# CUSTOMERS' INTENTION TO PURCHASE HALAL PRODUCTS IN MALAYSIA: A CASE OF NON-MUSLIMS

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# Customers' Intention to Purchase *Halal* Products in Malaysia: A Case of Non-Muslims

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#### DECLARATION

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#### DEDICATION

To Dr. Chong Shyue Chuan, my final year project supervisor, To my family and my fellow friends and course mate,

And

All the respondents.

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#### PREFACE

This research objective is to examine the intention of non-Muslim customers to purchase *halal* food products in Klang Valley. Subject to the limitation of time, efforts and resources, every possible attempt has been made to study the problem. The whole project is measured through questionnaire, then the data collected from the study will be analysed by using SSPS and interpreted for further study.

According to prior studies, there were limited numbers of research when it comes to the intention of non-Muslim to purchase *halal* food products. Furthermore, some studies also stressed that the opportunity of the growing market of *halal* food products around the world might be a trend that should not be missed out by both the public and private sectors. For example, the *halal* industry in China itself worth USD2.1 billion with 10.0 per cent of growth rate annually.

Therefore, the outcome of this study is expected to provide insight into the intention of non-Muslim customers to purchase *halal* food products in Klang Valley, Malaysia. Hopefully, this research will provide useful information for the government sector to further develop the *halal* industry into the international market and the private sector also can tap into the opportunity provided in the *halal* market as well.

#### ABSTRACT

In today's modern society, people are more concern about the food they purchase and consume. The issues of food poisoning and unethical food preparation and sources had caused the concern around the world, especially in a less developed country. Therefore, people tend to be more cautious about the source of the ingredients, the preparation process and finished products in the market. As the advancement of the information technology, customers were more educated and information is easily available by just-a-click on the search engine. Hence, there will be more consumers looking for products with quality and safe to consume. In a Muslim country, *halal* products were a norm in the society whereby the *halal* products were not only being consumed by Muslims in their daily life, the acceptance of non-Muslims towards the *halal* food products is growing as well because of the strict process and laws to follow. Besides, the *halal* food products are also being monitored, certified and enforced by the government. *Halal* product with certification will automatically gain the confident of the customers without any doubts.

Therefore, this study tends to examine the intention of non-Muslim customers in purchasing *halal* food products in Klang Valley. Six independent variables are being adapted and adopted in this research to identify the intention of non-Muslim customers to consume *halal* food products which are product quality, product price, product availability, product ingredients, product awareness and product safety.

A total of 321 respondents from Klang Valley area were participated and responded in this survey. Based on the findings and analysis, this study revealed that there are three independent variables that have positive significant relationship in affecting the intention of non-Muslim customers to purchase *halal* food products which are product quality, product price and product availability. Hopefully, these findings can be used by the government and private sector to further develop the *halal* industry locally and internationally. Lastly, based on the findings, the researcher also suggested a few proposals for further study and improvement.

## **CHAPTER 1**

## INTRODUCTION

#### 1.1 Introduction

According to Matthew (2014), customer's demand for food has changed considerably. Besides, the same study also stated that the *halal* food sector in Malaysia is booming. Malaysia is a Muslim country and consists of a majority of Muslim population (Matthew, 2014). Moreover, Malaysia was the first country in the world to develop a well-organised assurance system on *halal*. It was documented and being released in the year 2000 by Islamic Tourism Centre (2019). The term '*halal*' means healthy living, purity and hygiene (Soraji, Awang & Yusoff, 2017). The same study also stated that *halal* food products include the aspects of clean, safe, quality and good (tayyib).

In 2005, the Department of Islamic Development Malaysia (JAKIM) was being set up to monitor issues related to *halal*. Malaysia's *halal* standard is being used widely not only in the sector related to food and beverage, nowadays, it is also being used in other sectors such as cosmetics, logistics, tourism and banking industry. According to Zulkifli (2007), besides JAKIM, there are other government agencies involve in monitoring the *halal* industry such as Ministry of Domestic Trade and Consumer Affairs (MDTCA), Ministry of Health (MOH), Royal Malaysian Customs Department, Department of Veterinary Services, Department of Standards Malaysia and Local Authorities (PBT).

Department of Statistics Malaysia (2017) stated that the export of *halal* products was Ringgit Malaysia (RM) 39.4 billion in total. The amount contributed by food and

beverages was RM 19.5 billion whereas the *halal* ingredient was the second largest contributor at RM 11.0 billion, followed by oil palm derivatives with recorded RM 5.0 billion. Furthermore, Yunus, Rashid, Ariffin and Rashid (2014) mentioned in their research about the potential market of the *halal* sector nationwide which consists of about 1.6 billion Muslims. Ali, Xiaoling, Sherwani and Ali (2017) further stated in their research that by 2050, the Muslim population consists of 2.8 billion people or 30.0 per cent of the population in the world.

Under the Islamic teaching, all the Muslims in the country are bound to their beliefs to consume only *halal* products. JAKIM will certify all the *halal* products in Malaysia. However, for the non-Muslims, they are free to make their choices whether to consume *halal* or non-*halal* products. In order to develop Malaysia as the world *halal* centre point (Norhabibah, 2011), the *halal* sector is providing many chances for *halal* food producers to tap into the domestic and international markets. According to Golnaz, Zainulabidin, Mad Nasir and Eddie Chiew (2010), the interest on *halal* items has been expanding since a previous couple of decades.

According to the information distributed by the Department of Statistics Malaysia (2017), the complete population in Malaysia was evaluated at 31.7 million persons (Figure 1.1). There was an increment from 31.2 million persons in 2015 of 0.5 million persons. From the total population in Malaysia, Bumiputera or Muslim consists of 68.6 per cent followed by the Chinese which is 23.4 per cent, Indians which is 7.0 per cent and others which is only 1.0 per cent. The high percentage of non-Muslim customers is a new market opportunity to be tapped into as it could contribute more towards the development of the *halal* nourishment sector in Malaysia. Muhammad, Norhaziah, Nuradi and Hartini (2007) have further stated that overall, all the people including non-Muslims will enjoy the advantages of *halal* food.

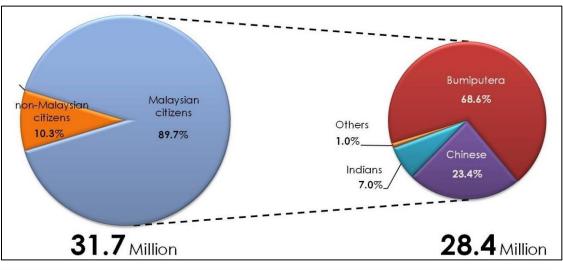


Figure 1.1: Distribution of Population by Ethnic Group, Malaysia, 2016

Source: DOSM, 2016

#### **1.2 Background of the Study**

According to Haque, Sarwar, Yasmin, Tarofder and Hossain (2015), non-Muslim customers' aim in buying the *halal* items in Malaysia using the Theory of Planned Behaviour (TPB) solely depends on attitude, subject norms and perceived behavioural control. However, the purpose of the study should fill in the gap which is to analyse not only on the non-Muslim's purpose to buy by using attitude, subject norms and perceived behavioural such as product safety, product awareness and product quality, but research can be done to find out on other determinants that contribute to the customer's aim to buy the *halal* items in Malaysia in the case of non-Muslims.

#### **1.3 Problem Statement**

Haque et al. (2015) stated that customer's intention to buy any items solely based on three main determinants which are attitude, subjective norms and perceived behavioural control using the TPB model. The study showed that for the positive attitudes of customers, product consciousness on the *halal* items was being used to measure it. Haque et al. (2015) categorised that under the subject norms category, product quality was being used as the measurement as it positively affects the non-Muslim customers' perception towards buying *halal* food items in Malaysia. Under the perceived behavioural category, product safety was used to measure the non-Muslim customers in Malaysia to buy *halal* food items (Haque et al., 2015).

The interest in *halal* items are increasing and the interest is not only from the Muslim communities (Ismail, Abdullah, Ahmad & Sidek, 2018). *Halal* is deemed as a typical food choice among non-Muslims today (Chua, Chia, Lau & Lee, 2017), who appreciate the idea of *halal* items. However, in Malaysia, previous study showed that the government effort focused more on *halal* certification, but the education and awareness of *halal* information were still lacking (Chua et al., 2017). Besides, Ambali and Bakar (2014) also mentioned that there are a lot of studies being carried out on *halal* certification logo only, but researches on the consciousness of Muslim customers themselves on *halal* items and foods are also very rare. Furthermore, studies found out that religion is not only the factor contributing to the world's consumption behaviour but also depending on the degree of religiosity (Chua et al., 2017).

Matthew (2014) stated that market acknowledgement on *halal* food could be of a few reasons. Some of the reasons might be that customers expect to consume it, try it before or continue to consume the products among non-Muslim consumers. The study further mentioned that customers would acknowledge and better reaction towards high-quality products. Therefore, the variables used in the study only focused on the intention to buy, product quality, voluntary and product safety. However, Matthew (2014) further stated that there were limited numbers of study being done when comes to the customer's acceptance of *halal* food items of non-Muslims.

#### 1.4 Objective of the Study

The general purpose of this research is to find out the elements influencing the non-Muslim customer's intention to buy the *halal* food items in Malaysia.

For the specific objective, there are two as stated below:

- i. To identify the elements influencing the customer intention to buy the *halal* food products in Malaysia in the context of Non-Muslim; and
- ii. To analyse the relationship between product quality, product price, product availability, product ingredients, product awareness, product safety and the intention to buy *halal* food items from the non-Muslims.

### **1.5** Research Questions

- i. What are the factors affecting the client intends to purchase the *halal* food items in Malaysia in the context of non-Muslims?
- ii. Is there any relationship between product quality, product price, product availability, product ingredients, product awareness and product safety with the customer's intention to buy *halal* food items among the non-Muslims?

### **1.6** Significance of the Study

According to Matthew (2014), when it comes to food, there were plenty of opportunities to focus especially on the non-Muslim's interests. In non-Muslim countries, KFC, Burger King, Taco Bell and McDonald as the fast-food outlets introduced many choices of *halal* food in their menu (Ali et al., 2017). Hong, Sun, Beg and Zhou (2018) stated that in the world of Muslim population, China ranked number ninth and the demand in China for *halal* food products is huge. In Yang's (2017) investigation about the determinants of *halal* food buying behaviour by non-Muslim customers in China, it stated that *halal* food means green and clean. It is also being translated as pure, rustic and natural in Chinese dictionaries. The *halal* industry in China is worth USD2.1 billion with 10.0 per cent of growth rate annually (Hong et al, 2018).

However, Ali et al. (2017) mentioned in their study that *halal* food is not readily available in a non-Muslim nation like China. Besides, the same study also stated that the authenticity of available *halal* food was also an issue. Hong et al. (2018) further revealed the immature and less developed certification procedure and *halal* sector in a non-Muslim country like China as compared to other Muslim-oriented countries. For example, a serious incident happened as the labelled *halal* beef consists of pork (Hong et al., 2018).

Du and Zhang (2018) stated that the One Belt One Road (OBOR) like the 21<sup>st</sup> Century Maritime Silk Road and the Silk Road Economic Belt policy is a good initiative on the economic integration with Africa, Europe and Asia. Besides, OBOR initiatives were also a tool to boost export, natural resources accessibility and support to the local industries (Du & Zhang, 2018). China is the second largest overseas investor with an investment flow exceeded USD100.0 billion in the world (Du & Chang, 2018). Furthermore, a five-year plan worth of USD160.0 billion was signed between China and Malaysia government to boost the tourism, education, financial sector, infrastructure and trade (Yeoh, Chang & Zhang, 2018). Chua et al. (2017) further stated that besides Muslim tourists, there is also a huge opportunity in *halal* food sector for non-Muslim tourists. Hong et al. (2018) in their study also stated that there is an overwhelming need for a credible *halal* industry whereby the *halal* products with genuine *halal* production processes and materials did urge the Chinese Muslims in China to pursue it. Furthermore, the Chinese government is looking for worldwide expertise to improve and organise the *halal* certification process and also *halal* trading (Hong et al., 2018). Halal exporters like Malaysia have a good opportunity to sell products to this huge and emerging market in China (Hong et al., 2018). Yeoh et al. (2018) stated that Malaysia is the third largest trading partner after South Korea and Japan with a registered trade value of more than USD10.0 billion with China.

At the end of the study, it will contribute towards the popularity of *halal* items in Malaysia among the Muslim customers as well as the non-Muslim clients. It will gather the variables which affect the intention to purchase the *halal* items of nonMuslims in Malaysia. Awan, Siddiquei and Haider (2015) further stated that consumers were more worried about the food they buy and eat in recent years including both Muslims and non-Muslims. The data collected can be used by the relevant authority to draw a proper plan on the improvement of *halal* food consumption and development in Malaysia and to tap into the export opportunity in other countries which consists of a growing population of Muslims. Hong et al. (2018) further stated that Muslims in China had enjoyed new imported consumer goods as a result of income increment. The contribution of *halal* industry towards the economy will create more jobs and business opportunities around the world especially in a market like China.

#### **1.7 Delimitations**

In research, researchers need to sort out what is most relevant and creating clarity for the research and it is being defined as delimitation in the research (Creswell & Creswell, 2017). Therefore, the delimitation of this research is presented below:

- 1. The research is delimited to the non-Muslim customers in Malaysia; and
- 2. The study is delimited to non-Muslim customers in Klang Valley area only because it consists of the most population in Malaysia.

Having discussed the delimitation for this research, the definition of terms adapted and adopted in this research was presented in the following section. Besides, the findings of the non-Muslim customers in Malaysia can be used in the global market as well like China. It is because the non-Muslim respondents in Malaysia is being considered the third generation of the Chinese people from China as well. Furthermore, some of the non-Muslim in Malaysia still have relatives in China. Therefore, the religion, belief and culture is still similar both in Malaysia and China.

#### **1.8 Definition of Terms**

The study conducted will be focusing on the non-Muslim client's intention to buy. Therefore, some of the following terms for the constructs used in this research are defined in the context of this study and presented as follows:

#### *i. Halal* Food Products

"A permissible food that can be consumed with no doubt is being defined as halal in Quran, which also means lawful and permitted" (Matthew, 2014).

#### *ii.* Intention to Purchase

"Purchase intention can be conceptualised as an individual's intention to buy products/services. Purchase intention can ultimately result in actual purchase behaviour" (Luo, Chen, Chin & Liu, 2011).

#### iii. Product Quality

"Quality as the totality of characteristics and features of a product/service that bear on its ability to fulfil stated/implied needs" (Kotler, 2000).

#### *iv.* Product Price

"From the customer's perspective, price represents the amount of money customers must give up getting the product/service" (Zeithaml, 1988).

#### v. Product Availability

"For customers with low perceived availability of sustainable products, consuming sustainable products may be impossible" (Bonne, Vermeir, Bergeaud-Blackler & Verbeke, 2007).

#### vi. Product Ingredients

"Main ingredients put into the food, as well as additives and condiments" (Wandel, 1997).

#### *vii.* Product Awareness

"The knowledge in the direction of the influence of marketing related concept such as advertising and branding with halal purchase intention is almost unavailable" (Aziz & Chok, 2013).

#### viii. Product Safety

"Food supplied cannot contain elements that are harmful to health either in terms of food preparation, sale and consumption something foodstuffs" (Soraji, Awang & Yusoff, 2017).

#### **1.9** Outline of the Study

The research attempts to identify the factors which determine the intention to buy *halal* food items among the non-Muslim customers. Besides, it is also to assess the interrelationship among product price, product quality, product availability, product awareness and product safety, product ingredients and intention to buy *halal* food items in Malaysia. In the end, it will consist of five sections in this research.

Chapter 1 provides the background of the study and an overview of the *halal* sector in Malaysia. Besides, by referring to the latest research, the study problems were established for this research referring to the gaps identified. Subsequently, the aim of the study and the research objectives are presented.

Chapter 2 presents the definition of *halal* food products and their attributes. Besides, a theory related to this study was being discussed and an overview of concepts in product price, product social media, word of mouth communication, brand image, perceived service quality, product quality, product availability, product awareness, product safety, product ingredients and intention to buy *halal* food items in Malaysia are reviewed and presented. Besides, this chapter will also explain the Theory of Reasoned Action (TRA) model and the Theory of Planned Behaviour (TPB) model, which will be adopted in this research. Then, a conceptual framework will be proposed and discussed on the hypotheses established for this research based on the review of the literature.

Chapter 3 shows the research methodologies that were used to verify the hypotheses developed. Besides, the research design, measurements of variables, the technique of data collection and the description of the sampling strategy will be extensively discussed. Furthermore, the statistical procedures that were implemented in data analysis and the ethical consideration are also presented.

Chapter 4 presents the data analysis, which will be the statistical analysis of the data collected from the questionnaire survey. Techniques such as descriptive analysis, scale measurement, inferential analysis, factor analysis and the summary that give the final result for this research will be determined in this current chapter. All those patterns and exploration of the results are corresponding to the questions, objectives and also hypotheses of the report.

Chapter 5 shows the discussion and conclusion based on the findings. The last chapter will be the argument of major findings according to the final results of the analysis. Besides that, the limitations of the research, proposal for future study and an overall conclusion will be reported as well.

