#### **CHAPTER FIVE**

#### DISCUSSION, RECOMMENDATION AND CONCLUSION

#### 5.1 Introduction

This chapter focused on the discussion related to the findings of the study and subsequently proposed several recommendations. The chapter also discussed some limitations faced by this study and listed suggestions for future research. Overall, this chapter is divided into six sub-sections consisting of sub-section 5.1 Introduction, 5.2 Overview of the Study, 5.3 Summary of the Research Findings, 5.4 Hypothesis Testing, 5.5 Discussion of the Results, 5.6 Contribution of Research, 5.7 Limitations, 5.8 Implications, 5.9 Future Research, 5.10 Recommendation and 5.11 Conclusion.

### 5.2 Overview of the Study

The main objective of this study was to investigate Muslim consumer' intention toward goat milk purchasing behaviour in the Malaysian context. Four specific objectives were set in order to achieve the main objectives.

The first objective was to identify motives of Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. The second objective was to examine factors that influence Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. The third objective further studied the demographic profile of Muslim consumers as moderating effect toward goat milk purchasing behaviour in Malaysia and the last objective was to study the intention of Muslim consumers toward goat milk purchasing behaviour in Malaysia.

The first objective was achieved by identifying the eight main determinant motives of Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia which were attitude, subjective norms, perceived behavioural control, health, nutrition, religious, taste and price. In order to achieve the second and third objective, the researcher explored the factors that influences Muslim consumers' intention and the moderating effect of demographic profiles of Muslim consumers toward goat milk purchasing behaviour. This is important in order to further understand the intention of Muslim consumer toward goat milk purchasing on attitude, subjective norms, perceived behavioural control, health, nutrition, religious, taste and price. Furthermore, factors such as age, education and level of income were looked into to either enhance or decrease the effect of predictors on the dependent variable in some cases. The last objective was achieved by conducting a test on independent variables for intention toward goat milk purchasing behaviour.

In order to achieve the outlined objectives, library research, including books, website, journal, government reports and field research which involved collecting data using questionnaires were utilized. Firstly, the researcher underwent a process of conceptual development through Focus Group Discussion (FGD) and by reviewing the literature on Muslim consumer intention toward goat milk 240

purchasing behaviour in Malaysia as well as other countries. Based on previous studies, the Theory of Planned Behaviour (TPB) was proven as an established theoretical framework in predicting human intention including the behavioural intention in goat milk purchasing. According to the TPB, the three independent variables, namely attitude, subjective norms and perceived behavioural control are influential predictors of human intention to perform a behaviour. Therefore, the TPB was used as a conceptual framework to explain the intention of Muslim consumers toward goat milk in Malaysia.

By conducting the Focus Group Discussion (FGD) and reviewing previous studies, five other important predictors were identified to explain Muslim consumers' intention toward goat milk purchasing in Malaysia, which were health, nutrition, religious, taste and price. Health factor was identified as one of the motives for Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia. Through the FGD conducted and from various literatures, it was found that goat milk contains many health benefits. This study found that health was one of the motive of Muslim consumers' intention toward goat milk purchasing behaviour. Analysis from PLS-SEM also found that there was positive significance of health motive of Muslim consumer' intention toward goat milk purchasing behaviour in Malaysia. This was due to previous studies which identified goat milk to be able to prevent and reduce several types of illness such as diabetes (Malik et al., 2012) and high blood pressure (Nguyen et al., 2013; Reuser et al., 1994). Furthermore, nutrition was also one of the factors influencing Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. Nutritional contents of goat milk attracted people to consume goat milk as they believed that the nutrition from goat milk have a positive impact on their health. Goat milk plays an important role in nutrition and socioeconomic wellbeing of developing and underdeveloped countries, where it provides basic nutrition and subsistence to the rural people (Park & Haenlein, 2007). Goat milk is also an important nutrient for humans, especially to those who are sensitive to other animals' milk product. Goat milk is composed of different usable nutrients which are important to humans. Among those important nutrients that are found in goat milk are fat, protein, lactose, vitamins, enzymes and mineral salts. Most of the components of goat milk are greater than that of other milk producing animals. In this study, analysis via PLS-SEM found that nutrition was a positive significance to Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia.

On top of the health and nutrition motive, religion was also identified as one of the predictor factors. This was due to the fact that goat milk is prescribed in Islam as a sunnah food. Furthermore, a number of research have shown an important role of religion in food consumption. Religion in this study refers to the religious commitment which comprises of two dimensions which are Islamic worldview *tawhid* paradigm or Islamic belief and Islamic worldview and religious personality or the practices of a Muslim in his or her daily live. The role of religion of Muslim consumers in the intention toward goat milk purchasing behaviour was explored in order to achieve the objective of this study.

Besides that, regardless of the rising consumers' demand for health benefits from food such as goat milk, taste is still among the most significant influencers in a consumers' decision-making process (Thompson & Moughan, 2008). Consumers' perceptions of dairy product quality are complex and involve much more than sensory attributes such as taste or smell (Grunert et al., 2000). According to Nagyová et al. (1998), the major reason for purchasing milk is taste and its wide usage in household (for the purpose of cooking). Furthermore, according to Alwis et al. (2009), taste is among the key factors determining purchase of fresh milk. Another study stated that taste was among the key factor in determining fluid milk consumption in Taiwan (Hsu & Lin, 2006).

Price was also considered as one of the motives for Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. Goat milk price is expensive in Malaysia due to a lack of production and unavailability in urban areas. However, for some Muslim consumers, price is not comparable to the health benefits gain from consuming goat milk. Thus, a higher price point may not affect their decision in purchasing goat milk. This was in line with the FGD, where participant stated that due to its health benefits, prices were not considered and analysis from PLS-SEM also found there was significance effect of price on Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. Therefore, this study incorporated health, nutrition, religious, taste and price into the TPB objectively to acquire a better understanding of factors influencing Muslim consumers' intention toward goat milk purchasing. Hence, this study included additional dimensions and contributed to the development of theory in consumer behaviour.

