



**CUSTOMER PURCHASING BEHAVIOUR IN
ONLINE SHOPPING DURING PANDEMIC
(COVID-19)**

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ABSTRACT

COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown and discovered somewhere around December 2019. COVID-19 is now a pandemic affecting many countries globally. Thus, it has affected all around the world especially economically, along with current events of staying at home, this shows the decreasing effects of going outside for traditional shopping. Hence, the community look towards online shopping and the rates of online shoppers has increase drastically. With different worries and opinions, many topics appears such as how the pandemic would affect the customers purchasing behaviour. Therefore, this study has two objectives. One is to determine the impact of factors, (e.g., trust, time, price, privacy, safety and security) on the intention of purchasing behaviour in online shopping platform. And the second one is to compare the customers purchasing behaviour in online shopping during pandemic based on gender. The study will be conducted in Politeknik Sultan Salahuddin Abdul Aziz Shah. The target population are students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah. The total of staffs is 426 people and a total of 4,730 students. The study will be carried out on 200 respondents. The method of collecting data is through quantitative method. With the lockdown and movement control order it has been stricter for any face-to-face activities. Therefore, the collection method used is “Google Form”. The findings of this study will contribute to bridging the gap in knowledge on the potential of using online shopping and where it might lead in the future.

Keywords: Customer Purchasing Behaviour, Online Shopping, Pandemic, Covid-19, Genders, Trust, Time, Price, Privacy, Safety & Security

ABSTRAK

COVID-19 adalah penyakit berjangkit yang disebabkan oleh coronavirus yang baru ditemui. Virus dan penyakit baru ini tidak diketahui dan dijumpai di suatu tempat sekitar Disember 2019. COVID-19 kini menjadi wabak yang menyerang banyak negara di seluruh dunia. Oleh itu, ia telah mempengaruhi seluruh dunia terutamanya dari segi ekonomi, bersama dengan kejadian semasa tinggal di rumah, ini menunjukkan kesan penurunan dari pergi ke luar untuk membeli-belah tradisional. Oleh itu, masyarakat memandang ke arah membeli-belah dalam talian dan kadar pembeli dalam talian meningkat secara drastik. Dengan kebimbangan dan pendapat yang berlainan, banyak topik muncul seperti bagaimana wabak itu mempengaruhi tingkah laku pembelian pelanggan. Oleh itu, kajian ini mempunyai dua objektif. Salah satunya adalah untuk menentukan kesan faktor, (seperti kepercayaan, masa, harga, privasi, keselamatan dan keselamatan) terhadap niat tingkah laku pembelian di platform membeli-belah dalam talian. Dan yang kedua adalah membandingkan tingkah laku pembelian pelanggan dalam membeli-belah dalam talian semasa pandemik berdasarkan jantina. Kajian akan dilakukan di Politeknik Sultan Salahuddin Abdul Aziz Shah. Populasi sasaran adalah pelajar dan kakitangan Politeknik Sultan Salahuddin Abdul Aziz Shah. Jumlah kakitangan adalah 426 orang dan seramai 4,730 pelajar. Kajian akan dilakukan terhadap 200 orang responden. Kaedah pengumpulan data adalah melalui kaedah kuantitatif. Dengan perintah penguncian dan kawalan pergerakan, lebih ketat bagi sebarang aktiviti tatap muka. Oleh itu, kaedah pengumpulan yang digunakan adalah "Google Form". Penemuan kajian ini akan menyumbang untuk merapatkan jurang pengetahuan mengenai potensi menggunakan membeli-belah dalam talian dan di mana ia mungkin membawa masa depan.

Kata kunci: Tingkah Laku Pembelian Pelanggan, Belanja Dalam Talian, Pandemik, Covid-19, Jantina, Kepercayaan, Masa, Harga, Privasi, Keselamatan & Keselamatan

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION/PREAMBLE

This chapter was explored of the recent outbreak of COVID-19 related to purchasing behaviour in online shopping during the pandemic. It is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic affecting many countries globally (WHO, 2020). Thus, it has affected all around the world especially economically, with the creation of Movement Control Order (MCO) here in Malaysia, it had increased the difficulty of movement from one place to another, for instance purchasing essential items such as foods products, water supplies, hygiene items and raw materials for companies to run manufacturing factories. Therefore, consumers have alternated to online shopping.

Online shopping is one of the commonly used mediums for convenient shopping. It is, in fact, a popular means of shopping among the Internet community (Bourlakis et al,2008, as cited in Rizwana, Irsa, Waqas, 2015). With up-and-coming e-commerce development, there is constant upgrade, and it causes change towards customer purchasing behaviour. There are many variables that can lead a customer's purchasing behaviour into buying or not towards a product. These factors can conclude to what can be affected towards purchasing behaviour, but which do impact the most? The constant change of impact of each variables plays a role into customer purchasing behaviour as it led customer into buying a product or not.

Consumer characteristics are driven by various types of features. Consumer shopping orientations, demographic variables, computer, internet knowledge and usage, consumer innovativeness and psychological variables (Lakshmi, 2016) This means that variables such as gender can be very impactful or the quite opposite and

any factors whether it be as small as an internet problem or as big as a world pandemic, it is a certain that there is an impact occurs.

As a citizen and a community, it increases the fear of going outside due to virus and the additional fear of “panic-purchasing” in the earlier stages of the pandemic. The Movement Control Order (MCO) was implemented as a preventive measure by the federal government of Malaysia in response to the Covid-19 pandemic in the country on 18 March 2020. The MCO is a general prohibition of mass movement and public gathering across the county for instance religious, sports, social and cultural activities. To enforce this prohibition, all business premises would be closed except for supermarket, public markets, groceries stores and convenience stores selling everyday necessities. Due to this, all members in the community are made to abide to follow order from the government. Before Malaysia announced the movement control order, supermarkets across the country began to see a surge in panic buying, and the supply of surgical masks everywhere was out of stock, causing prices to skyrocket.

With this, it led to customers to use more of online shopping platform as it is convenient and safe during this pandemic. Online shopping has been off the chart ever since the pandemic hits, On Sunday, 22 March 2020, The Star reported that only the head of the family is allowed to go out to buy daily necessities and medication as was announced by Senior Minister Datuk Seri Fadillah Yusof. With the new guidelines to prevent the spread of COVID-19, the rates of the brick-and-mortar shopping method had decreased, and this had affected the customer’s desire to shop and therefore they had alternate towards online shopping.

1.2 BACKGROUND OF STUDY

In the coming years, it is expected that growth of e-commerce will increase like never before with all the current technologies. The rate of online shopping is increasing beyond measure rate and this is driving e-commerce owner's crazy to keep their solid place in the online race (Haniska Roy,2020). That being said, this shows how determined e-commerce owners to understand online shopping even more. This cause e-commerce owner to raise their brows of what can be a factor for a customer to purchase a certain product, to understand their purchasing behaviour.

In March 2020, The Star reported that during the pandemic there was a lot of activities such as sports events, gatherings, religious, social, and cultural activities such as going out shopping were prohibited. Prime Minister Tan Sri Muhyiddin Yassin explain how all places of worship and business premises must be closed and that affected the whole dynamic of traditional consumer market. With the community's movement was restricted, their desire to traditional shop was limited as well, therefore many consumers and business owners alternate towards online shopping platform but this does raise a question of how the pandemic still would affect their behaviour towards online shopping.

Even when E-Commerce is already growing at an unprecedented rate it shows that it is already well established, but all had change when a global pandemic reached the globe early 2020. At this point of time, many shop owner and business owners were worried of the sudden change and see that e-commerce is the right alternative towards shopping. But as that may the right alternative it might not be the best. There are countless variables that can affect the customers' purchasing behaviour and which might be impactful towards it. Therefore, a study was conducted to bridge the gap.

1.3 PROBLEM STATEMENT

The Coronavirus had impacted the whole e-commerce of the world; it has changed the nature of the nature of business. According to research 52% of consumers avoiding going back brick and mortar shopping and crowded areas. Furthermore, 36% avoiding brick and mortar shopping until they get coronavirus vaccine. Overall e-commerce is growing rapidly because of the virus. (Anam Bhatti et al.,2020) This had increase customer's fear of going outside and contracted the virus.

