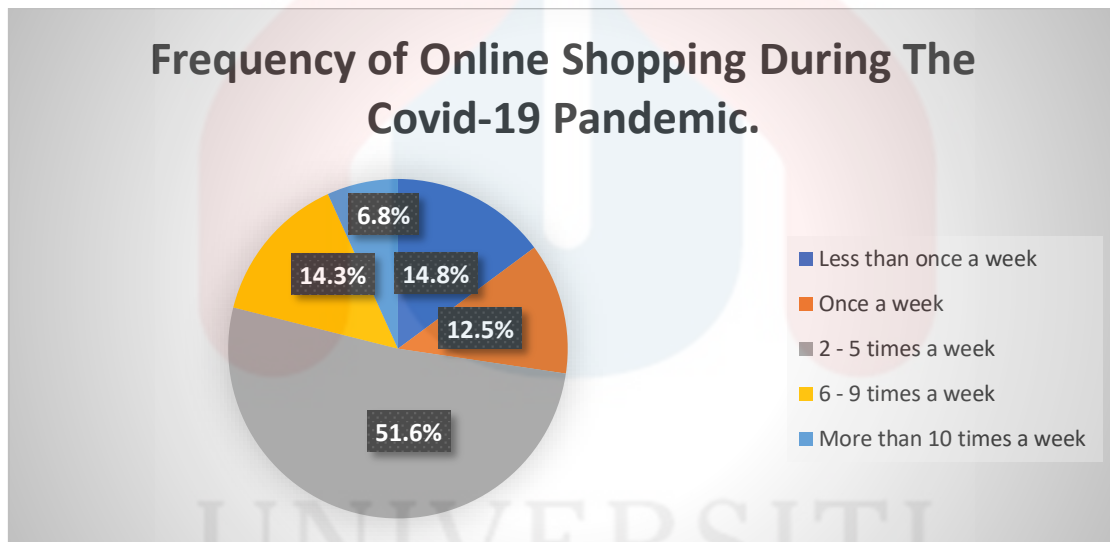
Figure 4.12: Respondent's Frequency of Online Shopping During The Covid-19 Pandemic

The overall number of respondents and their online shopping frequency during the COVID-19 Pandemic are shown in Table 4.14 and Figure 4.12. As can be seen, 14.8% of the 57 respondents, or less than one out of every seven, shop online. A total of 48 respondents, or 12.5%, said they purchase online once every week. A total of 198 respondents, or 51.6%, said they purchase online 2–5 times per week. The overall percentage of 55 respondents that shop online 6–9 times per week is 14.3%. Last but not least, 6.8% of the total 26 respondents purchase online more than 10 times every week.

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4.3.13 Frequency of Online Shopping After The Covid-19 Pandemic.

Table 4.15: Respondent's Frequency of Online Shopping After The Covid-19 Pandemic.

Frequency of Online Shopping After The Covid-19 Pandemic.	Frequency	Percent
Less than once a week	64	16.7
Once a week	38	9.9
2 - 5 times a week	91	23.7
6 - 9 times a week	98	25.5
More than 10 times a week	93	24.2

Source: Developed from research
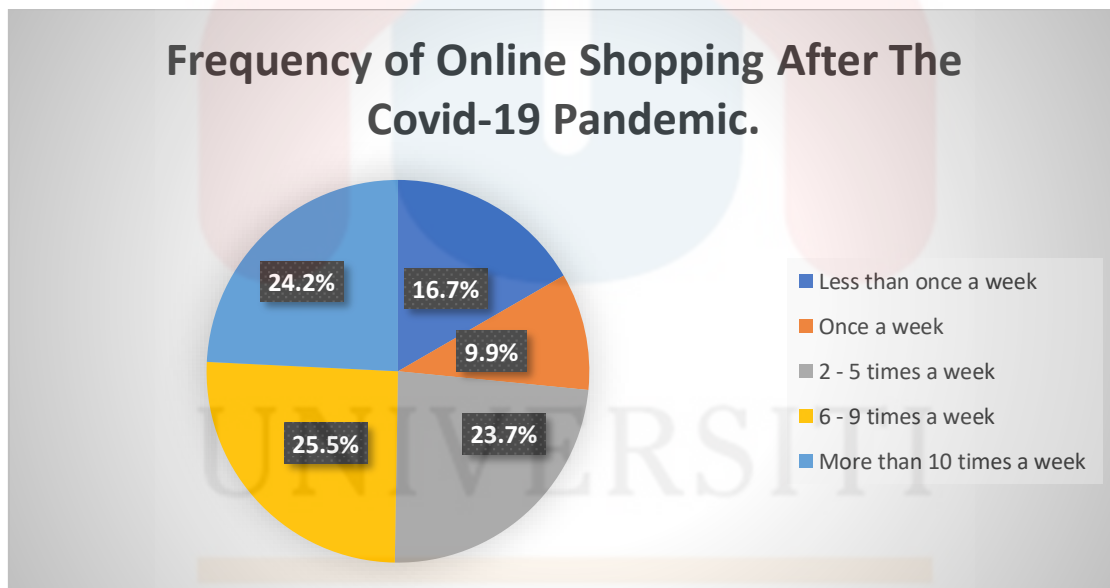
Figure 4.13: Respondent's Frequency of Online Shopping After The Covid-19 Pandemic.

The overall number of respondents' frequency of online shopping after the Covid-19 Pandemic is shown in Table 4.15 and Figure 4.13. We can see that 16.7% of the 64 respondents, or people, purchase online less than once a week. A total of 38 respondents, or 9.9%, said they purchase online once every week. A total of 91 respondents, or 23.7%, said they purchase online 2–5 times per week. The overall percentage of 98 respondents that shop online six to

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nine times per week is 25.5%. Last but not least, 24.2% of the 93 respondents overall reported

doing more than 10 times of internet shopping per week.

4.4 Statistical Data of Variables

4.4.1 Attitude

Table 4.16: Statistical Data of Attitude

	A1		A2		A3		A4		A5	
	f	%	f	%	f	%	f	%	f	%
Strongly Disagree	6	1.6	3	0.8	3	0.8	6	1.6	3	0.8
Disagree	3	0.8	3	0.8	6	1.6	6	1.6	3	0.8
Somewhat Disagree	4	1.0	7	1.8	7	1.8	13	3.4	7	1.8
Neutral	46	12.0	32	8.3	26	6.8	38	9.9	35	9.1
Somewhat Agree	128	33.3	128	33.3	118	30.7	133	34.6	98	25.5
Agree	132	34.4	152	39.6	141	36.7	134	34.9	132	34.4
Strongly Agree	65	16.9	59	15.4	83	21.6	54	14.1	106	27.6
Total	384	100.0	384	100.0	384	100.0	384	100.0	384	100.0

A1 = Online shopping is economical because business websites provide products at a cheaper price.

A2 = Online shopping is convenient because business websites provide more offers on product delivery.

A3 = Online shopping is easy to choose because business websites provide more product choices.

A4 = Online shopping is guaranteed because business websites provide convenient return policies.

A5 = Online shopping is safe because online shopping helps me not to stay in crowed place.

Source: Developed from research

Table 4.16 shows the statistical data of attitude, this part we have used five questions

in google form. The first question is "Online shopping is economical because business websites

provide products at a cheaper price.", which have 6 (1.6%) respondents strongly disagree, 3

(0.8%) respondents disagree, 4 (1.0%) respondents somewhat disagree, 46 (12%) respondents

neutral, 128 (33.3%) respondents somewhat agree, 132 (34.4%) respondents agree and 65 (16.9%) strongly agree.

Second question is "Online shopping is convenient because business websites provide more offers on product delivery.", which have 3 (0.8%) respondents strongly disagree, 3 (0.8%) respondents disagree, 7 (1.8%) respondents somewhat disagree, 32 (8.3%) respondents neutral, 128 (33.3%) respondents somewhat agree, 152 (39.6%) respondents agree and 59 (15.4%) strongly agree.

Third question is "Online shopping is easy to choose because business websites provide more product choices.", which have 3 (0.8%) respondents strongly disagree, 6 (1.6%) respondents disagree, 7 (1.8%) respondents somewhat disagree, 26 (6.8%) respondents neutral, 118 (30.7%) respondents somewhat agree, 141 (36.7%) respondents agree and 83 (21.6%) strongly agree.

Fourth question is "Online shopping is guaranteed because business websites provide convenient return policies.", which have 6 (1.6%) respondents strongly disagree, 6 (1.6%) respondents disagree, 13 (3.4%) respondents somewhat disagree, 38 (9.9%) respondents neutral, 133 (34.6%) respondents somewhat agree, 134 (34.9%) respondents agree and 54 (14.1%) strongly agree.

Fifth question is "Online shopping is safe because online shopping helps me not to stay in crowed place.", which have 3 (0.8%) respondents strongly disagree, 3 (0.8%) respondents disagree, 7 (1.8%) respondents somewhat disagree, 35 (9.1%) respondents neutral, 98 (25.5%) respondents somewhat agree, 132 (34.4%) respondents agree and 106 (27.6%) strongly agree.