As there were no established complete questionnaires found to be used in this study, the researcher constructed his own questionnaire based on the 'six steps of punch in developing questionnaires' and 'guidelines in constructing the questionnaire' provided by Ajzen (2012). Several items in the questionnaire were adopted from previous studies. The questionnaire was divided into five different sections, which measured demographic background, attitude, subjective norms, perceived behavioural control, health, nutrition, religious, taste, price, intention and behaviour. Data was ethically self-administered, collected from samples which were identified by stratified random sampling from Muslim consumers in Malaysia. 500 questionnaires were distributed all around in Malaysia and 420 completed questionnaires were collected and analysed.

The instrument was then tested and underwent the reliability and validity testing. The items were found to have a high alpha coefficient ranged between 0.748 and 0.983, demonstrating a good internal consistency of the instrument. The construct validity was also confirmed as all variables in the analysis had factorability value. The results of Fornell-Larcker Criterion were greater than other correlation value between latent variables. Meanwhile, Heterotrait Monotrait Ratio (HTMT) did not exceed the value 0.9 and cross-loadings were above 0.5. PLS-SEM 244

analyses were employed to answer the research questions, to accept or to reject null hypotheses and finally, to achieve the objectives of this study.

#### 5.3 Summary of the Research Findings

In this study, 420 respondents involved where 58.1% were consumers of goat milk in Malaysia, were analysed through the instrument of a nine-page self-administrated questionnaire. In general, the respondents were predominantly young respondents in the age group of 26 to 33 years old (30%) with higher education level of Bachelor Degree (61.2%). From the frequency analysis, the total income of most respondents was below RM1,500.00 (30.0%). Besides that, the occupation of most respondents was from the government sector (32.6%). Furthermore, from the marital status of respondents, 56.2% were married. This showed that there was an existing consumer base for goat milk in Malaysia.

Besides that, from FGD conducted and literature findings, there were five motives identified for Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. In addition to the established Theory of Planned Behaviour (TPB) which consisted of variables including attitude, subjective norm and perceived behavioural control, the researcher included five additional motives which were health, nutrition, religion, taste and price to predict Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. Thus, this study employed PLS-SEM to analyse and investigate Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia. Therefore, the objective of this study was to: (i) to identify motives of Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia; (ii) to examine factors that influence Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia; (iii) to study demographic of Muslim consumers' as moderating effect towards goat milk purchasing behaviour in Malaysia; and (iv) to study the intention of Muslim consumer towards goat milk purchasing behaviour in Malaysia.

Based on the Theory of Planned Behaviour (TPB), this study proposed a conceptual framework for Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. Attitude, subjective norm and perceived behavioural control were already variables under the TPB. Therefore, this study proposed five other motives on Muslim consumer intention toward goat milk purchasing behaviour which were health, nutrition, religion, taste and price. The conceptual framework of this study was used to test 10 developed hypotheses in order to answer the following three research questions, which were: (i) factor influence Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia; (ii) Muslim consumers' demographic as moderate have any effect towards goat milk purchasing behaviour in Malaysia; and (iii) the intention of Muslim consumer towards goat milk purchasing behaviour in Malaysia.

## 5.4 Hypothesis Testing

The main objective of using structural equation modelling analysis in this study was to develop and evaluate a framework of Muslim consumer intention toward goat milk purchasing behaviour. The results indicated that the framework was capable of explaining Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. Below Table 5.1 is the interpretation of hypothesis:

			5
Research Question	IS	Hypotheses	Results
RQ2: What are the factors influencing Muslim	H1	Attitude will have a significant effect on Muslim consumer intention towards goat milk purchasing behaviour in Malaysia.	Supported
	H2	Subjective Norm will have a significant effect on Muslim consumer intention towards goat milk purchasing behaviour in Malaysia.	Supported
	H3	Perceived Behavioural Control will have a significant effect on Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia	Not Supported
	H4	Health will have a significant effect on Muslim consumer intention towards goat milk purchasing behaviour in Malaysia.	Supported
	H5	Nutrition will have a significant effect on Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia.	Supported
An in	HS	Religion will have a significant effect on Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia.	Supported
	H7	Taste will have a significant effect on Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia.	Supported
	H8	Price will have a significant effect on	Supported

**Table 5.1:** Presents the summary of the result for hypothesis testing

<b>Research Questions</b>	Hypotheses	Results
	Muslim consumers' intention towards goat milk purchasing behaviour in Malaysia.	Z
RQ3: Does Demographic Profile of Muslim consumers as Moderating have any Effect between Intention and Goat Milk Purchasing Behaviour in Malaysia?	Demographic profile of Muslim consumers as moderator will have a significant effect between intention and goat milk purchasing behaviour in Malaysia	Not Supported
RQ4: What are the intentions of Muslim consumers towards goat milk purchasing behaviour in Malaysia?	0 Intention will positively affect Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia.	Supported

#### 5.5 Discussion of the Result

The modified framework in this study focused on eleven (11) variables related to Muslim consumer goat milk purchasing behaviour in Malaysia. These variables tested the appropriateness of TPB in explaining Muslim consumer goat milk purchasing behaviour in Malaysia by focusing more in their intention. The first two variables were noted as the key antecedents that affect Muslim consumer intention. Five additional variables also affected Muslim consumers' intention. These intentions positively affected purchasing behaviour. However, one variable tested did not significantly affect intention and one variable did not significantly affect purchasing behaviour. The model was tested at Muslim consumer in Malaysia, and the empirical findings provided interesting insights and results for discussion. Table 5.1 shows that the constructs in the model to prove the relationship between the variables. The significant results among the specified variable were discussed in the following subsections.

# 5.5.1 Research Question 1: Motives of Muslim consumer intention toward goat milk Purchasing behaviour in Malaysia.

It was important for this study to investigate the motive of Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. This was because at the present, there is limited of literature and studies found on motive of Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. As compared to other countries such as Indonesia (Utami, 2014; Santoso et al., 2012); India (Kumar & Babu, 2014; Pakhretia & Pirta, 2010). Japan (Ozawa et al., 2009; Ozawa et al., 2005), Africa (Jerop et al., 2013), Europe countries (Paskaš et al., 2020; Guney, 2019; Kuradjova & Petrovieova, 2015; Iancu, 2014; Guney & Ocak, 2013) and United States (Allen & Goddard, 2012) for example, have studies relating to their citizens' motive toward intention on goat milk and other animal dairy purchasing.