Therefore, shoppers decide to move to a different alternative which is online shopping. Even with their desire was fulfilling to do some shopping, the doubts were still lurking around the online shoppers. Area that was worrying for online shoppers such as the safety of the delivery service, shoppers asking themselves it is safe. Online shoppers were worried that the shopping platform may be time-consuming, or even is the price going to be different that traditional shopping. These are the few first problem that came into the online shoppers' minds.

Reported by The Star, Senior Minister Datuk Seri Fadillah Yusof said, "Only the head of the family is allowed to go out to buy daily necessities and medication during the 14-day movement control order (MCO)". As a result, it increases the difficulty of movement from their homes to the supermarket to buy the necessities. With restriction of movement, this conclude that most consumer will turn their heads into online shopping. This create a big gap as there are endless variables that can put an impact towards purchasing behaviour such as safety of a platform to be used first time, the trust to have towards a product, the probability of time to be consumed and many more.

There are few studies conducted towards online purchasing behaviour, but they were minimal studies that were conducted in a Malaysia setting. However, there were none in particular was conducted on online purchasing behaviour during the COVID-19 pandemic and in Shah Alam hence providing a big gap of knowledge for e-commerce owners.

1.4 RESEARCH OBJECTIVES

- To determine the impact of factors (trust, time, price, privacy, safety and security) on the intention of purchasing behaviour in online shopping platform.
- To compare the customer purchasing behaviour in online shopping during pandemic based on gender.

1.5 RESEARCH QUESTIONS

- What determine the impact of factors (trust, time, price, privacy, safety and security) on the intention of purchasing behaviour in online shopping platform.
- What is the customer purchasing behaviour in online shopping during pandemic based on gender?

1.6 SCOPE OF STUDY

This research studied the customer purchasing behaviour in online shopping during the pandemic (COVID-19). It is observed among Politeknik Sultan Salahuddin Abdul Aziz Shah staff and students located in Shah Alam.

1.7 SIGNIFICANT OF STUDY

Online shopping has put itself on the digital world as it was widely use even much during the pandemic. It has been a hotspot platform for customers usage due to the risk of catching the virus from going outside. On an advantage, purchasing behaviour plays a role thus put a lot of reduction on risks of buying outside and remain quarantine for safety reasons. Although e-commerce has been around for a while, it still plays a role in the future. With the pandemic outbreak, the charts will skyrocket, and it will help the increase of e-commerce usage. Nonetheless, the factors that affects the purchasing behaviour still poses a large gap of uncertain knowledge that can changes the perspective of purchasing behaviours.

1.8 OPERATIONALIZED DEFINITIONS

Customer is an individual or business that purchases another company's goods or services. Customers are important because they drive revenues; without them, businesses have nothing to offer. Most public-facing businesses compete with other companies to attract customers, either by aggressively advertising their products or by lowering prices to expand their customer bases. (Investopedia,2020)

Purchasing is the organized acquisition of goods and services on behalf of the buying entity. Purchasing activities are needed to ensure that needed items are obtained in a timely manner and at a reasonable cost. A purchasing department is especially necessary in a manufacturing business, where large amounts of raw materials and components must be obtained on a recurring basis. (AccountingTools,2019)

Behaviour is every action by a person that can be seen or heard. Behaviour must be defined in a way that is both observable and measurable so that everyone working with the child has a good understanding of what the behaviour looks like and sounds like (Alberto & Troutman, 2003).

Purchasing Behaviour/Buying Behaviour refers to the actions taken (both on and offline) by consumers before buying a product or service. This process may include consulting search engines, engaging with social media posts, or a variety of other actions. It is valuable for businesses to understand this process because it helps businesses better tailor their marketing initiatives to the marketing efforts that have successfully influenced consumers to buy in the past. (DemandJump Blog,2020)

Online shopping is becoming increasingly popular for variety of reasons. There are certainly outside factors such as increasing gas prices, difficulty in getting to traditional stores and hassles often associated with shopping malls and other traditional stores to contribute to the increased interest in online shopping. (C.K. Sunitha and Dr. M. Edwin Gnanadhas, 2014)

1.9 SUMMARY CHAPTER

To summarize, with restriction of movement, this conclude that most consumer will turn their heads into online shopping. Hence, the study was to identify the most impacted factor towards customer purchasing behaviour and which factor impacted in both male and female perspectives. If so, what level of purchasing behaviour is applied in online shopping during the pandemic outbreak.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter was focused on the previous research regarding purchasing behaviours before the pandemic, and after pandemic to see the understanding more in purchasing behaviour especially in online shopping. Literature review helped researchers to gain data from primary and secondary sources on related areas of the topic.

2.2 THEORY

As Internet usage is increasing, so is online shopping particularly in those countries whose marketing infrastructures are well developed. Customers can shop at any time and have access to products not available in their geographic region (Mehrdad Salehi, 2012). With the pandemic is the highlight of 2020, this shows that the possibility of the rise of online shopping usage rather than brick-and-mortar shopping. Quoted by Olga Andrienko, “Since 52% of consumers are trying to implement social distancing, more people are now shopping online for a growing number of new product categories.”

Lakshmi. S (2016) mention in his research that personal characteristic is also one of a main factor that affect purchasing behaviour. Lakshmi S. quoted “Both gender groups get familiar with using the Internet.”, Lakshmi S. continued “Men are more familiar with using technology and their interest is bigger than women.” he stated in his research. V. Vijaya et al. (2017) stated that Man and women do have different set of characteristics. Each sex has a firmly entrenched characteristic with women showing more sensitivity, warmth, and apprehension than men but change depending on location, context and are influenced by a variety of social and cultural factors.

Through Dr Rizwana et al. (2015) research mention that the customer purchasing behaviour is determine by five factors: trust, convenience, time product variety and privacy as shown in Figure 1.0

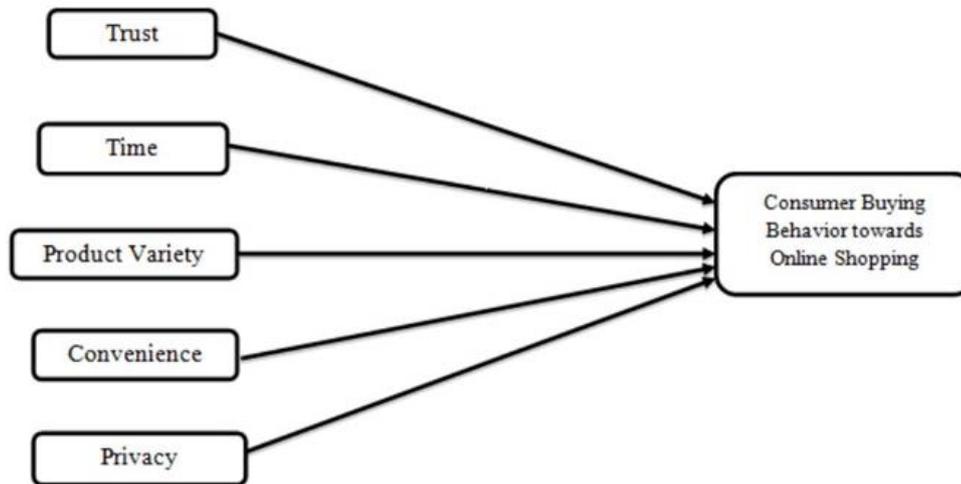


Figure 2. 1

Figure 2. 1 Dr Rizwana et al, 2015 Theoretical Model of the Study

In 2016, N Ramya and Dr. SA Mohamed Ali stated in their study that based on the model they used, “stimuli in the form of both the external environment and the elements of the marketing mix enter the buyer’s ‘black box’ and interact with the buyer’s characteristic and decision processes to produce a series of outputs in the form of purchasing behaviour.”

