

**THE RELATIONSHIP BETWEEN RELIGIOSITY, HALAL
PERCEPTION AND INTENTION TO PURCHASE HALAL
FOOD PRODUCTS: A COMPARATIVE STUDY BETWEEN
ARAB MUSLIM AND NON-ARAB MUSLIM CONSUMERS**

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**FACULTY OF BUSINESS AND ACCOUNTANCY
UNIVERSITY OF MALAYA
KUALA LUMPUR**

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ABSTRACT

This study investigates the impacts of religiosity and specific predictors that are relevant on halal food consumption. The research objectives are i) to assess the influence of religiosity and halal perception towards the intention to purchase halal food products, and ii) to develop a measurement for halal perception consisting of halal knowledge, halal consciousness, halal cautiousness, the importance of halal logo, and products that originate from Muslim countries. This study investigates the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The global Muslim population has grown rapidly in which the rate is nearly twice of the non-Muslim population in the future. Muslim population is very diverse with differences in the conformity to religious requirements and the understanding of halal food concept. There is an ample amount of literature to support the religion construct as a significant force in many individuals and the consumer behaviour. Therefore, this study provides an integrated model to comprehend the Muslims' attitude and behaviour using the classical theory of reasoned action (TRA) as a conceptual framework. In order to achieve the research objectives, qualitative approach (focus group discussion and interview) and quantitative approach (analysis of 788 valid questionnaires) were employed. Meanwhile, the data collection techniques used were (i) exploratory factor analysis, (ii) measurement model to test the validity assessment, and (iii) partial least square technique to examine the structural model estimation and evaluation. The results indicate a significant dissimilarity between Muslim consumers in different countries, in which this study focuses on Arab Muslim and non-Arab Muslim consumers. Religiosity gives an insightful meaning to consumer behaviour concerning halal products. This is combined with a specific set of consumer perceptions associated with food decisions. This study has developed four halal perception constructs that underwent various data purification techniques. Reliable and valid scale of halal perception allows researchers to test the relationship on a wider scope of Muslim segment and various measures to tackle and satisfy the Muslim segment. This study provides an important insight to marketing implications, as well as theoretical and methodological contributions. It also contributes to the existing body of knowledge by explaining the relationship between individual's religiosity and determinant factors of the intention to purchase halal food products. The findings may also serve as a guideline to formulate effective marketing strategies, locally or internationally. However, this study only focuses on Arab Muslims and non-Arab Muslims in the United Kingdom and Australia (non-Muslim countries). In short, it is recommended for future research to conduct a similar study in Muslim countries or among Muslims residing in countries other than the United Kingdom and Australia.

ABSTRAK

Kajian ini menyiasat kesan keagamaan kepada pengambilan makanan halal. Ramalan khusus yang relevan kepada pengambilan makanan halal dimasukkan dalam kajian ini. Objektif kajian ini adalah untuk 1) menilai pengaruh keagamaan dan persepsi halal terhadap niat untuk membeli produk makanan halal 2) Membangunkan pengukuran persepsi halal yang terdiri daripada pengetahuan halal, kesedaran halal, sikap berhati-hati halal, kepentingan logo halal, dan produk yang berasal dari negara-negara Islam. Kajian ini menyiasat kelakuan Arab Muslim dan bukan Arab Muslim di UK dan Australia terhadap niat untuk membeli produk makanan halal. Penduduk Islam global telah berkembang dengan pesat dan dijangkakan pada masa akan datang adalah dua kali ganda daripada penduduk bukan Islam. Penduduk Islam adalah sangat berbeza dari aspek kepada tuntutan agama hingga pemahaman konsep makanan halal. Terdapat banyak kesusasteraan yang menyokong agama sebagai kuasa penting dalam kehidupan ramai individu dan sudah tentu mempengaruhi tingkah laku pengguna. Oleh itu, kajian ini menggunakan Teori klasik Tindakan Bersebab (TRA) sebagai satu rangka kerja konseptual. Kajian ini menggunakan dua kaedah untuk mencapai objektif. Kaedah pertama adalah kualitatif (perbincangan kumpulan fokus atau FGD dan temu bual). Kaedah kedua adalah pendekatan kuantitatif dengan sejumlah 788 soal selidik yang dianalisis. Teknik pengumpulan data untuk kajian ini adalah analisis penerokaan faktor, model pengukuran (untuk menguji validiti) dan partial least square (PLS) untuk memeriksa anggaran model struktur dan penilaian. Hasilnya menunjukkan ketidaksetaraan yang signifikan antara pengguna Islam di negara-negara yang berbeza. Dalam kajian ini, kita menumpukan kepada pengguna Arab Muslim dan Muslim bukan Arab. Peranan keagamaan memberikan kesan kepada tingkah laku pengguna tentang produk halal digabungkan dengan set tertentu yang berkaitan dengan pemakanan halal. Kajian ini juga berjaya menghasilkan empat konstruk persepsi halal, yang telah menjalani pelbagai teknik penulisan data. Skala yang telah di validasi memberi peluang kepada penyelidik untuk menguji hubungan dengan pelbagai yang lebih luas langkah-langkah untuk menangani dan memenuhi segmen pemakanan halal. Kajian ini memberikan pandangan penting untuk implikasi pemasaran, sumbangan teori dan metodologi. Ia juga menyumbang kepada pengetahuan yang sedia ada dengan menjelaskan lebih mendalam hubungan antara nilai agama individu dan faktor-faktor penentu niat untuk membeli produk makanan halal. Ini boleh dijadikan sebagai panduan dalam merangka strategi pemasaran yang berkesan, sama ada tempatan atau antarabangsa. Walau bagaimanapun, kajian ini memberi tumpuan kepada Islam Arab dan Islam bukan Arab di UK dan Australia. Kedua-dua negara adalah negara-negara bukan. Oleh itu, adalah disyorkan untuk mempunyai kajian yang sama bagi Islam di negara-negara Islam atau Islam yang hidup di negara-negara bukan Islam yang lain daripada negara tersebut.

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University of Malaya

DECLARATION

This thesis contains no material that has accepted for the award of any degree or diploma in any university or any institutions, and to the best of my knowledge, contains no material previously published or written by another person, except where due reference is made in the text.

AZURA HANIM BINTI HASHI

University of Malaya

CHAPTER 1 : INTRODUCTION

1.1 Introduction

This chapter provides a concise overview of the research that begins with background of the study, followed by problem statement, significance of the study, research questions, research objectives, and finally it ends with organisation of the thesis.

1.2 Background of the study

In recent years, the global Muslim population has grown rapidly and this trend is expected to continue growing in the coming years. For example, in 2010, the number of Muslims constituted 24% of the world's population, and there will be approximately 1.8 billion Muslims by the year 2050 (Kettani, 2010; Rajagopal and Ramanan, 2011; Abdul Rahim and Junos, 2012; AlSerhan, 2012; Pew Research Center, 2015). The increasing rate of Muslim population has also increased the demand of halal food industry, from USD635 billion in 2009 to USD655 billion in 2010 and USD2.47 trillion in 2018 (State of the Global Islamic Economy, 2013; Bernama, 2009).

The accelerating growth of Muslim population in many countries has greatly influenced the rise of halal food industry (Lever, Bellacasa, Miele, and Higgin, 2010). Muslims are becoming more conscious about their food intake, especially in Muslim minority countries where their food chain has a longer and complex procedure (Hayat M. Awan, Ahmad Nabeel Siddiquei, Zeeshan Haider, 2015; Noreen Noor Abd Aziz et al., 2015; Bergeaud-Blackler, 2005). Halal is a religious requirement in Islam that influences personal behaviour and food intake (L. Kurth and P. Glasbergen, 2017; Thomas, A. M., White, G. R. T., Plant, E., and Zhou, P., 2017; Pettinger, Holdsworth, and Gerber, 2004; Dindyal, 2003; Delener, 1994; Musaiger, 1993).

The aforementioned discussion suggests that several religious variables need to be considered as explanatory constructs of consumer behaviour in halal food consumption. Moreover, religious influence in consumer behaviour still remains under-researched (Cohen, Mandel, Mick, Glen, 2016; Moklis, 2006; Lindridge, 2005; Assadi, 2003; Delener, 1994). The majority of empirical studies on food consumption have been conducted in the US where Judeo-Christian culture is predominant (Moklis, 2006; Wilde and Joseph, 1997). Additionally, studies on the impact of commitment to follow halal principles, especially within the halal food industry, are limited and have ignored the Muslim market segment (Lada, 2009; Bonne and Verbeke, 2008; Ahmed, 2008; Bonne, 2005; Ismail et al., 2008).