#### 1.10 Conclusion

In this section, this study has outlined a broad field of research, which guides and grasp the attention of readers by providing the context of the study. Then, it also comes with the statement of problem and purpose. Next, the researcher has formed some questions from the past empirical studies and came out with the non-Muslim clients' intention towards purchasing *halal* food items in Malaysia. The study objectives and questions will lead this study in the correct direction to complete the project. Lastly, the researcher has explained the significance of the findings. This chapter dedicated a concise introduction to the composition of this study. By the way, it can be used as a guideline for audiences before carrying on to the coming chapter.

## **CHAPTER 2**

## LITERATURE REVIEW

#### 2.0 Introduction

In this chapter, this study shows a review of the literature on the variables of the study. It reviews studies and theories by other scholars especially studies on customer's intention to buy *halal* food items and also the concepts of price, awareness, availability, safety, ingredients and quality of the *halal* products which affect their purpose to buy from the perspective of non-Muslim.

According to Awan et al. (2015), some studies are being carried out on the variables which are influencing the buying of *halal* food items, but their study was investigating the differences between customers' attitudes towards *halal* food products and *halal* cosmetics only. Said, Hassan, Musa and Rahman (2014) mentioned that there are many reasons which affect the customers' intention to buy and behaviour on *halal* food items. Some of the reasons are the lack of information, customers' confidence towards the *halal* logo, the concerns on the benefit of consuming healthy products and the level of individual education. According to Matthew (2014), many researches have been done on the consumption of *halal* food among Muslims in Malaysia. But, when it comes to researches on market acknowledgement among non-Muslim customers, there are constrained in numbers.

#### 2.1 Halal Food Products

Matthew (2014) stated that in Quran, the definition of *halal* means a reasonable food that can be taken with no uncertainty, which also means lawful and permitted. Besides, Said et al. (2014), in his study, stated that *halal* is an Arabic word which means legal and permissible. Besides, in the Holy Quran, God stated that Muslims and all human beings to consume *halal* things. Wilson and Liu (2010) mentioned that in the Arabic language, the word *halal* means permission in law. More specifically, Haque et al. (2015) stressed that acceptable activities based on the Holy Quran mean *halal*.

Muslim and non-Muslim customers' demand towards *halal* is growing and gaining more popularity around the world (Ismail & Nasiruddin, 2014). Yunus et al. (2014) stated that *halal* had become a new worldwide market demand with an estimated USD2.31 trillion of market value. Hussain, Rahman, Zaheer and Saleem (2016) further emphasised that the *halal* food trading will consist of the overall 20.0 per cent of the world's trading by considering the population growth and also the increase of the income level. Said et al. (2014) in their findings mentioned that the domestic *halal* industry is expected to increase to about 5.8 per cent by 2020 compared to the current contribution of less than 2.0 per cent of gross domestic product in Malaysia.

According to Henderson (2016), when describing *halal* and *haram* in the context of food and drink, it means that food and drink which can and cannot be consumed by Muslims as listed in the Quran and the Prophet's sayings and also under the legal point of view. Mathew (2014) also stated that the meaning of *halal* in the *Quran* means legal or allowed. Therefore, *halal* food that can be eaten with no uncertainty means permissible food. *Halal* food and beverages can be defined as things that individuals can consume with no legitimate proof disallowing it and also free from any unlawful or impure content (Said et al., 2014). According to Kotler and Keller (2005), to satisfy customer wishes and needs, the benefits are provided by the product's attributes. Besides, product attributes are also the benefits communicated and delivered and thus it can be concluded that the company can use a strong competitive tool to

differentiate a company's products from their competitors which is by providing more attractive features in their products (Wan & Toppinen, 2016).

Eliasi and Dwyer (2002) mentioned in their study that by looking at the entire food system, the nourishment is considered *halal* or *haram*. If the source is *haram* and has potential mischief to the psyche, body and soul of an individual, the food is considered haram. Mashbuh means nourishment that was categorised between halal and *haram*. Healthy food is often associated with *halal* food. Wan and Toppinen (2016) stated that *halal* food including seafood, frozen foods, canned foods, meats, seasoning, noodles and pasta, sauce, beverages and packaged cooking sauces. Said et al. (2014) mentioned that for animals' meat to be considered as *halal*, the slaughtering process must follow the Islamic manner and be obtained lawfully. Hussain et al. (2016) clearly stated that *halal* products should be free from illicit or restricted contains such as pork, liquor and animal oil in the making of cookies, toiletries, cakes and so on. A further study conducted mentioned that *halal* means at the point when utilised about food in any structure at all over the span of exchange or business or as a major aspect of an exchange description, is connected to legitimate items or foods or beverages (Ambali & Bakar, 2014). Lee, Siong, Lee and Kim (2016) mentioned that the coverage of the halal concept is very wide, which includes the medical industry, banking, clothing, hotel management, cosmetic and other types of businesses.

With that, the present researcher used the *halal* food products throughout the research because this is what this industry has labelled itself. The definitions for the *halal* food products based on past studies are presented in Table 2.1. Since the definition by Matthew (2014) is suitable for the nature of the present study. Thus, this definition was adopted for this study.

Authors	Definition
Eliasi and Dwyer (2002)	By looking at the entire food system, the nourishment is
	considered <i>halal</i> or <i>haram</i> . If the source is <i>haram</i> and has

 Table 2.1: Definitions of Halal Food Items

	potential mischief to the psyhe body and soul of an
	individual, the food is categorised haram. Mashbuh
	means foods that fall among halal and haram. Healthy
	food is often associated with halal food.
Ambali and Bakar (2014)	Halal means when used about food in any structure at all
	over the span of exchange or business or as a major
	aspect of an exchange description is connected to
	legitimate items or foods or beverages.
Matthew (2014)	A permissible food that can be eaten with no uncertainty
	is being defined as <i>halal</i> in Quran, which also means
	lawful and permitted.
Said et al. (2014)	Halal food and beverages can be defined as things that
	individuals can consume with no lawful proof denying it
	and also free from any unlawful or tainted elements.
Hussain et al. (2016)	Halal items should be free from unlawful or denied
	contains such as pork, liquor and creature oil in the
	production of cookies, toiletries, cakes and so on.
Wan and Toppinen	Halal food including seafood, frozen foods, canned
(2016)	foods, meats, seasoning, noodles and pasta, sauce,
	beverages and packaged cooking sauces.

#### 2.2 Descriptions of Variables included in the Study

#### 2.2.1 Purchase Intention

According to Azam (2016), the intention is the condition of an individual's readiness to play out conduct and it is viewed as a quick antecedent of conduct. Intention to purchase also can be characterised as the condition of an individual is to prepare to buy certain items. Besides, it is also stated that a person's attitude and behavioural intention dietary patterns and aide's decision making during buying affected by their religious commitment (Lee et al., 2016). Many previous studies conducted have used the Theory of Planned Behavior (TPB) to clarify an individual's

intention to buy, use and acknowledge *Halal* food items (Rahim & Junos, 2012). Asshidin, Abidin and Borhan (2016) further stated in the automobile sector, market research companies use to predict the sales of new products and existing products by analysing the intention to purchase.

Other than religion, the aim to take or to buy food is likewise identified with a positive or negative attitude, social weight and conduct control of the person. Based on the TPB, perceived behavioural control, attitude on the conduct and subjective norm have been seen as the components to anticipate and clarify the conduct and intention. According to Ajzen (1991) stated that based on the hypothesis set, attitude towards conduct could be dictated by assessing the advantages and disadvantages of directing certain conduct; subjective norm alludes to the perceived perception of a person on the companion or social weight prompting to the performing of the conduct; perceived behavioural control means to a person's interpretation confidence of certainty to play out the conduct. Ozgen and Kurt (2013) mentioned that research could be done to decide the relationship and impact of customer attitude to buy *halal* items.

Wan and Toppinen (2016) stated that after the customers considered and evaluated the product, the purchase behaviours or purchase intention will exist. In the same study, it stated that customers' purchasing behaviour and their subjective intentions could be predicted and being used as a key point. Therefore, it is considered as an effective tool used by most of the marketers in predicting the customers' purchasing intention (Khemchotigoon & Kaenmanee, 2015).

#### 2.2.2 Product Quality

According to Han and Hyun (2015), the noteworthy job of quality and fulfilment in framing the aim has been supported by many studies across the fields. In the study, it also mentioned that quality, as a rule, goes about as a critical indicator of fulfilment, subsequently, this relationship is a basic in producing behavioural aims too (Ryu & Han, 2010). Besides, Cronin and Taylor (1992) stated that a customer's behavioural intentions were built by the satisfaction of the services and product quality.

In their findings on diners' procedure in making a decision, Ryu and Han (2010) reliably demonstrated that quality segments including the nature of nourishment, atmospherics and administration essentially influence fulfilment and such connections effectively clarified the development of aim.

Sumirah, Nurul, Zaw and Wai (2015) mentioned that the execution of *halal* food certification increased the degree of trust among the customers. Hussain et al. (2016) in his study, stated that there are only a few local accredited bodies in Pakistan that can follow the *halal* quality standards despite many efforts to build up the *halal* industry. A product is considered the evidence of lawful if it carries the *halal* logo with it (Sumirah et al., 2015). Hence, according to Abdul Latiff, Mohamed, Rezai and Kamaruzzaman (2013), the *halal* market is no longer cater to the Muslim consumer only. It is also a concern for the non-Muslims towards health issue which arises around the world (Abdul Latiff et al., 2013). Besides, Matthew (2014) mentioned that products with high quality mean the products get a positive response from the customers in terms of cleanliness and freshness.

Roininen, Tuorila, Zandstra, Graaf, Vehkalahti, Stubenitsky and Mela (2001) stated that nowadays, the consumer is becoming more alert on a particular food because of longer lifespan and also the quality of the food they will consume and it is also a quality yardstick for customers. According to Mathew (2014), non-Muslims also think that food with *halal* logo is hygiene and clean to consume. In the current globalisation world, *halal* now is being viewed not only related to religious needs but also as a standard of hygiene and healthy style (Ismail & Nasiruddin, 2014). Besides, Das (2014) also mentioned that companies should know how the customers evaluate the product quality because customers sometimes do not mind about the cost of purchasing that product or services, but rather the quality of it.

According to Khemchotigoon and Kaenmanee (2015), perceived product quality did impact on consumer satisfaction in the retail business. Besides, the same study also stated the findings of the mobile phone industry in South Korea, Singapore and Canada which found out that customer satisfaction did impact by the perceived product quality and performance. Ismail et al. (2018) stated that there is a noteworthy connection between *halal* intention to buy in Muslim customers with hygiene and clean process.

#### 2.2.3 Product Price

Kaura (2012), the objective price of the product and service is being defined by the customer's perceptual representation and subjective perception. Cost, as a heuristic sign, is more promptly detectable than quality (Yoon, Oh, Song, Kim & Kim, 2014). Lien, Wen, Huang and Wu (2015) in their study did mention that buyer normally would have a scope of the cost that is worthy for a proposed buy. In marketing components, price is considered an important element and the sensitivity of price is being characterised as the level of reaction and mindfulness appeared from clients on the changes in the costs of products and services (Low, Lee & Cheng, 2013). Cho, Rha and Burt (2015) stated that the significant factor influencing the purchase of retail brands affected by the concern for the price paid relative to the quality received which is the value consciousness.

A study conducted by Dominique-Ferreira, Vasconcelos and Proença (2016) mentioned that for the past few decades, pricing has also been discussed because it is difficult to estimate, and it also affected the business profit. Besides, the difficulty of setting the correct price also means that not all the client is willing to pay a similar cost for a given item. Dominique-Ferreira et al. (2016) further mentioned that the overall profits of the companies and market acceptance is being considered in the pricing strategies. The chances of success in achieving the corporate profitability goal will be higher if managers have more information and well-equipped with the reactions of customers over the price (Ramirez & Goldsmith, 2009).

Besides, in a study conducted about the organic food in south Gujarat, majority of the consumer is willing to pay a similar cost for the natural food being manufactured (Sharma, Shukla, Leua, Parmar & Chaudharo, 2016). According to Low et al. (2013),

customers will measure their satisfaction when they are purchasing a product or service by comparing the value at the price they have to pay and also the cost incurred when acquiring the products or services with other similar purchases. In the same study, it also stated that consumers would not commit any further purchase or future purchases with the same retailer if being found out that the price being paid is high and the outcome of the product was unsatisfying. According to Liang, Choi and Joppe (2018), the factor that influences the customers' behaviour intentions is price. It is also stated in their study that there will be various considerations taken by customers based on the differences in the pricing.

#### 2.2.4 Product Availability

According to Moussaoui, Williams, Hofer, Aloysius and Waller (2016), to improve sales and revenue, many retailers believe that there is a need to improve the on-shelf availability (OSA) of the products. Aastrup and Kotzab (2009) stated that the major component of customer service is OSA and also the key execution pointer in the retail business. When the customer is seeking for the product at the shelf, the likelihood of the item is accessible in a saleable condition (Aastrup & Kotzab, 2009). The same study also stated that due to poor OSA, both retailers and manufacturers would suffer a significant loss (Aastrup & Kotzab, 2009). Therefore, Moussaoui et al. (2016) stated that poor OSA would have a negative impact on customer demand and also the loss of sales.

Generally, when customers accept that they have more assets and chances like time, cash, speciality shops and skills, their impression of control is high and thus their social expectations expanded (Alam & Sayuti, 2011; Omar, Mat, Imhemed & Ali, 2012). Consequently, the more the control a Muslim client feels in regard to consuming *halal* food, the more chances they will be planned to do as such. A study by Siddiquei, Raza, Awan and Bukhari (2013) stated that the low brand loyalty among customers is because of the lack of availability of the product which is a very important element in a country like Pakistan. But, some studies in the organic food segment set up showed no significant connection between the accessibility of natural food items and cost with purchase goals. But, from the research conducted by Sharma et al. (2016) about organic food products in south Gujarat, it mentioned that because of the lack of availability of the products, two-thirds of the consumer had never tried it.

# **2.2.5 Product Ingredients**

From the Islamic point of view, product ingredients imply that the client knows about the quality, safety and ingredients used in the food content (Yunus et al., 2014). The same study further stated that the decision to purchase or not is related to the information about the product ingredients. Ismail et al. (2018) further stated that via food labelling, customers would collect information and knowledge about the product ingredients. Ambali and Bakar (2014) mentioned that *halal* food consumption shows that ingredient and material are not unsafe to the wellbeing because Allah only allowed what is useful for a human being. Based on the Islamic guidelines, processed food and drink need to use an ingredient and raw materials, which is *halal* (Ambali & Bakar, 2014). The same study also stressed that Muslim people must be alert of the process of handling, item packaging and ingredients of the food and drinks. Yunus et al. (2014) emphasized that individual and environmental reasons, for example, promotional content and product ingredients are highly related to the consumers' aim to buy.

Moreover, Yunus et al. (2014) elaborated in their research that through food labelling, the information being gathered helps consumers to know what they are consuming. Furthermore, people's purchase behaviour will be reacted based on sufficient knowledge of the product ingredients. Hussain et al. (2016) stated that manufacturers must meet the *halal* requirements during the production process to gain the consumer's trust in the *halal* packages and sell it. Yunus et al. (2014) elaborated that processing aids, storage, retailing, transportation, handling and processing equipment are highly related to quality and safety, which included in the *halal* food as well. Therefore, the knowledge, Shariyah and information are extremely significant when choosing their nourishment option by Muslims (Yunus et al., 2014).

Hussain et al. (2016) also emphasized in their study that consumers and manufacturers' main concern in the *halal* food products are the ingredients. Disallowed ingredients like a pig, animal grease and alcohol, which is *haram*, should not be consumed by the consumers (Hussain et al., 2016). Therefore, the same study stated that product development and production processes need to be changed continuously for marketers to understand the concept of *halal*. Moreover, before producing and marketing the food products to consumers, the analysis of food contents and ingredients can be done with the advancement of technology (Hussain et al., 2016). Lastly, the same study further stated that products with a certified logo and *halal* ingredients would be the attention of customers to buy besides well-promoted products (Hussain et al., 2016).

#### 2.2.6 Product Awareness

Ambali and Bakar's (2014) mentioned that modern technology had created a variety of food products and choices for the customers. But it also comes with added substances and contents to coordinate with perfections and demands in food generation. Therefore, the customers are confused and most of them are ignorant of what they have eaten or are devouring because of the different variations and types of foods and items available for sale. Besides, religion and belief are also stated as a source of awareness towards consumption behaviour (Schiffman & Kanuk, 1997). Knowledge, religious identity, orientation and belief of different religious groups will influence their purchasing decision.

The assurance of intentional conduct means awareness in which the condition to deliberately interpret and recognize an object (Jang & Woo, 2015). According to Azam (2016), the meaning of 'awareness' is characterized just as being the information or understanding of a specific subject or circumstance. Furthermore, curiosity regarding the level of information among non-Muslim towards *halal* item emerges (Krishnan, Mohd Aderis, Azman & Kamaluddin, 2017). However, it is a tough thing to educate the non-Muslim about the benefits of *halal* (Yunos, Mahmood & Mansor, 2014).