Besides that, unlike other food purchasing motive, there is a specific motive for goat milk purchasing behaviour especially for Muslim consumer. Studies where a specific motive for consumer intention toward goat milk purchasing behaviour in Malaysia included, Kamarubahrin et al., 2019a; Kamarubahrin, 2019b; Umar et al., 2017; Rani et al., 2016; Siew et al., 2016; Chang et al., 2016. In addition, there was only limited studies that had been conducted on consumer intention toward goat milk purchasing behaviour in Malaysia (Kamarubahrin et al., 2019a; Kamarubahrin, 2019b; Rani et al., 2016; Siew et al., 2016; Chang et al., 2016). Among these limited studies on consumers' intention toward goat milk purchasing behaviour in Malaysia, there was only one study by Kamarubahrin et al (2019a) and Kamarubahrin (2019b) that related to motive of Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. Therefore, by identifying Muslim consumer intention toward goat milk purchasing behaviour in Malaysia, it definitely added to the body of knowledge, especially on Muslim consumer study.

The result from this study showed that health was identified as the motive for Muslim consumer intention toward goat milk purchasing behaviour in Malaysia by four (4) out of ten (10) of the FGD participants. Previous researchers (Kamarubahrin et al., 2019a; Kamarubahrin, 2019b) found that health is the motive of Muslim consumer intention toward goat milk purchasing behaviour Malaysia. Meanwhile, Rani et al (2016), Siew et al (2016) and Chang et al (2016) found health as one of factor influencing consumers' intention toward goat milk purchasing behaviour in Malaysia. According to Yangilar (2013), goat milk is a functional food and it now forms a part of the current trend to healthy eating. These findings are supported by the current study findings, which revealed that health was the motive of Muslim consumer intention toward goat milk purchasing behaviour in Malaysia.

Meanwhile, one (1) of the FGD participants recognized nutrition as his motive on the intention toward goat milk purchasing behaviour. Various studies have identified that nutrition can influence consumers' consumption behaviour in relation to goat milk and dairy animal products (Paskaš et al., 2020; Guney, 2019; Kuradjova & Petrovicova, 2015; Iancu, 2014; Jerop et al., 2013; Utami, 2014; Guney & Ocak, 2013; Santoso et al., 2012; Ozawa et al., 2009; Ozawa et al., 2005). Furthermore, previous studies (Chang et al., 2016; Siew et al., 2016; Rani et al., 2016) reported nutrition is a major factor Malaysian consumers keenly looked into when making the decision to consume goat milk products. This indicates that Malaysian consumers are quite conscious about the nutritional value of the goat milk and have shown their readiness to consume goat milk, with due consideration to health consciousness (Chang et al., 2016). The current study also mentioned nutrition as a motive for Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. Thus, nutrition is one of the motive for Muslim consumer intention toward goat milk purchasing behaviour in Malaysia.

Besides that, two (2) of the FGD participants identified religion as their motive toward intention on goat milk purchasing behaviour. Muslim consumers identified religion as their motive on the intention toward goat milk purchasing. According to their belief, consuming goat milk was practised by Prophet Muhammad (*pbuh*) sunnah (sunnah is a type of act/behaviour by the Prophet Muhammad (*pbuh*) as mentioned in Al-Quran and Hadith). Literatures (Kamarubahrin et al., 2019a; Kamarubahrin, 2019b; Rani et al., 2016; Chang et al., 2016; Siew et al., 2016) have identified that goat milk was listed as a prophetic food. Muslim consumer realised that consuming goat milk not only will have many health benefits to their body, but they also consume goat milk for *syafaat* in the hereafter by following and practicing Prophet Muhammad (*pbuh*) sunnah. This can be seen as religion commitment by Muslim consumer. Therefore, this scenario indicated that religion played an essential role as a motive to Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. The present study's results were consistent with those of other researchers, who found religion as a motive for Muslim consumer intention toward goat milk purchasing behaviour in Malaysia.

Furthermore, one (1) of the FGD participants identified taste as her motive on the intention toward goat milk purchasing behaviour. The present findings were consistent with those of other researchers, who discovered taste as a factor for consumer to purchase goat milk and others animal dairy products (Paskaš et al., 2020; Guney, 2019; Kuradjova & Petrovicova, 2015; Iancu, 2014; Utami, 2014; Jerop et al., 2013; Guney & Ocak, 2013; Santoso et al., 2012; Ozawa et al., 2009; Ozawa et al., 2005). These result showed that the texture of goat milk is viscous and produce an odour that stimulates Muslim consumers to consume and purchase it. Therefore, this scenario indicated that taste has an essential role as a motive on Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. Thus, the current study's result also indicated that taste was the motive of Muslim consumer intention towards goat milk purchasing behaviour in Malaysia.

Lastly, two (2) FGD participants stated that price was their motive toward intention on goat milk purchasing behaviour in Malaysia. The present findings are consistent with those of other researchers, who found that price is a factor to consumers' intention toward goat milk and animal dairy products purchasing behaviour (Paskaš et al., 2020; Kar et al., 2018; Kuradjova & Petrovicova, 2015; Jerop et al., 2013; Boniface & Umberger, 2012; VanBaale, 2000). These result showed that Muslim consumer consider goat milk price relied heavily with health benefits offered by goat milk. Therefore, this scenario indicated that price of goat milk played an essential role for Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. Previous studies (Adede & Kinoti, 2016; Rani et al., 2016; Jerop et al., 2013; Ozawa et al., 2009) reported that price as the factor influencing consumers' intention toward purchasing goat milk. The current study's results also mentioned taste as the motive of Muslim consumers' intention toward goat milk purchasing behaviour. Therefore, health, nutrition, religion, taste and price were identified as motives of Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. A thematic analysis was applied and these themes were identified according to the transcribe report from the FGD session conducted. Hence, motives of Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia were health, nutrition, religion, taste and price.