Furthermore, researchers must understand the differences in the conformity to religious requirements and the understanding or interpretation of what Muslims consider as halal food (Elasrag, 2016, Md Noor and Noordin, 2016; Bilgin and Nakata, 2016; Sungkar, 2007; Jukaku, 2006). For example, the certified halal logo has benefited many organisations and individuals for easy identification of halal food. However, the validity of some products or services claiming to be halal has been questioned because halal is a broad concept and does not refer to animal slaughtering method only (L. Kurth and P. Glasbergen, 2017; Thomas, A. M., White, G. R. T., Plant, E., and Zhou, P. 2017; Shafie et al., 2006; CAP, 2006). It includes respecting and treating the animals to be slaughtered, and how animal products are financed, sourced, manufactured, processed, distributed, stored, and sold (Sungkar, 2009).

Therefore, this study investigates the impact of religiosity on halal food consumption. The study also extends the current literature by empirically investigating the role played by religiosity in influencing consumer behaviour specifically on the purchase intention of halal food products. It is critical to understand whether religiosity affects the intention to purchase halal food products so that marketers are able to

strategically focus on common needs across Muslim consumer segment. This study relies on the Arab Muslim and non-Arab Muslim consumers to provide insightful information and represent the Muslims globally. The Arabs comprise 20% of the global Muslim population, however the non-Muslims often generalise the Islamic world as being Arabs (Rabasa, 2004). This study aims to create awareness, educate the consumers regarding halal food, and contribute to narrowing the gap of halal food literature.

1.3 Problem statement

Statistics show that the percentage of global Muslim population is expected to grow by 73% between 2010 and 2050 (Kettani, 2010; Pew Research Centre, 2015). This has definitely influenced the global demand in halal market which is expected to reach an incredible amount of \$30 trillion by 2050 (Fischer, 2008; Arif, 2010; Alserhan, 2010). However, there are challenges in the halal market such as misunderstanding of halal concept and heterogeneity of Muslim consumers (L. Kurth, P. Glasbergen, 2017; Rabasa, 2004). Hence, this study attempts to investigate the important determinant of the intention to purchase halal food products by empirically testing the relationship between religiosity and halal perception among the Arab Muslim and non-Arab Muslim consumers in the United Kingdom and Australia.

1.4 Significance of the study

There is still a need for further investigation on Islamic dietaries towards the intention to purchase halal food products (Dyah Ismoyowat, 2015). Studies on the intention theory that focus on halal food products show a lack of understanding on consumers' knowledge and perception towards halal products (Ahmad, A. N., Rahman, A. A., and Rahman, S. A., 2015; Khalek, A. A., Hayaati, S., and Ismail, S., 2015).

In order to understand food purchase decision-making within the halal context, it is crucial to understand the importance of Muslims' religiosity. Although the marketing literature reflect an emerging interest in the topic of culture, regrettably, to date, the empirical research focusing on the effectiveness of religiosity as cultural-based predictors to understand Muslim consumer behaviour are still limited (Mohd, N., Abang, S., and Abang, S., 2016). Empirical studies that investigate the impact of intention theory and the role of religiosity on halal food products are also scarce (Jamal, Ahmad, and Sharifuddin; Juwaidah, 2015). Thus, this study will add to the body of knowledge on the aspect of religiosity among Muslims and their purchase intention of halal food products.

Based on the aforementioned discussion, this study develops a modified model of halal food consumption based on theory of reasoned action (Bianchi, Constanza, and Mortimer, 2015). Additionally, several researchers in the past recommended for future research to conduct empirical studies on the constructs of religiosity and halal perception (Bruil, 2010; Tieman, 2011; Aziz et. al, 2013).

Next, development of halal perception constructs closely follows the steps recommended by Churchill (1979), Malholtra (2008), and Chen and Paulraj (2004). The proposed steps are as follows: (i) specify the domain of construct; (ii) generate the sample of items; (iii) purify the measures; and (iv) implement a continuous improvement cycle. Another important issue to investigate is the difference between Muslim ethnicities and countries. Based on the literature on religiosity, consumer behaviour, and halal food consumption, there is a lack of cross-comparison between countries and ethnicities (Mohd, N., Abang, S., and Abang, S., 2016; Lada, 2009; Bogal, 2007). A comparison study should also be included to generalise evidences concerning the factors influencing the intention to purchase halal food products (Mohd,

N., Abang, S., and Abang, S., 2016; Lada, 2009). In this case, Salman and Sadduqui (2011) recommended to study halal food perception in non-Muslim countries.

Muslim consumers, marketers, and legislators must be provided with sufficient information and must be given in-depth understanding pertaining to the concept of halal food. It seems that Muslims have often ended up as victims of greedy traders and manufacturers as the majority of producers or manufacturers of food-related items are non-Muslim. Therefore, it is important for Muslims to tackle issues related to halal food to avoid nonchalant attitude in terms of halal consumption. Thus, this study aims to create awareness, educate the Muslims regarding halal food, and help them in making wiser decision.

Additionally, the findings will also benefit the international marketers by helping the Muslim consumers to understand religious background and its influence on the intention to purchase halal food products. This is essential for international marketers to penetrate markets in different countries that have different ethnicities. In short, this research aims at narrowing the following gaps:

1. Limited research using empirical test to explore halal perception and a set of Islamic dietaries towards the intention to purchase halal food products.
2. Comparative research have not been done to investigate Muslims' religiosity, halal perception, and their intention to purchase halal food products in non-Muslim countries.
3. There have not been research conducted to investigate Muslims' religiosity, halal perception, and their intention to purchase halal food products among different ethnicities which may help marketers to understand future decision of Muslims' consumption.

1.5 Research questions and research objectives

Halal food industry is a fragmented market in which every country or region has its own characteristics. Therefore, it is vital to understand the means that influence the intention to purchase halal food products. In this case, questions regarding the impact of religiosity and consumer perception towards halal food consumption need to be solved. In addition, research that compares the intention among Arab Muslims and non-Arab Muslims is highly encouraged to identify their dissimilarities regarding halal food consumption. Therefore, the proposed research questions for the study are as follows:

RQ1: How to measure the perception towards the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia?

RQ2: Does Muslims' religiosity influence the intention to purchase halal food products among Arab Muslims and Non-Arab Muslims in the United Kingdom and Australia?

RQ3: Does Muslims' religiosity have any relationship with halal perception among Arab Muslims and Non-Arab Muslims in the United Kingdom and Australia?

RQ4: Does halal perception influence the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia?

RQ5: Does halal perception act as a mediator between Muslims' religiosity and their intention to purchase halal food products?

The main objective of this study is to assess the influence of religiosity and halal perception towards the intention to purchase halal food products. It investigates the intention to purchase halal food products among Arab Muslims and non-Arab Muslims. The proposed research objectives are as follows:

- RO1:** To develop a measurement for halal perception that consists of halal knowledge, halal consciousness, halal cautiousness, the importance of halal logo, and products that originate from Muslim countries.
- RO2:** To examine the relationship between Muslims' religiosity and the intention to purchase halal food products among Arab Muslim and non-Arab Muslims in the United Kingdom and Australia.
- RO3:** To investigate the relationship between Muslims' religiosity and halal perception among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia.
- RO4:** To examine the relationship between halal perception and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia.
- RO5:** To investigate the mediating effects of halal perception on the relationship between Muslims' religiosity and the intention to purchase halal food products.

1.6 Organisation of the thesis

The thesis is organised into five chapters. Chapter Two discusses the theoretical underpinning used in the study. It begins with an overview of the proposed research framework and the constructs used in this study – literature discussing about religiosity and halal perception. Subsequently, the discussion continues with literature concerning purchase intention. This chapter also examines the relationships between these constructs based on past literature and the propositions are presented. Next this chapter discusses about Muslims and halal food market, followed by the concept of halal and what constitutes halal food consumption.

Chapter Three focuses on research methodology and research design used in this study, as well as data collection and analysis method. It begins with discussion on

research instrument, followed by research design and research framework. These are followed by quantitative sampling design, questionnaire development, and measurement construct. This chapter is important to determine both methodology and measures since the study has developed several constructs.

Chapter Four represents the results and hypotheses testing. This section presents data analysis for the survey based on analysis techniques presented in the previous chapter. This section begins with a report of the sampling results, followed by treatment of the data which includes the process of coding, editing, and cleaning. Then, reports on data analysis are presented in the subsequent section.

Finally, Chapter Five begins with a brief review of the research which includes an overview of the research and research framework. The major findings of this study are discussed. Next, findings from the hypotheses derived from the data analysis are presented, followed by practical implications and theoretical contributions discovered from the findings of the current study. Last but not least, discussions on the limitations encountered during research process and direction for future research are presented.

CHAPTER 2 : LITERATURE REVIEW

2.1 Introduction

This chapter begins with discussion on the theory of behavioural intention used on halal food studies. Subsequently, it discusses the concept of halal and haram in Islam and the overview of global halal food market. This is followed by the challenges in the halal market. Next, this chapter discusses the Muslim population in the United Kingdom and Australia, and explores the challenges that exist in the halal market. This includes the interpretation of halal, halal certification, regulatory issues, and Muslim diversification. In the subsection of Muslim diversification, this chapter presents the diversity among Arab Muslims and non-Arab Muslims.