According to Anderson, Fornell and Rust (1994), customers are putting their trust in the data source and data received dependent on the vendor or outside eyewitnesses as well. Besides, in another study by Yunos et al. (2014) stated that a proper educational program and marketing tools are very crucial to ensure the success of the *halal* sector in Malaysia. The government assumes a major role in delivering education about the possibility of food safety and resources to the target audiences (Ambali & Bakar, 2014). Abd Rahman, Asrarhaghighi and Ab Rahman (2015) stated that knowledge could refer to the facts, experiences and feelings known by a person. Besides, awareness and consciousness can also be gained via learning and experience. Said et al. (2014) mentioned that according to the data in the customer's memories, they would make a decision after acquiring data and review data dependent on various examples in making a decision. Abdul Aziz and Chok (2013) also mentioned that non-Muslim customers' intention to purchase is positively related to the knowledge about halal food. Exposure, religiosity, knowledge and awareness are significant to describe the customer's intention to buy takaful insurance for their family (Lee, Ling, Ng, Tan & Wong, 2018)

#### 2.2.7 Product Food Safety

According to Teng, Rezai, Mohamed and Shamsudin (2012), the quality of food, food safety, supplements and sanitation is being controlled in Malaysia by JAKIM. Under the Malaysian *Halal* Standard MS 1500:2004, it includes packaging, manufacturing and providing the food items to the client. Besides, in the current globalisation world, the varieties of food products in the market have increased. But, problems like food with manufactured accreditation, absence of personality and false documentation consistently existed, and the client knows about it (Lee et al., 2016). Therefore, the customers will always concern about the food they consume and purchase (An, Sohn, Choi & Kim, 2015). Under the requirement of *halal*, the food being produced will be certified by reputable certification and this has given them confidence and is becoming the main choice of purchase by a consumer (Aziz & Chok, 2013). An et al. (2015) also mentioned that a product being certified with *halal* is a significant element in the buying choice and there is a demand for it by Muslim customers no matter which country they are in. Marzuki, Hall and Ballantine (2012) stated in their study that the restaurant manager, which is in the hospitality sector trust on the certification of *halal* food items. It helps them to understand better of Muslims' food practices and boundaries. Hussain et al. (2016) mentioned that non-Muslim also familiar with the *halal* concept and it was not only limited to Muslims. Besides, the same study also stated that safer food was demanded by both Muslim and non-Muslim customers.

In Malaysia, any food provided cannot include the components which are harmful to wellbeing either during the preparation process, sales and utilization. It will be governed under the Food Act 1983, Food Regulations 1985 and Food Hygiene Regulations 2009 to protect the customers (Soraji et al., 2017). According to Yang (2017), who did a case study on variables affecting the non-Muslim buying behaviour on *halal* food, the safety of the *halal* food has a critical impact on the non-Muslim clients.

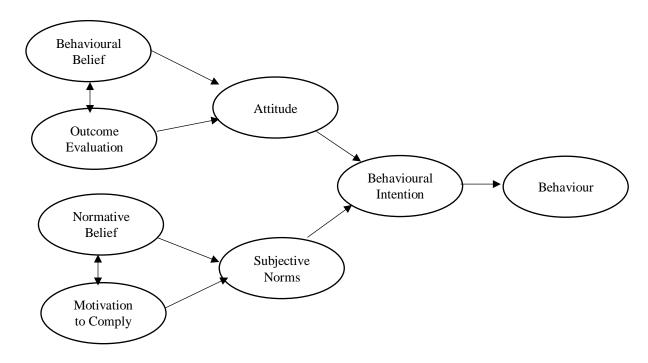
Ambali and Bakar (2014) stressed that the *halal* concept is extremely specific in food issues to prevent diseases by keeping the food and the things around us are clean. The same study also stated that an establishment in cleanliness procedures in guaranteeing food cleanliness was laid down under The Codex General Principles of Food Hygiene and the Malaysian Standard MS1514 on General Principles of Food Hygiene. Therefore, Ambali and Bakar (2014) stated that a safe food, beverage or item which does not cause hurt to the clients when it is arranged and eaten or in understanding to its proposed utilization including Muslims or non-Muslims as well.

# 2.3 Review of Relevant Conceptual Framework

# 2.3.1 Theory of Reasoned Action (TRA)

According to the TRA model, the intention to perform the behaviour will determine a person's behaviour (Hussain et al., 2016) (Figure 2.1). Hanzaee and Ramezani (2011) stated that this theory would be used to measure the individual's attitude on purchasing behaviour. Then, the subjective norm which means the influence of friends and family members on the person's behaviour on a concept or any objects (Hanzaee & Ramezani, 2011). TRA model was used in Malaysia to study the intention to pick *Halal* items by buyers (Lada, Tanakinjal & Amin, 2009). Besides, when analysing the building of Muslim consumers' attitude on *halal* products, TRA model was used in their study (Mukhtar & Butt, 2012).

#### Figure 2.1: Theory of Reasoned Action (TRA)



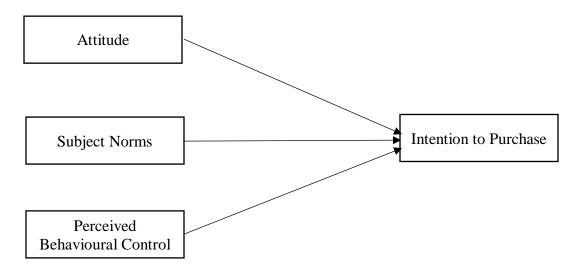
Source: Hussain et al., 2016

#### 2.3.2 Theory of Planned Behaviour (TPB)

Ismail et al. (2018) stated that until today, the TPB concept was widely applied to measure the customer's intention to accept, buy and consume *halal* products. Besides, the intention to buy will be high when the customers are confident and believe in the ingredients of the *halal* products. Furthermore, Ajzen (1991) stated that the TPB model was the extension of the TRA model and used in many studies.

Haque et al. (2015) used the "Theory of Planned Behaviour (TPB)" which consists of attitude, subject norms and perceived behavioural control (Figure 2.2). Research stated the concerns on the product and safety was used under the category of perceived behavioural. Furthermore, in order to accept an Islamic product, confident level of a person will affect the non-Muslim's intention (Shahril, Razimi & Romle, 2017). Then, the *halal* concept's awareness was categorised under the positive attitude's factors. Mas'ud (2017) stated that acceptance intention can be affected by affecting the non-Muslim customers' aim in buying *Halal* food item in Malaysia.



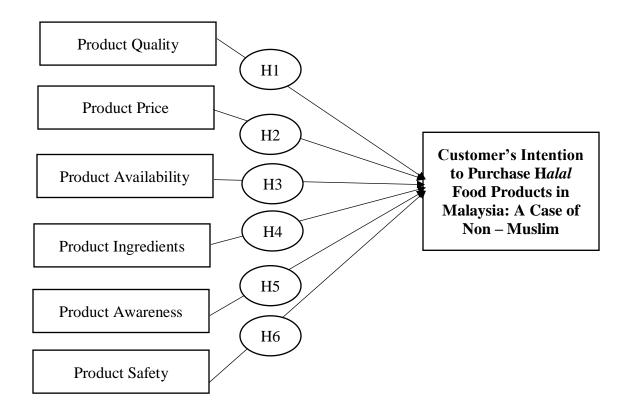


Source: Haque et al. (2015)

# 2.4 Proposed Research Framework

The proposed research framework for this research showed is adapted and adopted from the TPB model used in Haque et al. (2015), which were shown in Figure 2.3. However, more variables are being added into the main three categories of TPB, which are product price, product availability and product ingredients into this research study.

# Figure 2.3: Customer's Intention to Purchase *Halal* Food Products in Malaysia: A Case of Non – Muslim



# 2.5 Hypothesis Development

Market acknowledgement of *halal* food could be because of a few reasons. Numerous researches have been carried out on *halal* food utilization among Muslims (Matthew, 2014). But, for non-Muslim customers, it is another option whether to consume *halal* or non-*halal* food products. In this conceptual framework, the intention to buy *halal* food items of non-Muslim will be categorised as the dependent variable, which is relied upon to be affected by the independent factors as far as the product quality, price, availability, awareness, ingredients and safety of the *halal* items.

# 2.5.1 The Relationships between Product Quality and non-Muslim customers' Intention to Purchase *Halal* Food Products

According to Das (2014), perceived quality is one of the variables which influences the intention to buy. Besides, Das (2014) also mentioned that companies should know how the customers evaluate the product quality because customers sometimes do not mind about the cost of purchasing that product or services, but rather the quality of it.

According to Haque et al. (2015), the issue of food safety and quality is hereby a matter of changeless concern. Malaysia has built up itself as the centre point of *halal* foods. Now and again, the issues of Malaysian certification ensure for food and items are significantly commonplace and it is proposed that in the universal market, it is just Malaysia whose *halal* accreditation is done by the legislature and approved by their Islamic associations (Haque et al., 2015). Customers will always react positively and acknowledge items with top quality because it characterises the cleanliness and freshness of the items. In the same research about the acknowledgement of *halal* food, Matthew (2014) stated that generally, all customers are concerned about food safety. It is critical to be worried about what is taken into the body as it will turn out to be a piece of the individual based on the Islamic perspective (Matthew, 2014). Therefore, the findings by Haque et al. (2015) and Matthew (2014) will be used in this study. In the light from the discussion, the hypothesis is drawn as follow: H1: Product quality will have a positive effect on non-Muslim customers' intention to purchase halal food products.

# 2.5.2 The Relationships between Product Price and non-Muslim customers' Intention to Purchase *Halal* Food Products

From the client's point of view, price means the quantity of cash clients must offer up to get the item and service (Zeithaml, 1988). Numerous clients use price as a quality-signalling sign mirroring the conventional true way of thinking that "you get what you pay for" (Erickson & Johansson, 1985). Clients do not generally remember the actual costs of items. Rather, they encode costs in a manner that is significant to them (Zeithaml, 1988). Besides, some studies also expressed that intention to buy is the probability that a client will purchase a specific item or service (Hussain et al., 2016). In this study, findings by Cho et al. (2015) which stated that the significant factor influencing the purchase of retail brands affected by the concern for the price paid relative to the quality received which is the value consciousness will be used. According to Yang (2017), non-Muslim customers' acknowledgement of halal food is significantly related to the *halal* product price. Lien et al. (2015) stated that there will be a price range that is acceptable for intended buyers to buy. Hsu, Chang, and Yansritakul (2017) in their findings also further stated that customers' final buying decision and evaluation of product alternative is significantly impacted by the price. Therefore, findings in Lien et al. (2015) and Hsu et al. (2017) will be used in this study. In light of the discourse, hypothesis is drawn as below:

# H2: Product Price will have a positive direct effect on non-Muslim customers' intention to purchase halal food products.

# 2.5.3 The Relationships between Product Availability and non-Muslim customers' Intention to Purchase *Halal* Food Products

According to Elseidi (2018), for customers with low perceived availability of economical items, consuming manageable items may be impossible. They guarantee that this issue is identified with the shortage of local food shops or farmers' business

sectors, which frequently come up short on the consistency and accommodation requested by clients. Perceived availability of *halal* personal care items has a critical impact on the intent to buy these items (Bonne et al., 2007).

Awan et al. (2015) stated that because of the availability of the *halal* products, consumers have a lot of choices in Pakistan. Besides, the availability of food also falls under the responsibility of authority and government (Awan et al., 2015). As a customer, the easy to find *halal* food products when needed will directly encourage the non-Muslim customers to purchase *halal* food items. At the point when items are effectively accessible in the market, clients will in general buy it (Sharma et al., 2016). This study will refer to the study conducted by Sharma et al. (2016) about organic food products in south Gujarat whereby the study mentioned that because of the lack of availability of the products, two-thirds of the consumer had never tried it. One of the measurements being used in their study stated that organic food. Yang (2017) also mentioned that the easily available information and beautiful storefront design did affect on the non-Muslim buyer's acknowledgement. Hence, the following hypothesis is drawn based on the discussion:

H3: Product Availability will have a positive effect on non-Muslim customers' intention to purchase halal food products.

# 2.5.4 The Relationships between Product Ingredients and non-Muslim customers' Intention to Purchase *Halal* Food Products

Hussain et al. (2016) also emphasised in their study that customers strongly follow Shariah principles and laws on non-food items and foodstuffs. Besides, the study also stated that the crude materials and contents utilized in the item would be the attention of customers. Materials, ingredients and preservatives should be free of prohibited aromas and tasted like gelatine, pig contents and alcohol in the *halal* products like juices, cosmetics, candies and other products (Hussain et al., 2016). Hussain et al. (2016) stated that manufacturers must meet the *halal* requirements during

the production process to gain the consumer's trust in the *halal* packages and sell it. Furthermore, the customer's motivation to pick or not to pick any products related to the product ingredients (Hussain et al., 2016).

Yunus et al. (2014) mentioned that people would react differently in their buying attitude based on the product ingredient's knowledge. The same study also stressed that during the process of purchasing, the possibility of accepted or rejected is relatively related to the knowledge of the product ingredients. Therefore, when Muslims make a decision on the food option, it is based on the importance of information, Shariyah and knowledge (Yunus et al., 2014). Customer's familiarity with the quality and ingredients as well as food safety should be mulled over under the item fixings from the Islamic point of view (Yunus et al., 2014). Therefore, the findings will be used in this study. The following hypothesis is drawn according to the discussion as below:

H4: Products ingredients will have a positive effect on non-Muslim customers' intention to purchase halal food products.

# 2.5.5 The Relationships between Product Awareness and non-Muslim customers' Intention to Purchase *Halal* Food Products

According to Ambali and Baka (2014), customers need to depend on the dealer or outside eyewitnesses and put their trust in the data source and data received. Therefore, it is critical to encourage clients with rules through educating and introduction to acquiring the correct food. Findings suggested via education will be one of the techniques for making individuals mindful of what they take with regards to security and clean condition, which is the fundamental point of *halal*. It is also via education that people will get exposure and making the right choices during their consumption (Ambali & Baka, 2014).

Rajagopal, Ramanan and Satapathy (2011) suggested in their study that to better utilised the marketing and branding, which is through marketing communication to make it available and sell *halal* items and services. The same study further mentioned that customers were not presented enough to *halal* accreditation and *halal* brands. Husin, Ismail and Rahman (2016) stated that mass media and word of mouth will affect the purchase intention on Takaful. Waseem-Ul-Hameed, Ali, Nadeem and Amjad (2017) in their study mentioned that in order to increase the demand on Takaful, the level of awareness will increase based on the increase in the distribution channel and education level.

In this study, the research done by Abd Rahman et al. (2015) which stated that knowledge could refer to the facts, experiences and feelings known by a person. Besides, awareness and consciousness can also be gained via learning and experience will be used in the study. Past examinations researching the connection between a government job and the intention to purchase found a noteworthy positive relationship (Shamsollahi, Chong & Nahid, 2013). Awan et al. (2015) also mentioned in their study that the marketing of *halal* food products did positively related to the buying intention in Pakistan. Besides, the findings used in their investigation accomplished the requirement of the reliability test. Therefore, Ambali and Baka (2014) and Awan et al. (2015) researches on *halal* awareness will be applied in this study. The following hypothesis is drawn:

H5: Product Awareness will have a positive effect on non-Muslim customers' intention to purchase halal food products.

# 2.5.6 The Relationships between Product Food Safety and non-Muslim customers' Intention to Purchase *Halal* Food Products

In Malaysia, food safety is getting more attention from clients. The consumption of *halal* food and natural food is getting the acceptance of the customers. This can be seen by the number of organic and *halal* food outlets in Malaysia. Abdul Aziz and Chok (2013) mentioned that the *halal* logo did provide assurance and recognition regarding food products. Haque et al. (2015) stated that there was a

noteworthy worry from manufacturers, buyers, authority and food producers on food quality and safety.

According to Haque et al. (2015), quality and food safety in Malaysia is an undeniably significant problem. The improper use of pesticides is a concern and affecting the food safety level. Therefore, Hazard Analysis Critical Control Points has invented new rules for food products where food safety was the predominant issue (Haque et al., 2015). For non-Muslims, consuming halal food is becoming normal practices in Malaysia because of our multi-cultural practices. Rezai, Mohamad and Shamsuddin (2011) stated that the advantages of halal food are clarified from different contexts, including food safety. Yang (2017), in his study, did mention that the safety of *halal* food significantly affects the non-Muslim client's acknowledgement of *halal* food items. Hussain et al. (2016) mentioned that the client reacts to the food safety and quality of the *halal* products beyond religion. It is because the *halal* product is considered stricter in terms of safety and quality requirements than the non-*halal* items. According to Mathew (2014), non-Muslims also think that food with halal logo is hygiene and clean to consume. Therefore, the findings in Haque et al. (2015) and Matthew (2014) will be used in this study. Based on the discussion, the following hypothesis is drawn:

H6: Products food safety will have a positive effect on non-Muslim customers' intention to purchase halal food products.

# 2.6 Conclusions

Based on the literature review being conducted about the general *halal* industry, *halal* regulations and various factors influencing the client's intention to buy, the researcher had identified several areas in the literature, which can be further explored. There are many types of research being conducted about the *halal* industry in Malaysia, but there is limited research being conducted to explore the non-Muslim customers' intention to buy *halal* food items. Factors like the impact of product availability, product ingredients and product price, which might significantly influence the intention to buy *halal* food by non-Muslim can be further explored. Therefore, this research plan to further study and gather more comprehensive data on the interrelationships between product price, product quality, product safety, product awareness, product availability and product ingredients which will affect the non-Muslim customers' intention to buy *halal* food items.

# **CHAPTER 3**

# **RESEARCH METHODOLOGY**

# 3.1 Introduction

This chapter is to outline the methodology that will be used to collect data and to testify the proposed hypotheses in this study. Besides, Chapter 3 including exploration structure (research design) and inspecting plan (sampling design), measurements of each variable, information gathering instruments, questionnaire formulation, pilot test and data analysis techniques that are being employed.