FIGURE 2.1: MODEL OF BUYER BEHAVIOUR

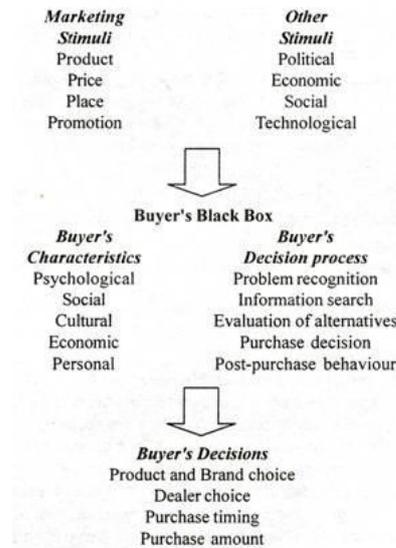


Figure 2. 2

Figure 2. 2 N Ramya et al. Model of Buyer Behaviour

2.3 ONLINE SHOPPING AND COVID-19

Sunitha and Edwin (2014), quoted “Online shopping is a process whereby consumers directly buy goods, service etc. from a web stores from the comfort of their house and shop as by sitting in front of the computer.” After a few years later, the landscape of Online Shopping has escalated into playing an important role in 2020 during the Covid-19 pandemic.

WHO (2020) stated that with the enforcement of social distancing, lockdown and other safety measures led to consumers to ramp up online shopping, social media use, etc. Later on, WHO also mention that with B2B (Business to Business) and B2C (Business to Consumer) online sales of physical goods have experienced a surge of demands in essential products such as medical supplies, household essentials and non-perishable foodstuffs. Hence, resulted into a spike in the online purchases of some products as well as increase demand for a wide range of digital services. This has caused several brick-and mortar businesses shifted resources to e-commerce.

Internet business have created more competitive environment, understanding features of online shoppers’ behaviours have been more important. Moreover, it should be analysed by online sellers that ‘why some still prefer not to buy online. (Lakshmi.S, 2016). Online Shopping has already been well-established since before

the pandemic hits early 2020. Andrienko, 2020, cited in Anam Bhatti, 2020, explains that coronavirus has impacted the whole e-commerce of the world and it has changed the nature of business. It is affected differently on different nature of products, means the impact of COVID-19 on several product is very high and, on some product, less impacted.

2.4 PURCHASING BEHAVIOUR

According to an article from MBA Skool, purchasing behaviour is an action which is the result of the attitudes, preferences, intentions and decisions made by the consumers in a marketplace before buying a product or a service. The study of consumer buying behaviour is an interdisciplinary subject area drawing widely from sociology, psychology, anthropology etc.



Figure 2. 3 MBA Consumer Buying Behaviour Process

With online group buying system, individuals enable to purchase products or services with a daily deal and for many different types (Erdogmus and Cicek, 2011, as cited in Mahjudin, Nurmawati, Indriana, 2019) The attitude and dynamic human behaviour affect consumer purchasing intention and this intention affect the behaviour of the consumers. Moreover, consumer purchase intention is a significant focus point of online buying behaviour and researcher deliberates on the consumer purchase intention and buying behaviour on online context (Vinay et al., 2020).

2.5 SAFETY & SECURITY

Consumers are always concerned and sensitive with payment or personal risk, privacy and security when considering online shopping (Hung, 2004 and Santouridis et al., 2012, cited in Chong, 2014). Online security concern varies over the product category bought online (Cha, 2011, cited in Tajalli, 2019).

One of the impacted variables that is most worrying for online shoppers is uncertainty risk or unwanted outcomes from online shopping. Consumers are less likely to make purchases online if they perceive a higher risk. The perception of risk associated with a company and their online presence can also affected by previous encounters and also affect their decisions to complete purchases without sensory perceptions available in traditional brick-and-mortar stores. (Mehrdad, 2012).

Consumer willingness to buy and patronize online store are affected by consumer's trust in giving personal information and security for payment through credit card transactions (Whysall, 2000, Chayapa and Cheng, 2011). With knowing the safety of a website or an online platform this decrease the risk of consumers to get scammed. Therefore, according to Chen and He, 2003, cited in Chayapa and Cheng, 2011 explains that customers tend to buy product and service from the seller who they trust, or brand that they are familiar with.

2.6 TIME

According to Berry, 2001, cited in George, 2012, retailers must offer their customers with convenient transaction in four way. Access convenience, which ensure

retail location and reliable operating hours. Search convenience, whereby products are in place with good measure for consumers to locate and pick up their desired products easily. Possession convenience, to have enough stock of products at any point in time to avoid disappointment. Lastly, Transaction convenience, which to maintain enough space for consumers to able to pay for their selected items without wasting much time.

One of the major issues people are dealing with is perceived time pressures. As a degree to which an individual finds himself lacking time as relative to the daily tasks of living. (Settle and Alreck,1991, cited in Dr Rizwana et al.,2015). As for individuals who works, they do not have time to scroll for products and scanning through shopping platforms. Therefore, with availability of a good website structure, it will be efficient to attract customers and help understanding the purchasing behaviour.

Certain shoppers often use their time to find the right product, right price, or even right brand. Since online stores offer customers with variety of products and services, it gives customers more chances to compare prices from different websites and find the products with lower prices than buying from local retail stores (Lim and Dubinsky,2004, cited in Chayapa and Cheng, 2011)

2.7 GENDER

Lakshmi. S (2016) mention in his research that personal characteristic is also one of a key factor that affect purchasing behaviour. Lakshmi S. quoted “Both gender groups get familiar with using the Internet.”, It continued with “Men are more familiar with using technology and their interest is bigger than women.” he stated in his research. Vijaya, Aparanjini and Lahari (2017) stated that men and women do have different set of characteristics. Each sex has a firmly entrenched characteristic with women showing more sensitivity, warmth, and apprehension than men but change depending on location, context and are influenced by a variety of social and cultural factors.

According to Rodgers and Harris (2003), cited in Sharul (2019), While in general women tend to dominate the shopping scene in offline establishments, but it is not the same for online shopping intention. Such gender differences had been highlighted in earlier research with the key conclusion that woman perceive online

purchasing as much riskier. The process of shopping is a mission for men. They do not like the process of shopping, but they love having something to be bought. It is a subtle difference but an important one. The biggest misconception is that men do not like shopping. Women they love shopping even when they have a deadline. Meanwhile, men shop and then they will leave. (Vijaya, Aparanjini, Lahari, 2017).

2.8 TRUST

The concept “trust’ is defined as the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party. (Mayer, Davis, Schoorman,1995, cited in Rizwana, Irsa, Waqas, 2015). The willingness of customers to buy from online store is greatly affected by consumer’s trust in giving their personal particulars and security for paying through credit card online. An easy way, an online seller can reduce concerns customers have regarding risk is to carry own brand name. (Korgaonkar & Karson, 2007, cited in Rizwana, Irsa, Waqas, 2015)

According to a study from Lakshmi, 2016, consumers’ trust to a provider or supplier results with becoming committed to the company. Trust issue is exceeding with a few successful transactions, after individuals start feel safe and believe that this supplier answers their needs and wants. On the other hand, provided information is another issue in terms of online shopping. Their decision is based on the information that provided by online retailer. Information issue not only important in terms of availability but it is also important in convenience and personalization concept. Website design, access to internet, access time and information also influence on behaviours of consumers.

2.9 CHAPTER SUMMARY

This chapter broadly explains the various ideas and studies on purchasing behaviour in online shopping before and during pandemic. It investigates the factors that determine the impactful of a driving force to purchasing behaviour especially during the pandemic. It is tricky for companies to understand the usage of online shopping platform especially to local who are new to technologies and e-commerce. However, the following factors explained the impact of the factors to understand further in customer purchasing behaviour.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter was defined the method will use to conduct this study. Researchers will explain how necessary data and information needed to address the research objective and questions. In this chapter, researchers also described the research design, data collection method, instrument study, followed by sampling technique and pilot test.

3.2 RESEARCH DESIGN

This research was conducted using quantitative method. An analysis of respondents' feedback determines the results. Quantitative method measured the data collected through polls, questionnaires, surveys or by manipulating pre-existing statistical data. Descriptive analysis included frequencies, percentage and mean, used to describe the factors that determine customers' purchasing behaviour in online shopping during the pandemic (Covid-19). This method focused on gathering numerical data and generalizing it across groups of people.

3.3 DATA COLLECTION METHOD

Quantitative method was used to collect data for this research study, by using questionnaire forms. For pilot test, it will be conducted with 30 respondents from Politeknik Sultan Salahuddin Abdul Aziz Shah. Since the lockdown, there is a lot of challenges for face-to-face distribution. Therefore, both pilot test and the questionnaires will be conducted through "Google Form". The structure of the questionnaire will be design as a close-ended question and using Likert scale. The questionnaire will be distributed to respondents online and face to face, at Politeknik Sultan Salahuddin Abdul Aziz Shah, Persiaran Usahawan, 40150 Shah Alam, Selangor. This questionnaire was distributed in October 2020.