# 5.5.2 Research Question 2: Factors influence Muslim consumer intention towards goat milk purchasing behaviour in Malaysia.

This research question intended to answer the second research objective of the eight-key antecedent's relationship with Muslim consumer intention. The experiential results showed that the Muslim consumers' attitude, subjective norm (i.e., the antecedents of the TPB model), health, nutrition, religion, taste and price positively influence their intention toward goat milk purchasing behaviour in Malaysia. Meanwhile, antecedent perceived behavioural control was not a significant influence Muslim consumer intention.

The PLS-SEM analysis showed the relationship between attitude, subjective norm, health, nutrition, religion, taste and price toward intention. The perceived behavioural control was not significant toward Muslim consumer intention goat milk purchasing behaviour in Malaysia. Therefore, H3 was rejected. The present findings were consistent with those of other researchers, who found a significant positive effect between attitude, subjective norm health, nutrition (Paskaš et al., 2020; Guney, 2019; Rani et al., 2016; Chang et al., 2016; Siew et al., 2016; Utami, 2014; Jerop et al., 2013; Guney & Ocak, 2013; Santoso et al., 2012), religion (Kamarubahrin, 2019a; Kamarubahrin et al., 2019b), taste and price (Paskaš et al., 2020; Guney, 2019; Kuradjova & Petrovicova, 2015; Iancu, 2014; Utami, 2014; Jerop et al., 2013; Guney & Ocak, 2013; Santoso et al., 2012; Ozawa et al., 2009; Ozawa et al., 2005) toward intention. These results showed that when Muslim consumers in Malaysia intent to purchase goat milk, these criteria influenced them. Therefore, this scenario indicated that attitude, subjective norm, health, nutrition, religion, taste and price has an essential role for Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. These results showed that Muslim consumers intention toward goat milk purchasing behaviour, which can result in their positive future behaviour by improving the general elements of TPB models and adding some elements. Thus, a better and advanced understanding of these elements is important in developing marketing strategies to encourage more Muslim consumers to purchase goat milk.

Hypothesis 1 (H1), which represents the relationship between attitude and intention. The hypothesis was supported. The findings that supported Hypothesis 1 are as follows: The PLS-SEM analysis shows Muslim consumers' attitude toward intention (Table 5.1). The findings were consistent with those of previous research, which determined a positive relationship between attitude and intention (Siew et al., 2016; Chang et al., 2016; Jerop et al., 2013). Given that Muslim consumer attitude is an essential role, this factor has and will continue to significantly influence the intention. Thus, Muslim consumers', goat milk purchasing behaviour must be influenced by attitude which can affect intention.

The context of this study's subjective norms refers to hypothesis 2 (H2) as the perceived social pressure on the intention and behaviour of individuals who perform or not (Ajzen, 1991, p. 462). A Muslim consumer who receives positive 255 social pressure from those who are important or close to himself/herself will make a positive decision. The PLS-SEM analysis showed that subjective norms were positively associated with Muslim consumer who have intention to purchase goat milk in Malaysia. These findings were consistent with those of previous studies (Kamarubahrin, 2019a; Siew et al., 2016; Chang et al., 2016; Jerop et al., 2013), which determined a positive relationship between subjective norms and consumer intention. The current research proved that subjective norms, which are essential components of Muslim consumer intention, will continue to have a substantial influence on behavioural.

Hypothesis 3 (H3) was perceived behavioural control, which describes the knowledge and experiences of performance based on the findings. These findings revealed that the perceived behavioural control was insignificant to Muslim consumer intention on goat milk purchasing behaviour in Malaysia. Previous research described this hypothesis as "knowledge and experiences" of performing the behaviour (Ajzen, 1991.p. 122). The rejection of H3 does not support Hessup (2010), Baker et al (2007), Cheng et al (2006), Conner and Abraham (2001), The current study's findings do not support this of Cheng et al. (2006) regarding the relationship between perceived behavioural control and intention, probably because of the questions develop for knowledge and experiences. These questions may not have been constructed in a valid context for goat milk.

The PLS-SEM analysis showed the relationship between health and intention. The received support from the analysis is significant, therefore, 256

hypothesis 4 (H4) was supported. The present findings were consistent with those of other researchers, who found a positive relationship between health and consumer intention (Kamarubahrin, 2019a; Umar et al., 2017; Ram et al., 2016; Siew et al., 2016; Chang et al., 2016). These results showed that when Muslim consumers have a good healthy body by consuming goat milk, his/her intention is high. Therefore, this scenario indicated that health has an essential role for Muslim consumers' intention and affects goat milk purchasing behaviour in Malaysia. Previous studies (Khuong & Duyen, 2016; Irianto, 2015; Yang et al., 2014; Leelayouthayotin, 2004) reported a significant relationship between health and consumer intention in other field of study on food purchasing behaviour. The current study's result also mentioned a significant relationship between health and intention toward goat milk purchasing behaviour in Malaysia. Thus, Muslim consumer believed the health benefits from goat milk

The experiential results showed that the nutrition positively influence the Muslim consumer intention toward goat milk purchasing behaviour as expected. Therefore, hypothesis 5 (H5) was supported. These results were as reliable as those of previous research (Chang et al., 2016; Siew et al., 2016; Rani et al., 2016; Prathiraja & Ariyawardana, 2003). These results showed that Muslim consumer were aware and believed the nutritional contents offered in goat milk and thus led to higher intention, which can result in their positive future purchasing behaviour. Thus, a better and more advanced understanding of nutrition motive is important in developing marketing strategies to encourage more consumer to consume and purchase goat milk in Malaysia.

The PLS-SEM showed that religion was a significantly positive effect on the intention toward goat milk purchasing behaviour in Malaysia. The experiential results showed that religion positively influence the Muslim consumers' intention toward goat milk purchasing behaviour as expected. These results corresponded to those of previous research on consumer behaviour (Mathras et al., 2015; Mukhtar & Butt, 2012; Lada et al., 2009; Bonne & Verbeke, 2008; Essoo & Dibb, 2004; Assadi, 2003; Delener, 1990; Hirschmann, 1981). These results showed that religion of Muslim consumers can affect higher intention, which can result in positive purchasing behaviour. Thus, a better and further understanding of religion element is important in developing marketing strategies to encourage more Muslim consumers to consume and purchase goat milk. Thus, hypothesis 6 (H6) was supported. The current research proved that religion, which was an essential component of Muslim consumer intention, will continue to affect goat milk purchasing behaviour.