# 3.2 Research Design

Gyempeh (2017) mentioned that people can share their feedback by using quantitative method which measures the customer's intention to purchase, attitude and behaviour. Creswell and Creswell (2017) stated that to study the cause and effect, quantitative research uses the questionnaires on targeted respondents and analyses it mathematically upon empirical assessment. Sekaran (2005) defined an exploration structure is a device to settle on the best way to gather information, interpret information and investigate information to propose an answer for the issue. This finding will use a quantitative method or a structured approach. Besides, Chua et al. (2017) mentioned that a research method comprises the measurement of data collection and statistical processing is quantitative research. Kumar (2014) also stated that questions that were predetermined such as design, sample, objectives and questions that the study will ask from the respondents are being defined as a quantitative approach.

Moore (2016) stated that in the quantitative approach, the researcher would normally build up a hypothesis before surveying to know the significant or not significant impact among the variables. Besides, in order to analyse the hypothesis about the questions, primary and secondary information will be collected to give the best result in a quantitative approach (Moore, 2016). Therefore, this study will discuss the variables in the TPB model which are product price, product quality, product safety, product availability, product awareness and product ingredients and to find out the relationship towards the intention of non-Muslim's clients to buy *halal* food items.

# **3.3 Data Collection Method**

Rouse (2016) mentioned that to get a complete result of research in data collection, it involved sources collected from many places and evaluated. During the data collection, the researcher needs to ensure that there is no bias. Eng, Lee, Tan and Yeoh (2012) stressed that a data collection that is not properly carried out would affect the outcome of the study and become invalid. Besides, Palinkas, Horwitz, Green, Wisdom, Duan and Hoagwood (2015) also stated that to avoid invalid result, it is crucial for a researcher to have data collection methods as the data gathered will be reliable and valid. During the data interpretation, data is analysed against the theoretical framework. Information gathered via the questionnaire survey will be dissected to test the hypothesis. Some of the data analysis techniques like hypothesis testing by using the correlation analysis and reliability test will be used in this study. There is two main information gathering method, which is the primary data and secondary information gathering method. For this particular research, primary information is chosen for this information analysis through a questionnaire survey.

#### 3.3.1 Primary Data

Eng et al. (2012) stated that the questionnaire is more convenient and cheaper. The information created and gathered explicitly for the exploration venture close by is defined as primary information (Zikmund, 2003). The principal source of an information accumulation strategy is the primary data used in this examination to take care of the particular research issue as described in Chapter 1. Primary information can be gathered via interviews, study or centre gathering. For this research, a self-administered poll study will be developed to collect the information. Therefore, for this research, an aggregate of 300 sets of polls were circulated to the non-Muslim respondents to gather the data on their purpose to buy *halal* food items in Malaysia. Google Form will be used to send to the targeted respondents to fill in and return it automatically when they finish answering. This will be one of the cost-effective and fast approaches to outreach into a bigger group of respondents. But, a traditional way of approach which is a questionnaire survey through face to face approach will be used as well for the data collection.

# 3.4 Sampling Design

Soni (2014) stated that there are five stages in completing a sampling structure which is to choose a population, decide on the sampling structure and inspecting the area, then testing approach, size and at the end, to proceed with the process of sampling. To draw interferences about the population and represents a bigger population, the subset of the population being surveyed is a subset of a sample (Crossman, 2019). Sekaran and Bougie (2016) stated that information gathered via sampling design will have fewer errors and better efficiency.

## 3.4.1 Target Population and Location

In this study, the target population consists of non-Muslim local customers in the Klang Valley area in Malaysia. According to Saunders et al. (2012), 300 respondents are enough to represent the overall population. Therefore, the survey will be carried out to focus on a total of 300 non-Muslim respondents in the Klang Valley area. According to PEMANDU (2010), there was approximately 20.0 per cent of the national population, which is around six million peoples in the Klang Valley area. Besides, the peoples living in Klang Valley contributed about 30.0 per cent of gross national income (GNI ), which is RM 263 billion to the country. Therefore, the reason that this study selected Klang Valley as the sampling area is because of the high population and spending power. World Population Review (2019) stated that there were an estimated 7,780,301 people of the population in Klang Valley.

#### 3.4.2 Sampling Size

Pedhazur and Schmelkin (1991) stated that 50 respondents are more lenient for each variable in a quantitative method, cited by VanVoorhis & Morgan (2007). But, Manning and Munro (2007) stated that a group size of 100 is being categorised as "poor", 200 is categorised as "fair" and the group size exceeding 300 is considered "good". According to Saunders et al. (2012), 300 respondents are enough to represent the overall population. Therefore, questionnaires will be distributed to 300 non-Muslim respondents for this research.

#### 3.4.3 Sampling Frame

A list of components from where the samples can be drawn is being defined as the sampling frame (Zikmund, 2003). However, the testing frame is not suitable in this examination on account of non-probability sampling strategies that are utilized for further understanding. Non-Muslim respondents will be selected randomly regardless of the gender, income level and education level with no sampling frame.

## 3.4.4 Sampling Technique

Zikmund (2003) stated that the sampling approach consists of two, which is a likelihood (probability) approach and the non-likelihood (non-probability) approach. By choosing an example from the target respondents, it is considered as examining strategy. Snowball sampling, quota sampling, convenience sampling and judgemental sampling is categorised under the non-probability approach (Zikmund, 2003). According to Kumar (2014), by choosing the respondents based on their availability, easy and volunteering, it is considered a non-probability sampling which was categorised as convenience sampling. Etikan, Musa and Alkassim (2016) mentioned that feedbacks are easily available, simple and affordable by using convenience sampling approach to allow the researcher to collect an enormous number of finished polls that result in rapidly and cost-effectively.

# 3.5 Research Instrument

Questionnaire survey via hardcopy and Google Form will be utilized in this examination. A self-administered questionnaire will be used to survey and achieve the objective of this study. Hair, Money, Samouel and Page (2007) stated that without the need for the certified interviewer, the target respondents could answer and understand the survey questions for data collection. Each questionnaire will need about 15 minutes to complete it.

## 3.5.1 Questionnaire Design

Data collected from the poll survey is yield as accurate, high credibility and meet the investigation objective (Sekaran & Bougie, 2016). To ensure that the research objectives for the study can be answered with the information collected, it should be one of the main criteria in a questionnaire development (Churchill & Iacobucci, 2006). Besides, Churchill and Iacobucci (2006) also mentioned that the questionnaire design and administration are performed according to the research objectives, hypothesis developed literature's support and also the constructs adopted.

In this study, the questionnaire will be organized depends on the variables distinguished to have affected the non-Muslim clients to buy *halal* food items. The questionnaire will be categorised into two parts. The first part comprises the respondents' demographic background, for example, sexual orientation, age gathering, salary level and education background. The applicable statistics factors will be utilized as illustrative factors in deciding the hidden components of the examination.

The second section of the questionnaire will consist of all the independent variables and dependent variable to discover the elements affecting the non-Muslim clients to buy *halal* food items. Questions that will be used comprises of product quality (5 items), product price (5 items), product availability (4 items), product ingredients (5 items), product awareness (4 items), product safety (5 items) and intention to purchase (6 items). This survey will be carried out using self-administered data collection mode,

where it required the respective respondents to answer the questionnaire themselves, with the absence of the researcher.

# 3.5.2 Measurement Scale

Li (2013) stated that to gauge the extent of agreement and disagreement of the designated questions is by using a Likert scale as an indicator. Dawes (2008) stated that a 5-point scale format is normally used by researchers. Besides, the same study mentioned that 5-point scales did increase the improvement on validity and reliability result compared with fewer scale. Furthermore, to reflect the respondent's actual thought, it is more accurate to use a 5 point Likert-scale (Joshi, Kale, Chandel & Pal, 2015). Therefore, this study will use a Likert scale whereby all the variables will be assessed utilizing a 5 point Likert-scale to show their level of understanding. Scale point "5" specified "Strongly Agree", point "4" designated "Agree", point "3" designated "Neutral", point "2" designated "Disagree" and point "1" specified "Strongly Disagree".

# 3.5.3 Pilot Test

Adolphus (2017) mentioned that to make a question construction more beneficial, a pre-test of questionnaire needs to have specialists. A pilot study was carried out to examine the reliability and validity of the poll before the actual study. The purpose is to ensure that the respondents comprehend the issues being raised by the researcher. Besides, it is also to make sure that the flow of the questionnaire and the length of the questionnaire are properly used in this study. Malhotra (2004) mentioned that experts and academicians are needed to evaluate the questionnaire.

Shuttleworth (2015) mentioned that to examine the feasibility, reliability, validity and identified errors within the questionnaire, a pilot study needs to be carried out. Therefore, field pilot testing needs to be conducted by distributing the questionnaire to 30 non-Muslim. Kothari (2004) expressed that the sample size for the pilot testing is ranged from 25 to 100 respondents.

## 3.6 Measurements of Variables in the Study

Hair, Black, Babin, Anderson and Tatham (2010) stated that if the support from the previous research on the topic is inadequate, a researcher needs to develop his or her construct measurement. If the previous literature is sufficient enough to support the discussion, it was recommended that existing literature could be used to operationalise a particular construct. Besides, Hair et al. (2010) mentioned that the reliability and validity aspects of the construct's measurements could further be enhanced by adopting the existing variables from the previous literature.

In this study, to obtain a reliable measurement scale items, a two ways approach were taken for this study. Firstly, a literature review was carried out on the *halal* industry, *halal* regulations, non-Muslim customers' intention to purchase and factors affecting the customers to identify the initial measurements on the related variables. Secondly, after reviewing all the related literature review related to the *halal* industry, the measurements construct which were firmly identified with the target of this investigation were adapted and modified based on the objective of this study. All the measurements adapted will be discussed in the following section.

#### **Purchase Intention**

Haque et al. (2015) conducted a study on customers' intention to buy *halal* food items of non-Muslim in Malaysia. The study is using the Theory of Planned Behaviour (TPB) which consists of attitude, subjective norms and perceived behavioural control (Ajzen, 1991) which affect the non-Muslim customers' perception toward purchasing *halal* food. All the data used in the study was tested using Cronbach's alpha on the reliability of the data. Besides, controls on environmental friendliness and food safety influenced non-Muslims' attitude on the in-take of *halal* foods (Haque et al., 2015).

According to Mathew (2014), non-Muslim also think that food with *halal* logo is hygiene and clean to consume. In their study, two items were used to measure the intention to purchase *halal* food among non-Muslim customers. Therefore, the two items used are suitable for this research. Besides, all the two items used in his study did

achieve the requirement of the reliability test. Therefore, the items adopted and modified, as shown in Table 3.1 presents six measurement scale that the researcher used in this study to measure the intention to purchase.

No.	Items
1.	I will purchase <i>halal</i> food in the future
2.	I will choose <i>halal</i> food even if I am not familiar with the brand
3.	The probability that I would consider buying <i>halal</i> food product is high
4.	I believe that <i>halal</i> food product is safe in terms of the process (slaughtered
	according to Muslim ritual)
5.	I believe that <i>halal</i> food product is safe from animal diseases
6.	I believe that <i>halal</i> food product available in the market is being monitored by
	the government.

<b>Table 3.1:</b>	Purchase	Intention
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Sources: Haque et al. (2015); Matthew (2014)

## **Product Quality**

According to Haque et al., (2015), the issue of food safety and quality is to some degree matter of changeless concern. Malaysia has built up itself as the centre point of *halal* foods. Sometimes, the issues of Malaysian accreditation ensure for food and items are enormously recognizable and it is proposed that in the worldwide market, it is just Malaysia whose *halal* affirmation is issued by the government body and authorised by their Islamic associations (Haque et al. 2015). The measurement scales used in the study will be adopted and modified in this study. Besides, all the variables utilized in their examination achieved the necessity of the validity and reliability test.

According to Mathew (2014), non-Muslims also think that food with *halal* logo is hygiene and clean to consume. In their study, three items were used to measure the food quality, which affects the acknowledgement of *halal* food among non-Muslim clients. Along these lines, the three items used in the previous study are suitable with one of the variables in this study, which is product quality. Besides, all the three items used in his study achieved the requirement of the reliability test. Therefore, five measurement items will be used to measure the product quality as shown in Table 3.2.

Items
I think <i>halal</i> food products are of better quality.
I believe that <i>halal</i> food product is guaranteed with a <i>halal</i> certificate and is under the
control of the Malaysian halal authority.
Halal concept guarantees the quality of food.
The quality of <i>halal</i> food is more important than price.
I consume <i>halal</i> food because of its quality.

Table 3.2: Product (	Quality
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Sources: Haque et al. (2015); Matthew (2014)

# **Product Price**

According to Liang et al. (2018), the factor that influences the customers' behaviour intentions is price. It is also stated in their study that there will be various considerations taken by customers based on the differences in the pricing. To measure the price sensitivity, they adapted the scale from Irani & Hanzaee (2011) to Airbnb context. But it is not suitable to use in this study because it did not focus on physical products. According to Yang (2017), non-Muslim customers' acknowledgement is significantly related to the *halal* product price and *halal* food. Yet, the measurement being used in that particular study is wide, which includes the measurement of the design of the store is beautiful and easy access to information, sales reputation and delivery time. Therefore, it does not suit the objective of this study.

Hsu et al. (2017) also conducted a study on the price sensitivity of consumers' willingness to buy the green skincare items in Taiwan. The scale items developed by Laroche, Bergeron, and Barbaro-Forleo (2001) was to find out the willingness of customers to fork out a higher price for green skincare items instead of non-green skincare items in Taiwan was used in their study. These measurement scales were also

reported to fulfil all the requirements for confirmatory factor analysis, validity and reliability that confirmed the scale to be valid and will be adopted in this study.

Lien et al. (2015), trust, price, brand image and value have an impact on the customer intention to book a hotel online in Taiwan. Besides, their study also stated that the customers would have an acceptable price range to book online. The measurements used surpassed the threshold value of 0.7, which shows that it is reliable (Hair et al., 2010). Average Variance Extracted (AVE) also exceeded the value of 0.5, which showed sufficient convergence (Hair et al., 2010). Therefore, the price estimation scales used in their study on online hotel booking are used and altered to suit the purposes of this research. In total, there are five measurement items used to measure the product price, as shown in Table 3.3.

No.	Items
1.	It is acceptable to pay more for <i>halal</i> products than for non- <i>halal</i> products.
2.	I am willing to pay more for <i>halal</i> products than for non- <i>halal</i> products.
3.	I am willing to spend extra money per month to buy <i>halal</i> products.
4.	The <i>halal</i> product price is reasonable.
5.	The <i>halal</i> product price is affordable

Sources: Hsu et al. (2017); Lien et al. (2015)

# **Product Availability**

Sharma et al. (2016) stated that as a customer, the easy to find *halal* food products when needed would directly encourage the non-Muslim customers to purchase *halal* food items. When products are accessible in the market, customers in general will to buy it. This study will refer to study conducted by Sharma et al. (2016) about organic food products in south Gujarat; it did mention that because of the lack of availability of the products, two-thirds of the consumer had never tried it. However, the main objective of that particular study is to find out the customers' awareness and opinion regarding organic food in India.

To get more measurements for this particular variable, measurements from Yang (2017) which also conducted a study on factors that influences the buying behaviour by non-Muslim customers in China will be adapted and modify according to the needs of this study. It is because the previous study was focusing more on the vendor side to provide *halal* food to the customers. All the measurements from the previous study were tested on the reliability using SPSS software. Therefore, Table 3.4 presents the four items adopted and modified to be used to measure product availability in this study.

No.	Items
1.	The halal food information is true and easily available
2.	Halal food product is difficult to find.
3.	Halal authorities are responsible for halal product availability.
4.	I am willing to put considerable effort into obtaining <i>halal</i> foods.
Sources: Awan et al. (2015): Sharma et al. (2016): Yang (2017)	

Sources: Awan et al. (2015); Sharma et al. (2016); Yang (2017)

## **Product Ingredients**

Hussian et al. (2016) stated that manufacturers and customers' main concern are the ingredients in *halal* food products. The same study further stated that consumers' behaviour on *halal* products was influenced by ingredients. Customers' motivation to buy or not to buy will be based on product ingredients (Hussain et al., 2016). Besides, Golnaz et al. (2010) mentioned that a person and natural factors like promotion data, circumstances and food specific properties that incorporate the ingredients of the item are highly associated with customers' purchase intention towards food.

Yunus et al. (2014) in their study stated that the chances of rejecting or accepting during a purchasing decision are related to the information of product ingredients. The same study further mentioned that Muslims' judgement on *halalness* was affected by the familiarity of product ingredients. People will react to their buying behaviour based on sufficient knowledge about product ingredients (Yunus et al., 2014). Besides, all the measurements applied in their investigation did achieve the rule of thumb of the reliability test, which is moderate and good (Hair, 2007). Therefore, Table 3.5 presents the five measurements scale which was adopted from Yunus et al. (2014) to be used in this study to measure the product ingredients.