3.4 RESEARCH INSTRUMENTS

The method that researchers was implemented in this study is quantitative method, questionnaire, and Likert scale. Questionnaire is one of the main instruments in this research, alongside with the respondents to get more information and records. Questionnaire are circulated among the students and lecturers located in Politeknik Sultan Salahuddin Abdul Aziz Shah, Persiaran Usahawan, Shah Alam. The questions will ask the students and lecturers are related to their purchasing behaviour in online shopping during the pandemic (Covid-19). There are four section in the survey conducted with a name of section A (General Question), B (Dependent variable), C (Independent variable) and D (Demographic Question).

3.4.1 SECTION A

Section A asked to answer few general questions to understand the respondent's knowledge on online shopping and understanding their customer behaviours.

3.4.2 SECTION B

Section B asked question regarding purchasing behaviour in online shopping among the online shoppers in Politeknik Sultan Salahuddin Abdul Aziz Shah.

3.4.3 SECTION C

Section C asked question regarding the independent variables such as time, trust, price, privacy, safety and security.

3.4.4 SECTION D

Section D asked demographic information of the respondents where researchers asked question in terms of age, income, gender and lastly the status of the respondent either the respondents were staff or students in Politeknik Sultan Salahuddin Abdul Aziz Shah.

3.5 SAMPLING TECHNIQUE

There are two types of sampling technique which are probability and non-probability. Probability sampling involves random selection, allowing to make statistical inferences about the whole group. Non-probability sampling involves non-random selection based on convenience or other criteria. This technique uses non-random selection method to choose the subject of the research. Normally, in this technique the researcher chooses the subject based on certain causes.

3.6 PILOT TEST

Test pilot study or case refers to the beginning or the first trial before the actual review. A pilot test was conducted using a similar set of items to the set needed to be done. Researchers conducted a pilot study to assess the suitability of the question before distribution of actual questionnaire. The pilot test able to give a smooth and effective review of the questionnaire before the actual review to be distributed.

To review the reliability of the questionnaire was evaluated through Cronbach Alpha, it is the most common measure of internal consistency and to review if the scale of the questionnaire were reliable (Tavakol and Dennick,2011). Researchers distributed the questionnaire to 30 online shoppers consist of staff and students of Politeknik Sultan Salahuddin Abdul Aziz Shah. After obtaining the response, researchers evaluated the reliability of the survey using SPSS's Cronbach Alpha statistic.

Table 3. 1. Reliability Test for Pilot Test

Cronbach's Alpha	N of Items	Strength of relation
.821	47	Good

In Figure 3.1 it shows the Cronbach's Alpha rule-of-thumb internal consistency from excellent to unacceptable.

Figure 3. 1 Cronbach's Alpha rule-of-thumb (Tavakol and Dennick,2011)

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

3.7 DATA ANALYSIS METHOD

Analysed data was obtained using quantitative methods using questionnaires. The data obtain by researchers will be process using the Statistical Package for Social Sciences. (SPSS). The statistical method used is descriptive statistic which are the frequency, percentage, and mean, that studies the customers' purchasing behaviour in online shopping during the pandemic (Covid-19).

3.8 CHAPTER SUMMARY

In conclusion, this chapter discussed the population, method, and technique using for data collection and data analysis, procedure used to conduct the research. Furthermore, researchers discuss to use non-probability technique method for sampling and conducting a pilot test to assess the suitability of the questions. This chapter states data analysis is done using quantitative method.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

In this chapter, results obtained from the distributed questionnaires was analysed. A total of 200 questionnaire were distributed through Google Form to online shoppers among staff and students of Politeknik Sultan Salahuddin Abdul Aziz Shah, Shah Alam. The survey period ran for a week. The data collected from the respondents were analysed using Statistical Package for Social Sciences (SPSS). Results were obtained and presented in table from to understand easier and efficiently.

4.2 CRONBACH ALPHA

Cronbach's Alpha is a pointer to determine the reliability of the questionnaire. Cronbach Alpha ranges from 0 to 1.0. Following the rules of thumb (Tavakol and Dennick,2011), it is considered that 0.8 to more than or the same as 0.7 is acceptable. The most excellent strength of relation is if it achieved more than or same as 0.9. Therefore, if it is less than 0.6 is considered poor.

Table 4. 1 Reliability Test for actual questionnaire

Cronbach's Alpha	N of Items	Strength of relation
.865	47	Good

4.3 DESCRIPTIVE ANALYSIS

Descriptive statistics are brief description coefficients that summarize a given data set, which can be either a representation of the entire or a sample of a population. Descriptive statistics are broken down into measures of central tendency which include the mean, median and mode, while the measures of variability include standard deviation, variance, minimum variables, kurtosis and skewness. The most recognized types of descriptive statistics are measures of centre which are mean, median and mode, which are used at almost all levels of math and statistics. Mean, or the average, is calculated by adding all the figures within the data set and then dividing by the number of figures within the set. Mode of a data set is the value appearing most often and the median is the figure situated in the middle of the data set. (Will Kenton, 2019)

4.3.1 RESPONDENT DEMOGRAPHIC PROFILE

In this study, the demographic in Section D was broken into 4 questions that were asked under respondents' personal details such as gender, status, age and income.

Table 4.2 D1. GENDER

	FREQUENCY	PERCENTAGE
MALE	81	40.5
FEMALE	119	59.5

The gender distribution of respondents in this research is shown in Table 4.2. Majority of the respondents were females consisting of 59.5% or 119 respondents. Meanwhile, the rest of the respondents were males with 40.5% or 81 respondents.

Table 4. 3 D2. STATUS OF RESPONDENT

	FREQUENCY	PERCENTAGE
POLITEKNIK SHAH ALAM STUDENTS	139	69.5
POLITEKNIK SHAH ALAM STAFF	61	30.5

The status distribution of respondent in this research is shown in Table 4.3. Majority of the respondent were Politeknik Shah Alam students which consist 139 respondents (69.5%). Meanwhile, the remaining of the respondent were Politeknik Shah Alam staff with 61 respondents (30.5%).

Table 4. 4 D3. AGE RANGE

	FREQUENCY	PERCENTAGE
19 to 24 years old	143	71.5
25 to 44 years old	23	11.5
45 to 64 years old	34	17.0
65 years and above	0	0

The age distribution of respondent in this research is shown in Table 4.4. The highest amount of respondent is the age range of 19 to 24 years old with 143 respondents (71.5%). Followed by 45 to 64 years old with 34 respondents (17.0%). Next was 25 to 44 years old with 23 respondents (11.5%) and lastly, no respondent from 65 years and above.

Table 4. 5 D4. PERSONAL INCOME

	FREQUENCY	PERCENTAGE
RM200 – RM400	117	58.5
RM500 – RM700	14	7.0
RM800 – RM1000	5	2.5
ABOVE RM1000	64	32.0

Table 4.5 shows the distribution of personal income of each respondent per month. The highest frequency was 117 respondents (58.5%) who was categorized in the range between RM200-RM400. Next, followed by Above RM1000 with 64 respondents (32,0%). Continued with RM500-RM700 with 14 respondents (7.0%) and last but not least, RM800-RM1000 with 5 respondents (2.5%).

4.3.2 CENTRAL TENDENCIES MEASUREMENT OF CONSTRUCTS

Table 4. 6 Statistical Summary Overall

Variables	Items	Mean	Standard Deviation
Purchasing Behaviour	PB1	3.51	.972
	PB2	3.78	.990
	PB3	3.35	.985
	PB4	3.98	.844
	PB5	3.40	.930
	PB6	3.95	.947
	PB7	4.07	.897
	PB8	3.96	.832
	PB9	4.29	.806
	PB10	4.05	.852
Trust	T1	3.89	.778
	T2	4.17	3.681
	T3	3.91	.842
	T4	3.86	.914
	T5	4.24	.785
Time	TM1	4.02	.839
	TM2	4.02	.940
	TM3	4.25	.825
	TM4	3.80	.947
	TM5	3.74	.985
Price	PR1	4.01	.883
	PR2	4.17	.809
	PR3	4.22	.835
	PR4	4.22	.876
	PR5	3.67	1.024
	PR6	3.43	.927

Safety & Security	SS1	3.99	.730
	SS2	3.46	.971
	SS3	4.19	.726
	SS4	3.66	.928
	SS5	3.64	.909
	SS6	3.40	.977
Privacy	P1	3.72	.846
	P2	3.58	.888
	P3	3.47	.982
	P4	3.67	.869
	P5	3.62	.889
	P6	3.92	.841

According to Will Keaton, 2019, measure of central tendency focus on the average or middle values of data sets. Measure of central tendency describe the centre position of a distribution for a data set. A person analyses the frequency of each data point in the distribution and describes it using the mean, median or mode, which measures the most common patterns of the analysed data set.