The discussion then proceeds to look at the literature on halal food and its relation to Muslim consumer behaviour. Next, the chapter presents the literature on halal perception that consists of five constructs, namely halal knowledge, halal consciousness, halal cautiousness, and the importance of halal logo and products originated from Muslim countries. The discussion then proceeds with the literature on purchase intention. This chapter also discusses the relationships between the constructs based on past literature and finally, the propositions are presented.

2.2 Theory or model of behavioural intention used in food consumption studies

Intention captures the motivational factors that influence human behaviour (Eagly and Chaiken, 1993, Saba and Vassallo, 2002). In this sense, the intention to purchase is one of the most important behavioural points in determining the potential demand for food products (Lilien and Kotler, 1983). The measure of intention to purchase is a commonly used construct which includes planning, expectation, and willingness to consume (Ajzen, 1991). In this study, behavioural intention is the

dependent variable to measure the intention to purchase halal food products (Sabbe et al., 2008; Chen 2007, 2008). The following section discusses the most popular intention theory used in the studies of halal food.

2.2.1 Theory of planned behaviour

Theory of planned behaviour (TPB) includes perceived behavioural control as a variable for predicting intention and behaviour (Ajzen, 1985). TPB comprises three constructs that determine consumers' intention, namely attitude, subjective norm, and perceived behavioural control. It is a popular theory frequently used in food consumption studies (Bredahl et al., 2001; 1998; Arvola et al., 2008; Tarkiainen et al., 2005). Most researchers in the past who adopted TPB applied additional determinants that contribute to the intention of food consumption (Lobb et al., 2007; Lin et al., 2006; Chen, 2007).

2.2.2 Theory of reasoned action

Theory of reasoned action (TRA) assumes that people have volitional control over the behaviour of interest, specifically, they realise that they are capable of performing the behaviour they desire. Among research that have used TRA in the studies of food consumption are Lin (2006), Ahmed et al. (2004), Honkanen et al. (2000), Honkanen et al. (2005), Saba et al. (1999), Thompson et al. (1994), Ollikainen (1986), Shepherd et al. (1985), Ajzen and Fishbein (1980), Bredahl et al. (2001; 1998), Arvola et al. (2008), Tarkiainen et al. (2005), and Netemeyer, Andrews, and Durvasula (1993). TRA has also been utilised in halal food literature (Lada et al. 2009; Shahrudin et al., 2010; Rezai, 2008). In the aforementioned studies, there are two constructs determining the TRA, namely attitude and subjective norm.

According to Olsen et al. (2008), the model integrates different aspects of a particular food product, as well as individual consumer and environment in order to predict food consumption behaviour (Bredahl and Grunert, 1997; Conner, Martin, Silverdale and Grogan, 1996; Dennison and Sheppard, 1995; Sparks, Conner, James, Sheppard, and Povey, 2001; Verbeke and Vackier, 2005).

Most studies that use TRA examined the linkage between external variables, for example the linkage between external variables and intention (Randall, 1989). The present study includes the linkage between external variables and intention to purchase halal food products. According to the theory, external variables consist of external influences and personal variables. Religious background is a subcategory of culture and personal values (Sheth, 1983). Figure 2.1 shows the model of theory of reasoned action.

Next, religiosity is a personal value that moulds one character which reflects the personal variables that are able to shape an individual's behavioural intention (Mokhlis, 2006; Sheth, 1983). Figure 2.2 shows the linkage between Muslims' religiosity as an external variable and the intention to purchase halal food products. In short, it is important to understand the aspect of religiosity because it is regarded as a personal variable. This helps marketers to understand the intention to purchase within their target market.

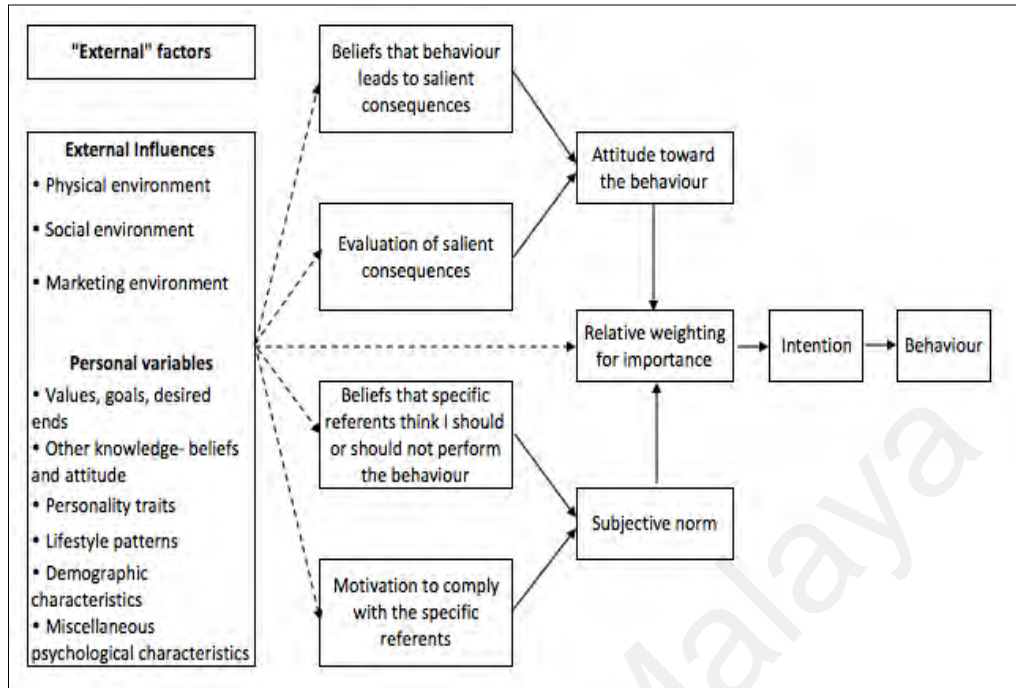


Figure 2.1: Theory of reasoned action

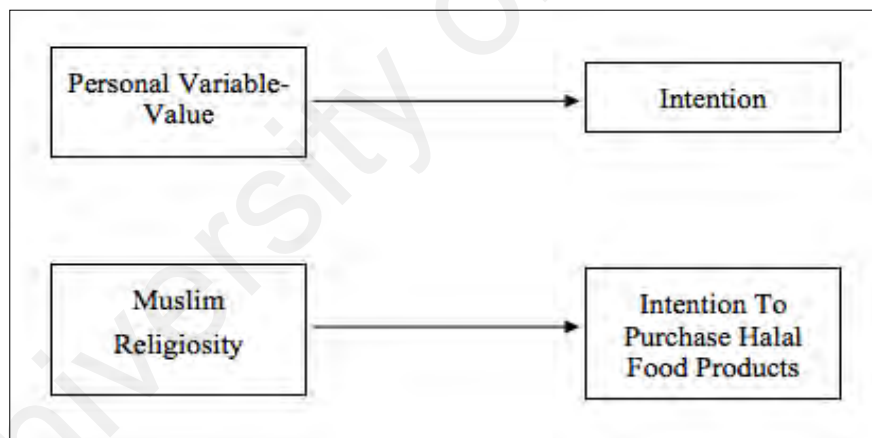


Figure 2.2: The linkage between external variables and the intention to purchase Halal Food Products

2.2.3 Halal food studies employing theory of reasoned action (TRA)

This section discusses previous studies on food and halal food that employed theory of reasoned action (TRA). However, the studies did not incorporate the main constructs in the model (Shaharudin, 2010; Kavak, 2007) but they developed a modified model of food consumption based on TRA (Bianchi, Constanza, and Mortimer Gary;

2015; Honkanen et al., 2005). Table 2.1 shows the studies on food consumption employing the TRA model.

Table 2.1: Overview of studies on food consumption employing the TRA

| Researcher | Additional | Att. | SN |
|---------------------------------|------------------------|------|----|
| Honkanen et al. (2005) | Past behaviour | √ | X |
| | Habit | | |
| A. Saba and R. Di Natale (1999) | Habit | √ | X |
| McCarthy et al. (2003) | - | √ | √ |
| McCarthy et al. (2004) | - | √ | √ |
| Shaharudin (2010) | Health consciousness | X | X |
| | Perceived value | | |
| | Food safety concern | | |
| | Religious factor | | |
| Kavak et al. (2007) | Lifestyle | X | X |
| | Consumer ethnocentrism | | |

Att.: Attitude SN: Subjective Norm

Table 2.2 summarises the studies on halal products using TRA. For example, Aziz, Amin, and Isa (2010) applied additional determinants contributing to the intention of purchasing halal products. The findings demonstrated that TRA is significant to predict food consumption. In addition, it is practical to incorporate additional determinants or variables in TRA based on the literature of halal food consumption (Bianchi, Constanza, and Mortimer Gary, 2015).