4.4.2 Subjective Norm

Table 4.17: Statistical Data of Subjective Norm

	SN1		SN2		SN3		SN4		SN5		SN6	
	f	%	f	%	f	%	f	%	f	%	f	%
Strongly Disagree	3	0.8	6	1.6	15	3.9	12	3.1	6	1.6	6	1.6
Disagree	6	1.6	12	3.1	11	2.9	9	2.3	12	3.1	6	1.6
Somewhat Disagree	14	3.6	12	3.1	18	4.7	21	5.5	17	4.4	13	3.4
Neutral	37	9.6	32	8.3	25	6.5	37	9.6	50	13.0	40	10.4
Somewhat Agree	85	22.1	99	25.8	106	27.6	101	26.3	70	18.2	84	21.9
Agree	145	37.8	142	37.0	132	34.4	132	34.4	149	38.8	129	33.6
Strongly Agree	94	24.5	81	21.1	77	20.1	72	18.8	80	20.8	106	27.6
Total	384	100.0	384	100.0	384	100.0	384	100.0	384	100.0	384	100.0

SN1 = Due to the severity of the covid-19 pandemic, I use online shopping on purpose.
SN2 = Due to the severity of the covid-19 pandemic, I have to use online shopping.
SN3 = Due to influence from reference group (friends, family, colleagues), I changed to online shopping.
SN4 = Due to the propaganda from Government, I chose to online shopping.
SN5 = Due to communication messages such as "Stay at Home" on social medias, I chose to online shopping.
SN6 = I chose online shopping because I find it is essential by myself.

Source: Developed from research

Table 4.17 shows the statistical data of subjective norm, this part we have used six questions in google form. The first question is "Due to the severity of the covid-19 pandemic, I use online shopping on purpose.", which have 3 (0.8%) respondents strongly disagree, 6 (1.6%) respondents disagree, 14 (3.6%) respondents somewhat disagree, 37 (9.6%) respondents neutral, 85 (22.1%) respondents somewhat agree, 145 (37.8%) respondents agree and 94 (24.5%) strongly agree.

Second question is "Due to the severity of the covid-19 pandemic, I have to use online shopping.", which have 6 (1.6%) respondents strongly disagree, 12 (3.1%) respondents

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disagree, 12 (3.1%) respondents somewhat disagree, 32 (8.3%) respondents neutral, 99 (25.8%) respondents somewhat agree, 142 (37.0%) respondents agree and 81 (21.1%) strongly agree.

Third question is "Due to influence from reference group (friends, family, colleagues), I changed to online shopping.", which have 15 (3.9%) respondents strongly disagree, 11 (2.9%) respondents disagree, 18 (4.7%) respondents somewhat disagree, 25 (6.5%) respondents neutral, 106 (27.6%) respondents somewhat agree, 132 (34.4%) respondents agree and 77 (20.1%) strongly agree.

Fourth question is "Due to the propaganda from Government, I chose to online shopping.", which have 12 (3.1%) respondents strongly disagree, 9 (2.3%) respondents disagree, 21 (5.5%) respondents somewhat disagree, 37 (9.6%) respondents neutral, 101 (26.3%) respondents somewhat agree, 132 (34.4%) respondents agree and 72 (18.8%) strongly agree.

Fifth question is "Due to communication messages such as "Stay at Home" on social medias, I chose to online shopping.", which have 6 (1.6%) respondents strongly disagree, 12 (3.1%) respondents disagree, 17 (4.4%) respondents somewhat disagree, 50 (13.0%) respondents neutral, 70 (18.2%) respondents somewhat agree, 149 (38.8%) respondents agree and 80 (20.8%) strongly agree.

Sixth question is "I chose online shopping because I find it is essential by myself.", which have 6 (1.6%) respondents strongly disagree, 6 (1.6%) respondents disagree, 13 (3.4%) respondents somewhat disagree, 40 (10.4%) respondents neutral, 84 (21.9%) respondents somewhat agree, 129 (33.6%) respondents agree and 106 (27.6%) strongly agree.

4.4.3 Behavior Control

Table 4.18: Statistical Data of Behavior Control

	BC1		BC2		BC3		BC4	
	f	%	f	%	f	%	f	%
Strongly Disagree	3	0.8	3	0.8	3	0.8	6	1.6
Disagree	3	0.8	6	1.6	6	1.6	13	3.4
Somewhat Disagree	10	2.6	10	2.6	4	1.0	10	2.6
Neutral	32	8.3	9	2.3	25	6.5	33	8.6
Somewhat Agree	106	27.6	117	30.5	102	26.6	69	18.0
Agree	116	30.2	143	37.2	155	40.4	149	38.8
Strongly Agree	114	29.7	96	25.0	89	23.2	104	27.1
Total	384	100.0	384	100.0	384	100.0	384	100.0

BC1 = Online shopping is a useful way to reduce the risk of infection from crowd exposure in the Covid- 19 pandemic.

BC2 = It is an appropriate way to ensure the requirement of restricting crow exposure from the Government in the Covid-19 pandemic.

BC3 = Online shopping is a suitable way of quickly responding to customers' requirements.

BC4 = It is a convenient way for customers in the Covid-19 pandemic.

Source: Developed from research

Table 4.18 shows the statistical data of behavior control, this part we have used four questions in google form. The first question is "Online shopping is a useful way to reduce the risk of infection from crowd exposure in the Covid- 19 pandemic.", which have 3 (0.8%) respondents strongly disagree, 3 (0.8%) respondents disagree, 10 (2.6%) respondents somewhat disagree, 32 (8.3%) respondents neutral, 106 (27.6%) respondents somewhat agree, 116 (30.2%) respondents agree and 114 (29.7%) strongly agree.

Second question is "It is an appropriate way to ensure the requirement of restricting crow exposure from the Government in the Covid-19 pandemic.", which have 3 (0.8%) respondents strongly disagree, 6 (1.6%) respondents disagree, 10 (2.6%) respondents

somewhat disagree, 9 (2.3%) respondents neutral, 117 (30.5%) respondents somewhat agree, 143 (37.2%) respondents agree and 96 (25.0%) strongly agree.

Third question is "Online shopping is a suitable way of quickly responding to customers' requirements.", which have 3 (0.8%) respondents strongly disagree, 6 (1.6%) respondents disagree, 4 (1.0%) respondents somewhat disagree, 25 (6.5%) respondents neutral, 102 (26.6%) respondents somewhat agree, 155 (40.4%) respondents agree and 89 (23.2%) strongly agree.

Fourth question is "It is a convenient way for customers in the Covid-19 pandemic.", which have 6 (1.6%) respondents strongly disagree, 13 (3.4%) respondents disagree, 10 (2.6%) respondents somewhat disagree, 33 (8.6%) respondents neutral, 69 (18.0%) respondents somewhat agree, 149 (38.8%) respondents agree and 104 (27.1%) strongly agree.

4.4.4 Trust

Table 4.19: Statistical Data of Trust

	T1		T2		T3		T4		T5	
	f	%	f	%	f	%	f	%	f	%
Strongly Disagree	13	3.4	11	2.9	6	1.6	9	2.3	10	2.6
Disagree	20	5.2	27	7.0	26	6.8	21	5.5	14	3.6
Somewhat Disagree	34	8.9	18	4.7	27	7.0	31	8.1	41	10.7
Neutral	34	8.9	17	4.4	24	6.3	35	9.1	32	8.3
Somewhat Agree	77	20.1	83	21.6	106	27.6	82	21.4	90	23.4
Agree	132	34.4	148	38.5	127	33.1	139	36.2	127	33.1
Strongly Agree	74	19.3	80	20.8	68	17.7	67	17.4	70	18.2
Total	384	100.0	384	100.0	384	100.0	384	100.0	384	100.0
T1 = I trust product quality when shopping online.										
T2 = I trust service quality when shopping online.										
T3 = I feel secure when providing personal information through business website.										
T4 = I trust the banking payment method when shopping online.										
T5 = I believe that online stores will execute my orders rightly.										

Source: Developed from research

Table 4.19 shows the statistical data of trust, this part we have used five questions in google form. The first question is "I trust product quality when shopping online.", which have 13 (3.4%) respondents strongly disagree, 20 (5.2%) respondents disagree, 34 (8.9%) respondents somewhat disagree, 34 (8.9%) respondents neutral, 77 (20.1%) respondents somewhat agree, 132 (34.4%) respondents agree and 74 (19.3%) strongly agree.

Second question is "I trust service quality when shopping online.", which have 11 (2.9%) respondents strongly disagree, 27 (7.0%) respondents disagree, 18 (4.7%) respondents somewhat disagree, 17 (4.4%) respondents neutral, 83 (21.6%) respondents somewhat agree, 148 (38.5%) respondents agree and 80 (20.8%) strongly agree.

Third question is "I feel secure when providing personal information through business website.", which have 6 (1.6%) respondents strongly disagree, 26 (6.8%) respondents disagree, 27 (7.0%) respondents somewhat disagree, 24 (6.3%) respondents neutral, 106 (27.6%) respondents somewhat agree, 127 (33.1%) respondents agree and 68 (17.7%) strongly agree.