No.	Items
1.	Familiarities of product ingredients influence purchase intention
2.	Information about product ingredients is very important
3.	A complex terminology used in describing product ingredients is difficult to
	understand
4.	Unfamiliar ingredients create suspicious in term of "Halalness."
5.	Product ingredients reflect the safety and quality of Halal packaged food
	product

**Table 3.5: Product Ingredients** 

Sources: Yunus et al. (2014)

## **Product Awareness**

According to Ambali and Baka (2014), customers need to depend on the vendor or third party observers and put their trust in the data source and data gathered. Therefore, it is crucial to encourage clients with a rule via instructing and exposure to obtain the correct food. Findings suggested that via education, which is by making individuals mindful of kinds of what they consume with regards to wellbeing and hygienic condition, which is the principal point of *halal*. It is also via education that people will get exposure and making the right choices during their consumption (Ambali & Baka, 2014).

Therefore, the four measurement scales being used in their study did suit the objectives of this study. Sekaran and Bougie (2016) stated that to test how well an instrument created measures a specific construct planned to measure is by using a construct validity test. Besides, to test how reliable the estimating instruments had measured the constructs, the reliability test needs to be used.

Awan et al. (2015) mentioned in their finding that consumer intention to buy *halal* food products could be significantly related to explicit marketing strategy in Pakistan. The study-proven that *halal* awareness has a significant connection with the marketing of *halal* food items. Besides, all the items used in their study did achieve the requirement of the reliability test. Table 3.6 presents the measurement items which were adopted and modified from Ambali and Bakar (2014) and Awan et al. (2015) to measure the product awareness in this study.

No.	Items
1. ]	I am highly aware of <i>halal</i> food.
2. 1	I believe I have enough knowledge about <i>halal</i> food.
3. 1	I always concern about halal issues.
4. 1	By consumer right, I always take action when there is something wrong with
t	the food I purchase.

Sources: Ambali and Baka (2014); Awan et al. (2015)

# **Product Safety**

According to Haque et al. (2015), it is an undeniably significant problem related to food quality and security in Malaysia. Matthew (2014) also stated that to determine food safety, food quality also is used. For non-Muslim, consuming *halal* food is becoming normal practices in Malaysia because of our multi-cultural practices. Rezai et al. (2011) stressed that the benefits of *halal* food are explained from other contexts, including food safety. Haque et al. (2015) further stated that only in Malaysia, the *halal* certification is being authorized by Islamic associations and issued by the government.

According to Mathew (2014), non-Muslim also think that food with *halal* logo is hygiene and clean to consume. In their study, three items were used to measure food safety, which affects the acceptance of *halal* food among non-Muslim customers. Therefore, measurement items used in the previous study are suitable to be adopted and modified for this study. Besides, all three items used in his study did achieve the requirement of the reliability test. Therefore, Table 3.7 presents the five items which will be used to measure the product safety in this study.

No.	Items
1.	Halal food products are safer and more hygienic.
2.	I choose <i>halal</i> food products because of cleanliness.
3.	I am concern about food safety.
4.	I feel secure eating <i>halal</i> food.
5.	I feel that <i>halal</i> food is safe to consume.

**Table 3.7: Product Safety** 

Sources: Haque et al. (2015); Matthew (2014)

# 3.7 Data Processing

Data processing is those data being collected and converted into valuable information or information into data. The process including checking of data, data editing, data coding, data transcribing and data cleaning. In order to be utilized for further investigation purposes, the information introduced will be in the perfect, orderly path and straightforward.

# 3.7.1 Questionnaire and Data Checking

Checking on the questionnaire is the first step of processing the data (Malhotra & Peterson, 2006). A pilot test was conducted to detect any factors and problems which will interrupt the quality of the data. The pilot test will help to avoid any misunderstanding and misinterpretation during the actual survey. Changes can be made to improve the quality of the actual questionnaire further like amend or drop the unrelated and unacceptable questionnaire.

# 3.7.2 Data Editing

Data checking on the consistency, completeness, reliability and legibility is important to make the data ready for coding. When the information is prepared for coding and move to information keeping, it is being categorised as data editing (Zikmund, 2003). Inaccurate and incomplete data will be filtered and dropped.

# 3.7.3 Data Coding

The process of changing the feedback from the questionnaire or data into a character symbol. Data coding need to be done to categorise each measurement into a number to represent the feedback of each question (Malhotra & Peterson, 2006). The analysis process will be easier and faster after the data coding.

# 3.7.4 Data Transcribing

There are several statistical softwares available for performing statistical analysis which is Statistical Package for Social Sciences (SPSS), SAS, R-programming, STATA, SEM-AMOS, SEM-SmartPLS and WarpPLS (Ong & Puteh, 2017). However, this paper only focuses on using SPSS, which is commonly used in social sciences research to analyse the data collected. As mentioned by Ong and Puteh (2017), SPSS statistical software is usually used for comparison analysis.

Besides, the same study also stated that both parametric and non-parametric comparison analysis could be easily performed by using SPSS. Moreover, it also enables a frequency analysis, normality test and outliers test to be used. After the data being categorised, the following move is moving the data being coded from the survey into the relevant software, which is the Statistical Project of Social Science (SPSS) to execute the eventual cross tabulation. The results will be generated through SPSS software for analysis.

# 3.7.5 Data Cleaning

In the last step of data processing, the data cleaning process will be carried out with the help of SPSS software. SPSS can be used to identify the inconsistent, extensive value and missing value.

# 3.8 Data Analysis

# 3.8.1 Demographic Characteristic of the Respondents

Section I consists of the demographic characteristics like age, gender, income level, education level and employment status. However, this study will be focus only on the client's intention to buy *halal* food item by non-Muslims only.

Section II consists of the independents variable which affects the purpose to buy *halal* food items by non-Muslims like product quality, product safety, product ingredients, product awareness, product availability and product price. The respondents are required to indicate their response to each statement using "1" for "Strongly Disagreed" to "7" for "Strongly Agreed". Sekaran and Bougie (2016) mentioned that SPSS could be used to perform analysis like cluster analysis, categorical data analysis, factor analysis and analysis of variance (ANOVA). A process of transferring the raw data into a format that will provide better guidance and understanding of the raw data is being defined as descriptive analysis (Zikmund, 2003). The purpose of descriptive analysis is to identify and summarise the characteristics of the data to make it easier to understand and analyse.

# 3.8.2 Factor Analysis

Pallant (2016) mentioned that factor analysis is used to develop and evaluate scales and tests. Besides, the same study also stated that there are two ways in carrying out a factor analysis, which is an exploratory analysis that is used in the early stages for information collection about the relationship of the variables. Then, the second way is a complex set of approaches used in the latter part of the analysis, which is confirmatory analysis. Kasier (1974) stated that a Kaiser-Meyer-Olkin (KMO) measurement above 0.6 is acceptable. Table 3.8 below shows the KMO value interpretations.

KMO Value	Description
≥ 0.9	Marvellous
$\geq 0.8$	Meritorious
≥ 0.7	Middling
≥ 0.6	Mediocre
≥ 0.5	Miserable
< 0.5	Unacceptable

**Table 3.8 KMO Value Interpretations** 

Source: Kaiser (1974)

# 3.8.3 Reliability Test

Zikmund (2003) mentioned that the purpose of the reliability test is to test the consistency and stability in measuring the inter-correlation of the data. The same study also stated that Cronbach's alpha is used to measures the reliability that shows how good the variables are correlated among others. The higher the value of Cronbach's alpha, the test results will be more reliable. Goforth (2015) also stated that the higher the value of Cronbach's alpha, it portrays that the measurements in the group have the same covariance and same concept. Table 3.9 below shows the Range of Cronbach's Alpha value.

 Table 3.9 Range of Cronbach's Alpha Value

Cronbach Alpha (α)	Indication
$\alpha$ value between $0.81 \sim 0.95$	Very
$\alpha$ value between $0.71 \sim 0.80$	Good
$\alpha$ value between 0.61 ~ 0.70	Fair
$\alpha$ value < 0.60	Poor

Source: Cheng, Wee, Leow and Yeo (2014)

## 3.8.4 Descriptive Analysis and Central Tendencies Measurement of Constructs

Kline (2005) stated that the acceptable range value of the Skewness is ( $\pm$ 3), and the range value of Kurtosis is ( $\pm$ 10) for all the variables to be considered as normal.

This study will analyse the data collected and compare the dependent variable with all the independent variables to study whether all the variables are within the range value of Skewness and Kurtosis to show that the data in this research is normal.

## **3.8.5** Normality Test

A normality test is used to examine the degree to which the distribution of data corresponds to the normal distribution (Hair et al., 2010; Mirjalili & Nadeb, 2018). If the sample size is less than 50, Shapiro-Wilk (sig-value) will be used. But, for sample size more than 50, Kolmogorov-Smirnov (significant value) will be used. If the significant value is greater than  $\alpha$  0.05, the data is normally distributed.

# 3.8.6 Inferential Analysis

Lee et al. (2018) stated that in order to analyze the relationship and conclusion on behalf of both independent and dependent variables, inferential analysis is used. Besides, inferential analysis also used to check on the research framework, research questions and hypothesis. In this study, SPSS is used as the tool to conduct the following analysis which is Pearson's Correlation Analysis and Multiple Regression Analysis.

# 3.8.6.1 Pearson Correlation Analysis

Tan, Ang, Chee, Lau and Teh (2018) stated that to measure the direction and strength of the relationship between independent variables and dependent variable, Pearson correlation coefficient is used. The coefficient can range from positive "1" to negative "1" to (Hair et al, 2007). Tan (2015) stated that a perfect positive correlation represents by a value of +1 and a perfect negative correlation represents by a value of +1 and a perfect negative correlation represents by a value of correlation of the rule of thumb for the correlation coefficient, which determines the strength of association between the IV and DV.

 Table 3.10 Rules of Thumb of Pearson Correlation Analysis

Coefficient Range	Strength of Association
$\pm 0.91 \sim \pm 1.00$	Very Strong

$\pm 0.71 \sim \pm 0.90$	High
$\pm 0.41 \sim \pm 0.70$	Moderate
$\pm 0.21 \sim \pm 0.40$	Small but definite relationship
$\pm 0.00 \sim \pm 0.20$	Slight, almost negligible

Source: Hair et al. (2006).

#### **3.8.6.2** Multiple Linear Regression Analysis

Multiple linear regression is a model that has one dependent variable (Y) but with more than one independent variable (X). It is used to determine whether there is a positive or negative connection between the factors and to anticipate the estimation of dependence variable (Y) in light of the estimation of independent variables (X). The multiple linear regression model is as below:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + e$$

In this study, the dependent variable is the intention to buy the *halal* item by non-Muslim. The multiple linear regression is used to prove whether the independent variables have a significant relationship with the dependent variable. The equation of the study as below:

$$IP = \beta_0 + \beta_1(PQ) + \beta_2(PP) + \beta_3(PAY) + \beta_4(PI) + \beta_5(PAW) + \beta_6(PS) + e$$

IP = Non-Muslim Consumers' Intention to purchase Halal Food Products

- PQ = Product Quality
- PP = Product Price
- PAY = Product Availability
- PI = Product Ingredients
- PAW = Product Awareness
- PS = Product Safety
- e = Error Term

#### **3.9 Ethical Consideration**

While conducting research, there are three aspects of ethical issues that need to be emphasised by a researcher. First, the protection from harm; second, the confidentiality of the research and lastly, informed consent. Various considerations of ethics need to be adopted to address the potential ethical issues that might arise and to safeguard all the parties from any negative ethical issues during the implementation of this study.

Firstly, to make sure that there were no risks associated with the research procedures when analysing the data and presenting the finding of the data, the research study was designed carefully. Secondly, the researcher will inform the respondents of the objectives and benefits of this study. Besides, their contributions towards the study can be used by future researchers who are interested in exploring further into the *halal* development industry. All the data collected will be treated strictly and confidentially. Thirdly, there will be no respondents' personal information in the questionnaire survey.

To make sure the respondents feel safe and comfortable in participating in this research, the personal contact number, email, purpose of the research and background will be included. Besides, the respondents will voluntarily participate in this study and will be informed of the privacy and confidentiality of the research that will be carried out.

#### 3.10 Conclusion

In conclusion, this chapter explained the research methodology that will be used for this study. The questionnaire survey is to use a quantitative approach by collecting data and to find out whether the variables affecting non-Muslim customers to purchase *halal* food products is positively proven.

Besides, the steps involved to operationalise the constructs and variables in the questionnaire design, which is by using some of the original measurements and modified measurements from the previous studies to suits the objective of this study.

Sampling design and selection also being mentioned in this chapter. Lastly, data analysis will be carried out through SPSS software upon collecting the questionnaires. The results obtained will be interpreted in the coming chapter to answer the proposed hypotheses.

# **CHAPTER 4**

# DATA ANALYSIS

# 4.0 Introduction

The study would reveal the results of the report after analysing all the received data in this chapter. The explanation would be done to provide an overall image of the consequence. To analyse all data, the researcher used the Statistical Package for Social Science (SPSS) version 23.0 software. Data will be analysed using descriptive analysis, principal component analysis, multiple regression, and multicollinearity. The reliability analysis of the research will be shown.

# 4.1 Demographic Characteristics of the Respondents

In this study, the survey conducted had collected 321 completed questionnaires around the Klang Valley area. The gender of the respondents was quite even with male respondents (51.1 per cent), and the balance were female respondents, as shown in Table 4.1, with 48.9 per cent. The primary purpose of this study is to find out the non-Muslim's intention to purchase *halal* food products in Malaysia. Therefore, the non-Muslim respondents consist of the majority from the Chinese group; 72.0 per cent. The Indians and others are only composed of 28.0 per cent, which include local ethics who were working in the Klang Valley area like Kadazan, Bidayuh, Dayak and Sikh.

Characteristics	Chinese	Indians and	Total
	(%)	others	(%)
		(%)	
Gender			
Male	44.2	68.9	51.1
Female	55.8	31.1	48.9
Age Group			
21 - 30	33.8	22.2	30.5
31-40	39.4	34.4	38.0
41 - 50	14.3	26.7	17.8
51-60	9.5	12.2	10.3
61 and above	3.0	4.4	3.4
Total	100.0	100.0	100.0
Sample size (n)	(231)	(90)	(321)

 Table 4.1: Percentage Distribution of Respondents Gender and Age Group by

 Race

In terms of age group distribution, the majority of the respondents were between aged 21 to 30 years (30.5 per cent) and 31 to 40 years (38.0 per cent). The rest of the minority respondents were aged between 41 to 50 years (17.8 per cent) and (10.3 per cent) aged between 51 to 60 years. Respondents who were aged 61 and above only consists of (3.4 per cent) (Table 4.1).

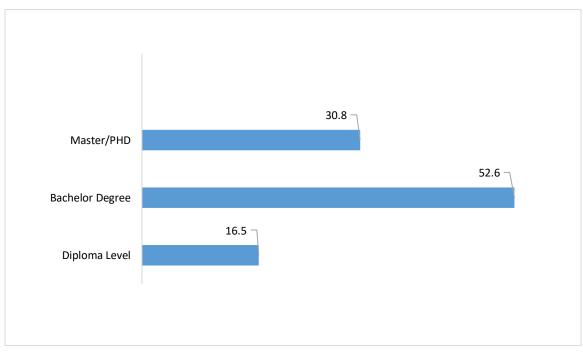
Table 4.2 shows the respondents' employment background by race group. The respondents from the private sector and government sector is about the same with 39.9 per cent from the private sector and 39.3 per cent from the government sector. The quite even responses from the private sector are very useful for this study because the employee working in private sector have more choices to eat when consuming their daily meals at their working place which consists of *halal* and non-*halal* food at the

restaurants nearby. However, for the government employee, the majority of the food being served is *halal* because of the government regulation and the reason of consisting a majority of Muslim employees. But, when it comes to purchasing *halal* food products in hypermarket or supermarket, most of the product are *halal* and been certified by the *halal* authority. This study shows that only 6.9 per cent of the respondents were employed and self-employed. Lastly, 14.0 per cent of the respondents were categorised under others, which consists of housewives, students, retired and unemployed persons. Therefore, it can be shown that this study does not only focus on a non-Muslim employee from the government sector which already well aware about *halal* food products but also looking into the employee from the private sector which has more choices when consuming food in their daily working schedule as shown in Table 4.2.

Characteristics	Chinese	Indians and others	Total
	(%)	(%)	(%)
Employment Status			
Employee-Private Sector	45.0	26.7	39.9
Employee-Government Sector	32.9	55.6	39.3
Employer/Self-Employed	9.5	0.0	6.9
Others	12.6	17.8	14.0
Total	100.0	100.0	100.0
Sample size (n)	(231)	(90)	(321)

 Table 4.2: Percentage Distribution of Respondents Employment Status by Race

Figure 4.1 shows that all of the respondents are educated with a minimum diploma level (16.5 per cent) and more than 80.0 per cent have bachelor's degree and master or PhD level. This shows that all the respondents can read and write. Therefore, the result from the survey will be very useful because all the respondents are educated and will not face any difficulties in understanding and answer the questionnaire survey.



**Figure 4.1: Distribution of Respondents Education Level in Percentage** 

Characteristics	Chinese	Indians and	Total
	(%)	others	(%)
		(%)	
Education Level			
Diploma and below	19.5	8.9	16.5
Bachelor Degree	48.9	62.2	52.6
Master/PhD Degree	31.6	28.9	30.8
Total	100.0	100.0	100.0
Sample size (n)	(231)	(90)	(321)

Overall, the Chinese respondents were exposed to the minimum level of diploma education (19.5 per cent) as compared to Indians and others with only 8.9 per cent. Yet, Indians and others respondents have more education in bachelor's degree (62.2 per cent) as compare to Chinese respondents (48.9 per cent). The Chinese

respondents have access to the higher education level of master and PhD Degree level (31.6 per cent) as compared to Indians and others (28.9 per cent) only.