PB9 had the highest mean value at 4.29 with standard deviation of .806 while PB3 shows the lowest mean value at 3.35 with standard deviation of .985

T5 appeared to have the highest mean score of 4.24 with standard deviation of .785 meanwhile the lowest mean score achieved by T4 of 3.86 with the standard deviation of .914.

TM3 recorded the highest mean value 4.25 with the standard deviation of .825 meanwhile TM5 shows the lowest mean value with 3.74 and appeared to have standard deviation of .985

PR4 had the highest mean value at 4.22 with standard deviation of .876 while PR6 shows the lowest mean value at 3.43 with standard deviation of .927

SS3 appeared to have the highest mean score of 4.19 with standard deviation of .726 meanwhile the lowest mean score achieved by SS6 of 3.40 with the standard deviation of .977

P6 recorded the highest mean value 3.92 with the standard deviation of .841 meanwhile P3 shows the lowest mean value with 3.47 and appeared to have standard deviation of .982

4.4 INFERENCE ANALYSIS

Inferential statistics allows to make prediction from the descriptive statistics data. With inferential statistics, the data was taken from the sample and make generalization about a population. There are two main areas of inferential statistics which are firstly, Estimating Parameters. It means the statistics from the sample data and using it to review a population parameter. The other one is Hypothesis Tests. It is used for sample data to answer research questions. (Stephanie, 2014)

4.4.1 PEARSON'S CORRELATION COEFFICIENT

Pearson's correlation coefficient is represented by the Greek letter rho (ρ) for the population parameter and r for a sample statistic. The correlation coefficient is a single number that measures both the strength and direction of the linear relationship between two continuous variables. Values can range from -1 to +1.

Figure 4.1 below shows the interpretation the strength of a correlation coefficient. (Zakaria Jaadi,2019). Table 4.7 shows the correlation between independent variables which include trust, time, price, safety & security and privacy with dependent variable which is purchasing behaviour of online shopper among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah. Independent variables have positive linear relationship to dependent variable at significant level 0.05.

Figure 4. 1 Size of Correlation Coefficient

Size of Correlation	Interpretation
.90 to 1.00 (-.90 to -1.00)	Very high positive (negative) correlation
.70 to .90 (-.70 to -.90)	High positive (negative) correlation
.50 to .70 (-.50 to -.70)	Moderate positive (negative) correlation
.30 to .50 (-.30 to -.50)	Low positive (negative) correlation
.00 to .30 (.00 to -.30)	negligible correlation

Table 4. 7 Pearson's Correlation Coefficient Overall

		MEANT	MEANTM	MEANPR	MEANSS	MEANP	MEANPB
MEAN T	Pearson Correlation Sig. (2-tailed) N	1 200					
MEAN TM	Pearson Correlation Sig. (2-tailed) N	.425** .000 200	1 200				
MEAN PR	Pearson Correlation Sig. (2-tailed) N	.326** .000 200	.593** .000 200	1 200			
MEAN SS	Pearson Correlation Sig. (2-tailed) N	.321** .000 200	.487** .000 200	.588** .000 200	1 200		
MEAN P	Pearson Correlation Sig. (2-tailed) N	.366** .000 200	.377** .000 200	.411** .000 200	.639** .000 200	1 200	

MEAN	Pearson						
PB	Correlation	.461**	.634**	.535**	.319**	.321**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	200	200	200	200	200	200

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

There was a significant relationship between time and purchasing behaviour in online shopping during pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah. The correlation between time and purchasing behaviour falls under the positive moderate category which is in between .50 to .70. The correlation of time and purchasing behaviour was ($r=0.634$).

There was a significant relationship between price and purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah. The correlation between price and purchasing behaviour fall under positive moderate with ($r=0.535$).

There was a significant relationship between trust and purchasing behaviour in online shopping during the pandemic. When it comes to trust and purchasing behaviour, it had lower corelation than time and price which is ($r=0.461$). Trust and purchasing behaviour fall under low positive correlation.

There was a significant relationship between safety & security and purchasing behaviour in online shopping during the pandemic among students and staff in Politeknik Sultan Salahuddin Abdul Aziz Shah. With safety & security and purchasing behaviour it had a low positive correlation which is ($r=0.319$).

There was a significant relationship between privacy and purchasing behaviour in online shopping during the pandemic. The correlation between privacy and purchasing behaviour fall under the low positive correlation which is in between .30 to .50. The correlation between privacy and purchasing behaviour was ($r=0.321$).

Table 4. 8 Correlation Coefficient Men Perspective

		MEANT	MEANTM	MEANPR	MEANSS	MEANP	MEANPB
MEAN T	Pearson Correlation Sig. (2-tailed) N	1 81					
MEAN TM	Pearson Correlation Sig. (2-tailed) N	.338** .000 81	1 81				
MEAN PR	Pearson Correlation Sig. (2-tailed) N	.243** .000 81	.640** .000 81	1 81			
MEAN SS	Pearson Correlation Sig. (2-tailed) N	.271** .000 81	.561** .000 81	.619** .000 81	1 81		
MEAN P	Pearson Correlation Sig. (2-tailed) N	.343** .000 81	.405** .000 81	.481** .000 81	.781** .000 81	1 81	
MEAN PB	Pearson Correlation Sig. (2-tailed) N	.373** .000 81	.646** .000 81	.524** .000 81	.344** .000 81	.243** .000 81	1 81

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

There was a significant relationship between time and purchasing behaviour in online shopping during pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah. The correlation between time and purchasing behaviour falls under

the positive moderate category which is in between .50 to .70. The correlation of time and purchasing behaviour was ($r=0.646$).

There was a significant relationship between price and purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah. The correlation between price and purchasing behaviour fall under positive moderate with ($r=0.524$).

There was a significant relationship between trust and purchasing behaviour in online shopping during the pandemic. When it comes to trust and purchasing behaviour, it had lower corelation than time and price which is ($r=0.373$). Trust and purchasing behaviour fall under low positive correlation.

There was a significant relationship between safety & security and purchasing behaviour in online shopping during the pandemic among students and staff in Politeknik Sultan Salahuddin Abdul Aziz Shah. With safety & security and purchasing behaviour it had a low positive correlation which is ($r=0.344$).

There was a significant relationship between privacy and purchasing behaviour in online shopping during the pandemic. The correlation between privacy and purchasing behaviour fall under the low positive correlation which is in between .30 to .50. The correlation between privacy and purchasing behaviour was ($r=0.243$).

Table 4. 9 Correlation Coefficient Women Perspective

		MEAN T	MEANTM	MEANPR	MEANSS	MEANP	MEANPB
MEAN T	Pearson Correlation Sig. (2-tailed) N	1 119					
MEAN TM	Pearson Correlation Sig. (2-tailed) N	.676** .000 119	1 119				
MEAN PR	Pearson Correlation Sig. (2-tailed) N	.628** .000 119	.567** .000 119	1 119			
MEAN SS	Pearson Correlation Sig. (2-tailed) N	.455** .000 119	.457** .000 119	.569** .000 119	1 119		
MEAN P	Pearson Correlation Sig. (2-tailed) N	.477** .000 119	.362** .000 119	.361** .000 119	.598** .000 119	1 119	
MEAN PB	Pearson Correlation Sig. (2-tailed) N	.730** .000 119	.630** .000 119	.547** .000 119	.316** .000 119	.370** .000 119	1 119

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

There was a significant relationship between trust and purchasing behaviour in online shopping during the pandemic. When it comes to trust and purchasing behaviour, it was the highest correlation out of all which was ($r=0.730$). Trust and purchasing behaviour fall under high positive correlation.