Fourth question is "I trust the banking payment method when shopping online.", which have 9 (2.3%) respondents strongly disagree, 21 (5.5%) respondents disagree, 31 (8.1%) respondents somewhat disagree, 35 (9.1%) respondents neutral, 82 (21.4%) respondents somewhat agree, 139 (36.2%) respondents agree and 67 (17.4%) strongly agree.

Fifth question is "I believe that online stores will execute my orders rightly.", which have 10 (2.6%) respondents strongly disagree, 14 (3.6%) respondents disagree, 41 (10.7%) respondents somewhat disagree, 32 (8.3%) respondents neutral, 90 (23.4%) respondents somewhat agree, 127 (33.1%) respondents agree and 70 (18.2%) strongly agree.

4.4.5 Perceived Risks

Table 4.20: Statistical Data of Perceived Risks

	PR1		PR2		PR3		PR4		PR5	
	f	%	f	%	f	%	f	%	f	%
Strongly Disagree	14	3.6	14	3.6	11	2.9	3	0.8	11	2.9
Disagree	13	3.4	24	6.3	22	5.7	12	3.1	9	2.3
Somewhat Disagree	34	8.9	47	12.2	34	8.9	48	12.5	57	14.8
Neutral	36	9.4	25	6.5	44	11.5	31	8.1	42	10.9
Somewhat Agree	62	16.1	87	22.7	104	27.1	99	25.8	85	22.1
Agree	130	33.9	106	27.6	89	23.2	120	31.3	110	28.6
Strongly Agree	95	24.7	81	21.1	80	20.8	71	18.5	70	18.2
Total	384	100.0	384	100.0	384	100.0	384	100.0	384	100.0
PR1 = Products may not come to my expectation. PR2 = It is possible to buy low quality products. PR3 = Personal information may be leaked during online transaction. PR4 = It is possible to lost money due to unsafe online payment transaction. PR5 = It wastes useless time when waiting for delivery.										

Source: Developed from research

Table 4.20 shows the statistical data of perceived risks, this part we have used five questions in google form. The first question is "Products may not come to my expectation.", which have 14 (3.6%) respondents strongly disagree, 13 (3.4%) respondents disagree, 34 (8.9%) respondents somewhat disagree, 36 (9.4%) respondents neutral, 62 (16.1%) respondents somewhat agree, 130 (33.9%) respondents agree and 95 (24.7%) strongly agree.

Second question is "It is possible to buy low quality products.", which have 14 (3.6%) respondents strongly disagree, 24 (6.3%) respondents disagree, 47 (12.2%) respondents somewhat disagree, 25 (6.5%) respondents neutral, 87 (22.7%) respondents somewhat agree, 106 (27.6%) respondents agree and 81 (21.1%) strongly agree.

Third question is "Personal information may be leaked during online transaction.", which have 11 (2.9%) respondents strongly disagree, 22 (5.7%) respondents disagree, 34 (8.9%) respondents somewhat disagree, 44 (11.5%) respondents neutral, 104 (27.1%) respondents somewhat agree, 89 (23.2%) respondents agree and 80 (20.8%) strongly agree.

Fourth question is "It is possible to lost money due to unsafe online payment transaction.", which have 3 (0.8%) respondents strongly disagree, 12 (3.1%) respondents disagree, 48 (12.5%) respondents somewhat disagree, 31 (8.1%) respondents neutral, 99 (25.8%) respondents somewhat agree, 120 (31.3%) respondents agree and 71 (18.5%) strongly agree.

Fifth question is "It wastes useless time when waiting for delivery.", which have 11 (2.9%) respondents strongly disagree, 9 (2.3%) respondents disagree, 57 (14.8%) respondents somewhat disagree, 42 (10.9%) respondents neutral, 85 (22.1%) respondents somewhat agree, 110 (28.6%) respondents agree and 70 (18.2%) strongly agree.

4.4.6 Online Purchasing Behavior

Table 4.21: Statistical Data of Online Purchasing Behavior

	OPB1		OPB2		OPB3		OPB4	
	f	%	f	%	f	%	f	%
Strongly Disagree							2	0.5
Disagree							1	0.3
Somewhat Disagree	7	1.8			10	2.6		
Neutral	31	8.1	21	5.5	29	7.6	19	4.9
Somewhat Agree	76	19.8	75	19.5	47	12.2	69	18.0
Agree	151	39.3	136	35.4	160	41.7	144	37.5
Strongly Agree	119	31.0	152	39.6	138	35.9	149	38.8
Total	384	100.0	384	100.0	384	100.0	384	100.0

OPB1 = I always use online shopping method.
OPB2 = I prefer to use online shopping rather than goes to physical stores.
OPB3 = I will continue to do online shopping often.
OPB4 = I have plans to buy more products online in the future.

Source: Developed from research

Table 4.21 shows the statistical data of online purchasing behavior, this part we have used four questions in google form. The first question is "I always use online shopping method.", which have 7 (1.8%) respondents somewhat disagree, 31 (8.1%) respondents neutral, 76 (19.8%) respondents somewhat agree, 151 (39.3%) respondents agree and 119 (31.0%) strongly agree.

Second question is "I prefer to use online shopping rather than goes to physical stores.", which have 21 (5.5%) respondents neutral, 75 (19.5%) respondents somewhat agree, 136 (35.4%) respondents agree and 152 (39.6%) strongly agree.

Third question is "I will continue to do online shopping often.", which have 10 (2.6%) respondents somewhat disagree, 29 (7.6%) respondents neutral, 47 (12.2%) respondents somewhat agree, 160 (41.7%) respondents agree and 138 (35.9%) strongly agree.

Fourth question is "I have plans to buy more products online in the future.", which have 2 (0.5%) respondents strongly disagree, 1 (0.3%) respondent disagree, 19 (4.9%) respondents neutral, 69 (18.0%) respondents somewhat agree, 144 (37.5%) respondents agree and 149 (38.8%) strongly agree.

4.5 Validity and Reliability Test

Cronbach's Alpha was once again utilized to conduct the measurement in order to assess the validity and reliability of the study's overall results. Based on a poll of 384 respondents, we have the current number of respondents. The test's outcome is displayed in the table below.

Table 4.22: Cronbach's Alpha Analysis

Construct	Items	Cronbach's Alpha	Result
Attitude	5	0.847	Good
Subjective norm	6	0.784	Acceptable
Behavioral control	4	0.804	Good
Trust	5	0.846	Good
Perceived Risks	5	0.899	Good
Online purchase behavioral	4	0.741	Acceptable

Source: Developed from research

According to the table above, reliability values below 0.60 are considered bad, those between 0.70 and 0.80 are considered acceptable, and values over 0.80 are considered good (Salkind, N., 2015). Because the variable's Cronbach's Alpha strength was greater than 0.70 in this instance, the result displayed in the above table was acceptable.

Five questions were used to determine the attitude and Cronbach's Alpha result for this section was 0.847, which is good. As a result, the coefficients produced for the questions about the attitude are very good.

Next, to measure the subjective norm variable, we have used six questions and the result of the Cronbach's Alpha for this section is 0.784 which resulted as acceptable. Therefore, the coefficients produced for the questions about the subjective norm are good.

Besides, to measure the behavioral control variable, we have used four questions and the result of the Cronbach's Alpha for this section is 0.804 which resulted as good. Therefore, the coefficients produced for the questions about the behavioral control are very good.

Plus, to measure the trust variable, we have used five questions and the result of the Cronbach's Alpha for this section is 0.846 which resulted as good. Therefore, the coefficients produced for the questions about the trust are very good.

Then, to measure the perceived risks variable, we have used five questions and the result of the Cronbach's Alpha for this section is 0.899 which resulted as good. Therefore, the coefficients produced for the questions about the perceived risks are very good.

Lastly, four questions were used to determine the online purchase behavioral and the Cronbach's Alpha result for this section was 0.741, which is acceptable. As a result, the coefficients produced for the questions about the online purchase behavioral are good.

4.6 Normality Test

The normality test examines if the sample data are drawn from a population where data are regularly distributed. It is typically used to check whether the research's data adhere to the normal distribution.

Table 4.23: Table of Skewness and Kurtosis

Tests of Normality				
Variable	Skewness Score		Kurtosis Score	
	Statistic	Std. Error	Statistic	Std. Error
Attitude	-1.884	0.125	6.332	0.248
Subjective norm	-1.280	0.125	1.988	0.248
Behavioral control	-1.733	0.125	5.372	0.248
Trust	-1.403	0.125	1.480	0.248
Perceived Risks	-1.160	0.125	0.644	0.248

| Online purchase behavioral | -0.820 | 0.125 | 0.427 | 0.248 |

Source: Developed from research

Based on the study, all the variable records skewness under the acceptable range between -1.96 and +1.96 (Williams & Wilkins, 2005), which is -1.884, -1.280, -1.733, -1.403, -1.160 and -0.820 for attitude, subjective norm, behavioral control, trust, perceived risks and online purchase behavioral. Other than that, skewness's negative score shows the distribution of the data set tends to be skewed left. Among these variables, the independent variable which is attitude, subjective norm, behavioral control, trust, perceived risks and online purchase intention is closest with -1. It followed with the dependent variable which is online purchase behavioral. Therefore, this research could conclude that the independent and dependent variable of study records a right skewed with normal data.