Glaurdić and Vuković (2016), in their study, stated that the definition of marriage as a union of life between a man and a woman. In this study, more than 50.0 per cent of the respondents are married (53.9 per cent), as shown in Table 4.4. But respondents who were still single consist of 42.7 per cent of the total respondents. This might due to the majority of the respondents were only between the ages of 21 to 40 years. It is quite common nowadays for a couple to get married after the age of 30 years old when their financial and job security are more stable. Besides, according to the Department of Statistics, Malaysia (2018), in 2017, the number of marriages is 190,532, which decreased by 4.9 per cent from 200,274 in 2016. Under the category of others, which consists of divorced and widowed, it only consists of 3.4 per cent in the study.

Characteristics	Chinese	Indians and	Total (%)	
	(%)	others		
		(%)		
Marital Status				
Single	48.9	26.7	42.7	
Married	48.1	68.9	53.9	
Others	3.0	4.4	3.4	
Total	100.0	100.0	100.0	
Sample size (n)	(231)	(90)	(321)	

Table 4.4: Percentage Distribution of Respondents Marital Status by Race

In terms of ethnicity, the Chinese respondents' marital status between single and married is quite even with a single for 48.9 per cent and married for 48.1 per cent in Table 4.4. But, under the Indians and others, the married respondents (68.9 per cent) are more than the single respondents (26.7 per cent). In comparison, based on the married status between male and female respondents, this study found that the Indians and others have a huge gap between male (68.9 per cent) and female (31.1 per cent), a difference of more than 30.0 per cent. But, the gap between Chinese respondents of male (44.2 per cent) and female (55.8 per cent) is only about 10.0 per cent.

According to the Department of Statistics, Malaysia (2017), there are three different income groups, which are those with a median household income of at least RM13,148 is being defined as the top 20 (T20). Then, those who have a median household income of RM6,725 is under the middle 40 (M40) groups. Last but not least, the median household income with RM3,000 is under the bottom 40 (B40) group. Therefore, this study has categorised the income level of respondents into three categories, as shown in Table 4.5. Overall, there were more than 60.0 per cent of respondents earning RM3,500 and above. This shows that the respondents, as consumers, will have the purchasing power and decide what type of food to consume and purchase.

Characteristics	Chinese	Indians and others	Total
	(%)	(%)	(%)
Income Level			
Less than RM3,500	40.7	22.2	35.5
RM3,500-RM7,999	35.5	51.1	39.9
RM8,000 and above	23.8	26.7	24.6
Total	100.0	100.0	100.0
Sample size (n)	(231)	(90)	(321)

 Table 4.5: Percentage Distribution of Respondents Income Level by Race

Table 4.5 also shows that overall, Chinese respondents earn RM3,500 to RM7,999 and RM8,000 and above is only 59.3 per cent as compared to Indian and other respondents which have 77.8 per cent received more in both categories. Furthermore, the percentage of income earned by the Indians and other categories earned more than RM3,500 to RM7,999 is 51.1 per cent and also higher than the

Chinese respondents, which only consist of 35.5 per cent. In terms of gender, this study managed to cover both male and female working respondents of 51.1 per cent and 48.9 per cent, respectively, which have income.

## 4.2 Principal Component Analysis

The usage of principal component analysis was to find alternative solutions by grouping statements into a smaller set of numbers or factors and also to explore and form the composition of a set of statements. Besides, this study also used the reliability analysis to determine how reliable all the variables were. Therefore, principal component analysis with varimax rotation test was performed to assess the underlying constructs for 34 items and five items were subsequently deleted from the scale.

KMO and Bartlett's Test					
Kaiser-Meyer-Olkin Measure of Sampling Adequacy0.916					
Bartlett's Test of Sphericity	Approximate Chi-Square	6,694.248			
	Degrees of freedom (df)	406			
	Significant (Sig.)	0.000			

Table 4.6: Kaiser-Meyer-Olkin and Barlett's Test

Based on Table 4.6, the Kaiser-Meyer-Oklin value is 0.916, which exceeds the value of 0.600 (Kaiser, 1974). Besides, Bartlett's Test of Sphericity also reached the statistical significance with the p-value of less than 0.01 level, which supports the factor ability of the correlation matrix (Dziuban & Shirkey, 1974).

Principal components analysis showed that the presence of seven factors with Eigenvalue exceeding one (1.000), and in total explained 72.3 per cent of the variance (Table 4.7). Moreover, the rotated matrix was examined to name and explain the seven factors. In this study, the sample size was 321, and the factor loading greater than 0.500 (greater than 0.21) was identified as significant (Hair et al., 2007). Lastly, the items loaded in each factor and their factor loadings were summarized in Table 4.8.

		Initial Eigenva	lues	Extract	tion Sums of Squa	red Loadings	<b>Rotation Sums of Squared Loadings</b>		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.881	40.968	40.968	11.881	40.968	40.968	5.760	19.861	19.861
2	2.875	9.914	50.882	2.875	9.914	50.882	3.690	12.725	32.586
3	1.701	5.867	56.749	1.701	5.867	56.749	2.944	10.152	42.738
4	1.251	4.315	61.064	1.251	4.315	61.064	2.429	8.377	51.115
5	1.157	3.990	65.054	1.157	3.990	65.054	2.247	7.749	58.864
6	1.069	3.687	68.741	1.069	3.687	68.741	2.056	7.091	65.955
7	1.025	3.536	72.277	1.025	3.536	72.277	1.834	6.322	72.277
8	0.788	2.716	74.993						
9	0.737	2.543	77.536						
10	0.682	2.352	79.887						
11	0.651	2.244	82.131						
12	0.549	1.892	84.023						
13	0.522	1.799	85.822						
14	0.481	1.660	87.482						
15	0.437	1.507	88.989						
16	0.412	1.422	90.412						
17	0.353	1.218	91.629						
18	0.335	1.155	92.784						
19	0.315	1.085	93.869						
20	0.293	1.009	94.878						
21	0.256	0.884	95.762						

## Table 4.7: Results of Total Variance Explained

22	0.218	0.751	96.514					
23	0.207	0.714	97.228					
24	0.189	0.650	97.878					
25	0.162	0.559	98.437					
26	0.135	0.465	98.902					
27	0.132	0.454	99.357					
28	0.098	0.338	99.695					
29	0.089	0.305	100.000					
Extraction Metho	straction Method: Principal Component Analysis.							

Rotated Con	nponent	Matrix <sup>3</sup>	*						
	Component								
	1	2	3	4	5	6	7		
Halal food products are safer and more hygienic	0.804								
I choose Halal food products because of cleanliness	0.749								
I feel that Halal food is safe to consume	0.720								
I feel secure eating Halal food	0.714								
I believe that <i>Halal</i> food product is safe from animal diseases	0.714								
Halal concept guarantee the quality of food	0.710								
I think Halal food products are of better quality	0.703								
I consume Halal food because of its quality	0.645								
It is acceptable to pay more for <i>Halal</i> products than for non- <i>Halal</i> products		0.812							
I am willing to spend extra money per month in order to buy <i>Halal</i> products		0.784							
I am willing to pay more for <i>Halal</i> products than for non- <i>Halal</i> products		0.774							
I am willing to put considerable effort into obtaining <i>Halal</i> foods		0.610							
I believe that <i>Halal</i> food product available in the market is being monitored by the government			0.768						
I believe that <i>Halal</i> food product is guaranteed with a <i>Halal</i> certificate and is under the control of the Malaysian <i>Halal</i> authority			0.740						
<i>Halal</i> authorities are responsible for <i>Halal</i> product availability			0.688						
The Halal product price is reasonable			0.605						
The Halal product price is affordable			0.596						
I will purchase Halal food				0.818					
The probability that I would consider buying <i>Halal</i> food product is high				0.760					
I will choose <i>Halal</i> food even if I am not familiar with the brand				0.528					
A complex terminology used in describing product ingredients is difficult to understand					0.794				

 Table 4.8: Results of Rotated Component Matrix

Unfamiliar ingredients create suspicious in term of "Halalness"	0.747		
Product ingredients reflect the safety and quality of <i>Halal</i> packaged food product	0.590		
I believe I have enough knowledge about <i>Halal</i> food		0.770	
I always concern with Halal issues		0.686	
I am highly aware of <i>Halal</i> food		0.668	
I am concern about food safety			0.758
By consumer right, I always take action when there is something wrong with the food I purchase			0.746
Information about product ingredients is very important			0.581
Extraction Method: Principal Component Analysis.			1
Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 8 iterations.			

Based on the result analysis, the findings have answered the research question that total six factors were affecting the non-Muslim customer's intention to buy *halal* food items in Klang Valley area as shown in Table 4.9. The intention to purchase as the dependent variable were tested with three loaded statements and those statements combined accounted for 4.3 per cent of the variance. The findings stated that customers are willing to purchase *halal* food. Besides, the study also shows that the chances of the customer considering *halal* food is high. Azam (2016) mentioned that when a person is prepared to buy certain products, it can be defined as purchase intention.

Factor	Factor loadings	Eigenvalues	% of variance explained	Cronbach's Alpha
Factor Y: Intention Purchase		1.251	4.315	0.818
I will purchase Halal food	0.818			
The probability that I would consider buying <i>Halal</i> food product is high	0.760			
I will choose <i>Halal</i> food even if I am not familiar with the brand	0.528			
Factor X <sub>1</sub> : Product Quality		11.881	40.968	0.938
Halal food products are safer and more hygienic	0.804			
I choose Halal food products because of cleanliness	0.749			

 Table 4.9: Summary Results of Principal Component Analysis

I feel that <i>Halal</i> food is safe to consume	0.720			
I feel secure eating Halal food	0.714			
I believe that <i>Halal</i> food product is safe from animal diseases	0.714			
Halal concept guarantees the quality of food	0.710			
I think Halal food products are of better quality	0.703			
I consume Halal food because of its quality	0.645			
Factor X <sub>2</sub> : Product Price		2.875	9.914	0.916
It is acceptable to pay more for <i>Halal</i> products than for non- <i>Halal</i>				
products	0.812			
I am willing to spend extra money per month in order to buy	0.784			
Halal products	0.784			
I am willing to pay more for Halal products than for non-Halal	0.774			
products	0.774			
I am willing to put considerable effort into obtaining Halal foods	0.610			
The stars X is Developed A see the ball the		1 701	5.9/7	0.9(2
Factor X <sub>3</sub> : Product Availability		1.701	5.867	0.863
I believe that the government is monitoring <i>halal</i> food product available in the market	0.768			
I believe that Halal food product is guaranteed with a Halal				
certificate and is under the control of the Malaysian Halal	0.740			
authority				
Halal authorities are responsible for Halal product availability	0.688			
The Halal product price is reasonable	0.605			
Halal product price is affordable	0.596			
Factor X <sub>4</sub> : Product Ingredients		1.157	3.990	0.681
A complex terminology used in describing product ingredients is		1.137	3.330	0.001
difficult to understand	0.794			
Unfamiliar ingredients create suspicious in term of "Halalness"	0.747			
Product ingredients reflect the safety and quality of Halal				
packaged food product	0.590			
Factor X <sub>5</sub> : Product Awareness		1.069	3.687	0.739
	0.770	1.007	5.007	0.157
I believe I have enough knowledge about <i>Halal</i> food	() / / ()			
I believe I have enough knowledge about <i>Halal</i> food I always concern about <i>Halal</i> issues I am highly aware of <i>Halal</i> food	0.770			

Factor X <sub>6</sub> : Product Safety		1.025	3.536	0.629
I am concern about food safety	0.758			
By consumer right, I always take action when there is something wrong with the food I purchase	0.746			
Information about product ingredients is very important	0.581			

Factor  $X_1$ : This factor is labelled as "product quality" and is one of the six independent variables, and it relates to how the customers evaluate the product quality that becomes one of the customer's concerns when decide to purchase *halal* food products. Besides, customers will always respond positively and accept products with high quality because it defines the cleanliness and freshness of the products. In this factor, eight loaded statements were tested, and the results demonstrated that these combined loaded statements concerned displayed 40.97 per cent of the variance (Table 4.9). This result also shows that *halal* food items are safe, hygiene and clean for the customer to eat. Customers are very confident that *halal* products are a guarantee of quality and free from animal diseases. Furthermore, only the government of Malaysia issued the *halal* certification and authorised by their respective Islamic associations (Haque et al., 2015). Matthew (2014) in their study, also stated that the quality of food is more important than price when purchasing *halal* food.

Factor  $X_2$ : This factor is named "product price" with the loaded statements covering whether the customer is willing to pay more for *halal* products as compared to non-*halal* products. Besides, it also tested whether the customers are willing to spend more money every month to buy *halal* products. Furthermore, it also shows that the customers are willing to put up some effort into buying *halal* foods. Four loaded statements were tested, and the theses statements combined accounted for 9.91 per cent of variance (Table 4.9). Lien et al. (2015) stated that there is an acceptable price range for purchasers in their study. In addition, Liang et al. (2018) also mentioned that according to the price differences, customers would have various considerations in making a decision.

Factor  $X_3$ : This factor is labelled "product availability" with loaded statements comprising of government role to monitor the product and also the product available in the market is a guarantee in terms of quality and safety. Besides, customers also think that the price of *halal* food products available is reasonable. Under the product availability, five loaded statements were tested. The statements combined accounted for 5.87 per cent of variance

(Table 4.9). Sharma et al. (2016) stated that customers would tend to purchase when products are easily available in the market.

Factor X<sub>4</sub>: This factor is named "product ingredients", and three loaded statements were tested. The result shows that these combined loaded statements concerned displayed 3.99 per cent of variance (Table 4.9). The information about product ingredients will affect the chances of accepting or rejecting during a purchasing decision (Yunus et al., 2014). The same study further stated that when customers have sufficient knowledge about the product ingredients, it will affect their buying behaviour. In the three loaded statements, customers will tend to be suspicious if unfamiliar with the product ingredients. Furthermore, *halal* packaged food's product ingredients reflected safety and quality. However, if the product ingredient's description is too complicated, it will make the customer difficult to understand.

Factor  $X_5$ : This factor is called "product awareness" in which to test how much knowledge and understanding of the non-Muslim's customers towards *halal* food products and also be awared of it. This factor has three loaded statements and accounted for 3.69 per cent of the variance (Table 4.9). The study suggested that one of the ways to make people aware of *halal* food safety and hygiene condition is through education (Ambali & Baka, 2014). The same study also stated that people would make the correct decision during their purchasing when they were educated. Furthermore, Awan et al. (2015) stated that the marketing of *halal* food products had a positive relationship with *halal* awareness.

Factor  $X_6$ : This factor is labelled "product safety" with three loaded statements and can explain 3.53 per cent of variance (Table 4.9). The findings stated that the quality and safety of food in Malaysia is a significant problem (Haque et al., 2015). Besides, Rezai et al. (2011) also stressed that from other perspectives, food safety is used to explain the benefits of *halal* food. In the three loaded statements, customers are concern about the safety of the food when purchasing and will take relevant action if they feel that something is wrong.

## 4.3 Reliability Analysis

In this research, the purpose of the reliability test is to find out the consistency and stability in measuring the inter-correlation of the data (Zikmund, 2003). Therefore, Cronbach's alpha value will be used to measures the reliability that shows how good the variables are

correlated among others. Besides, Goforth (2015) also mentioned that if the value of Cronbach's Alpha is higher, it shows that the measurements in the group have the same concept and the same covariance.

Furthermore, this study found that the Cronbach's Alpha for the dependent variable, which is the intention to purchase (Y) was 0.818. Then, the six independent variables which were tested with Cronbach's Alpha were above 0.60 (the first factor was 0.938, the second factor was 0.916, the third factor was 0.863, the fourth factor was 0.681, the fifth factor was 0.739, and the last factor was 0.629) as shown in Table 4.11. Cheng et al. (2014) stated that Cronbach's Alpha value of 0.610 and above is fairly reliable, and Cronbach's Alpha value of more than 0.710 is good reliability.

Table 4.10 points out that the Cronbach's alpha value was good at 0.938 for the product quality variable. The lowest Cronbach's alpha value is 0.629 for product safety. This might be due to the interpretation of the respondents that the product quality and product safety are the same. Product ingredients also have the Cronbach's alpha value of 0.681. This might be due to customers already familiar with *halal* food items when purchasing and usually will look at the expired date instead of the ingredients.

Variable	Mean	Standard Deviation	Cronbach's Alpha	Items
Y: Intention Purchase	3.012	1.201	0.818	3
X <sub>1</sub> : Product Quality	2.739	1.165	0.938	8
X <sub>2</sub> : Product Price	2.095	1.149	0.916	4
X <sub>3</sub> : Product Availability	3.470	1.039	0.863	5
X <sub>4</sub> : Product Ingredients	3.951	0.950	0.681	3
X <sub>5</sub> : Product Awareness	3.004	1.179	0.739	3
X <sub>6</sub> : Product Safety	4.207	0.856	0.629	3

Table 4.10: Descriptive Statistics on the Constructs and Cronbach's Alpha

### 4.4 **Descriptive Statistics**

In order for the data to be considered normal, Kline (2005) claimed that the acceptable range value of the Skewness is ( $\pm$ 3), and the range value of Kurtosis is ( $\pm$ 10). Some studies

also stated that a value between  $\pm 2.0$  in many cases is acceptable, depending on the particular application (George & Mallery, 2016). Table 4.11 describes the statistics in detail; all the variables are within the range value of Skewness and Kurtosis, which means the data in this research, is normal.