The PLS-SEM results also showed that taste was significant to Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. Therefore, hypothesis 7 (H7) was supported. The findings were consistent with those of previous research, which determined a positive relationship between taste and intention (Hung et al., 2016a; Shan et al., 2016; Tobin et al., 2014; Jerop et al., 2013). These results showed that taste was among the most significant influence in a Muslim consumers' decision-making process toward goat milk purchasing behaviour. Given that taste is an essential component, this factor has and will continue to significantly influence intention. Thus, taste must be regarded as an influence factor component that can affect intention.

The findings of hypothesis 8 (H8) revealed that the price of goat milk was significantly associated with the Muslim consumers intention toward goat milk purchasing behaviour in Malaysia. The current study's findings supported those of Priyajor et al (2018), Hsu and Pham (2015), Nguyen and Gizaw (2014), Jerop et al (2013), Santoso et al (2012), Cazacu et al (2014) regarding the relationship between price and consumer intention. This is probably because of consumers' willingness to pay due to health benefits offered by consuming goat milk. Given that price is an essential influence component, this factor has and will continue to significantly influence intention. Thus, price of goat milk must be regarded as factor influence that can affect intention.

5.5.3 Research Question 3: Demographic Characteristics as moderate have effect on Muslim consumer intention toward goat milk purchasing behaviour in Malaysia.

This research question intended to answer the third research objective of demographic profile as moderating effect on Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. The experiential results showed that the demographic profile as moderating effect was insignificant to intention and goat milk purchasing behaviour. The rejection of the Hypothesis 9 (H9) does not support Lobb et al (2007) findings where demographic profile positively affects consumer intention. The current study's findings was unable to support Lobb et al (2007) regarding the relationship between demographic profile, intention and purchasing behaviour as the respondents in their study were mostly from developed countries and did not focus on goat milk. By contrast, the participants of the current study were local and Muslim. This study also focused solely on the goat milk sector. However, this study's findings were similar to the study by Mazzocchi et al (2008). They found no relationship between demographic characteristic variables and consumers' trust in food safety information.

# 5.5.4 Research Question 4: Intention of Muslim consumer towards goat milk purchasing behaviour in Malaysia.

Previous researchers (Aziz & Vui, 2012; Jin & Suh, 2005; Grewal et al., 1998) found that the intention of consumers was also a powerful factor for purchasing behaviour. Armitage and Conner (2001) concluded that intention was the motivation for individuals to engage in a certain behaviour. This concept also included the intention toward goat milk purchasing behaviour in Malaysia. These findings were supported by the current study's findings, which revealed that intention positively affect Muslim consumers toward goat milk purchasing behaviour in Malaysia. This study stated that Muslim consumers have more positive intention toward goat milk purchasing behaviour for a better healthy lifestyle.

#### 5.6 Contribution of Research

The findings of this study provided important theoretical and practical contribution. The contribution derived from the findings were discussed as follows.

#### 5.6.1 Theoretical Contributions

This study contributed to the Ajzen's Theory of Planned Behaviour (TPB) from the dimension of Muslim consumers' intention toward goats' milk purchasing behaviour in Malaysia. Variables such as attitude, subjective norm (SN), perceived behavioural control (PBC), health, nutrition, religion, taste and price rarely to be found as an indicator to predict consumer behaviour. However, the empirical data itself proved that the model of intention and behaviour that cover some of the above elements was significant. These findings were important and meaningful, adding to the numbers of consumer behaviour references. The finding of this study showed that intention significantly influenced the consumers' behaviour toward goat milk purchasing. Thus, the propose model can be used as the foundation to future research.

The empirical finding of this research has several significant theoretical contributions. Factors influencing intention to purchase goat milk were investigated using consumer behaviour theory which was Theory of Planned Behaviour (TPB). The overall results indicated that the theories provide a good understanding of these factors and may contribute to people's intention to purchase goat milk. An important theoretical contribution of this study was that it helps to understand the importance of variables on consumers' intention toward goat milk purchasing behaviour. By integrating these variables simultaneously, this study was able to discover the relative significance of attitude, subjective norm, perceived behavioural control, health, nutrition, religion, taste and price.

From a theoretical standpoint, these results contributed to the existing literatures in several ways. The findings of this research supported the Theory of Planned Behaviour (TPB) which indicates that behaviour or attitude is a determinant of intention towards goat milk purchasing behaviour, as well as predicting intention. Moreover, some studies contend that demographic variables such as: gender, age, marital status, level of education, and level of income etc., have an influence on moderating effect toward goat milk purchasing behaviour. As an argument for those studies, consumers often considers several issues before opting to purchase goat milk.

Based on findings of the current study, attitude, subjective norm, health, nutrition, religion, taste and price have been identified as key factors in determining Muslim consumers intention toward goat milk purchasing behaviour. As suggested by Ajzen (1980), consumers are easily influenced by subjective norms of influential people and groups they belong to. The point is that consumer's perception of the beliefs of those around them: parents, friends, colleagues, partners etc. would influence their intention toward goat milk purchasing behaviour because they prefer to purchase products that benefit them and have a sense of belonging among the peer group or society. In addition, TPB were carried out using personal component, 262

specific behaviour component and social component. These factors serve as key determinants of attitude toward intention which influenced behaviour.

Thus, the findings of this empirical study illustrated that the Muslim consumers segment hold favourable intention toward goat milk purchasing behaviour which were sufficiently noticeable to endorse retailers and goat milk producers. Increasing the awareness of Muslim consumers about the positive, negative, direct and indirect effects of their purchasing behaviour on the healthy impacts is absolutely necessary to encourage these practical consumptions by Muslim consumer to purchase and consume goat milk more frequently.