Table 2.2: Overview of studies on halal products employing the TRA

| Researcher | Additional Variable | Att. | SN |
|--------------------|---------------------|------|----|
| Lada et al. (2009) | - | √ | √ |
| Aziz et al. (2010) | Price | √ | √ |
| Taib et al. (2008) | - | √ | √ |

Att.: Attitude SN: Subjective Norm

Sheppard, Hartwick, and Warshaw (1990) suggested that the model should be extended due to limitation in terms of the model's generality. Meanwhile, Bagozzi, and Warshaw (1990) and Randall (1989) discussed the needs to modify and extend the

model to better explain the pursuit of goal. Next, TRA is the foundation in constructing the conceptual model for this study. However, the model used as the foundation in constructing the conceptual model for this study is much simple than the original one. This is consistent with Aziz and Chok (2013), Bonne et al. (2008), and Rezai (2010) who argued that in order to understand the halal concept and the intention of purchase, the integration of both aspects should be based on the assumption of marketing by investigating the relationships that are considered to be important.

2.3 Concept of halal and haram in Islam

This section focuses on the concept of halal and haram in Islam, which is the anchor for Muslims. Halal and haram are part of the Islamic legal system or also known as Sharia law (Regenstein et al., 2003; Hussaini and Sakr, 1984). The principles are based on the Quran and Sunnah to benefit the humankind (Tumin, 2004; Regenstein et al., 2003; Al-Qaradawi, 1995; Hussaini and Sakr, 1984). Halal and haram is a very significant concept to Muslim consumers since it is mentioned 83 times in the Quran. Consuming halal and avoiding haram is an order from Allah and it is an essential part of the Islamic faith. Quran guides the followers by providing the general rule in respect of the concept of halal and haram (Anir, Nizam, and Masliyana, 2008; Leaman, 2006; Al-Qaradawi, 1995). Several verses stated in the Quran on halal food are as follows:

“Eat of the things which Allah hath provided for you, lawful and good: but fear Allah, in Whom ye believe.” (5:88)

“O” mankind! Eat of that which is lawful and wholesome in the earth, and follow not the footsteps of the devil. Lo! he is an open enemy for you”. (2:168)

“This day are (all) good things made lawful for you. The food of those who have received Scripture is lawful for you and your food is lawful for them.” (5:5)

“So eat of the lawful and good food, which Allah has provided for you and thank the bounty of your Lord if it is Him ye serve” (16:114)

Islam states that most foods are halal except the following prohibited items that are considered as haram (Riaz et al., 2004): (i) carrion or dead animals; (ii) flowing or congealed blood; (iii) swine, including all by-products derived there from; (iv) animals slaughtered without pronouncing the name of God over them; (v) animals killed in a manner that prevents their blood from being fully drained from their bodies; (vi) animals slaughtered while pronouncing a name other than God; (vii) intoxicants of all types, including alcohol and drugs; (ix) carnivorous animals with fangs, such as lions, dogs, wolves, or tigers; (x) birds with sharp claws (birds of prey), such as falcons, eagles, owls, or vultures; (xi) certain land animals such as frogs and snakes.

In summary, Quran has clearly stated the Islam permits all clean and wholesome foods for consumption excluding those prohibited in the Quran (Riaz and Choudry, 2004). The next section discusses the principles of permissible foods.

2.3.1 Principles of permissible foods

There are five major terms used to describe the permissible foods mentioned in the Quran (Riaz and Choudry, 2004; Hussaini and Sakr, 1984). The first term is “halal” or permissible and lawful, while the second term is “haram” which means prohibited and unlawful food (Riaz and Choudry, 2004). Next, the third term is “makrooh” which means discouraged or hated by Muslims (Riaz and Choudry, 2004), followed by the fourth term “mashbooh” which means something questionable or doubtful. This is either due to divergence in the opinion of scholars or doubtful ingredients in any food products (Riaz et al., 2004). Finally, the fifth term is “zabeeha” which means slaughtered animal that conforms to religious requirements (Riaz et al., 2004).

Explanation of the five terms is presented in Table 2.3. On the other hand, in Islam, there are eleven accepted principles pertaining to halal (permitted) and haram (prohibited) foods (Al-Qaradawi, 1995) that Muslims must follow (Al-Qaradawi, 1995; Riaz, 2004; Regenstein et al., 2003).

Table 2.3: Terms to describe the permissibility of food

| Term | Explanation |
|-----------------------|--|
| Halal | Halal means permissible and lawful. Most diets and foods are considered to be halal unless they are specified or mentioned in the Quran or hadith. Human beings cannot change the unlawful (haram) into lawful (halal). It is also unlawful (haram) to make the lawful (halal) unlawful (haram). |
| Haram | Haram is an Arabic word which generally means prohibited or unlawful. In Islam, haram foods are meant to be unlawful. They are pork and its by products, alcohol, meat of dead animals, animals slaughtered in a name other than Allah (God), blood, intoxicating drugs, carnivorous animals, birds of prey, and land animals without ear. If a Muslims uses any of these haram products, he is sinful. |
| Makrooh (discouraged) | Makrooh is an Arabic word which generally means religiously discouraged or hated. In the food industry, any food or diet which is not recommended to be eaten or drank could be suspected. If, through the verification process, one finds a record of information that a food is distasteful or harmful to the individual's health, then the food is said to be "makrooh", hated, or discouraged. The person who involves himself in the makrooh may be blamed in the Day of Judgment, but not be penalised. |
| Mashbooh (suspected) | Mashbooh is something questionable or doubtful, either due to the differences in scholars' opinions or the presence of undetermined ingredients in a food product. It means "suspected" or in Arabic word means "syubhah". Things are suspected because a person is unsure if those items referred to are halal or haram. |
| Zabeeha (zabeeha) | Zabeeha is an Arabic word which means slaughtered. When an animal is slaughtered using Islamic slaughtering method, the meat is considered to be "zabeeha". It is halal or lawful meat. The name of God (Allah) must mentioned during slaughtering so that the meat becomes lawful for Muslims to eat. The term is often used by Muslims in the United States to differentiate Muslims-slaughtered meat as opposed to being slaughtered by people of the book, or also known as "ahlul kitab" (Jews or Christians) or without religious connotation. |

Source: Al Quran; Riaz and Choudry (2004)

Al-Qaradawi (1995) mentioned that the first principle is most of Allah's creations are halal or permitted and only a few are needed and prohibited. The prohibited items include pork, blood, meat of dead animals due to causes other than proper Islamic method of slaughtering, alcohol, intoxicant, and inappropriately used drugs, and slaughtered food for the reasons other than Allah. The second principle is the right to make lawful or unlawful is the right of Allah alone. In this sense, human beings are not allowed, no matter how pious or powerful, to take it into their own hands to change what is lawful. The third principle is prohibiting what is permitted or permitting what is prohibited is similar to ascribing partners with Allah. This is a sin of the highest degree that makes one fall out of the sphere of Islam (Al-Qaradawi, 1995).

The fourth principle is the prohibition of things is due to impurities and harmful actions. Muslims are not supposed to question exactly why or how something is unclean or harmful in respect of what Allah has prohibited (Regenstein et al., 2003). In total, there are six possible rationales for Allah's prohibition. The first rationale for the prohibition of dead animal is due to the formation of chemicals during decaying process which is harmful to human consumption. The second rationale for the prohibition of blood is due to harmful bacteria and toxins contained therein. The third rationale for the prohibition of swine is due to pathogenic worms within them that can get into the human body. The fifth rationale for the prohibition of alcohol or intoxicants is due to its harmfulness to the nervous system that affects the human mind and judgment. Subsequently, slaughtering animals in a name other than Allah can cause a person to be considered as shirk.

The fifth principle is that what is permitted is adequate and what is prohibited is unnecessary (Riaz, 2004). The sixth principle is to forbidden is itself prohibited. The seventh principle is falsely representing unlawful as lawful is prohibited, for example, drinking alcohol on the grounds of medical reasons. The eighth principle is that good

intention does not justify the means, hence, haram remains haram even on the ground of good intention.

The ninth principle is to avoid doubtful things and grey areas between what is lawful and unlawful. Although the guidelines of halal and haram are clear in the Quran, there are still doubtful matters between the two which are not able to be distinguished (Tieman, 2013). In this sense, Prophet Muhammad (PBUH) was quoted saying “The halal is clear and the Haram is clear. Between the two there are doubtful matters concerning which people do not know whether they are halal or haram. One who avoids them in order to safeguard his religion his religion and his honour is safe” (Al-Qaradawi, 1995, p. 33).

The tenth principle is the statement of unlawful. It is universal to every human being with no privilege to any race, creed, or gender. Finally, the eleventh principle is an exception when there is an urgent need – implied when involving matters related to the lives of its kind. Table 2.4 summarises the eleven principles of food in Islam.