There was a significant relationship between time and purchasing behaviour in online shopping during pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah. The correlation between time and purchasing behaviour falls under the positive moderate category which is in between .50 to .70. The correlation of time and purchasing behaviour was ($r=0.630$).

There was a significant relationship between price and purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah. The correlation between price and purchasing behaviour fall under positive moderate with ($r=0.547$).

There was a significant relationship between safety & security and purchasing behaviour in online shopping during the pandemic among students and staff in Politeknik Sultan Salahuddin Abdul Aziz Shah. With safety & security and purchasing behaviour it had a low positive correlation which was ($r=0.316$).

There was a significant relationship between privacy and purchasing behaviour in online shopping during the pandemic. The correlation between privacy and purchasing behaviour fall under the low positive correlation which is in between .30 to .50. The correlation between privacy and purchasing behaviour was ($r=0.370$).

4.4.2 MULTIPLE REGRESSION

Multiple linear regression (MLR), also known simple as multiple regression, is a statistical technique that uses several explanatory variables to predict the outcome of a response variable. The goal of multiple linear regression (MLR) is to model the linear relationship between the explanatory (independent) variables and response (dependent) variable.

4.4.2.1 MULTIPLE REGRESSION OVERALL

Table 4. 10 Model Summary Overall

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.698	.488	.475	.38944	1.980

- a. Predictors: (Constant), MEANPRIVACY, MEANTRUST, MEANPRICE, MEANTIME, MEANSAFETYSECURITY
- b. Dependent Variable: MEANPB

Based on the table above, it shows that the value of correlation coefficient (R value) was 0.488. Independent variable can explain that there was 48.8% of the variation in dependent variable. However, it is still left with 51.2% unexplained in this study.

Table 4. 11 ANOVA

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	28.029	5	5.606	36.963	.000b
	Residual	29.422	194	.152		
	Total	57.452	199			

- a. Dependent Variable: MEANPB
- b. Predictors: Constant, MEANPRIVACY, MEANTRUST, MEANPRICE, MEANTIME, MEANSAFETYSECURITY

Table 4.11 shows that p-value (Sig 0.000) was less than alpha value 0.05. The alternative hypothesis as the five independent variables were significantly explained the variance in customers' level was supported by data and was accepted.

Table 4. 12 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(CONSTANT)	1.338	.221		6.049	.000
MEANTRUST	.118	.034	.202	3.426	.001
MEANTIME	.365	.056	.443	6.554	.000
MEANPRICE	.240	.064	.226	3.750	.000
MEAN SAFETYSECURITY	-1.65	.075	-1.68	-2.201	.029
MEANPRIVACY	0.64	0.56	.078	1.146	.253

a. Dependent Variable: MEANPB

Based on table above, (Coefficients) shows that trust, time, price and safety & security were significant to predict dependent variable (purchasing behaviour in online shopping during the pandemic) this was because p-value is less than alpha value 0.05. On the other hand, the only independent variable that was no significant to predict the dependent variable was privacy. The p-value was equal to 0.253 which is more than 0.05.

The relationship can be denoted as the following equation from the analysis from the table above:

$$\text{Purchasing behaviour} = 1.338 + 0.118 (\text{Trust}) + 0.365 (\text{Time}) + 0.240 (\text{Price}) - 1.65 (\text{Safety \& Security}) + 0.640 (\text{Privacy})$$

According to table 4.12, trust was found to exert a significant positive impact towards purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah ($t = 3.426$, $p = 0.001$, $\beta = 0.118$). When other variables were held constant, each one unit increase in Trust would lead to increase in purchasing behaviour by 0.118 units.

Analysis from table 4.12, shows that time had significant positive impact towards purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah ($t = 6.554$, $p = 0.000$, $\beta = 0.365$) as the p-value is less than 0.05. It can be explained by each one unit increase in Time that would lead to 0.365 units increased in purchasing behaviour.

From the table 4.12, also shows that price had significant positive impact towards purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah ($t = 3.750$, $p = 0.000$, $\beta = 0.240$) as the p-value is less than 0.05. It can be explained by each one unit increase in price that would lead to 0.240 units increased in purchasing behaviour.

The analysis in table 4.12 shows that there was a significant positive impact on safety & security with purchasing behaviour ($t = -2.201$, $p = 0.029$, $\beta = -0.165$) as it shows that p-value is less than 0.05. but it explained that each unit decrease in safety & security that led to -0.165 units decreased in purchasing behaviour.

On the other side, there was insignificant or no impact by privacy on purchasing behaviour ($t = 1.146$, $p = 0.253$, $\beta = 0.064$) as the p-value is more than 0.05.

4.4.2.2 MULTIPLE REGRESSION MALE PERSEPECTIVE

Table 4. 13 Model Summary Male Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.692	.478	.444	.34891	2.027

- b. Predictors: (Constant), MEANPRIVACY, MEANTRUST, MEANPRICE, MEANTIME, MEANSAFETYSECURITY
- c. Dependent Variable: MEANPB

Based on the table above, it shows that the value of correlation coefficient (R value) was 0.478. Independent variable can be explained that 47.8% of the variation in dependent variable. However, it is still left with 58.2% unexplained in this study.

Table 4. 14 ANOVA Male Perspective

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	8.375	5	1.675	13.759	.000b
	Residual	9.130	75	.122		
	Total	17.505	80			

- a. Dependent Variable: MEANPB
- b. Predictors: Constant, MEANPRIVACY, MEANTRUST, MEANPRICE, MEANTIME, MEANSAFETYSECURITY

Table 4.14 shows that p-value (Sig 0.000) was less than alpha value 0.05. The alternative hypothesis as the five independent variables was significantly explained the variance in customers' level was supported by data and was accepted.

Table 4. 15 Coefficients Male Perspective

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(CONSTANT)	1.758	.308		5.706	.000
MEANTRUST	.071	.033	.195	2.137	.036
MEANTIME	.382	.088	.504	4.357	.000
MEANPRICE	.194	.093	.248	2.082	.041
MEAN SAFETYSECURITY	-.071	.115	-.083	-.616	.540
MEANPRIVACY	-0.62	0.84	-.089	-.738	.463

a. Dependent Variable: MEANPB

Based on table above, (Coefficients) shows that trust, time and price was significant to predict dependent variable (purchasing behaviour in online shopping during the pandemic) this was because p-value was less than alpha value 0.05. On the other hand, the two independent variable that is no significant to predict the dependent variable was privacy and safety & security. The p-value of privacy was 0.463 and safety & security 0.540 which is more than 0.05.

The relationship can be denoted as the following equation from the analysis from the table above:

$$\text{Purchasing behaviour} = 1.758 + 0.071 (\text{Trust}) + 0.382 (\text{Time}) + 0.194 (\text{Price}) - 0.71 (\text{Safety \& Security}) - 0.62 (\text{Privacy})$$

According to table 4.15, trust was found to exert a significant positive impact towards purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah ($t = 2.137$, $p = 0.036$, $\beta = 0.071$). When other variables were held constant, each one unit increase in Trust will lead to increase in purchasing behaviour by 0.071 units.

Analysis from table 4.15, shows that time had significant positive impact towards purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah ($t = 4.357$, $p = 0.000$, $\beta = 0.382$) as the p-value is less than 0.05. It can be explained by each one unit increase in Time will lead to 0.382 units increased in purchasing behaviour.

From the table 4.15, also shows that price had significant positive impact towards purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah ($t = 2.082$, $p = 0.041$, $\beta = 0.194$) as the p-value is less than 0.05. It can be explained by each one unit increase in price will lead to 0.194 units increased in purchasing behaviour.

On the other side, there was no significant impact towards safety & security with purchasing behaviour ($t = -0.616$, $p = 0.540$, $\beta = -0.071$) as it shows that p-value was more than 0.05.

Lastly, the analysis in table 4.15 shows there is insignificant or no impact by privacy on purchasing behaviour ($t = 1.146$, $p = 0.253$, $\beta = 0.064$) as the p-value is more than 0.05.