Finally, these finding also provided valuable information for retailers, goat milk farmers and investors on Muslim consumers concerns. The demographic inferential analysis revealed that female consumers who hold a higher education level have more favourable intention toward goat milk purchasing behaviour. Retailer, dairy goat farmer and investor can simply trace this segment as their target market to increase their market shares. Given that potential Muslim consumers now increasingly purchase goat milk, retailers, dairy goat farmers and investors can begin to promote goat milk practices not only as temporary strategies, but rather as fundamental motivators that involved government agencies. Researchers agreed that Muslim consumers are highly concerned about the goat milk benefits.

#### 5.6.2 Practical Contributions

The research findings added helpful explanations of significant antecedents leading to Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. This research also provided practical contributions to more accurately understand Muslim consumer intention regarding important dimension of goat milk. In this research, the methods (qualitative and quantitative) were seen as complementary. Since qualitative findings were used as input for quantitative research, the mixed methods contributed to the overall findings and practical implications of this research.

First, this research demonstrated that motives of Muslim consumer intention toward goat milk purchasing behaviour were health, nutrition, religion, taste and price. The research also showed that attitude, subjective norm, health, nutrition, religion, taste, price and intention were significant antecedents of Muslim consumer intention toward goat milk purchasing behaviour in Malaysia. Furthermore, this research reported that perceived behavioural control was insignificant on Muslim consumer intention toward goat milk purchasing behaviour. This due to the fewer the supporting factors and the many inhabiting factors, the individuals will perceive themselves as difficult to perform the behaviour. This implies Muslim consumer control belief in this study did not have favourable toward intention on purchasing goat milk. Hence, detailed explanation of this can be explore further in future in-depth studies using a qualitative approach for examples interviews. Besides that, demographic profile of Muslim consumer as moderate did not have any effect between intention and purchasing behaviour. Thus, the government can apply these findings to develop long-term strategies for developing a goat milk consumption culture, considering the following implications:

- i. The cost of goat milk purchasing is not just dependent on healthy consumption but also economic and social, causing massive impacts to the quality of life. To minimise unhealthy consumption, the government can implement social marketing campaign to raise awareness among Muslim consumers or Malaysian's involvement with health issues. The challenge for policy makers is to find ways to address Muslim consumers' religion perspective whereby improving their purchasing and consumption practice of goat milk toward healthy lifestyle. Social marketing campaigns need to develop a clear vision to associate Muslim consumers with health benefits and religious beliefs, thereby creating and enhancing the distinction of goat milk to consumers for maintaining a better quality of life.
- ii. It can also be noted that as attitude and subjective norm were found to be significant effects on Muslim consumer intention toward goat milk purchasing behaviour in the research context of Malaysia, attitude and subjective norm involvement are important to promote goat milk purchasing behaviour. Muslim consumers are more likely to purchase goat milk when they believe the effects and quality functioning of the products. In case the government fails to do so, the alternative way to facilitate behavioural

change could be through policy changes, which do not encourage other dairy animal products. Therefore, to develop a goat milk purchasing behaviour culture in Malaysia, the desirable images of goat milk as well as dairy goat farmer should be projected on a national scale.

Secondly, businesses can apply factors of religion and taste in their marketing communication to enhance positive public images of goat milk. The message should project goat milk as a desirable social image targeting a mass market, and not just a niche market. As Muslim consumers express a desire to purchase and consume goat milk, the production of dairy goat should be enhanced by scientific lab testing to increase the production on a larger scale. This will impact the reduction of price and increase accessibility of goat milk and thereby increasing the purchasing behaviour of Muslims and Malaysian consumers.

Finally, this research was conducted in the context of Muslim consumers in Malaysia as the population size is dominant, consisting of young Muslim consumers who are well educated and have healthy consumption practices. Therefore, the research findings are applicable to the emerging market which share similar conditions in terms of population sizes and fast changing consumption patterns. As Muslim consumer are dominant, the potential positive effects of goat milk purchasing behaviour can be far reaching, should goat milk consumption culture be built and enforced. The future of goat milk consumption in this country could begin within the private-sphere of consumer behaviours such that consumers purchase fast-moving products with eco-friendly characteristics.

#### 5.7 Limitation

The researcher strongly believes, undoubtedly that this research will contribute to the field of consumer behaviour theory and practice as discuss earlier or at least contributing to the body of research and literatures on consumer behaviour. However, this study has its limitations, as does almost all other research empirical or non-empirical. Although efforts were made to ensure the validity of the results from this study, several limitations existed that was accounted for when interpreting these findings. Limitations in the areas of sampling method and experimental design and suggestions for ways to overcome these limitations in further research will be discussed here.

Firstly, respondent's participation was especially difficult to obtain. Some of the respondents were available to participate and some were not. In addition, the sample of the study may not be an exact representation of the Malaysian Muslim consumers due to non-cooperation of potential respondents as well as time and financial constraints. Furthermore, the convenience sampling process may limit the generalizability of the findings to the entire population.

Secondly, concerning the level of intention and goat milk purchasing behaviour, the analysis indicated that a majority of respondents fall within the high category of intention and goat milk purchasing behaviour. This shows that, the respondents are devout Muslim consumers, trying their best to follow the Prophet Muhammad (*pbuh*) sunnah. This model represents the relationship of intention and goat milk purchasing behaviour of Muslim consumers who are committed with Islamic value. However, in reality, there are Muslims who are not as devout in practising the values of Islam in the daily life. In order to understand the varying level of Muslim consumer, more respondents from different background are needed in future study. The convenience sampling mentioned above can help to include varying groups.

Thirdly, the intention before purchasing or doing anything is very important for Muslims. Intention is difficult to measure, because it is related to the heart and sincerity of each individual. This study observed small angle of Islamic understanding in explaining the purchase intention. Therefore, additional Islamic perspective can be added as elements of intention as an extension of this model in future studies on the dimension of purchase intention.

Besides that, Malaysia has a multi-ethnic population and therefore, may have a different interpretation of the questionnaires. Thus, the accuracy of data obtained depended on the honesty of respondents in giving their opinions.