Table 2.4: Principles pertaining to halal (permitted) and haram (prohibited) in Islam

| | |
|----|---|
| 1 | The basic principle is that all things created by Allah are permitted, with a few exceptions that are prohibited. |
| 2 | To make lawful and unlawful is the right of Allah alone. No human being, no matter how pious or powerful, may change it. |
| 3 | Prohibiting what is permitted and permitting what is prohibited is similar to ascribing partners to Allah. |
| 4 | The fundamental reasons for the prohibition are due to impurity and harmfulness. |
| 5 | What is permitted is sufficient and what is prohibited is superfluous. |
| 6 | Whatever is conducive to the prohibited is in itself prohibited. If something is prohibited, anything leading to it is also prohibited. |
| 7 | Falsely representing unlawful as lawful is prohibited. |
| 8 | Good intentions do not make the unlawful acceptable. |
| 9 | Doubtful things should be avoided. |
| 10 | Unlawful things are prohibited to everything alike. |
| 11 | Necessity dictates exceptions. |

Source: Regenstein et al. (2003)

2.3.2 What is halal food?

According to Al-Qaradawi (1995), halal is an Arabic word that means lawful or what is permitted and allowed by the lawgiver, the divine creator, which is Allah SWT. Halal means anything that is permissible under religion (Aljallad, 2008). Chand (1998) defined halal as loosening a knot, lawful, free that which is allowed, permitted, permissible, legal, licit, or legitimate. There are various definitions of halal concept in the literature. In Malaysia, in which the majority of population are Muslim, there is a more specific definition of halal food as stated in the Trade Descriptions Act (1975).

“When used in relation to food in any form whatsoever in the course of trade or business as or as part of, a trade description applied to the food, the expression “halal”, “guaranteed halal” or “halal food” or any other expression indicating or likely to be understood as indicating that Muslims are permitted by their religion to consume such food such expression shall have the following meaning, that is to say the food in relation to which such expression or expressions are used:

- a. Neither is nor consists of or contains any part or matter of an animal that a Muslim is prohibited by Sharia law to consume or that has not been slaughtered in accordance with Islamic law;
- b. Does not contain anything, which is considered to be impure according to Islamic law;
- c. Has not been prepared, processed or manufactured using an instrument that was not free from anything impure according to Islamic law; and
- d. Has not in the course of preparation, processing or storage been in contact with or close proximity to any food that fails to satisfy paragraphs (a) (b) or (c) or anything that is considered to be impure according to Islamic law.”

The definition explains the meaning of halal food and the followers of Islam or Muslims must eat halal food (Hussaini and Sakr, 1984). According to Hussaini and Sakr (2004), most foods on earth are permissible, but Islam is detailed in everything that it emphasises on the fact that its adherents should eat what is pure and nutritious as written in the Quran.

“These days are (all) things good and pure lawful unto you.” (5:5)

While the verse stated that Muslims should eat what is permitted specifically or by implication, it also prohibits the consumption of foods and drinks that are categorised as haram (Al-Qaradawi, 1995). This is the opposite of halal, which means unlawful or prohibited (Al-Qaradawi, 1995; Riaz and Choudry, 2004). Islamic food law prohibits the consumption of alcohol, pork, blood, dead meat, and meat not slaughtered according to Islamic rulings based on the Quran and hadith (Bonne, 2009; Hussaini and Sakr, 1984). However, in this case, Muslims have different views on halal as Muslims themselves are varied in culture and lifestyle. This thesis is therefore important because the difference is an illumination to address the question of heterogeneity of market beliefs which have implications on heterogeneous group. This includes the practical use of halal certification. Table 2.5 presents the definitions of halal concept.

2.3.3 Halal food and Muslim consumer behaviour

Literature on halal concept have evolved in recent years and now gaining a global attention (Othman, Shaarani, and Arsiah Bahron, 2016), however studies about consumer behaviour that specifically focus on the area of halal food are still limited (Lada, 2009). Among the limited empirical works done in this area are Rezai et al. (2012), Omar (2009), Talib (2009), Muhammad (2009), Lada et al. (2009), Bonne (2008a; 2008b), Ahmed (2008), Nasir et al. (2008); Ruenrom et al. (2005), Shafie et al. (2006), and Zakaria (2008). Meanwhile, Othman, Shahrani, and Bahron (2016) found

Table 2.5: Definition of halal food concept

| Definition of Halal food concept | Authors |
|---|--|
| Halal is “lawful” or “allowed”. Most diets and foods are considered to be Halal unless they are specified or mentioned in the Qur’an or hadith. | Hussaini and Sakr (1984) |
| Halal or “the lawful” that which is permitted with respect to which no restriction exists, and the doing of which the Law Giver, Allah, has allowed. | Al-Qaradawi (1995) |
| 1. It does not harm or interfere with normal functions of body and mind | Consumer Associations, Pulau Pinang (2006) |
| 2. It is free from filth and non-product obtained from pigs or animal sources that are not hunted or slaughtered according to Islamic law | |
| 3. It is independent of the product taken from pigs and other animals or other animals are illegal | |
| Loosening a knot, lawful, free that which is allowed, permitted, or permissible, legal, licit, legitimate. | Chand (1998) |
| Used by Arabs and Muslims, refers to anything that is considered permissible and lawful under religion | Al Jallad (2008) |
| <p>Definition of Halal in accordance to Trade Descriptions (Use of expression "halal") 1975 is as follows:</p> <p>When used in relation to food in any form whatsoever in the course of trade or business as or as part of, a trade description applied to the food, the expression "Halal", "Guaranteed Halal" or "Halal food" or any other expression indicating or likely to be understood as indicating that Muslims are permitted by their religion to consume such food such expression shall have the following meaning, that is to say the food in relation to which such expression or expressions are used:</p> <p>a. Neither is nor consists of or contains any part or matter of an animal that a Muslim is prohibited by Islamic law to consume or that has not been slaughtered in accordance with <i>Hukum Syarak</i></p> <p>b. Does not contain anything, which is considered to be impure according to Islamic law.</p> <p>c. Has not been prepared, processed or manufactured using instrument that was not free from anything impure according to Islamic law; and</p> <p>d. Has not in the course of preparation, processing or storage been in contact with or close proximity to any food that fails to satisfy paragraph (a) (b) or (c) or anything that is considered to be impure according to Islamic law</p> | Trade Descriptions (Use of expression "halal", 1975) |
| a. Not consist of or contain any part of an animal or thing that Muslims are prohibited by Islamic law to eat or not slaughtered according to Islamic law. | Razak (2003) |
| b. Does not contain any thing that was executed as unclean according to Islamic law | |
| c. Not made available, or processed in factories using any device that is not free from things unclean according to Islamic law and | |
| d. It is not the time preparing, processing or store it near or in contact with any food that does not meet the requirements of paragraph (a), (b) or (c) or anything that was executed as unclean according to Islamic law. | |

that there is a significant difference between level of knowledge, halal dietary quality assurance practices, and commitment among industry players to implement halal in Malaysia. On the other hand, Muhamad, Leong, and Mizersi (2016) found that the influence of Muslim consumers' knowledge on products are subjected to contemporary fatwa ruling.

Suki (2016) assessed consumers' intention to patronise halal stores and found that it is influenced by attitude, perceived behavioural control, subjective norms, and halal image. Khalek and Ismail (2015) found that the intention of urban, Generation-Y consumers in consuming halal food is also predominantly influenced by attitude, subjective norms, and perceived behavioural control towards halal food. Next, Rezai et al. (2012) assessed the factors influencing the understanding of halal principles among non-Muslims in Malaysia. The results indicated that non-Muslims recognise the existence of halal food in Malaysia since the country is a multiracial country. Besides understanding the principle of halal, the respondents were also concerned about food safety issues and environmentally friendly food products.

On the other hand, Nahdi et al. (2009) investigated the intention of Malaysian Muslims to patronise restaurants that are guided by Sharia law. The study examined the effects of attitude, subjective norms, perceived behaviour control, and ambiance towards the intention to patronise restaurants. It was found that attitude has no relationship with the intention to patronise halal restaurants, however, the subjective norms, perceived behavioural control, and positive ambiance influence consumer behaviour intention to patronise halal restaurants.

Meanwhile, Lada et al. (2009) tested the applicability of the theory of reasoned action in predicting the intention to choose halal products among Malaysians. The findings showed that attitude and subjective norms positively influence the intention to choose halal products. On the other hand, Bonne et al. (2008) investigated the

determinants of halal meat consumption within a Muslim immigrant population using the theory of planned behaviour as a conceptual framework. It explored the role of self-identity as a Muslim and dietary acculturation.

Next, Bonne et al. (2008a) investigated the consumers' trust towards Belgian Muslims and their confidence with halal meat chain. The findings discovered that Islamic butcher receives most confidence and trust in performing the monitoring and controlling of the halal status of meat. Next, Omar et al. (2008) conducted another study that employed the theory of planned behaviour. The variables used include ingredients, processing, certified halal logo, ownership, marketing-related factors, and attitude towards halal food products. It analysed the attitude of Muslims towards halal food products in Kelantan, Malaysia. The finding suggested that ingredients, ownership, and marketing have a positive relationship with halal food products among Muslims in Kelantan. However, certified halal logo is negatively related to attitude towards halal food products. This means that halal logo is not an important factor and not an issue for Muslims when purchasing and consuming food products in Kelantan (Omar et al., 2008).