Besides, all the independent variable of the study records a score of kurtoses such as attitude (6.332), subjective norm (1.988), behavioral control (5.372), trust (1.480), perceived risks (0.644) and online purchase behavioral (0.427).

Therefore, this research could conclude that all data for the variable of the study is normal distributed. In a nutshell, the researcher can summarize the normal distribution of study data due to satisfying the acceptable threshold of the normal distribution of data (-1.96 ≤ score of skewness ≤ +1.96).

4.7 Multivariate Analysis of Variance (MANOVA)

Table 4.24: Table of Multivariate Tests

Multivariate Tests[a]						
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.987	4768.925[b]	6.000	377.000	.000	.987
	Wilks' Lambda	.013	4768.925[b]	6.000	377.000	.000	.987

	Hotelling's Trace	75.898	4768.925[b]	6.000	377.000	.000	.987
	Roy's Largest Root	75.898	4768.925[b]	6.000	377.000	.000	.987
DAC	Pillai's Trace	.085	5.859[b]	6.000	377.000	.000	.085
	Wilks' Lambda	.915	5.859[b]	6.000	377.000	.000	.085
	Hotelling's Trace	.093	5.859[b]	6.000	377.000	.000	.085
	Roy's Largest Root	.093	5.859[b]	6.000	377.000	.000	.085
a. Design: Intercept + DAC							
b. Exact statistic							

Source: Developed from research

Based on the table 4.24, showing the Multivariate Tests result table. For this data, all the statistics test were significant with sig. p = 0.000 (which is less than 0.05). To find out whether all variables have differences or not, significant values can be seen from Wilks' Lambda level of significance sig. p = 0.000 (which is less than 0.05). Since the obtained significant value is 0.000 less than 0.05 (p<0.05), researchers can use multivariate analysis of variance (MANOVA) to determine whether there is a difference in online shopping behaviour during and after Covid-19 for attitude, subjective norms, perceived behavioural control, trust, perceived risk and online purchasing behavior. To find out more we need to look at the next table which is Tests of Between-Subjects Effects.

Table 4.25: Tests of Between-Subjects Effects

Tests of Between-Subjects Effects							
Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Attitude	2.449[a]	1	2.449	3.120	.078	.008
	Subjective norm	10.304[b]	1	10.304	12.052	.001	.031
	Behavioral control	1.753[c]	1	1.753	1.969	.161	.005
	Trust	.529[d]	1	.529	.363	.547	.001
	Perceived Risks	41.688[e]	1	41.688	25.319	.000	.062
	Online purchase behavioral	.242[f]	1	.242	.454	.501	.001

Intercept	Attitude	6783.809	1	6783.809	8642.921	.000	.958
	Subjective norm	6803.352	1	6803.352	7957.921	.000	.954
	Behavioral control	7137.143	1	7137.143	8017.391	.000	.955
	Trust	5964.851	1	5964.851	4090.219	.000	.915
	Perceived Risks	5090.497	1	5090.497	3091.706	.000	.890
	Online purchase behavioral	7868.667	1	7868.667	14788.894	.000	.975
DAC	Attitude	2.449	1	2.449	3.120	.078	.008
	Subjective norm	10.304	1	10.304	12.052	.001	.031
	Behavioral control	1.753	1	1.753	1.969	.161	.005
	Trust	.529	1	.529	.363	.547	.001
	Perceived Risks	41.688	1	41.688	25.319	.000	.062
	Online purchase behavioral	.242	1	.242	.454	.501	.001
Error	Attitude	299.831	382	.785			
	Subjective norm	326.578	382	.855			
	Behavioral control	340.059	382	.890			
	Trust	557.078	382	1.458			
	Perceived Risks	628.963	382	1.647			
	Online purchase behavioral	203.249	382	.532			
Total	Attitude	12061.720	384				
	Subjective norm	11817.611	384				
	Behavioral control	12769.000	384				
	Trust	11030.600	384				
	Perceived Risks	10836.760	384				
	Online purchase behavioral	14090.563	384				
Corrected Total	Attitude	302.280	383				
	Subjective norm	336.882	383				
	Behavioral control	341.812	383				
	Trust	557.607	383				
	Perceived Risks	670.652	383				
	Online purchase behavioral	203.491	383				

a. R Squared = .008 (Adjusted R Squared = .006)

b. R Squared = .031 (Adjusted R Squared = .028)

c. R Squared = .005 (Adjusted R Squared = .003)

d. R Squared = .001 (Adjusted R Squared = -.002)

e. R Squared = .062 (Adjusted R Squared = .060)

f. R Squared = .001 (Adjusted R Squared = -.001)

Source: Developed from research

4.8 Hypotheses Testing

This measurement is used in the hypothesis test section to assess the differences and connections between the independent and dependent variables. In order to test the dataset of difference and correlation in both variables, the researcher would be carrying out the manova and correlation result by using IBM SPSS technology. Each of the difference and relationships between both independent and dependent variables used to manova and correlation test are including attitude, subjective norm, behavioral control, trust, perceived risks, and online purchase behavioral.

4.8.1 Hypothesis 1

Hypothesis 1: There are significance differences between attitude, subjective norms, perceived behavioral control, trust, perceived risk and online purchasing behavior COVID-19 pandemic among university student.

Based on the table 4.25, look at the DAC, the significant value of the attitude variable is 0.078. Because the significant value is greater than 0.05, it can be concluded that there is no difference in online shopping during and after Covid-19. The second, sig. p value of subjective norms show that 0.001 is smaller than 0.05 (p<0.005) so there is a significant difference in online shopping during and after Covid-19. Next, for perceived behavioral control, the p value of 0.061 greater than 0.05 shows that there is no difference for this variable. In addition, for the value of sig. p for trust is 0.547. This means there is no difference in online shopping during and after Covid-19. Besides, for the variable perceived risk, the value of sig. p is 0.000 indicating that there is a significant difference for online shopping during and after Covid-19. Lastly, online purchasing behavior shown the sig. p value is 0.501, it can be concluded that there is no difference in online shopping during and after Covid-19.

To see the difference between subjective norms and perceived risk, can also be seen from the effect size by Cohen's. Both of these variables show a weak effect even though there is a significant difference. Subjective norms is 0.031 and perceived risk is 0.062. It is in the range of 0-0.20 which is a weak effect.

4.8.2 Hypothesis 2

Table 4.26: Table of Correlation for attitude and online purchasing behavior

		Online Purchasing Behavior
Attitude	Pearson Correlation	.174**
	Sig. (2-tailed)	.001

Source: Developed from research

Hypothesis 2: There is significant relationship between attitude and online purchasing behavior among university students.

Based on the result shown in Table 4.26 above, the Pearson correlation coefficient value of the relative advantage factor is 0.174. It can be considered that the factor of relative advantage factor has a weak positive relationship between attitude and online purchasing behavior. Likewise, the p-value was 0.001 shown in Table 4.7.2, which is smaller than 0.05. Therefore, it indicates that there is significant relationship between the variables. Based on this result, hypothesis H2 accepted and rejected the null hypothesis.

4.8.3 Hypothesis 3

Table 4.27: Table of Correlation for subjective norms and online purchasing behavior

		Online Purchasing Behavior
Subjective	Pearson Correlation	.313**
Norms	Sig. (2-tailed)	.000

Source: Developed from research

Hypothesis 3: There is significant relationship between subjective norms and online purchasing behavior among university students.

Based on the result shown in Table 4.27, the Pearson correlation coefficient value of the relative advantage factor is 0.313. It can be considered that the factor of relative advantage factor has a weak positive relationship between subjective norms and online purchasing behavior. Likewise, the p-value was 0.000 shown in Table 4.7.3, which is smaller than 0.05. Therefore, it indicates that there is significant relationship between the variables. Based on this result, hypothesis H3 accepted and rejected the null hypothesis.

4.8.4 Hypothesis 4

Table 4.28: Table of Correlation for behavioral control and online purchasing behavior

		Online Purchasing Behavior
Behavioral Control	Pearson Correlation	.296**
	Sig. (2-tailed)	.000

Source: Developed from research

Hypothesis 4: There is significant relationship between behavioral control and online purchasing behavior among university students.

Based on the result shown in Table 4.28 above, the Pearson correlation coefficient value of the relative advantage factor is 0.296. It can be considered that the factor of relative advantage factor has a weak positive relationship between behavioral control and online purchasing behavior. Likewise, the p-value was 0.000 shown in Table 4.7.4 which is smaller than 0.05. Therefore, it indicates that there is significant relationship between the variables. Based on this result, hypothesis H4 accepted and rejected the null hypothesis.