#### 5.8 Implications

The results of the present study provided insights into future directions for Muslim consumer behavioural research.

#### 5.8.1 Policy Development

The results of the present study have shown that perceived behavioural control and demographic profiles were not strong enough to influence the intention of Muslims consumers toward goat milk purchasing behaviour. Therefore, this study implies a possible scenarios, ease and difficulty to purchase goat milk and factor do not influence the intention of Muslim consumer toward goat milk purchasing. This is probably because of goat milk is not readily available, expensive and has a strong odour. Thus, Muslim consumers may not have an interest to purchase it, even though it is a teaching in Islam.

Therefore, it is recommended that the government initiate programmes Muslim consumers can be reached and attract them to purchase goat milk. This could be done by engaging Muslim consumers in designing the government initiatives that suit their characteristics and attract them to purchase goat milk. Promotion and publicity should also suit the preference of Muslim consumers. It is also important to utilize the appropriate medium of communication, for example social media to reach the Muslim consumers and attract them to purchase goat milk. Moreover, the government could involve public and private universities in their awareness programmes, for example, organizing events to increase awareness of the benefits of goat milk.

In addition, hardly any of earlier researches deliberated on the government's initiatives to encourage goat milk purchasing by providing reliable

information and knowledge. Thus, it is recommended that policy makers in the government, research centres and universities allocate more funding for researchers in this field. This is to enable more in-depth studies to be conducted on consumer behaviour toward goat milk purchasing in Malaysia. Hence, this could enhance the strategies and policies of the government on consumer behaviour toward goat milk purchasing, for Malaysia to achieve its aim of becoming the Global Health Society.

#### 5.8.2 Practice

The findings of the present study have shown that attitude, subjective norm, health, nutrition, religion, taste and price were the variables that determined Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. This implies that Muslim consumer could be influenced if they understood and practise Islam as their way of life, have a positive attitude towards goat milk and are surrounded by people who encourage them to purchase goat milk. Religious factor was one of the determinants. As halal consumption is a part of the religious obligation in Islam, an individual with moderate or high religiosity would consume halal food in their daily lives. Thus, it is important to educate Muslim consumers on the concept of halal and Islamic rulings on food purchasing.

Secondly, the influence of attitude was also important in determining Muslim consumer intention toward goat milk purchasing. The attitude of Muslim consumers toward goat milk purchasing covers the advantages of goat milk itself, for example the aspects of its benefits. If someone has low religiosity and does not practice Islam as their way of life, they could still purchase goat milk if they have a positive attitude about goat milk, especially if they know the advantages that goat milk could provide. It is important to highlight to Muslim consumers that goat milk has many advantages, especially goat milk that is certified with the halal certification. This is because the halal certification ensures that goat milk products have met the standard of halal, hygiene and safety. In fact, JAKIM's halal certification complies with the HACCP and the GMP endorsement. It is also important to inform consumers about the benefits that is ensured by the JAKIM certification, as this would change the way they view this certification and could eventually develop their positive attitude on goat milk. Furthermore, as proven in previous researches, positive attitude about halal food could influence non-Muslim consumers to consume halal food. Subsequently, this would increase the halal trade and consumption in the country.

The third significant determinant was subjective norm. According to the result of this study, family and friends could influence Muslim consumer intention toward goat milk purchasing. As Muslim consumer meet with people from different background every day in their daily life, they are influenced by the way their friends purchase goat milk. If they socialize with friends who purchase and consume goat milk, there is high possibility that they too would purchase goat milk, and vice versa. Adding to that, it is recommended that families be the platform to educate their family members on goat milk purchasing. The importance of goat milk

purchasing should be highlighted in Muslim household, so they can educate their families about goat milk in the future.

The results of the moderating effects of demographic profile between the intention and goat milk purchasing behaviour among Muslim consumer suggested that there was no interaction of demographic profile between intention and goat milk purchasing behaviour. This implied demographic profile did not affect the intention of Muslim consumer and did not contribute to the goat milk purchasing behaviour.

#### 5.8.3 Marketing

This study investigated Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. The interesting finding on this study is that several similarities and differences occurred between intention and purchasing behaviour. Thus, producers and marketers in goat milk industry can develop marketing plans and strategies accordingly based on the Muslim consumer behaviour.

Consumer behaviour are important in marketing because they determine the actual behaviour; and thus, are relevant for market segmentation. Some factors are relatively more stable such as attitude, subjective norm, perceived behavioural control and so on. The five motives of intention can be viewed as basic segments that can be used in conjunction with demographic profiles. Marketers could design product or communication strategies specifically to target these segments. Advertisements targeting Muslim consumers from factual and value-oriented segments, for instance, could focus on the products' key nutritional value, taste (ingredients) and price aspects rather than trying to convey an image or emotion.

Marketers can also use socio-demographics to identify market segments through a target group for their goat milk brand or product. The issue with sociodemographics is surrogating the cultural influences on Muslim consumer purchasing behaviour. Therefore, marketers can create different commercials and advertisement for different age groups.

To maintain a competitive advantage, companies or goat milk suppliers can use the information on Muslim consumer intention on goat milk purchasing behaviour which are collected to plan and design targeted market approaches, seek methods of positioning goat milk products within target markets and even develop new goat milk products and test different markets. Lastly, findings from this study may be used to create marketing communication channels from the perspective of Muslim consumers. To get their message across to consumers effectively, companies or goat milk suppliers need to create marketing communication in such a way that consumers can learn about goat milk's prices, health benefits, nutrition, religion fact and taste. The findings showed that social media was one of the major advertisings that provides a good source of information for Muslim consumers.

#### 5.9 Future Research

As mentioned earlier, goat milk purchasing behaviour is different from other products' purchasing behaviour. This is because consumers have unique intention with regards to different product. The current study proposes additional dimensions, which could lead to new intention. Therefore, there is a need to conduct research on goat milk with new instruments developed.

Even though the purchasing behaviour was able to identify consumer segments and compared to different socio-demographic variables, little consideration was given to whether these segments are substantial, responsive and stable and therefore can be effectively used by producers and marketers. Further research is needed to determine the extent purchase behaviour differs at the product level, which would give more accurate information on identifying segments to cater the different needs and wants of each consumer segment.