Meanwhile, Ruenrom et al. (2005) attempted to understand the needs, consumption, and attitude of Muslims in the UAE for Thai-halal packaged food. The study found that in the UAE, Muslims favour Thai food products because of the taste. However, they are very sensitive towards the information and product label, hence food manufacturers must consider these two aspects when planning on boosting their sales.

Next, Ahmed (2008) explored the relationship between marketing issues and the intention to buy halal meat from local shops or supermarkets in the United Kingdom. Most Muslims in the United Kingdom trust Muslim shops to buy halal meat compared to big supermarkets due to the existence of trusted sales persons who can communicate effectively with consumers regarding any halal issues. Nasir et al. (2008) and

Soesilawati (2010) also argued that a more religious person is more conscious about halal issue.

Table 2.6 illustrates the summary of studies on halal food and Muslim consumer behaviour. The summary suggests that Muslims across different places and cultures have different views on halal concept. This shows the importance of addressing the question of the heterogeneity of market beliefs that have implications on heterogeneous group. The studies also discussed on the practical use of halal certification.

Next, a few authors in the past emphasised the importance of halal logo in playing an important role in purchasing decision (Shafie et al., 2006; Nooh et al., 2007; Anir et al., 2008; Zakaria, 2008; Soesilawati, 2010). Halal logo and certificate are crucial when making decisions to purchase food products. It is a symbol of quality and religious compliance to ensure halal status for food products are acknowledged and well accepted by the consumers (Harran and Low, 2008). Based on the discussion, halal logo and certificate or label are among the important factors for Muslims in making a decision to purchase halal food products, on top of individual's religiosity level.

Table 2.6: Studies on halal food and Muslim consumer behaviour

| Author(s) | Year | Results |
|------------------|-------------|--|
| Othman et al. | 2016 | There are significant differences between the level of knowledge, halal dietary quality assurance practices, and commitment among food industry players in regard to the implementation of halal in Malaysia. |
| Muhamad et al. | 2015 | The influence of Muslim consumers' knowledge on products are subjected to contemporary fatwa ruling. |
| Suki et al. | 2016 | Consumers' intention to patronise Halal stores are influenced by attitude, perceived behavioural control, subjective norm and Halal image |
| Khalek et al. | 2015 | The intention of urban, Generation-Y consumers to consume halal food is predominantly influenced by attitude, subjective norms, and perceived behavioural control towards halal food. |
| Rezai et al. | 2012 | Non-Muslims recognise the existence of halal food in Malaysia. |
| Soesilawati | 2010 | The higher the degree of individual religiosity, the greater the concern for consuming halal food. |
| Nahdi et al. | 2009 | Attitude has no relationship with the intention of Malaysian Muslims to patronise halal restaurants |
| Lada et al. | 2009 | Attitude and subjective norm positively influence the intention to choose halal products. |
| Bonne et al. | 2008 | Investigate the determinants of halal meat consumption within a Muslim migration population using the theory of planned behaviour as a conceptual framework. |
| Bonne et al. | 2008(a) | Generally, Islamic institutions, particularly the Islamic butchery in Belgian receive utmost confidence and trust in performing the monitoring and controlling of halal status of meat and as a channel to communicate about halal meat. |
| Omar et al. | 2008 | Ingredients, ownership, and marketing have a positive relation towards halal food products among Muslims in Kelantan. Halal logo however has a negative relationship. |
| Ahmed | 2008 | Most Muslims in the United Kingdom trust Muslim shops to buy halal meat compared to big supermarkets. |
| Nasir et al. | 2008 | It is proven that there is a relationship between individual religiosity and the intention to consume halal products, whereby the more religious a person is, the more conscious he or she will be about halal issue. |
| Zakaria | 2008 | Respondents agreed that logo and certificate are crucial when making decisions to purchase food products. |
| Harran and Low | 2008 | Halal logo is a symbol of quality and religious compliance to ensure the halal status of a particular food product for consumption. It is also a form of marketing strategy. |
| Anir et al. | 2008 | Muslims will be highly likely looking for halal logo and certification before purchasing certain food products. |
| Shafie et al. | 2007 | |
| Nooh et al. | 2006 | |
| Ruenrom et al. | 2005 | Muslims in the UAE are very sensitive towards the product information and label, hence the food manufacturers must consider the information stated in the product packaging especially for the purpose of boosting their sales. |

2.4 Global halal food market

Many international food companies have strategies for halal food marketing since the current consumer behaviour trend among the Muslim population has made the halal food market important and significant. For example, McDonald's, KFC, Domino's Pizza, and Subway in the United Kingdom all offer halal food in some of their restaurant chains (Alserhan, 2010). This shows that the food providers are committed to conform to consumers requirements and respond to the rise of a strong Islamic attitude and demand among Muslims (Bergeaud-Blackler, 2006).

The previous section indicated that Islam is the fastest growing religion and constitutes the second largest religious group on earth. The growth pattern of global halal food industry has shown an improvement from USD795 billion in 2014 to USD2.537 trillion in 2019 (Rasid, 2016; Asnidar Hanim Yusuf, Syadiyah Abdul Shukor, and Ummi Salwa Ahmad Bustamam, 2016). It is projected to reach USD30 trillion by 2050 and this is equal to 21.2% of global food expenditure (Gulfood Halal Forum, 2016; Bernama, 2009). Consequently, the halal market represents a significant portion of most countries' economies and the market value is expected to increase annually (Global Islamic Economy Report 2015/2016, Alserhan, 2010).

Looking at the halal food market trend and its evolution, the Canadian International Market Bureau reported that the global halal food trade is approximately USD150 billion a year (Bonne and Verbeke, 2008). For that reason, it is not surprising to see a global increase in halal market in the future. In total, there are about 70% of the Muslim population who are concerned about the demand of halal food products (Minkus-McKenna, 2007). Muslims have become more conscious of their food intake, especially Muslims in minority countries (Nasir, 2008; Bergeaud-Blackler, 2005) due to longer and complex procedures in the food chain (Bergeaud-Blackler, 2005). Muslim consumers want to make their presence felt socially and politically, demanding for

halal-labelled food products (Karijn Bonne and Verbeke, 2007). Additionally, increase in the halal market also occurs due to the shift in consumer behaviour trend among Muslim population (Lever et al., 2010).

Next, a study conducted by Ahmed (2008) on the marketing of halal meat in the United Kingdom reported that the authenticity of halal meat is the most important factor for all respondents. The current strategies require fast food chains, such as MacDonald's, KFC, Domino's and Subway, to offer halal lines in some of their restaurant chains, even in the United Kingdom (Alserhan, 2010). Meanwhile, in France, the first halal fast food restaurant, Beurger King Muslim, was launched in 2005 that targets at young Muslim consumers who are keen on consuming halal fast food. These are a few examples of the halal market to which the providers must conform in respect of fulfilling consumers' requirements and responding to the rise of a strong Islamic attitude among Muslims (Bergeaud-Blackler, 2006).

The emergence of halal food market symbolises a large opening for international food companies. The halal market is widening across many countries, which also includes Western countries with their significant and growing Muslim population. Without doubt, the halal food market is rapidly growing in Europe with over 50 million Muslims. This signifies a significant growth in the halal food market (Hanzaee et al., 2011).

2.4.1 Muslim population

Islam is the fastest growing religion on earth today and the percentage of the global Muslim population is expected to grow at a faster rate than the non-Muslim population (Hanzaee et al., 2011; Kettani, 2010). It is expected to grow from 23.2 billion in 2010 to 29.7 billion within five years (Pew Research Center, 2015; Kettani, 2010). Figure 2.3 illustrates the number of Muslim population by region (Pew Research Centre, 2015). The figure shows an estimation growth of Muslim population in the Middle East, North America, Sub Saharan, and American region. In Europe, although Muslims are the minority, they constitute a rising share of the

| | 2010 POPULATION | % OF WORLD POPULATION IN 2010 | PROJECTED 2050 POPULATION | % OF WORLD POPULATION IN 2050 | POPULATION GROWTH 2010-2050 |
|--------------------|------------------------|--------------------------------------|----------------------------------|--------------------------------------|------------------------------------|
| Christians | 2,168,330,000 | 31.4% | 2,918,070,000 | 31.4% | 749,740,000 |
| Muslims | 1,599,700,000 | 23.2 | 2,761,480,000 | 29.7 | 1,161,780,000 |
| Unaffiliated | 1,131,150,000 | 16.4 | 1,230,340,000 | 13.2 | 99,190,000 |
| Hindus | 1,032,210,000 | 15.0 | 1,384,360,000 | 14.9 | 352,140,000 |
| Buddhists | 487,760,000 | 7.1 | 486,270,000 | 5.2 | -1,490,000 |
| Folk Religions | 404,690,000 | 5.9 | 449,140,000 | 4.8 | 44,450,000 |
| Other Religions | 58,150,000 | 0.8 | 61,450,000 | 0.7 | 3,300,000 |
| Jews | 13,860,000 | 0.2 | 16,090,000 | 0.2 | 2,230,000 |
| World total | 6,895,850,000 | 100.0 | 9,307,190,000 | 100.0 | 2,411,340,000 |

Source: The Future of World Religions: Population Growth Projections, 2010-2050
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total population in the region.