4.8.5 Hypothesis 5

Table 4.29: Table of Correlation for trust and online purchasing behavior

		Online Purchasing Behavior
Trust	Pearson Correlation	.190[**]
	Sig. (2-tailed)	.000

Source: Developed from research

Hypothesis 5: There is significant relationship between trust and online purchasing behavior among university students.

Based on the result shown in Table 4.29 above, the Pearson correlation coefficient value of the relative advantage factor is 0.190. It can be considered that the factor of relative advantage factor has a weak positive relationship between trust and online purchasing behavior. Likewise, the p-value was 0.000 shown in Table 4.7.5 which is smaller than 0.05. Therefore, it indicates that there is significant relationship between the variables. Based on this result, hypothesis H5 accepted and rejected the null hypothesis.

4.8.6 Hypothesis 6

Table 4.30: Table of Correlation for Perceived Risk and Online Purchasing Behavior

		Online Purchasing Behavior
Perceived Risk	Pearson Correlation	-.083[**]
	Sig. (2-tailed)	.103

Source: Developed from research

Hypothesis 6: There is significant relationship between perceived risk and online purchasing behavior among university students.

Based on the result shown in Table 4.30 above, the Pearson correlation coefficient value of the relative advantage factor is -0.083. It can be considered that the factor of relative

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advantage factor has a weak negative relationship between perceived risk and online purchasing behavior. But, the p-value was 0.103 shown in Table 4.7.6, which is larger than 0.05. Therefore, it indicates that there is not significant relationship between the variables. Based on this result, hypothesis H6 rejected and accepted the null hypothesis.

4.8 Summary / Conclusion

The results of the data analysis using the Statistical Package for Social Science (SPSS) version 26 are covered in the final section of this chapter. Reliability analysis, and Pearson correlation analysis are the metrics employed. Looking at the overall analysis part of this chapter, the entire measurement tool used in the questionnaire of this study is accurate after data analysis and statistical testing. This section is illustrated by focusing on the research analysis to see the frequency and percentage of the respondents' background, the results of the descriptive analysis data, and the findings of the survey. Next, the researchers also used SPSS software to measure the accuracy data of Cronbach's alpha coefficient. The resulting value of the correlation coefficient obtained from a Pearson correlation data set defines the relationship between the independent and dependent variables in terms of non-normal results explained by the normality test. In addition, the researchers present more comprehensive results discussed further in the next section.

CHAPTER 5
DISCUSSION AND CONCLUSION

5.1 Introduction

In this chapter, discussions will be held on key findings, implications, research constraints, and recommendations for future research. In section 5.1, the key findings of the study are explained. There are tables that sum up the outcome of the testing of hypotheses that will be explained in section 5.2. The main results and discussion of the hypothesis that was developed to examine the relationship between attitude, subjective norms, perceived behavioral control, trust, perceived risk and online purchasing behavior.

Section 5.3 is about the study's consequences. Researchers have some consequences in this research that will be clarified in this section by doing this study. Section 5.4 is about the study's limitations. This study was performed face-to-face and limitations occur here that are related to time constraints. Moreover, when responding to the questionnaire and also the constraint, the extent of the respondent's region is unable to define the truthfulness of the respondents. In section 5.5, a proposal for future research is discussed. Finally, in section 5.6, the conclusion of this study is discussed.

5.2 Key Findings

The main objective of this study is to identify a significance difference and the relationship between attitude, subjective norms, perceived behavioral control, trust, perceived risk and online purchasing behavior in COVID-19 pandemic among university students. Based on the results in chapter 4 the researchers agreed that only 2 variables have significant different which is subjective norms and perceived risk. While attitude, perceived behavioral control, and trust with online purchasing behavior there are no significant difference in Covid-19 pandemic. For the relationship, all the independent variables have a significant relationship but only perceived

risk have not significant relationship. Table 5.1 exhibits the summary of the results regarding the objectives.

Table 5.1: Findings of the Result

Research Question and Objective	Result	Findings
RQ 1: Is there significance difference between attitude, subjective norms, perceived behavioral control, trust, perceived risk and online purchasing behavior in COVID-19 pandemic among university students? **RO 1:** To identify the significance difference between attitude, subjective norms, perceived behavioral control, trust, perceived risk and online purchasing behavior in COVID-19 pandemic among university students.	**Attitude** - $p > 0.005$ $p = 0.078$ **Subjective norms** - $p < 0.005$ $p = 0.001$ **Perceived behavioral control** - $p > 0.005$ $p = 0.161$ **Trust** - $p > 0.005$ $p = 0.547$ **Perceived risk** - $p < 0.005$ $p = 0.000$ **Online purchasing behavior** - $p > 0.005$ $p = 0.501$	- There are significance differences between subjective norms and perceived risk in COVID-19 pandemic among university students. - There is no significant difference between attitude, perceived behavioral control, trust, and online purchasing behavior in COVID-19 pandemic among university students.
RQ 2: What is the relationship between attitude and online purchasing behavior among university students? **RO 2:** To determine a relationship between attitude and online purchasing behavior among university students.	$r = 0.174$ $p = 0.001$ Weak positive relationship	There is significant relationship between attitude and online purchasing behavior among university students.
RQ 3: What is the relationship between subjective norms and online	$r = 0.313$ $p = 0.000$	There is significant relationship between subjective norms and

purchasing behavior among university students? **RO 3:** To determine a relationship between subjective norms and online purchasing behavior among university students.	Weak positive relationship	online purchasing behavior among university students.
RQ 4: What is the relationship between perceived behavioral control and online purchasing behavior among university students? **RO 4:** To determine a relationship between perceived behavioral control and online purchasing behavior among university students.	r = 0.296 p = 0.000 Weak positive relationship	There is significant relationship between behavioral control and online purchasing behavior among university students.
RQ 5: What is the relationship between trust and online purchasing behavior among university students? **R0 5:** To determine a relationship between trust and online purchasing behavior among university students.	r = 0.190 p = 0.000 Weak positive relationship	There is significant relationship between trust and online purchasing behavior among university students.
RQ 6: What is the relationship between perceived risk and online purchasing behavior among university students? **RO 6:** To determine a relationship between perceived risk and online purchasing behavior among university students.	r = -0.083 p = 0.103 Weak negative relationship	There is not significant relationship between perceived risk and online purchasing behavior among university students.

5.3 Discussion

5.3.1 Hypothesis 1: There are significance difference between attitude, subjective norms, perceived behavioral control, trust, perceived risk and online purchasing behavior in Covid-19 pandemic among university students.

According to the results, attitudes is no significant difference in online purchasing behaviour in Covid-19 pandemic among university students. This is because the significant value of the attitude variable is 0.078. Since the significant value is greater than 0.05, it can be concluded that there is no difference in online shopping during and after COVID-19. Previous research backs up this finding (such as Long and Khoi, 2020; Hamdah et al., 2020; Huynh & Nguyen, 2020). Because students with a fearful attitude always try to avoid potential damage with progressive awareness, there is no significant difference in online purchasing behaviour during and after the COVID-19 pandemic. Students continue to use online shopping after the COVID-19 pandemic because they have a positive attitude toward avoiding the risk of infection and strong emotions regarding COVID-19 concerns. Students are hesitant to make purchases in physical stores after COVID-19 for fear of becoming ill, preferring to shop online easily from the comfort of their homes. Closures, market unavailability, health risks, and time savings are the primary reasons for students to shop online during and after COVID-19. As a result, attitudes do not differ significantly because, in the face of unprecedented problems and constraints, students tend to use online shopping platforms after COVID-19 as an alternative way to buy their daily life necessities. The findings concluded that students discovered a convenient, quick, and dependable method of shopping under COVID-19 conditions. Students prefer to shop online because it is relevant to their interests and hobbies. Students, as young adaptors, prefer to shop online because it is related to their interests and hobbies, and it is an appealing, safe, and suitable shopping medium where they can search freely to find and associate what they want, according to their attitudes and perceptions.

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Next, subjective norms. The significant value of the subjective norms variable is shows 0.001 is smaller than 0.05 (p<0.005) so there is a significant difference in online shopping during and after Covid-19. This finding is supported by the research of S Akter, T Ashrafi, and V Waligo, et al (2021). The study demonstrates that the COVID-19 pandemic has a strong influence on subjective norms for online shopping behaviour, confirming the perceived threat effect of the infectious syndrome on compliance with public norms. Peer pressure to conform to social norms, such as social distancing, can create barriers to health and safety risks in the community during the COVID-19 pandemic. Furthermore, during a pandemic, the public's compliance with protective behaviours such as face coverings and social isolation is the main driver for maintaining low levels of mass infection. Peer pressure is primarily responsible for the development of preventive behaviour because people who violate the norm face blame and odium from those around them. People learn and adopt a heuristic progression to adopt normative behaviour, especially in uncertain situations (Eidelman & Crandall, 2009).