	Intention to	Product	Product	Product	Product	Product	Product
	Purchase	Quality	Price	Availability	Ingredients	Awareness	Safety
N Valid	321	321	321	321	321	321	321
Missing	0	0	0	0	0	0	0
Mean	3.012	2.739	2.095	3.4700	3.951	3.004	4.207
Std. Error of Mean	0.067	0.065	0.064	0.058	0.053	0.066	0.048
Median	3.000	2.625	2.000	3.600	4.000	3.000	4.667
Mode	3.000	1.000	1.000	4.200	5.000	2.330	5.000
Std. Deviation	1.20063	1.16516	1.14936	1.03880	0.95017	1.17939	0.85627
Variance	1.442	1.358	1.321	1.079	0.903	1.391	0.733
Skewness	-0.105	0.282	1.106	-0.477	-0.691	-0.049	-1.002
Std. Error of Skewness	0.136	0.136	0.136	0.136	0.136	0.136	0.136
Kurtosis	-0.965	-0.897	0.428	-0.494	-0.194	-0.996	0.277
Std. Error of Kurtosis	0.271	0.271	0.271	0.271	0.271	0.271	0.271
Range	4.000	4.000	4.000	4.000	4.000	4.000	4.000
Minimum	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Maximum	5.000	5.000	5.000	5.000	5.000	5.000	5.000
Sum	967.000	879.250	672.500	1113.800	1268.330	964.330	1350.330

 Table 4.11: Descriptive Analysis of Dependent Variable and Independent Variables

### **Intention to Purchase**

Table 4.11 shows that the mean of intention to purchase in this study is 3.012 for the 321 respondents with a standard deviation of 1.201,  $3.012\pm1.201$ . The variance value is 1.442. The median value is 3.000, and near the mean value, therefore, the data is symmetrical distribution. The maximum value is 5.000, and the minimum value is 1.000. The range is 4.000. The skewness value is -0.105, which is within 0. The Kurtosis value is -0.965, which is less than 1. Therefore, the data is symmetrical.

#### **Product Quality**

The mean of product quality (Table 4.11) in this study is 2.739 for the 321 respondents with a standard deviation of 1.165,  $2.625\pm1.165$ . The variance value is 1.358. The median value is 2.625, and near the mean value, therefore, the data is symmetrical distribution. The maximum value is 5.000, and the minimum value is 1.000. The range is 4.000. The skewness value is 0.282, which is within 0. The Kurtosis value is -0.897, which is less than 1. Therefore, the data is symmetrical.

#### **Product Price**

In this study, Table 4.11 shows the mean of the product price is 2.095 for the 321 respondents with a standard deviation of 1.149,  $2.095\pm1.149$ . The variance value is 1.321. The median value is 2.000, and near the mean value, therefore, the data is symmetrical distribution. The maximum value is 5.000, and the minimum value is 1.000. The range is 4.000. The skewness value is 1.106, and the Kurtosis value is 0.428 is still within the range of 0 to 1. Therefore, the data is symmetrical.

### **Product Availability**

Table 4.11 shows that the mean of product availability in this study is 3.470 for the 321 respondents with a standard deviation of 1.039,  $3.470\pm1.039$ . The variance value is 1.079. The median value is 3.600, and near the mean value, therefore, the data is symmetrical distribution. The maximum value is 5.000, and the minimum value is 1.000. The range is 4.000. The skewness value is -0.477, which is within 0. The Kurtosis value is -0.494, which is less than 1. Therefore, the data is symmetrical.

### **Product Ingredients**

The mean of product ingredients (Table 4.11) in this study is 3.951 for the 321 respondents with a standard deviation of 0.950,  $3.951\pm0.950$ . The variance value is 0.903. The median value is 4.000, and near the mean value, therefore, the data is symmetrical distribution. The maximum value is 5.000, and the minimum value is 1.000. The range is 4.000. The skewness value is -0.691, which is within 0. The Kurtosis value is -0.194, which is less than 1. Therefore, the data is symmetrical.

#### **Product Awareness**

In this study, Table 4.11 shows that the mean of product awareness is 3.004 for the 321 respondents with a standard deviation of 1.179,  $3.004\pm1.179$ . The variance value is 1.391. The median value is 3.000, and near the mean value, therefore, the data is symmetrical distribution. The maximum value is 5.000, and the minimum value is 1.000. The range is 4.000. The skewness value is -0.049 and the Kurtosis value is -0.996 is still within the range of 0 to 1. Therefore, the data is symmetrical.

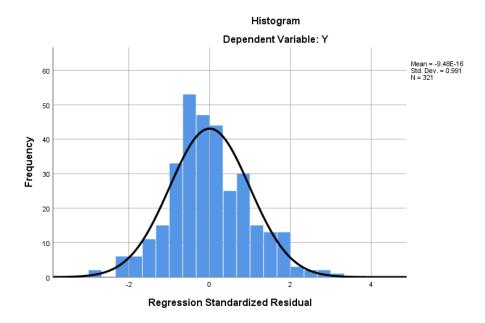
#### **Product Safety**

Table 4.11 shows that the mean of product safety in this study is 4.207 for the 321 respondents with a standard deviation of 0.856,  $4.207\pm0.856$ . The variance value is 0.733. The median value is 4.667, and near the mean value, therefore, the data is symmetrical distribution. The maximum value is 5.000, and the minimum value is 1.000. The range is 4.000. The skewness value is -1.002 and the Kurtosis value is 0.277, which is within the range of 0 to 1. Therefore, the data is symmetrical.

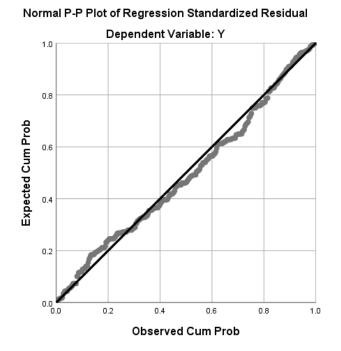
### 4.4.1 Normality Test

In this study, the dependent variable, which is the intention to purchase is inspected by using a normality test to evaluate whether the collected data is normally distributed. Figure 4.2 shows that the histogram is all bell-shaped, suggesting that the residuals (and hence the error terms) are approximately normally distributed. Besides, the normal P-P plot showed that mostly all the data are on the linear regression line, supporting the condition that the error terms are normally distributed (Figure 4.3).

Figure 4.2: Histogram Analysis



## Figure 4.3: Normal P-P Plot Analysis



## 4.5 Multiple Regression

The multiple regression is used to analyse the relationship and conclusion on behalf of both independent and dependent variables (Lee et al., 2018). Besides, the inferential analysis also is used to check on the research questions, research framework, and hypothesis. In this study, SPSS is used as the tool to lead the accompanying examination, which is Independent ttest and Multiple Regression Analysis.

In Table 4.12, the regression equation shows that the explanatory variables accounted for about 49.5 per cent of the variation in the customer's intention to buy *halal* food items in Malaysia by non-Muslim model, using multiple regression analysis and can be explained by product quality, product price, product availability, product ingredients, product awareness and product safety. The adjusted r-square value is 48.5 per cent.

**Table 4.12 Model Summary of Multiple Regression** 

Model	R	R Square	Adjusted R Square	Std. error of the Estimate
1	0.704 <sup>a</sup>	0.495	0.485	0.86126

a. Predictors: (Constant), Product Quality, Product Price, Product Availability,

Product Ingredients, Product Awareness and Product Safety

b. Dependent Variable: Intention to Purchase

 Table 4.13: Analysis of Variance

Moo	del	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	228.369	6	38.062	51.312	0.000 <sup>a</sup>
	Residual	232.914	314	0.742		
	Total	461.283	320			

a. Predictors: (Constant), Product Quality, Product Price, Product Availability, Product Ingredients,

Product Awareness and Product Safety

b. Dependent Variable: Intention to Purchase

Referring to Table 4.13 above, the significant level, p-value from the ANOVA is shown as 0.000. As its value smaller than alpha 0.05, it means that at least one of the six independent variables from that product quality, product awareness, product price, product safety, product ingredients and product availability can be used to model the non-Muslim customer's intention to buy *halal* food items. Besides, it also shows that the groups or sample means are significantly differences.

		andardized efficients	Standardized Coefficients	t	Sig.	Collinearity	v Statistics
Model	В	Std. Error	Beta			Tolerance	VIF
(Constant)	0.568	0.273		2.084	0.038		
Product Quality	0.292	0.072	0.283	4.043	0.000	0.328	3.050
Product Price	0.231	0.066	0.221	3.471	0.001	0.398	2.513
Product Availability	0.326	0.063	0.282	5.186	0.000	0.543	1.843
Product Ingredients	0.004	0.061	0.003	0.068	0.946	0.697	1.436
Product Awareness	0.048	0.051	0.047	0.942	0.347	0.632	1.582
Product Safety	-0.031	0.064	-0.022	-0.489	0.625	0.770	1.298

 Table 4.14: Multiple Regression

a. Dependent Variable: Intention to Purchase

**b. Predictors: (Constant),** Product Quality, Product Price, Product Availability, Product Ingredients, Product Awareness and Product Safety

In this study, the regression equation can be explained that the explanatory variables accounted for about 49.5 per cent of the variation in the customer's intention to purchase (Y) model by using multiple regression analysis (Table 4.14). Estimations reveal that the explanatory variables, namely product quality  $(X_1)$ , product price  $(X_2)$  and product availability,  $(X_3)$  are the most important explanatory variables with statistically significance at alpha level 0.01. Therefore, a one per cent increase in product quality  $(X_1)$ , on average, has the positive relationship effect of an increase in the intention to purchase by 0.292 per cent with statistical significance at the 0.01 level, holding constant with other variables. Similarly, a one per cent increase in the product availability  $(X_3)$ , on average, has the positive relationship effect of increase in the intention to purchase by 0.231 and 0.362 per cent respectively with statistical significance at the 0.01 level significance at the 0.01 level. But, the explanatory variable of product safety has a negative relationship effect on the intention to purchase. Therefore, a one

per cent increase in product safety ( $X_6$ ), on average, has the negative relationship effect of a decrease in the intention to purchase by 0.031 per cent.

As a rule of thumb, when the value of tolerance is smaller than 0.20 with Variance Inflation Factors (VIF) are above 4, a problem with multicollinearity is demonstrated (Garson, 2010). The Multicollinearity statistics illustrated that the tolerance for product quality (0.328), product price (0.398), product availability (0.543), product ingredients (0.697), product awareness (0.632) and product safety (0.625) as shown in Table 4.17 which all greater than 0.2. Furthermore, only the VIF value for product quality is the highest one at 3.050, the rest of the VIF value for all the variables is less than 4.0. Therefore, indicating no multicollinearity problems happened.

## 4.6 Hypothesis Testing

In order to achieve the study objectives, as discussed in Chapter One, the testable hypothesis was developed in Chapter Two. The following part provides the testing of the relationship between the independent variables and dependent variables under study as in Chapter Two.

# H1: Product Quality will have a positive direct effect on non-Muslim customers' intention to purchase halal food products.

Based on the finding results as shown in Table 4.15, this hypothesis is supported because the p-value is 0.000, which is less than alpha level 0.01. It can be concluded that product quality has a critical positive relationship in affecting the non-Muslim customer's intention to buy *halal* food items. Yang (2017) also stated in their study that non-Muslim consumers are more concerned about the quality of *halal* food in China. From the total 321 respondents, more than 80.0 per cent have bachelor's degree and master or PhD level. This shows that all the respondents is highly educated and will seek for halal product because the quality of the food is guaranteed and regulated by the government.

H2: Product Price will have a positive direct effect on non-Muslim customers' intention to purchase halal food products.

Referring to the analysis in Table 4.15, the p-value is 0.001, which is less than alpha level 0.01. Therefore, this hypothesis is accepted. In conclusion, the product price has a positive significant connection in affecting the non-Muslim customer's intention to purchase *halal* food products. Matthew's (2014) study also revealed that in general, Malaysians were happy to pay a superior cost for included advantages in *halal* food items. Based on the respondents demographic profile, 64.5 per cent of the 321 respondents is earning RM3,500 and above. This shows that the consumers will have the purchasing power to decide and willing to spend more for *halal* food products.

# H3: Product Availability will have a positive effect on non-Muslim customers' intention to purchase halal food products.

According to this study, the null hypothesis is rejected because the p-value is 0.000 (Table 4.15), which is less than alpha level 0.01. Therefore, it can be concluded that product availability has a positive significant relationship in affecting the non-Muslim customer's intention to purchase *halal* food products. Sharma et al. (2016) stated that when products are readily available in the market, customers will tend to purchase it. Based on the findings, the halal food information is easily available especially in Malaysia. Besides, as a Muslim country, there were a total of 68.6 per cent Muslim persons from the total 31.2 million of population in Malaysia. Therefore, it is normal for the people in Malaysia to be exposure and consume halal food products.

## H4: Products Ingredients will have a positive effect on non-Muslim customers' intention to purchase halal food products.

Based on the finding results as shown in Table 4.15, this null hypothesis is not rejected because the p-value is 0.946, which is higher than alpha level 0.01. It can be concluded that product ingredients do not have a positive significant relationship in affecting the client's intention to buy *halal* food items by non-Muslims. Yunus et al. (2014) also stated that there was a weak relationship between product ingredients and purchase intention. This might due to the reason that Malaysia is an Islamic country; therefore, the non-Muslim customers in Malaysia already well aware of *halal* food products. Besides, customers normally focus on the expiry date of the products rather than the ingredients.

# H5: Product Awareness will have a positive effect on non-Muslim customers' intention to purchase halal food products.

Referring to the analysis in Table 4.15, the p-value is 0.347, which is more than alpha level 0.01; hence, do not reject the null hypothesis. In conclusion, product awareness does not have a critical positive connection in affecting the non-Muslim customer's intention to buy *halal* food items. This might be due to the reason that *halal* product already a norm in Malaysia's market as a Muslim country. Therefore, most of the products selling in the hypermarket and supermarket were already being certified by the *halal* authority. Yet, customers will have choices when dine-in the *halal* restaurant or non-*halal* restaurant. Said et al.'s findings (2014) mentioned that the lack of education, information and *halal* knowledge by government authorities also contributed to the low awareness on *halal* food products. Besides, based on the findings of 321 respondents, more than 80.0 per cent have bachelor's degree and master or PhD level. This shows that all the respondents is highly educated and already have the knowledge about *halal* food products. Besides, Malaysia as a Muslim country with more than 68.6 per cent of Muslim population, it is normal for the non-Muslim to have Muslim friends and also consume *halal* food products. Therefore, most of the non-Muslim consumers already aware about halal food products and information.

# H6: Products Safety will have a positive effect on non-Muslim customers' intention to purchase halal food products.

According to this study, the null hypothesis is not rejected because the p-value is 0.625 (Table 4.15), which is more than alpha level 0.01. Therefore, it can be concluded that the product food safety does not have a significant positive relationship in affecting the client's intention to buy *halal* food items by non-Muslims. It might be due to the reason that there was a lack of food poisoning cases involving *halal* food items. In Malaysia, customers are exceptionally sure that the *halal* food items are being monitored and controlled by the *halal* agency. Besides, the *halal* certification provided confident level to the consumers as well that the product is in safe and needs to go through a strict process.

 Table 4.15 Summary of Hypothesis Tests

othesis Hypothesis Res	ılt
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H1	Product Quality will have a positive direct effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Supported (at 1% level)
H2	Product Price will have a positive direct effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Supported (at 1% level)
НЗ	Product Availability will have a positive effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Supported (at 1% level)
H4	Product Ingredients will have a positive effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Not supported
Н5	Product Awareness will have a positive effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Not supported
H6	Product Food Safety will have a positive effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Not supported

### 4.7 Conclusion

In this chapter, the data collected was analysed in SPSS 23.0 and interpreted. The results of the tests were checked whether the findings meet the hypotheses proposed in Chapter 2. In the descriptive analysis, the demographic profile of the respondents was summarized into tables, and the construct measurements of the six variables were also tabulated into tables. All the data findings also fulfilled the factor analysis's requirements. Besides, reliability test and normality test for the statement also included in scale measurement.

Furthermore, according to the analysis above, data proposed that all sample items from the questionnaire were reliable, and by using multicollinearity statistics, there are no multicollinearity problems exist. Multiple regression analysis was used to analyse the relationship between the intention of non-Muslim's to purchase *halal* food products in Malaysia. In the next Chapter 5, the findings of Chapter 4 are discussed and its implication on theories, limitations, recommendations and future study are highlighted and presented in a proper sequence.

## CHAPTER 5

## **DISCUSSION AND CONCLUSION**

### 5.0 Introduction

In this chapter, a discussion on the research results will be done in detailed and validate the hypotheses. Furthermore, the statistical results will accompany the research limitation and recommendation for the future study. The main objective of the research is to examine the intention of non-Muslim customers to purchase *halal* food products. This concept of TPB model was used in this study to determine the factors which affect the intention to purchase has proven that the product quality, product price and product availability play a part in influencing the customers to purchase *halal* food items. Haque et al. (2015) in their study mentioned that in Malaysia, the ultimate determinants in affecting the clients' intention of consuming *halal* food by non-Muslims are the attitude, subjective norms and perceived behaviour control.