Figure 2.3: Size and projected growth of major religious group

2.4.2 Muslim population in the United Kingdom and Australia

Muslim population in the United Kingdom has increased rapidly and the growth rate is ten times faster than the rest of society (Lever and Miele, 2012). In 2006, the

total population was about 51.2 million or 6%, but by 2030 the Muslim population is expected to be 8% of the Europe's total population (Third Industrial Master Plan, 2006; Pew Research Centre, 2011). In the United Kingdom alone the population grew from 1.59 million to 2.4 million within 2004 until 2008 (Ansari, 2004; Lever et al., 2010). In 2010, the percentage of Muslim population in the United Kingdom was 2.87 million. Muslims in the United Kingdom had the largest proportion of increased from 2001 to 2011 with an additional 1.1 million followers (from 2.8% to 4.8%) and the second largest religious group with 2.7 million people (Pew Research Centre, 2010).

According to the United Kingdom Labour Force Survey (2010), this increasing pattern is linked to a number of related factors, including immigration, higher birth rate amongst Muslims, conversion to Islam, and a growing enthusiasm to convert to Islam. The immigrants mostly originate from South Asia, for instance, Pakistan, Bangladesh, and India. Middle Easterners also constitute quite a huge number of the total population (Lever et al., 2010). This has resulted in diversity of the Muslim population in the United Kingdom because they are of various ethnic backgrounds (Lever et al., 2010). Table 2.7 presents the religion composition in the United Kingdom. The data were retrieved from the United Kingdom National Statistics website.

Table 2.7: Religion composition in the United Kingdom

| Religion | 2001 | Percentage | 2011 | Percentage |
|---------------------|-------------------|----------------|-------------------|----------------|
| Christian | 41,014,811 | 71.82% | 33,243,175 | 59.28% |
| Buddhist | 149,157 | 0.26% | 247,743 | 0.44% |
| Hindu | 558,342 | 0.98% | 816,633 | 1.46% |
| Jewish | 267,373 | 0.47% | 263,346 | 0.47% |
| Muslim | 1,588,890 | 2.78% | 2,706,066 | 4.83% |
| Sikh | 336,179 | 0.59% | 423,158 | 0.75% |
| Other religion | 159,167 | 0.28% | 240,530 | 0.43% |
| No religion | 8,596,488 | 15.05% | 14,097,229 | 25.14% |
| Religion not stated | 4,433,520 | 7.76% | 4,038,032 | 7.20% |
| Total | 57,103,927 | 100.00% | 56,075,912 | 100.00% |

On the other hand, the Australian community is one of the most ethnically and racially diverse religious groups. With members from over 60 different ethnic and racial backgrounds, Australia's Muslim population was approximately 281,578 in 2001 (ABS, 2011). Muslims are the minority in Australia but are projected to have the greatest proportional increase in the size of their population (Pew Research Centre, 2010). The Muslim population in Australia is forecasted to grow nearly 80% from 2010 to 2030, from approximately 399,000 to about 714,000. Meanwhile, the non-Muslim population is projected to increase by around 18% (Pew Research Centre, 2010; 2015).

Table 2.8 presents the religious composition in Australia from 2006 to 2011. The data were retrieved from the Australian Bureau of Statistics (ABS), showing an increase in the Muslim proportion within five years (2006-2011). In 2011, there was a sharp increase in the Muslim population to 476,300 people from 340,000 in 2006. With the increase of 2.25% of the total Australian population, this has put Islam as one of the religious groups that has grown in Australia. The increase was due to high birth rate and the recent growth of immigration trend (ABS, 2016).

Table 2.8: Religion composition in Australia

| Religion | 2011 | Percentage | 2016 | Percentage |
|-----------------|-------------------|-------------------|-------------------|-------------------|
| Christianity | 13,150,01 | 61.15% | 12,201,60 | 52.1% |
| Buddhism | 529,000 | 2.46% | 563,700 | 2.40% |
| Hinduism | 275,001 | 1.28% | 440,301 | 1.9% |
| Judaism | 97,000 | 0.45% | 91,000 | 0.40% |
| Islam | 476,300 | 2.25% | 604,300 | 2.6% |
| Other Religions | 168,000 | 0.78% | 95,000 | 0.4% |
| No Religion | 6,810,001 | 31.67% | 7,040,700 | 30.1% |
| Total | 21,505,003 | 100.00% | 23,401,900 | 100.00% |

Source: ABS Census of Population and Housing (2016)

From the discussion, although Muslim was not the largest proportional group, however, they are projected to have the greatest proportional increase in the size of their population within a few years. The Muslim population in Australia is forecasted to grow nearly 80% from 2010 to 2030, from approximately 399,000 to about 714,000 (Pew Research Centre, 2010) due to several factors including immigration, higher birth rate among Muslims, and conversion to Islam.

2.4.3 Halal food market in the United Kingdom and Australia

In Britain itself, halal meat accounts for up to 15% of meat sales in the United Kingdom, and each year more than £2 billion is spent on halal meat by British Muslims (Harvey, 2010). Australia is another Muslim-minority country that has a strong potential for halal certified products in the Muslim-minority market. The government of Australia is involved in the halal market and taking advantage of the knowledge and understanding of about 300,000 Muslims living in Australia (Sungkar, 2007; Z. M. Shariff, 2006).

Although halal market in the United Kingdom and Australia is growing at a fast rate, the perception, in general, and many other questions related to their precise attitude and food choices remain under researched (Karijn Bonne and Verbeke, 2007; Bonne et al., 2009). This is apparently due to fundamental problems that arise within the restriction of halal food consumption. Studies on consumer food choice and consumption of Muslims have also been rarely studied (Karijn Bonne and Verbeke, 2007; Bonne et al., 2009). Halal market is a new discipline of marketing, whereby the empirical knowledge related to Islamic dietary laws and practices are still lacking (Bonne et al., 2008).

The food industry in the United Kingdom has shown promising revenue since it has contributed £96.1 billion a year to the country and was the single largest

manufacturing sector in 2012 (Sara Spary, 2013). The average UK households spend 11.3% of their income on food, while households whose income is in the lowest 20%, spend 16.6% of their income on food (National Statistic, 2012).

Correspondingly, the fundamentals of halal food certainly look favourable. In this sense, European Union (EU) is a money-spinning market for halal exports (Agriculture and Agri Food of Canada, 2011). The United Kingdom is an excellent target market of halal food products due to its highly significant purchasing power. The requirements for halal products in the United Kingdom are high and market for halal food grew at 30% in 2006 (Halal Food in the United Kingdom, Scotland Food and Drink, 2008). The same occurred in 2008 when the market for halal food products in the United Kingdom grew at a remarkable rate of 30% estimation yearly (Lever et al., 2010).

In Britain, the combined sales in 2011 for all types of halal food was £2.6 billion (WHF, 2011). Halal meat accounts for up to 15% or £2 billion of meat sales in the United Kingdom each year (Harvey, 2010). Moreover, the current trend in the United Kingdom require halal-only rival fast food chains that offer halal meat in their restaurants. For instance, many KFC outlets around the country, as well as Pizza Express and Nando's in Britain offer halal-only in their restaurants (Henley, 2013). Meanwhile, Tesco was interested in bringing £148 million of Malaysian halal products to the United Kingdom over the next five years (Alserhan, 2010). Halal food products were once very hard to find in the United Kingdom but have now become easily accessible, gaining high demand among consumers in the United Kingdom.

However, although halal market in the United Kingdom is increasing, research on Muslim consumer food choice and meat consumption are still limited (Wright, 2015; Karijn Bonne and Verbeke, 2007). The situation for halal foods in the United Kingdom is complex because there is no legislation that is exclusive to halal (Jamal and

Sharifudin, 2015; Pointing et al., 2008). There are over 20 different halal food authorities and certification bodies operating in the United Kingdom and these bodies have different agreements on halal issues (Wan et al., 2009).

For instance, the most renowned halal food authority and certification bodies in the United Kingdom are Halal Food Authority (HFA) and Halal Monitoring Committee (HMC) (Harvey, 2010). Both of these bodies have different opinion and agreement over the technology used in the halal industry, for example HFA permits the practice of electrical stunning while HMC rejects such a practice (Fuseini, Wotton, Knowles, and Hadley, 2016; 2017; A. M. Thomas et al., 2017; Pointing et al., 2008, Wan et al., 2009). Electrical stunning is the process of making an animal senseless before it is slaughtered. This method is common practice in halal industry to handle the excessive demand of chicken among Muslims (Lever, 2012).

Apart from the lack of consensus on the slaughter method, the perception and understanding of halal food among Muslim communities also differs (L. Kurth, P. Glasbergen, 2017; Jukaku, 2006; Bonne et al., 2008), resulting to confusion among Muslim consumers in the United Kingdom. This makes them feel less confidence with halal food products (L. Kurth, P. Glasbergen, 2017; Pointing et al., 2008). This has indirectly affected the marketing activities and potentially leads to fraud by the manufacturers (Carrie Amani Annabi, Olufunbi Olajumoke Ibidapo-Obe, 2017; Jukaku, 2006; Bonne et al., 2009).