Next, perceived behavioral control. The significant value of the perceived behavioral control is shows 0.161 is bigger than 0.05 (p<0.005) so there is no significant difference in online shopping during and after covid-19. According to (Bulsara and Vaghela,2020), in order to maximize effective action in context of e-commerce, the individual must capable of handling and controlling their own information technology during online shopping process occurred which bring to the meaning of if a consumer want to use online shopping they must first learn or have knowledge on how to use online shopping. In the context for university students, most of university student were already have the knowledge and well-known how to operate online shopping even before the covid-19 pandemic. Hence the reason why there were no significant difference between during and after covid-19 pandemic due to their awareness of using online shopping as their main e-commerce site. Perceived behavioural control in online shopping is

defined as the consumer's perception of the necessary knowledge and available resources to carry out the online shopping process (Lin, 2007).

Next, trust. The significant value of the trust is shown 0.547 which is bigger than 0.05 (p<0.005). This means there is no difference in online shopping during and after Covid-19. Based on (Halim and Karsen, 2020) Trust in online transactions is a very important factor because it is the willingness of the parties to exchange money and goods without direct interaction. Basically, trust plays a special and most important role in influencing someone when doing online purchasing or online shopping (Yet Mee et al.,2019). The significant difference were showing no difference because of most of the university student were already have their own favourable online shopping website or person whenever they were decide on buying any product from online shopping even before the covid-19 pandemic. This shows that trust has played its part on how consumer manage to do online shopping even if they don't know very well the seller.

Lastly is perceived risk. The significant value of perceived risk is 0.000. Because the significant value is less than 0.05 (p<0.05), it can be concluded that there is significant difference in online shopping during and after Covid-19. After the covid-19, people go to physical stores because it is safer to shop. According to Catherine (2022) offline shopping ranked higher in terms of shopping experience due to the enjoyment it can provide with in-person, tangible attributes such as an aesthetic store or friendly service. It propose that this will hold true when consumers feel comfortable to shopping offline. During Covid-19, online purchases have increased and in the post-Covid-19 people are increasingly going to physical stores because of concerns about the perceived risks when using online purchases.

5.3.2 Hypothesis 2: There is significant relationship between attitude and online purchasing behavior among university students**.**

From the study, attitude has positive relationship with online purchase behaviour among university student, that effect before and after Covid-19 in Malaysia. From the result of correlation test, the value is 0.174, at p is 0.001 (p<0.05). Therefore, hypothesis 2 is accepted.

Based on research question 2, the study concludes that there is a positive relationship between attitudes and online purchasing behavior. This is supported by Akar and Dalgic (2018); Lim et al. (2016) confirmed that attitudes have a positive effect on actual online purchasing behavior. It implies that during an epidemic, customers are more likely to make online purchases (Lim et al. 2016; Rehman et al. 2019; Singh and Srivastava 2018). According to the study Ozt € urk € (2020), all consumers around the world are changing their purchasing habits due to health concerns, anxiety, and closure. Consumers' perceptions of online shopping influence their willingness to purchase products or services during the pandemic. Therefore, the researchers defined attitudes as having a positive relationship with online purchasing behavior during the occurrence and spread of Covid-19.

5.3.3 Hypothesis 3: There is a significant relationship between subjective norms and online purchasing behavior among university students.

From the study, subjective norms have positive relationship with online purchasing behavior among university student on Covid-19 pandemic in Malaysia. From the result of correlation test, the value is 0.313, at p is 0.000 (p<0.05). Therefore, hypothesis 3 is accepted.

Based on research question 3, the study can conclude that there is positive relationship between subjective norms and online purchasing behavior. This is supported by (Ha et al., 2021; Wen et al., 2020; Ha, 2020; Rana & Islam, 2019) subjective norms have a significant impact on consumer intentions in a number of emerging economies, including Malaysia,

Vietnam, India, and Saudi Arabia (see, e.g., Table 1). The findings of these studies, on the other hand, are similar to those of previous studies conducted in developed countries (Troise et al., 2020; Dharmesti et al., 2019; Chiu et al., 2018). The subjective norm is defined as student perceptions of online shopping in accordance with the referent group's opinions (such as friends or colleagues). Therefore, the researchers defined subjective norms("<University Student's Behavior Towards Online Shopping during COVID19 Pandemic in Lahore, Pakistan.pdf>,") as having a positive relationship with online purchasing behavior during the occurrence and spread of Covid-19.

5.3.4 Hypothesis 4: There is a significant relationship between perceived behavioral control and online purchasing behavior among university students.

From the study, perceived behavioral control has positive relationship with online purchase behaviour among university student on Covid-19 pandemic in Malaysia. From the result of correlation test, the value is 0.296, at p is 0.000 (p<0.05). Therefore, hypothesis 4 is accepted.

Based on question 4, the study can conclude that there is positive relationship between perceived behaviour control with online purchasing behaviour. This is supported by (Cheah, 2015) cognitive behaviour control determined consumers' perception toward the available resources and the knowledge that shows on how well consumer conduct online shopping process. The phenomenon that occurs among university student such as Covid-19 outbreak has make most university students in Malaysia more rely on online shopping rather than go out from their home due to the inability for them to go buy their necessity at physical stores.

5.3.5 Hypothesis 5: There is significant relationship between trust and online purchasing behavior among university students.

From the study, trust has positive relationship with online purchase behaviour among university students, that effect before and after covid-19 in Malaysia. From the result of correlation test, the value is 0.190, at p is 0.000 (p <0.05). Therefore, hypothesis 5 accepted.

Based on research question 5, the study can conclude that there is positive relationship between trust and online purchasing behaviour. This is supported by (Hsu, 2013; Rehman, 2019; Nghia, 2020) trust also had their own impact toward online purchase intention which has been stated by the researchers that the better how seller treat their customer, the better people trust on e-commerce platform. Being trusted by customer is almost impossible if the seller intends to use customer's trust and cheat behind them. The effectiveness of online banking also plays a specific role when some of the customers were still questioning the online banking security due to online scammer nowadays were at large such as lying about products qualities and such.

5.3.6 Hypothesis 6: There is a significant relationship between perceived risk and online purchasing behaviour among university students.

From the study, perceived risk has negative relationship with online purchasing behaviour among university student, that effect before and after Covid-19 in Malaysia. From the result of correlation test, the value is -0.083, at p is 0.103 (p>0.05). Therefore, hypothesis 6 is rejected.

Based on research question 6, the study can conclude that there is weak negative relationship between perceived risk and online purchasing behaviour. Perceived risk has not significant influence on online purchasing behavior. This support with the previous study by Yoshida (2014) argued that perceived risk has a negative influence on online purchase decisions. According to Wai (2019) product risk has a positive and considerable impact on online buying decisions, whereas perceived risk in the context of financial risk has a negative

and moderate impact. Therefore, this is further added by Suh's (2015) findings, perceived risk has no significant influence toward online shopping decision.

5.4 Implication of the study

Through the study, the implication of the study would be that even though after the Covid-19 pandemic, university student would more prefer online shopping more than traditional type of stores. Online seller nowadays knows how to attract their consumers on their own marketing strategy which led to subjective norms towards university student to buy on their online stores (Hamza and Saidalavi, 2014). Now people have multiple options to choose their products and services while they are shopping through an online platform (Rahman, Islam, Esha, Sultana, and Chakravorty, 2018). By using online shopping, consumers will have wide variations of choices to choose either the product inside or outside of the country based on how limitation the seller has rather than traditional store that were offered limited choice of product that sometimes could affect the consumers' behaviour when they found out that the product were out of stock.

Next, building a trust towards online shopping may affect current flow of online shopping because most of seller knows that trust is an important piece for consumer to keep purchasing their product. Trust in online transactions is a very important factor because it is the willingness of the parties to exchange money and goods without direct interaction (Halim and Karsen, 2020). Some of the university students in Malaysia already have their own favourite store to visit when they performing online shopping but in order to widen their choices, they need to visit other stores as well and that where seller need to build their trust with their new consumers.

Finally, based on the study, it is shown that subjective norms and perceived risk has shown significant changes during and after covid-19. Subjective Norms describe that

consumers are influenced by the people around them, from social media, etc., so they should switch to online shopping (Nittala, 2015; Nguyen and Thuy, 2020). By asking reference from their families and colleague, university students would make a better decision when performing to buy a new product in online shopping. This type of behaviour would be an important piece of puzzle in order to maximize their knowledge on buying and avoiding risk such as fraud and financial lost due to scam.

5.5 Limitation of the study

The study aims to explore the relationship between behavioural control, subjective norms and attitude with online purchasing intention that has cause an impact among university students in Malaysia.

For this study, there are some limitations that occur. The first limitation is that researcher was difficult to get cooperation from respondents to answer Google forms that has been given. Difficulties occur when many of the respondent who answer are not from the designated university that has been line by researcher. This is because this study was only focused on the use of Google Form method when some of the respondents that involve in this questionnaire where not student and were excluded from the questionnaire.

In addition, researchers also face problems during the data collection process. There is a time when data becomes problematic such as unreadable, error, invalid and missing. This is due to the questionnaire in google form had to be checked or were answered more than once. Furthermore, the limitation of the questionnaire that has been conduct were mostly ignored by the respondent. Some of the question doesn't even occur towards respondent during their usage of online shopping.