4.4.2.3 MULTIPLE REGRESSION FEMALE PERSEPECTIVE

Table 4. 16 Model Summary Female Perspective

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.765	.585	.567	.38275	1.898

- a. Predictors: (Constant), MEANPRIVACY, MEANTRUST, MEANPRICE, MEANTIME, MEANSAFETYSECURITY
- b. Dependent Variable: MEANPB

Based on the table above, it shows that the value of correlation coefficient (R value) was 0.488. Independent variable can be explained that 58.5% of the variation in dependent variable. However, it is still left with 41.5% unexplained in this study.

Table 4. 17 ANOVA Female Perspective

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	23.383	5	4.677	31.922	.000b
	Residual	16.555	113	.147		
	Total	39.37	118			

a. Dependent Variable: MEANPB

b. Predictors: Constant, MEANPRIVACY, MEANTRUST, MEANPRICE, MEANTIME, MEANSAFETYSECURITY

Table 4.17 shows that p-value (Sig 0.000) was less than alpha value 0.05. The alternative hypothesis as the five independent variables was significantly explains the variance in customers' level was supported by data and was accepted.

Table 4. 18 Coefficients Female Perspective

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(CONSTANT)	.695	.296		2.226	.028
MEANTRUST	.528	.100	.498	5.293	.000
MEANTIME	.215	.074	.249	2.908	.004
MEANPRICE	.153	.086	.156	1.781	.078
MEANSAFETYSECURITY	-.176	.093	-.164	-1.889	.061
MEANPRIVACY	.076	0.72	.085	1.062	.290

a. Dependent Variable: MEANPB

Based on table above, (Coefficients) shows that trust, time was significant to predict dependent variable (purchasing behaviour in online shopping during the pandemic) this was because p-value is less than alpha value 0.05. On the other hand, the independent variables that had no significant to predict the dependent

variable were privacy, price and safety & security. The p-value of each variables were privacy (p=0.290), price (p=0.078) and safety & security (p=0.061).

The relationship can be denoted as the following equation from the analysis from the table above:

$$\text{Purchasing behaviour} = 0.659 + 0.528 (\text{Trust}) + 0.215 (\text{Time}) + 0.153 (\text{Price}) - 0.176 (\text{Safety \& Security}) + 0.076 (\text{Privacy})$$

According to table 4.18, trust was found to exert a significant positive impact towards purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah ($t = 5.293$, $p = 0.000$, $\beta = 0.528$). When other variables were held constant, each one unit increase in Trust will lead to increase in purchasing behaviour by 0.528 units.

Analysis from table 4.18, shows that time had significant positive impact towards purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah ($t = 2.908$, $p = 0.004$, $\beta = 0.215$) as the p-value is less than 0.05. It can be explained by each one unit increase in Time will lead to 0.215 units increased in purchasing behaviour.

From the table 4.12, there was no significant impact towards price and purchasing behaviour in online shopping during the pandemic among students and staff of Politeknik Sultan Salahuddin Abdul Aziz Shah ($t = 1.781$, $p = 0.078$, $\beta = 0.153$) as the p-value is more than 0.05.

The analysis in table 4.12 shows there was no significant impact on safety & security with purchasing behaviour ($t = -1.889$, $p = 0.061$, $\beta = -0.176$) as it shows that p-value is more than 0.05.

Lastly, there is insignificant nor impact by privacy on purchasing behaviour ($t = 1.062$, $p = 0.061$, $\beta = 0.076$) as the p-value is more than 0.05.

4.5 OVERALL TEST OF SIGNIFICANT

Hypothesis 1

H₀: Trust has significant impact relationship with Customer Purchasing Behavior in Online Shopping during the Pandemic.

H₁: There was an impact from trust towards purchasing behavior in online shopping during the pandemic.

Rejected H₀ if $p < 0.05$

The p-value of trust according to the table 4.12 was 0.001 which is less than the significant level of 0.05. Then, H₀, rejected, which means trust had an impact toward purchasing behavior in online shopping during the pandemic.

Hypothesis 2

H₀: Time has significant impact relationship with Customer Purchasing Behavior in Online Shopping during the Pandemic.

H₁: There was an impact from trust towards purchasing behavior in online shopping during the pandemic.

Rejected H₀ if $p < 0.05$

The p-value of time according to the table 4.12 was 0.000 which is less than the significant level of 0.05. Then, H₀, rejected, which means time had an impact toward purchasing behavior in online shopping during the pandemic.

Hypothesis 3

H₀: Price has significant impact relationship with Customer Purchasing Behavior in Online Shopping during the Pandemic.

H₁: There was an impact from trust towards purchasing behavior in online shopping during the pandemic.

Rejected H₀ if $p < 0.05$

The p-value of price according to the table 4.12 was 0.000 which is less than the significant level of 0.05. Then, H_0 , rejected, which means price had an impact toward purchasing behavior in online shopping during the pandemic.

Hypothesis 4

H_0 : Safety & Security has significant impact relationship with Customer Purchasing Behavior in Online Shopping during the Pandemic.

H_1 : There was an impact from trust towards purchasing behavior in online shopping during the pandemic.

Rejected H_0 if $p < 0.05$

The p-value of safety & security according to the table 4.12 was 0.029 which is less than the significant level of 0.05. Then, H_0 , rejected, which means safety & security had an impact toward purchasing behavior in online shopping during the pandemic.

Hypothesis 5

H_0 : Privacy has significant impact relationship with Customer Purchasing Behavior in Online Shopping during the Pandemic.

H_1 : There was no impact from trust towards purchasing behavior in online shopping during the pandemic.

Rejected H_0 if $p < 0.05$

The p-value of privacy according to the table 4.12 was 0.253 which is more than the significant level of 0.05. Then, H_0 , accepted, which means privacy had no impact toward purchasing behavior in online shopping during the pandemic.

4.6 CHAPTER SUMMARY

This chapter summarized that respondent's demographic profile and general information was analysed using descriptive analysis meanwhile correlation and multiple regression was analysed using inferential analysis. Researcher also identify the significant of each variable and the hypotheses for this research. The subsequent chapter contains discussion on major findings as well as a conclusion to this research.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter provide an overall summary of this research. Researchers discussed the summary from the major finding obtained during this research. Next this chapter will discuss, give conclusion, explain the limitation and purpose few recommendations for future researcher can make improvement of the research that has been done.

5.2 DISCUSSION

In this research, a set of questionnaires was given to respondents with two objectives of the study, to determine the impact (trust, time, price, privacy, safety & security) on the intention of purchasing behaviour in online shopping platform and to compare the customer purchasing behaviour in online shopping during pandemic based on gender. The objective has shown reliability results proven by analysis Statistical Package for Social Science (SPSS). The analysis of the result and findings showed that Trust and Time is the most significant factor overall that impacted the purchasing behaviour in online shopping during the pandemic. Majority of the respondents strongly agreed that since online shopping is a big part of the pandemic as it helps become the alternative to brick-and-mortar shopping.

5.3 CONCLUSION

Overall conclusion, the overall of correlation coefficient shows that price and safety & security had moderate correlation with purchasing behaviour meanwhile trust, time and privacy showed a low correlation with purchasing behaviour. Meaning, price and safety & security had a stronger relation towards purchasing behaviour rather than trust, time and privacy shows weaker relation towards purchasing behaviour. Evidence from the findings also indicated that trust, time, price, and safety & security significantly affected purchasing behaviour, followed by privacy that had less affected purchasing behaviour in online shopping.

The study documented that the factors of purchasing behaviours is the most dominant route to customers purchasing behaviour therefore, it is imperative for e-commerce owners operating in Shah Alam to identify and improve in order to capture a larger market share and develop a better online shopping platform for consumers.

Based on the correlation coefficient, in male perspective and female perspective, researchers conclude that male perspective towards time and price had moderate correlation with purchasing behaviour, whilst, in female perspective, had a higher correlation towards trust and purchasing behaviour rather than male. Therefore, male is more moderately relate to time and price meanwhile female have higher relation towards trust in purchasing behaviour

Evidence from multiple regression shows that both male and female trust, time and price significantly affected purchasing behaviour towards both genders, followed by safety & security and privacy that had least affected towards purchasing behaviours. In male perspective, time is the most significant predictor, followed by price, while female, trust is the most significant predictor, followed by time. In conclusion, researchers understand that male is siding more towards time rather than other variables and female holds trust the most out of all the other variables.