## 5.1 Summary of the Research's Findings

Based on the findings, this research presented the summary of all the hypothesis, as shown in Table 5.1 below. From the total of six hypotheses which were set before the findings, three of them were supported, and three of them were not supported. These hypotheses have all fulfilled the objectives of this study, which are to investigate and analyse the intention of non-Muslim customers to purchase *halal* food products in Klang Valley area.

Hypothesis	Hypothesis	Result
H1	Product Quality will have a positive direct effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Supported (at 1% level)
H2	Product Price will have a positive direct effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Supported (at 1% level)
НЗ	Product Availability will have a positive effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Supported (at 1% level)
H4	Product Ingredients will have a positive effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Not supported
Н5	Product Awareness will have a positive effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Not supported
H6	Product Food Safety will have a positive effect on non- Muslim customers' intention to purchase <i>halal</i> food products	Not supported

Table 5.1: Summary of Hypothesis Testing

# H1: Product Quality will have a positive direct effect on non-Muslim customers' intention to purchase halal food products.

Based on the finding results, it can be concluded that product quality has a significant positive relationship affecting the non-Muslim customer's intention to purchase *halal* food products. Yang (2017), in their study about the *halal* food in China, stated that non-Muslim consumers also show the same positive result that consumers are more concerned about the quality of *halal* food. Besides, this finding is also supported by Matthew (2014), where the study concluded that the main concern of consumers today is food quality.

H2: Product Price will have a positive direct effect on non-Muslim customers' intention to purchase halal food products.

Referring to the analysis, this hypothesis is accepted. In conclusion, the product price has a positive significant connection in affecting the non-Muslim customer's intention to buy *halal* food items. Matthew (2014) in their study also found out that in general, Malaysians can pay a superior cost for added advantages in *halal* food items.

# H3: Product Availability will have a positive effect on non-Muslim customers' intention to purchase halal food products.

According to this study, it can be concluded that product availability has a positive significant relationship in affecting the client's intention to buy *halal* food items by non-Muslims. Sharma et al. (2016) in their study, also stated that when products are easily available in the market, customers will tend to purchase it. Furthermore, this also supported by Hong et al. (2018) who stated that by making the *halal* products easily accessible and available, it would boost the consumption of consumers.

### 5.2 Implications of the Study

#### 5.2.1 Managerial Implication

Research proofs that only three independent variables have a critical positive relationship in affecting the intention of non-Muslims to purchase *halal* food products. The product quality was the most significant reason in affecting the intention to buy *halal* food products. In Malaysia, *halal* food products in Malaysia is guaranteed in terms of quality because it is governed and certified by the *halal* authority. Sumirah et al. (2015), in their study, also mentioned that the level of confidence among the customers increased followed by the implementation of *halal* food certification. Furthermore, Abdul Latiff et al. (2013) stated that the health concern among the non-Muslims around the world did arise. Then, Matthew (2014) in their study, further stated that customers responded positively to the product with high quality that means clean and fresh.

Secondly, the product price is also part of the factor influencing the intention of non-Muslim to purchase *halal* food products. Based on the survey, the respondents are willing to pay more for *halal* food items. This may due of the idea that the *halal* food item is more expensive because the manufacturer needs to go through a proper process and ingredients when producing *halal* food products. Low et al. (2003) stated that customers would measure their satisfaction based on the price by comparing with the value they received, which is quality. Besides, among the 321 respondents, 39.9 per cent earning above RM3,500 to RM7,999 and 24.6 per cent earning more than RM8,000 per month. More than 60.0 per cent of the respondents earning above RM3,500. Therefore, it can be indicated that customers have more buying power.

Thirdly, the product availability also supported this study that the intention of non-Muslims to purchase *halal* food products is based on product availability in the market. Bonne et al. (2007) stated that there was a significant impact of the *halal* personal care products' availability to purchase. Therefore, the easily available of *halal* products in the market encouraged the non-Muslim customer to purchase. Besides, the respondents also confident that the government is overseeing the *halal* food item accessible in the market.

However, this study also found out that product awareness, product ingredients and product safety did not have a significant critical connection in affecting the intention of clients to purchase *halal* food items by non-Muslim. This might be due to this country is an Islamic country. Therefore, most of the product selling in the market need to be halal to attract the majority of the Muslim population in Malaysia. Besides, in a multiracial country, people from all races already mix around and get used to the *halal* product in their daily life. From the 321 respondents, all the respondents are also educated with a minimum education level of diploma. This shows that all the respondents are educated and might be exposed to *halal* information in their daily life. Customers also will normally look at the product expiration date when purchasing a product rather than in details of the product ingredients. Besides, this study also found out that a mind-boggling wording utilized in portraying item fixings is hard to understand, and this might be the reason that customers do not pay much attention to the product ingredients. On the product safety, it might be due to the reason that the customers are confident that the Malaysia government and *halal* authorities already monitored and take action on a company that does not comply with *halal* certification and law. Besides, there were not any incidents that happened involving *halal* food products in Malaysia. Therefore, respondents think that product safety is not the main issue.

Based on the findings and analysis on factors that affect the intention of client to purchase the *halal* items by non-Muslims in Malaysia, it is hoped that the data collected can be

used by the relevant authority such as Ministry of Domestic Trade and Consumer Affairs (MDTCA), Ministry of Health (MOH), Royal Malaysian Customs Department, Department of Veterinary Services, Department of Standards Malaysia and JAKIM to draw a proper plan on the development of *halal* food products in Malaysia and also tap into the export opportunity in another country which consists of growing population of Muslims. *Halal* market demand with an estimated value of USD2.31 trillion worldwide (Yunus et al., 2014).

### **5.2.2 Theoretical Implications**

Theory of Planned Behaviour (TPB) was utilised to develop a foundation for this study to examine and understand the factors affecting clients to buy *halal* food item by non-Muslim. From the total six independent variables, this study has successfully identified three independent variables which are product quality, product price and product availability, have a positively significant relationship in affecting the intention of non-Muslim to purchase *halal* food products.

### 5.3 Limitations of the Study

The challenges of this study are the limited locations of the data collection, which focused only around Klang Valley area. Therefore, not all the states in Malaysia are covered, which consists of non-Muslim customers as well and the focus only in Klang Valley. However, having more accurate data analysis needs a more extensive sampling area and also increases the number of respondents. Furthermore, the findings might be different because the cost of living, income level education level and accessibility are different between urban and rural areas.

Secondly, this study only focuses on six variables developed based on the TPB theory. Therefore, future researchers can further explore more factors that affect the intention of non-Muslim customers to purchase *halal* food products. Besides, with the continuous effort from the government in promoting the *halal* industry, the factors might change from time to time.

Thirdly, the way of the internet-mediated questionnaire has loopholes that will impact the data collection progress as spam guard might block the email sent by the unknown sender. Besides that, Google form will also be blocked in a certain area like Facebook without any reason, and this will delay the progress of the study and data collection. Respondents might misinterpret the questions as well because different people will have a different interpretation of the questions being asked.

### 5.4 **Recommendations for Future Study**

Researcher at this moment suggested some improvements to the future researchers who plan to execute a similar study about the intention of the customer in Malaysia to buy *halal* food items by non-Muslims. Firstly, the researcher suggests extending the research's coverage across the whole nation to get clearer information to further develop *halal* industry in Malaysia. Besides, different states in Malaysia consist of different numbers of population, race, education background, income level and also exposure towards *halal* food products. Furthermore, this will also increase the sample size and guarantee the integrity of the outcome and also make the collected data more convincible since the research target population is the intention of non-Muslims to purchase *halal* food products in the whole country.

Secondly, there are many data collection methods that can be carried out to collect data such as interviews which can be used in future research as an alternative to the questionnaire survey. Besides, it is also strongly recommended to have questionnaires delivered by hand or face to face surveys which will consume a lot of time. This is to ensure the higher response rate because the researcher could quickly get back 100.0 per cent of the response even it takes time. Also, answered on the spot will make the results tend to be more accurate and reliable due to the help from the researcher may clarify those questions and problems that may happen rather than just using email to send the Google Form.

Future studies may use this research as a stepping stone to develop a complete theoretical model to link the factors affecting the intention of non-Muslims to purchase *halal* food products. Norhabibah (2011) stated that to promote Malaysia as the world *halal* centre point in the national plan, the government should also conduct further study to identify and tap into the domestic and international markets as well which offers many opportunities for *halal* food producers and consumers around the world.

### 5.5 Conclusion

In this chapter, it contains the whole report being summarised in statistical analysis based on the findings and explanation in details. All the concepts and variables of the intention of non-Muslims to purchase *halal* food products were based on past empirical studies, and the hypothesis was developed based on it. Three hundred twenty-one respondents participated in this study and data collected were tested using normality, reliability, factor analysis and multiple regression using the SPSS program.

Based on the analysis result, it can be concluded that in Malaysia, the product quality with the most reliable relationship, follow by the product price and product availability that has a significant positive relationship in affecting the intention of non-Muslim customers to buy *halal* food items. Yet, product awareness, product ingredients and product safety do not have a positive significant relationship in Malaysia in affecting the purpose of the customers to buy *halal* food items by non-Muslims.

Lastly, there are also some limitations and suggestions for future researchers who plan to study in the similar area. Finally, all the findings had responded to the research questions, and the objectives of this study had been achieved as well.

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#### **Appendix A: Questionnaire**



UNIVERSITI TUNKU ABDUL RAHMAN FACULTY OF ACCOUNTANCY AND MANAGEMENT MASTER OF BUSINESS ADMINISTRATION

### <u>Customers' Intention to Purchase Halal Food Products in Malaysia:</u> <u>A Case of Non-Muslims</u>

I am currently pursuing Master of Business Administration (MBA) at Universiti Tunku Abdul Rahman (UTAR). As part of the fulfilment of my MBA Final Year Project, I am required to conduct this research and I appreciate your co-operation in order to complete the survey.

The purpose of this study is to investigate the customer's intention to purchase *Halal* food products in Malaysia: A case of non-Muslim in Klang Valley area. It is because the demand on *Halal* food products are gaining more popularity and common among the non-Muslim as well. Hence, this study can be a reference for the relevant department and industry to further develop and educate on the *Halal* industry.

This questionnaire consists of two parts. Section A, consists of questions related to demographic characteristics and Section B, consists of questions related to factors affecting the non-Muslim customer's intention to purchase *Halal* food products in Malaysia. I would be grateful if you could take 15 minutes to fill the questionnaire. Your answers are extremely valuable and certainly make an important contribution to this study. All the information collected is for research purposes and will be kept confidential.

Please proceed to fill the questionnaire if you are a non-Muslim.

Thank you.

Yours Sincerely, Yeow Chin Chai, UTAR student ID: 1702504 (<u>ycc1182@yahoo.com</u>) Title: Customers' Intention to Purchase *Halal* Food Products in Malaysia: A Case of Non-Muslims.

**Questionnaire:** 

#### Section A: Demographic Profile

The following personal information is necessary for validation of the questionnaire. All responses (*\*must be non-Muslim*) will be kept confidential. Your cooperation in providing this information will be greatly appreciated. Please tick the response.

A1:	Gender
A1:	Gender

1. Male

2. Female

#### A2. Ethnicity/ Race

- 1. Chinese
- 2. Indian
- 3. Others, please specify

#### A3. Age Group (Years Old)

- 1. 21 30
- 2. 31 40
- 3. 41 50
- 4. 51 60
- 5. 60+

# A4. What is your current employment status?

- 1. Employee Private Sector
- 2. Employee Government Sector
- 3. Employer
- 4. Self-employed
- 5. Housewife
- 6. Retired
- 7. Student
- 8. Unemployed
- 9. Others, please specify: \_\_\_\_\_

#### A5. Education level

- 0. No formal education
- 1. Primary
- 2. Secondary
- 3. Pre-university/STPM/A-level
- 4. Certificate/Diploma
- 5. Degree
- 6. Master/PhD
- 7. Professional qualifications
- 8. Others, please specify:

#### A6. Current Marital Status

## 1. Single

- 2. Married
- 3. Divorced/Separated
- 4. Widowed
- 5. Others, please specify: \_\_\_\_\_

#### A7. What are your MONTHLY Income? (Ringgit Malaysia)

1.	Less than 500	10.	4,500 – 4,999
2.	500 – 999	11.	5,000 – 5,999
3.	1,000 – 1,499	12.	6,000 – 6,999
3. 4. 5.	1,500 - 1,499 1,500 - 1,999 2,000 - 2,499	12. 13. 14.	7,000 - 7,999 8,000 - 8,999
6.	2,500 - 2,999	15.	9,000 – 9,999
7.	3,000 - 3,499	16.	10,000 – 12,999
7.	3,500 - 3,999	10.	10,000 - 12,999
8.	3,500 - 3,999	17.	13,000 - 14,999
9.	4,000 - 4,499	18.	15,000 and above

#### Section B

Respondent are required to indicate the level of agreement on the following statement based on seven-point Likert scales. (1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 -Strongly Agree)

I) Intention to Purchase

#### (1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree)

Inte	ntion to Purchase	1	2	3	4	5
1.	I will purchase <i>Halal</i> food.					
2.	I will choose <i>Halal</i> food even if I am not familiar with the brand.					
3.	The probability that I would consider buying <i>Halal</i> food product is high.					
4.	I believe that <i>Halal</i> food product is safe in terms of the process (slaughtered according to Muslim ritual).					
5.	I believe that <i>Halal</i> food product is safe from animal diseases.					
6.	I believe that <i>Halal</i> food product available in the market is being monitored by the government.					

#### II) Product Quality

#### (1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree)

Pro	Product Quality		2	3	4	5
1.	I think <i>Halal</i> food products are better quality.					
2.	I believe that Halal food product is guaranteed					
	with a Halal certificate and is under the control of					
	the Malaysian Halal authority.					
3.	Halal concept guarantee the quality of food.					
4.	The quality of the Halal food is more important					
	than price.					
5.	I consume Halal food because of its quality.					

#### III) Product Price

#### (1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree)

Pro	duct Price	1	2	3	4	5
1.	It is acceptable to pay more for Halal products					
	than for non-Halal products.					
2.	I am willing to pay more for <i>Halal</i> products than					
	for non-Halal products.					
3.	I am willing to spend an extra money per month					
	in order to buy Halal products.					
4.	The Halal product price is reasonable.					
5.	The Halal product price is affordable.					

#### IV) Product Availability

### (1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree)

Pro	duct Availability	1	2	3	4	5
1.	Halal food product are difficult to find.					

2.	Halal food information is true and easily			
	available.			
3.	Halal authorities are responsible for Halal			
	product availability.			
4.	I am willing to put considerable effort in			
	obtaining Halal foods.			

#### V) Product Ingredients

## (1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree)

Pro	duct Ingredients	1	2	3	4	5
1.	Familiarity of product ingredients influence					
	purchase intention.					
2.	Information about product ingredients is very					
	important.					
3.	A complex terminology used in describing					
	product ingredients is difficult to understand.					
4.	Unfamiliar ingredients create suspicious in term					
	of "Halalness."					
5.	Product ingredients reflect the safety and quality					
	of Halal packaged food product.					

### VI) Product Awareness

## (1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree)

Pro	Product Awareness		2	3	4	5
1.	I am highly aware of <i>Halal</i> food.					
2.	I believe I have enough knowledge about Halal					
	food.					
3.	I always concern with Halal issues.					
4.	By consumer right, I always take action when					
	there is something wrong with food I purchase.					

## VII) Product Safety

(1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree)

Pro	Product Safety		2	3	4	5
1.	Halal food products are safer and more hygienic.					
2.	I choose <i>Halal</i> food products because of cleanliness.					
3.	I am concern about food safety.					
4.	I feel secure eating Halal food.					
5.	I feel that <i>Halal</i> food is safe to consume.					

Appendix B: Ethical Approval for Research Project/Protocol



#### UNIVERSITI TUNKU ABDUL RAHMAN Wholly Owned by UTAR Education (Company No. 578227-M)

Re: U/SERC/96/2019

4 July 2019

Dr Chong Shyue Chuan Department of Economics Faculty of Accountancy and Management Universiti Tunku Abdul Rahman Jalan Sungai Long Bandar Sungai Long 43000 Kajang, Selangor

Dear Dr Chong,

#### Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your research project (Master student's project) and are pleased to inform you that your application has been approved under <u>expedited review</u>.

Research Title	Customer's Intention to Purchase Halal Products in Malaysia: A Case of Non-Muslim
Investigator(s)	Dr Chong Shyue Chuan
	Yeow Chin Chai (UTAR Postgraduate Student)
Research Area	Social Sciences
<b>Research Location</b>	Klang Valley
No of Participants	450 participants (Age: 18 and above)
Research Costs	Self-funded
Approval Validity	4 July 2019 - 3 July 2020

The details of your research project are as follows:

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research;
- (2) Confidentiality of participants' personal data must be maintained; and
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

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 Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia



Should you collect personal data of participants in your study, please have the participants sign the attached Personal Data Protection Statement for your records.

The University wishes you all the best in your research.

Thank you.

Yours sincerely,

**Professor Ts Dr Faidz bin Abd Rahman** Chairman UTAR Scientific and Ethical Review Committee

c.c Dean, Faculty of Accountancy and Management Director, Institute of Postgraduate Studies and Research

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