Finally, Finally, the researchers were able to resolve the crisis by repeating it and becoming more cautious produce valid results. the main problem that researcher had to face is

that the issues or topic itself as there weren't many studies on the impact of the covid-19 pandemic on online purchasing behaviour among university students in Malaysia at this time. The researcher had to search through various journals topics and relate them with each other to create a new issue that have to be studied in the future.

5.6 Recommendations / Suggestion for Future Research

Based on this study, researchers made the following recommendation for future research. Firstly, enhancing the questionnaires design. Most of the respondents only interested to answer the simple and straight forward questionnaires. Besides that, the respondents prefer to answer a questionnaire with less numbers of questions so that they can save their time. The researcher needs to review the questionnaire before distributing it to the potential respondent.

In addition, the researcher offers various recommendations to enhance the study's findings. In order to gather data at a particular site, researchers must plan ahead enough time. Time management was crucial in order to assign tasks and gather all sample respondents within a set time frame. Next, the researchers advise establishing a strategy that will enable respondents to complete the entire questionnaire that was provided. The respondent may honestly answer the question and has adequate time to read the passage, which helps the researcher get good results. The researchers can also assign a period for the respondent to complete the questionnaire while they are not working. It will influence the focus of their responses. Time management is very important in order to complete the study. Hence, the researcher finds it essential to manage the time given wisely. The researcher suggests creating a timeline so that each process of the study can be completed within the time frame given.

Last but not least, future researchers should focus on methods such as the qualitative method, which is a face-to-face method used during data collecting to explain the questions in the questionnaire. This method of data collection is more honest, and the respondents

responded favorably. As a result, future researchers may need to consider ideas to improve the study's outcomes.

5.7 Overall Conclusion of The Study

This present study explores about the impact of the Covid-19 Pandemic on online purchasing behavior among university students in Malaysia. In this study, there are five independent variables it is, attitudes, subjective norms, perceived behavioral control, trust and perceived risk which was included to examine the relationship with online purchasing behavior. To conduct this study, 384 respondents completed the questionnaires delivered to target respondents.

Additionally, analysis of the results of the questionnaire are included in chapter 4. To interpret the outcome, descriptive analysis and Pearson correlation were performed. The final results reveal that 4 independents which is attitude, subjective norms, perceived behavioral control and trust have significant relationship with dependent variable while 1 more independents variables which is perceived risk not have significant relationship with the dependent variable. We also use Multivariate analysis of Variance (MANOVA) to interpret the results of significant different between independent variables and dependent variables. The final results reveal that only 2 independent variables have significant differences in online shopping behavior which is subjective norms and perceived risk. While the other 3 independent variables of attitude, perceived behavioral control and trust has no differences on online shopping behavior in Covid-19 pandemic.

Lastly, in Chapter 5, the study presents the summarization of the result based on data analysis. The researcher also mentioned some of difficulties encountered while conducting the study and suggestion for the future research.

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APPENDIX A - DRAFT OF QUESTIONNAIRE

IMPACT OF THE COVID-19 PANDEMIC ON ONLINE PURCHASING BEHAVIOR AMONG UNIVERSITY STUDENTS.

Dear respondents,

We are final year students from Faculty of Entrepreneurship and Business (FKP) Universiti Malaysia Kelantan (UMK) pursuing Degree in Bachelor of Entrepreneurship (Commerce) with Honors. We were asked to carry out a research survey as part of our Final Year Project (FYP).

We are currently conducting a research survey regarding "Impact of the Covid-19 Pandemic on Online Purchasing Behavior among University Students".

Your participation with this study would be highly appreciated. We guarantee that your response will be kept fully private and used exclusively for academic purposes. Your private information won't be shared or used for anything but academic research.

This survey was prepared by:
MAK CHEE FONG (A19A0263)
MUHAMAD AIMAN BIN MOHD TUAH (A18A0300)
NUR ANISSYA BINTI MOHAMMAD NORALIM (A19A0528)
SITI NURSYAFIQAH BINTI MUHAMMAD (A19A0883)

SECTION A: DEMOGRAPHIC PROFILE

Please tick your response on the appropriate space provided below. / *Sila tandakan jawapan anda pada ruangan yang disediakan.*

1. Age / *Umur*
    a. < 21 years old / *tahun*
    b. 22 years old / *tahun*
    c. 23 years old / *tahun*
    d. > 24 years old / *tahun*

2. Gender / *Jantina*
    a. Male / *Lelaki*
    b. Female / *Perempuan*

3. Race / *Bangsa*
    a. Malay / *Melayu*
    b. Chinese / *Cina*
    c. Indian / *India*
    d. Other/ *Lain-lain:.......................*

4. University / *Universiti*
    a. UMK
    b. USM
    c. UITM
    d. UMP
    e. UIAM
    f. UMT
    g. UNISZA

5. Course of Study / *Kursus pengajian*

    a. Sciences

    b. Engineering and Technical

    c. Social Sciences

    d. Other / *Lain-lain*:............................

6. Year / *Tahun*

    a. Year 1 / *Tahun 1*

    b. Year 2 / *Tahun 2*

    c. Year 3 / *Tahun 3*

    d. Year 4 / *Tahun 4*

    e. Other / *Lain-lain:*.............................

7. Do you have experience online shopping?

    Adakah anda mempunyai pengalaman membeli-belah dalam talian?

    a. Yes / Ya
    b. No / Tidak

8. What online platform do you use for shopping?

    Apakah platform dalam talian yang anda gunakan untuk membeli-belah?

    a. Lazada

    b. Shopee

    c. Grab

    d. Mudah.my

    e. Carousell

    f. Other / Lain-lain:...........................

9. Describe the products you always purchase online.

   You may select more than one.

   a. Clothes

   b. Shoes

   c. Electronics

   d. Groceries

   e. Health and Beauty

   f. Food

   g. Other / Lain-lain:.............................

10. Is the frequency of your online shopping still the same during covid and after covid?

    Adakah kekerapan membeli-belah dalam talian anda masih sama semasa covid dan selepas covid?

    a. Yes / Ya

    b. No / Tidak

11. If (yes/no), please state the reason.

    Jika (ya/tidak), sila nyatakan sebabnya.

    ....

12. Frequency of online shopping before the covid-19 pandemic.

    Kekerapan membeli-belah dalam talian sebelum pandemik covid-19.

    a. Less than once a week / *Kurang dari sekali seminggu*

    b. Once a week / *Sekali seminggu*

    c. 2 - 5 times a week / *2 - 5 kali seminggu*

    d. 6 - 9 times a week / *6 - 9 kali seminggu*

    e. More than 10 times a week / *Lebih dari 10 kali seminggu*

13. Frequency of online shopping during the covid-19 pandemic.

    Kekerapan membeli-belah dalam talian semasa pandemik covid-19.

    a. Less than once a week / *Kurang dari sekali seminggu*

    b. Once a week / *Sekali seminggu*

    c. 2 - 5 times a week / *2 - 5 kali seminggu*

    d. 6 - 9 times a week / *6 - 9 kali seminggu*

    e. More than 10 times a week / *Lebih dari 10 kali seminggu*

14. Frequency of online shopping after the covid-19 pandemic.

    Kekerapan membeli-belah dalam talian selepas pandemik covid-19.

    a. Less than once a week / *Kurang dari sekali seminggu*

    b. Once a week / *Sekali seminggu*

    c. 2 - 5 times a week / *2 - 5 kali seminggu*

    d. 6 - 9 times a week / *6 - 9 kali seminggu*

    e. More than 10 times a week / *Lebih dari 10 kali seminggu*

SECTION B: INDEPENDENT VARIABLE

Based on your opinion, please indicate the most appropriate response with the scale given below. You could tick (/) between 1 until 7.

Berdasarkan pendapat anda, sila nyatakan pendapat anda dengan skala yang diberikan di bawah. Anda boleh menanda (/) antara 1 hingga 7.

> *1- Strongly Disagree / Sangat Tidak Setuju*
>
> *2- Disagree / Tidak Setuju*
>
> *3- Somewhat Disagree / Agak Tidak Setuju*
>
> *4- Neutral*
>
> *5- Somewhat Agree / Agak Setuju*
>
> *6- Agree / Setuju*
>
> *7- Strongly Agree / Sangat Bersetuju*

Attitude

1. Online shopping is economical because business websites provide products at a cheaper price.

   Membeli-belah dalam talian menjimatkan kerana laman web perniagaan menyediakan produk pada harga yang lebih murah.

2. Online shopping is convenient because business websites provide more offers on product delivery.

   Membeli-belah dalam talian mudah kerana tapak web perniagaan menyediakan lebih banyak tawaran untuk penghantaran produk.

3. Online shopping is easy to choose because business websites provide more product choices.

   Membeli-belah dalam talian mudah untuk dipilih kerana laman web perniagaan menyediakan lebih banyak pilihan produk.