5.4 LIMITATIONS

This study had the limitation of sample size of 200 respondents. The survey was only running in specific area of Shah Alam, Selangor which is, Politeknik Sultan Salahuddin Abdul Aziz Shah. Due to lack of network, researchers were unable to study customers purchasing behaviour in online shopping in other location. Other than that, researchers were also unable to gather more different gender respondents from other location other than Shah Alam.

This study was only concern towards purchasing behaviour in online shopping. There are so many other knowledge gaps of purchasing behaviour that is yet to discover. Lastly, due to time constraint, researchers were unable to stretch out to more branches in purchasing behaviour in online shopping to obtain further information.

5.5 RECOMMENDATION

Based on this research, purchasing behaviour is one of the important factors when it come to online shopping and there is yet a lot of gaps that still have not yet to be discovered.

As this research studied the purchasing behaviour in online shopping during the pandemic, this will allow future researchers to study on how important each variable can impact the purchasing behaviour as well as obtain a wider factor perspective.

With this study, it will allow future researchers to receive more information and provide more information towards purchasing behaviour in online shopping in other location. Lastly, future researchers can utilize this study as a start to further study on purchasing behaviour in online shopping during the pandemic as this was the first pandemic which impacted the whole world.

5.6 CHAPTER SUMMARY

This chapter presents the introduction, discussion, conclusion, limitation and recommendations. This chapter can be used as a guideline (Salehi, 2012)for future researchers and e-commerce owners to further improve and utilize this study.

REFERENCES

Bibliography

- Alberto, P. &. (Englewood Cliffs). *Applied Behavior Analysis Procedures for Teachers (4th Edition)*. New Jersey: Prentice Hall.
- Anam Bhatti, H. A. (2020). E-Commerce Trends during COVID-19 Pandemic. *International Journal of Future Generation Communication and Networking*, 1449-1452.
- Andrew Bloomenthal. (24 September, 2020). *Investopedia*. Retrieved from Investopedia: Business Essentials : <https://www.investopedia.com/terms/c/customer.asp>
- Anurag Pandey, J. S. (2019). Factors Affecting Consumer's Online Shopping Buying Behavior. *Proceedings of 10th International Conference on Digital Strategies for Organizational Success*, 541-548.
- Asamoah, G. (2012). Factors Which Influence the Buying Behaviours of Customers with Multiple Regular Customer Cards. *Arcada*, 1-69.
- C.K Sunitha, D. M. (2014). Online Shopping - An Overview. *B-Digest*, 16-22.
- Chayapa Katawetawaraks, C. L. (2011). Online Shopper Behavior: Influences of Online Shopping Decision. *Asian Journal of Business Research*, 66-74.
- DemandJump. (24 January, 2020). *DemandJump*. Retrieved from DemandJump Blog: <https://www.demandjump.com/blog/what-is-consumer-buying-behavior>
- Dr Rizwana Bashir, I. M. (2015). Effects of Online Shopping Trends on Consumer-Buying Behaviour: An Emperical Study of Pakistan. *Journal of Management and Research*, 1-14.

- Dr. Amit Kumar Singh, M. S. (2014). Consumer Behavior in Online Shopping: A Study of Aizawl. *International Journal of Business & Management Research (IJBMR) Volume 1, Issue 3*, 45-49.
- Dr. Vinay Kumar, D. M. (2020). Realising the Transformation of Customer Purchase Behaviour: Assessment of Impact of Social Media on Purchasing Behaviour of Consumers in India. *The Mattingley Publishing Co.*, 12990-12998.
- Glen, S. (14 December, 2014). *Inferential Statistics: Definition, Uses*. Retrieved from StatisticsHowTo: <https://www.statisticshowto.com/inferential-statistics/>
- Haniska Roy. (7 March, 2017). *The Next Scoop*. Retrieved from The Next Scoop: E-Commerce Tips: <https://thenextscoop.com/e-commerce-is-growing-at-an-unprecedented-rate-all-over-the-globe/>
- Ieva Anderson, E. G.-S. (2009). Behavioural Differences in Consumer Purchasing Behavior between Online and Traditional Shopping: Case of Latvia. *Ekonomika Ir Vadyba*, 345-352.
- Islam, S. (2019). Factors Influencing Customer's Intention to Adopt Online Shopping: A Holistic Approach. *International Journal of Business and Technopreneurship*, 57-66.
- Jozef Bucko, L. K. (2018). Online Shopping: Factors that Affect Consumer Purchasing Behavior . *Cogent Business & Management*, 1-30.
- Lakshmi.S. (2016). Consumer Buying Behavior towards Online Shopping. *International Journal of Research-Granthaalayah*, 60-65.

- MBA Skool Team. (02 May, 2020). *MBA Skool*. Retrieved from MBA Skool: Marketing and Strategy: <https://www.mbaskool.com/business-concepts/marketing-and-strategy-terms/13930-consumer-buying-behaviour.html#:~:text=Consumer%20buying%20behaviour%20is%20an%20action%20which%20is,area%20drawing%20widely%20from%20sociology%2C%20psychology%2C%20anthropology>
- Meyer, S. (2020). *Big Commerce*. Retrieved from Big Commerce: <https://www.bigcommerce.com/blog/covid-19-ecommerce/#is-it-safe-to-order-online-during-covid-19>
- Mohsen Tavakol, R. D. (2011). Making Sense of Cronbach's Alpha. *International Journal of Medical Education*, 53-55.
- N Ramya, D. S. (2016). Factors Affecting Consumer Buying Behavior. *International Journal of Applied Research*, 76-80.
- Naz, T. (2019). Online Shopping Behaviour Technology Advancement: A Great Change in Consumer Behaviour. *Proceedings of 10th International Conference on Digital Strategies for Organization Success*, 1133-1143.
- Olga Andrienko. (20 April, 2020). *Semrush*. Retrieved from Semrush: <https://www.semrush.com/blog/ecommerce-covid-19/>
- R. Mahjudin, I. N. (2019). Buying Behaviour Pattern on Online Consumer (A Comparision between Urban and Rural Buyer). *Sinergi*, 18-27.
- Rahman, M. A., Islam, M. A., Esha, B. H., Sultana, N., & Chakravorty, S. (2018). Consumer Buying Behavior toward Online Shopping: An Emperical Study on Dhaka City, Bangladesh. *Cogent Business & Management*, 1-22.
- Salehi, M. (2012). Consumer Buying Behaviour towards Online Stores in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 393-403.

- Steven Bragg. (22 September, 2019). *AccountingTools*. Retrieved from AccountingTools: <https://www.accountingtools.com/articles/what-is-purchasing.html>
- Teing, C. H. (2014). *Factors Affecting Online Shopping of Purchasing Appaels among Yong Adults*. Petaling Jaya: Universiti Tunku Abdul Rahman.
- The Star. (22 March, 2020). *The Star*. Retrieved from The Star: <https://www.thestar.com.my/news/nation/2020/03/22/only-one-person-allowed-out>
- V. Vijaya Lakshmi, D. A. (2017). Impact of Gender on Consumer Purchasing Behaviour. *IOSR Journal of Business Management (IOSR-JBM)*, 33-36.
- Will Kenton. (27 June, 2019). *Investopedia*. Retrieved from Investopedia: https://www.investopedia.com/terms/d/descriptive_statistics.asp
- World Health Organization. (12 October, 2020). *World Health Organization*. Retrieved from World Health Organization: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19>
- Zakaria Jaadi. (15 October, 2019). *Interpreting Correlations*. Retrieved from Towards Data Science: <https://towardsdatascience.com/eveything-you-need-to-know-about-interpreting-correlations-2c485841c0b8>

APPENDIX/APPENDICES

APPENDIX A: PROJECT GANTT CHART

Activity	Month/Week												Expected	Result				
	August				September				October						November			
	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1		
Identifying the Topic & Topic Determination	█																█	
Literature review					█	█	█	█	█	█	█	█	█	█	█	█		█
Consultation with supervisor					█	█	█	█	█	█	█	█	█	█	█	█		
Proposal Preparation								█										
Instrument Preparation and Data Collection								█	█	█	█	█						
Data analysis													█	█				
Writing a project draft																█		
Final review and draft																	█	█
Final Project Submission																	█	█

*Final Year Presentation will be presented on week 14

*Proposal Presentation will be presented on week 6