In addition, researchers should take into account in the sample representativeness. As noted earlier, the current research was done for Muslim consumers, which might not represent the overall Malaysian consumers. Furthermore, convenience sampling was used, therefore, it is recommended that the stratified random sampling be adopted in future research to represent heterogeneity of Malaysian population. This should put more emphasis on specific groups rather than individuals. As an example, the study on Muslim consumers' intention between married and unmarried groups or study on elderly consumers age of 50 or 60 and above in order to find specific results on trends and relationships for deeper comprehension. Splitting the sample groups showed that some variations do exist in the reliability of the construct for the groups (younger or older) (Wickliffe, 2004).

#### 5.10 Recommendation

There are three aspects of recommendation for future research to be conducted. The recommendation of this study are discussed from several perspectives as follows.

## 5.10.1 In-Depth Understanding on the Determinants of Muslim Consumer Intention toward Goat Milk Purchasing Behaviour

This study provided results on the determinants of Muslim consumer intention toward goat milk purchasing in Malaysia based on the statistical point of view. This research has provided a platform in understanding the intention and behaviour of Muslim consumer toward goat milk purchasing. However, in order to understand why some determinants were significant, and some were not an influence in Muslim consumers toward goat milk purchasing, an in-depth study could be conducted to investigate the determinants of Muslim consumers' intention. In-depth understanding of the model and variables proposed in this study could provide a comprehensive knowledge about Muslim consumers' intention toward goat milk purchasing. In addition, an extensive study could propose relevant suggestions in improving practices and policies of goat milk purchasing in Malaysia. The present study has shown that attitude, subjective norm, health, nutrition, religion, taste and price did influence the intention of Muslim consumer toward goat milk purchasing. The roles of these seven determinants could be elaborated further in future in-depth study. Similarly, as the perceived behavioural control and demographic profile were not found to be significant in the present study, detailed explanation of this can be explored further in future studies using a qualitative approach, such as interviews.

# 5.10.2 The Role of the Marketer and Government in Create Awareness Program to Promote Goat Milk

The role of the government in educating Muslim consumer toward goat milk purchasing was explored in this study. Future researches can focus on experimental studies which look at the influence of the Islamic studies or other similar subject towards the behavioural intention of Muslim consumers toward goat milk purchasing. This will help to determine if a particular subject actually influences Muslim consumers' intention toward goat milk purchasing. The findings of this future research could be used by the government and stakeholders in their planning for subjects and programmes for Muslim consumer. For instance, the results from this research could then be utilised to improve or to revise the content and the learning and teaching techniques in delivering the subject. Similarly, it could be used to improve any programs related to marketing generally and consumer behaviour specifically. In this study, contents and ingredients in goat milk were the important factor to Muslim consumers. Marketers can incorporate this segment in effective marketing plan to promote the health benefit of goat milk. Research has shown that omega-3 fatty acid found in goat milk can help lower risk of heart disease and is essential to the growth and development of children (Attaie, 2018; Kompan & Komprej, 2012). While a marketing effort touting nutritional may eventually convince Muslim consumers to purchase goat milk more often, in the meantime the goat milk producers could try to grab Muslim consumers' attention with a variety of flavour.

### 5.10.3 Further Refine the Conceptual Model of the Present Study

This study focused on Muslim consumer in Malaysia. The findings focused on religion for the mentioned scope. Therefore, it is recommended that future research applies this model to a larger group of population from different religious background, objectively to further refine the conceptual model developed in this study. Furthermore, future research can explore the potential and strength of this model in the Malaysian context across the different religion background of respondents. It can further test the Theory of Planned Behaviour (TBP) as a conceptual framework with an additional variable of health, nutrition, religion, taste and price as proposed in this study.

It is also recommended that future study be conducted to validate this model by comparing urban and non-urban areas. This could contribute in validating the model as a conceptual framework and enhancing understanding of the determinants influencing Muslim consumer intention toward goat milk purchasing behaviour in.

#### 5.10.4 Longitudinal Studies

Fourthly, longitudinal studies should be conducted in the near future to enrich or further improve Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia, since Muslim consumers' intention towards purchasing are dynamic and can change frequently. The information obtained can be used to deepen other factors that might influence Muslim consumers' intention toward goat milk purchasing behaviour because the challenge of providing quality and good products never ends. This will require local companies, the policy makers to periodically scrutinize their weakness and strength in order to achieve a competitive advantage over foreign companies and also to convince the consumer to patronize their consumption of goat milk.

## 5.11 Conclusion

This research attempted to investigate Muslim consumer intention toward goat milk purchasing behaviour in Malaysia with application of Theory of Planned Behaviour (TPB) and additional variables influencing the intention such as health, nutrition, religion, taste and price. The moderating effects of demographic profile on intention and purchasing behaviour were also considered. Besides that, the effects of intention on the purchasing behaviour were also included in this study.

This framework, which was adopted from the TPB conceptual framework, was developed to determine supportive answers for the research questions. Accordingly, ten (10) hypotheses were proposed. A qualitative study was conduct to identify the motives of Muslim consumers' intention toward goat milk purchasing behaviour. An empirical quantitative study was then designed to examine the study hypotheses. A questionnaire was developed according to existing literature review. A total of 500 structured questionnaire were distributed among the Muslim consumer all over Malaysia for the data collection. A total of 420 accomplished questionnaires were collected. The aggregated data was then analysed descriptively and inferentially by PLS-SEM analysis. Results of the analytical examination reveal that the attitude, subjective norm, health, nutrition, religion, taste and price significantly contributed to the Muslim consumers' intention toward goat milk purchasing behaviour in Malaysia. The next important finding of the inferential analysis indicated that female consumers and consumers with higher primary educational levels were more likely to show higher positive intention toward goat milk purchasing behaviour in Malaysia. These findings generally lend strong support for the applicability of TPB in consumer behaviour studies. They also provided opportunities for further research and progress in enriching the goat milk purchasing behaviour literature.