4. Online shopping is guaranteed because business websites provide convenient return policies.

   Membeli-belah dalam talian dijamin kerana tapak web perniagaan menyediakan dasar pemulangan yang mudah.

5. Online shopping is safe because online shopping helps me not to stay in crowed place.

   Membeli-belah dalam talian selamat kerana membeli-belah dalam talian membantu saya untuk tidak tinggal di tempat yang berkokok.

Subjective Norm

1. Due to the severity of the covid-19 pandemic, I use online shopping on purpose.

   Disebabkan oleh keterukan pandemik covid-19, saya sengaja menggunakan membeli-belah dalam talian.

2. Due to the severity of the covid-19 pandemic, I have to use online shopping.

   Disebabkan oleh keterukan pandemik covid-19, saya terpaksa menggunakan membeli-belah dalam talian.

3. Due to influence from reference group (friends, family, colleagues), I changed to online shopping.

   Disebabkan pengaruh dari kumpulan rujukan (rakan, keluarga, rakan sekerja), saya tukar kepada membeli-belah dalam talian.

4. Due to the propaganda from Government, I chose to online shopping.

   Disebabkan propaganda dari kerajaan,, saya memilih untuk membeli belah dalam talian.

5. Due to communication messages such as "Stay at Home" on social medias, I chose to online shopping.

   Disebabkan mesej komunikasi seperti "Stay at Home" di media sosial, saya memilih untuk membeli-belah dalam talian.

6. I chose online shopping because I find it is essential by myself.

   Saya memilih membeli-belah dalam talian kerana saya mendapati ia penting oleh saya sendiri.

Perceived Behavioral Control

1. Online shopping is a useful way to reduce the risk of infection from crowd exposure in the Covid-19 pandemic.

   Membeli-belah dalam talian adalah cara yang berguna untuk mengurangkan risiko jangkitan daripada pendedahan orang ramai dalam pandemik Covid-19.

2. It is an appropriate way to ensure the requirement of restricting crom exposure from the Government in the Covid-19 pandemic.

   Ia adalah cara yang sesuai untuk memastikan keperluan menyekat pendedahan crom daripada Kerajaan dalam pandemik Covid-19.

3. Online shopping is a suitable way of quickly responding to customers' requirements.

   Membeli-belah dalam talian adalah cara yang sesuai untuk bertindak balas dengan cepat kepada keperluan pelanggan.

4. It is a convenient way for customers in the Covid-19 pandemic.

   Ia adalah cara yang mudah untuk pelanggan dalam pandemik Covid-19.

Trust

1. I trust product quality when shopping online.

   Saya percaya kualiti produk semasa membeli-belah dalam talian.

2. I trust service quality when shopping online.

   Saya percaya kualiti perkhidmatan semasa membeli-belah dalam talian.

3. I feel secured when providing personal information through business website.

   Saya berasa selamat apabila memberikan maklumat peribadi melalui laman web perniagaan..

4. I trust the banking payment method when shopping online.

   Saya mempercayai kaedah pembayaran perbankan semasa membeli-belah dalam talian.

5. I believe that online stores will execute my orders rightly.

   Saya percaya bahawa kedai dalam talian akan melaksanakan pesanan saya dengan betul.

Perceived Risks

1. Products may not come to my expectation.

   Produk mungkin tidak sesuai dengan jangkaan saya.

2. It is possible to buy low quality products.

   Adalah mungkin untuk membeli produk berkualiti rendah.

3. Personal information may be leaked during online transaction.

   Maklumat peribadi mungkin bocor semasa transaksi dalam talian.

4. It is possible to lost money due to unsafe online payment transaction.

   Ada kemungkinan kehilangan wang kerana transaksi pembayaran dalam talian yang tidak selamat.

5. It wastes useless time when waiting for delivery.

   Ia membuang masa yang tidak berguna apabila menunggu penghantaran.

SECTION C: DEPENDENT VARIABLE (ONLINE PURCHASE BEHAVIORAL)

Based on your opinion, please indicate the most appropriate response with the scale given below. You could tick (/) between 1 until 7.

Berdasarkan pendapat anda, sila nyatakan pendapat anda dengan skala yang diberikan di bawah. Anda boleh menanda (/) antara 1 hingga 7.

1- Strongly Disagree / Sangat Tidak Setuju

2- Disagree / Tidak Setuju

3- Somewhat Disagree / Agak Tidak Setuju

4- Neutral

5- Somewhat Agree / Agak Setuju

6- Agree / Setuju

7- Strongly Agree / Sangat Bersetuju

Online Purchase Behavioral

1. I always use online shopping method.
    Saya sentiasa menggunakan kaedah membeli-belah dalam talian.

2. I prefer to use online shopping rather than goes to physical stores.

    Saya lebih suka menggunakan beli-belah dalam talian daripada pergi ke kedai fizikal.

3. I will continue to do online shopping often.

    Saya akan terus melakukan pembelian dalam talian dengan kerap.

4. I have plans to buy more products online in the future.

    Saya mempunyai rancangan untuk membeli lebih banyak produk dalam talian pada

    masa hadapan.

APPENDIX B – GANTT CHART

WEEK / TASK	1	2	3	4	5	6	7
Briefing for PPTA 1	■						
Discussion and draft the topic, issues, research objective and questions	■						
Draft submitted		■					
First meeting session with SV via google meet to correct the draft of chapter 1			■				
1st correction chapter 1			■				
Chapter 1 submission with synthesis literature review			■				
2nd Correction chapter 1				■			
Writing for chapter 2				■			
1st correction chapter 2				■			
Writing for chapter 3 and draft the questionnaire					■		
Submit Research Proposal						■	
1st and 2nd correction of proposal						■	
Presentation of Proposal							■

FACULTY OF ENTREPRENEURSHIP AND BUSINESS

WEEK / TASK	8	9	10	11	12	13	14
Briefing for PPTA 2	██						
Submit the draft of questionnaire to supervisor		██					
Questionnaire correction			██				
Distribute Questionnaire			██				
Run SPSS & Analyze Data				██			
Writing for Chapter 4				██			
Writing for Chapter 5					██		
Submit Report					██		
Make Correction					██		
Do the research paper						██	
Creating E-poster & E-Video						██	
Make correction						██	██
Submit Final Report							██
Colloquium							██

APPENDIX C – RESULT OF TURNITIN

Universiti Malaysia KELANTAN	**REKOD PENGESAHAN PENYARINGAN *TURNITIN*** ***VERIFICATION RECORD OF TURNITIN SCREENING***

Kod/Code*: ACS4112, ACS4113
Nama Kursus*/ Course Name:* Projek Penyelidikan (Perdagangan I),
Projek Penyelidikan (Perdagangan II)
Sesi/*Session:* 2022/2023
Semester: 7
Nama Program/*Name of Programme:* SAK
Fakulti/Pusat/*Faculty/Centre:* Fakulti Keusahawanan Dan Perniagaan/
Faculty of Entrepreneurship and Business

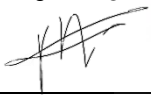**Pengesahan Penyaringan Plagiat/ *Verification of Plagiarism Screening***

Saya Mak Chee Fong (A19A0263), Muhamad Aiman Bin Mohd Tuah (A18A0300), Nur Anissya Binti Mohammad Noralim (A19A0528) dan Siti Nursyafiqah Binti Muhammad (A19A0883) dengan ini mengesahkan Kertas Projek Penyelidikan ini telah melalui saringan aplikasi turnitin. Bersama ini dilampirkan sesalinan laporan saringan Turnitin dengan skor persamaan sebanyak 28 %.

I Mak Chee Fong (A19A0263), Muhamad Aiman Bin Mohd Tuah (A18A0300), Nur Anissya Binti Mohammad Noralim (A19A0528) and Siti Nursyafiqah Binti Muhammad (A19A0883) hereby declare that I have screen my thesis using Turnitin Software. Enclosed here with a copy of verification of Turnitin screening with similarity score of 28 %.

Tajuk Kertas Kerja Penyelidikan/ *The Tittle of Research Project Paper*:

IMPACT OF THE COVID-19 PANDEMIC ON ONLINE PURCHASING BEHAVIOR AMONG UNIVERSITY STUDENTS.

Tandatangan/*Signature*

Nama Pelajar/*Student Name*: Mak Chee Fong
No.Matrik/*Matrix No*: A19A0263
Tarikh/*Date*: 29 JANUARY 2023

FACULTY OF ENTREPRENEURSHIP AND BUSINESS

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No.Matrik/*Matrix No*: A18A0300
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Nama Pelajar/*Student Name*: Nur Anissya Binti Mohammad Noralim
No.Matrik/*Matrix No*: A19A0528
Tarikh/*Date*: 29 JANUARY 2023

Tandatangan/*Signature*

Nama Pelajar/*Student Name*: Siti Nursyafiqah Binti Muhammad
No.Matrik/*Matrix No*: A19A0883
Tarikh/*Date*: 29 JANUARY 2023

Pengesahan Penyelia/*Supervisor*:   Tandatangan/*Signature:*   Tarikh/*Date:*

FINAL REPORT TURNITIN GROUP 34

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