On the other hand, Australia has a strong potential for halal certified products in the non-majority Muslim market. The growth of halal food market was approximately 33.3% within 2009 and 2010 (1.2 billion to 1.6 billion) (Agriculture and Agri Food of Canada, 2011). The government of Australia is open and keen to be involved in the halal market and prioritises the system and quality of halal market (Kabir, 2015; Z. M. Shariff, 2006). Currently, there are more than 14 recognised Islamic organisations for

halal certification of red meat in Australia (Sungkar, 2007). The organisations have an official procedure with the Australian Quarantine and Inspection Service for the accreditation of halal red meat for exports.

The food manufacturers in Australia are able to develop new export markets by taking advantage of the knowledge and understanding of about 300,000 Muslims living in Australia (Sungkar, 2007). Furthermore, the potential of Australia's halal food segment is correspondingly due to the estimated 28,000 Muslim students and 31,000 Muslim travellers in Australia at any one time (Matrade, 2005). This has given a major opportunity to Australia in the halal food market (Agriculture and Agri Food of Canada, 2011). Australia has the potential to become one of the major food exporters in the world as its halal food products are exported to more than 70 countries around the world (Carey et al, 2015; Sungkar, 2007). This is in line with Australia aiming to remain strong to ensure that Australia's future for food is bright (Department of Agriculture, 2011). The government of Australia is doing well in taking advantage of the increasing opportunities in the food industry.

In short, both countries are seen as a potential location for research on halal food products. They certainly look favourable owing to their prospect in the halal market, possessing a large market, significant purchasing power, and good reputation to produce high quality, safe and nutritious food, locally and internationally. Table 2.9 and Table 2.10 summarise the advantages of halal food market in United Kingdom and Australia.

Table 2.9: The advantages of halal food market in the United Kingdom

| | |
|---|---|
| Many international food companies and restaurant chains plan strategies in halal food market. | Al-Serhan (2010) |
| Demand for halal food is increasing tremendously in Britain. | Ayyub (2015), Spray (2013), Harvey (2010) |
| Diverse Muslim population due to many ethnic backgrounds. | Lever et al. (2010) |
| The growing of Muslim population is ten times faster than the rest of society. | Lever and Miele, 2012; Lever et al., 2010 |

Table 2.10: The advantages of halal food market in Australia

| | |
|--|---|
| Strong potential for halal certified products in the Muslim-minority market and strong government involvement. | Carey et al. (2015), Sungkar (2008), Z. M. Shariff (2006) |
| Australian community is one of the most ethnically and racially diverse religious groups. | Kathryn Benier and Rebecca Wickes (2016), Bouma, G. D. (2016), ABS (2011) |
| The Muslim population in Australia is forecasted to grow nearly 80% from 2010 to | Pew Research Centre (2015) |

2.5 Challenges in the halal market

Although halal market is considered to be a new discipline in marketing, the availability of empirical knowledge related to Islamic dietary laws and practices are still sparse (Kabir, 2015; Wotton, Knowles and Hadley, 2017; Bonne et al., 2008). This is apparently due to fundamental problems that arise within the confines of halal food consumption (Elasrag, 2016, Md Noor and Noordin, 2016; Jukaku, 2006; Bonne et al., 2009). Basically, there are three main challenges in the halal market, namely interpretation of halal, halal certification and regulatory issues, and Muslim diversity (Elasrag, 2016; Md Noor and Noordin, 2016; Bilgin and Nakata, 2016; Bonne, 2008; Pointing et al., 2008; Lawrence, 2000; Rabasa, 2004).

Table 2.11 presents the summary of challenges in the halal market. The next subsection provides an overview and discussion of these challenges, including the interpretation of halal, halal certification and regulatory issues, and Muslim diversification.

Table 2.11: Challenges in the halal market

| Challenges | Summary |
|---|---|
| Interpretation of halal | Muslims have different interpretation of halal due cultural practices, beliefs, et cetera. |
| Halal certification and regulatory issues | Halal certification has no standardised requirements for halal. |
| Muslim diversification | Muslims come from different ethnic backgrounds, practice diverse cultures, and speak different languages in which these are set as their blueprint. |

Sources: Elasrag (2016), Md Noor and Noordin (2016), Bilgin and Nakata (2016), Bonne et al. (2008), Pointing et al. (2008)

2.5.1 Interpretation of halal

There are contentions concerning the understanding of halal amongst knowledgeable Islamic scholars or Muslim law practitioners, especially in respect of the grey areas or “syubhah” (L. Kurth and P. Glasbergen, 2017; Khan MI et al., 2016; Ismail et al., 2008). This includes the practices of stunning, use of alcohol, and emerging areas such as genetically modified products (Ismail et al., 2008). For example, the issue of stunning animals involve prominent halal food authorities and certification bodies in the United Kingdom. Similarly, alcohol is another issue and each country has its own strict procedures to comply with (Anis Najiha, Tajul, and Norziah, 2010; Pointing, Teinaz, and Shafi, 2008). Synthetic alcohol can be used for certain reasons like processing food as long as the remaining amount of alcohol in the final products is very minimum, generally between 0.1% and 0.5%. However, even a small amount of alcohol makes food products to be considered as “unclean” (Pointing et al., 2008).

The divergence of understanding of what constitutes halal may be due to differences in cultural practices, beliefs, and so forth (Ismail et al., 2008). This fundamental problem has given a negative perception since there are many different definitions of halal food (Elasrag, 2016; Md Noor and Noordin, 2016; Jukaku, 2006; Bonne, 2008). This has resulted in dissimilar quality of certification scheme (Bonne, 2008). Additionally, due to globalisation and the emergence of science and technology,

marketers are taking the initiative to simplify the manufacturing processes without a clear understanding of the halal concept (Shafie, 2006). Muslims have no advantage of knowing whether certain products are halal or otherwise. Among the concerns are the exploitation of porcine-based hormones injected in halal animals, implanted plants with the genes of non-halal animals, the use of haram animals in fertiliser drops, genetically modified animals or plants, and the list goes on (Ismail et al., 2008).

There are over 20 different halal food authorities and certification bodies operating in the United Kingdom (Wan et al., 2009) that have different interpretations of certain issues, for instance the stunning practice. There are also more than 14 recognized Islamic organisations for halal certification of red meat in Australia (Sungkar, 2007). In almost all countries, halal is a religious issue, therefore, the state will not intervene, or at most halal is regulated under the labelling law (Bergeaud-Blackler, 2004; Pointing et al., 2008). Thus, there is no standard guideline for halal because the process of obtaining halal certification is conducted by various agencies or associations. Certainly, different qualifications require different approaches and with contrary outcomes (Fischer, 2008).

2.5.2 Muslim Diversification

Muslim is a diverse community with a progressive population increase from 17% in 1950 to 26% by 2020 (Kettani, 2016). Muslim communities around the world have different cultural backgrounds and practices, beliefs, ethnicities, and languages with complicated political ideologies and different levels of economic, social, and religious status (Ronald A. Lukens-Bull, 2016; Bilgin and Nakata, 2016; Lawrence, 2000; Rabasa, 2004; Waardenburg, 2004; Ismail et al., 2008).

There are four schools of thought in Islam which Muslims profess, namely madhab of Hanafi, madhab of Maliki, madhab of Shafi'i, and madhab of Hanbali (Movsesian, 2011). The madhabs' followers are dominant in different geographical

regions, in which they were all developed to refine the existing Islamic law for later generations. They have different opinions in some substantive jurisprudence, namely language, history of Sunnah, rules, and guidelines (UTM, 2013; Movsesian, 2011, Tieman et. al, 2013). Muslims do not need to be restricted to a particular madhab, however, holding to one madhab is important for the Muslim communities since the differences can cause pressure amongst Muslims.

In addition, there is a major cleavage between Arab Muslims and non-Arab Muslims (Ronald A. Lukens-Bull, 2016; Rabasa, 2004) including the compliance with religious law, as Islamic law was not built on a single and monolithic set of laws (Ronald A. Lukens-Bull, 2016; Esposito, 1996). Details of the potential differences between the Arab Muslims and non-Arab Muslims are discussed in the next subsection.

2.5.2.1 Diversity among Muslim groups: Arab Muslims and non-Arab Muslims

The US Census Bureau (2000) defined Arabs as “anyone reporting their ancestry to be Algerian, Arab Bahraini, Bedouin, Berber, Egyptian, Emirati (UAE), Iraqi, Jordanian, Kuwaiti, Kurdish, Lebanese, Libyan, Middle Eastern, Moroccan, North African, Omani, Qatari, Palestinian, Saudi Arabia, Syrian, Tunisian, or Yemeni”.

Additionally, Arab Muslims are defined as a collection of people who speak Arabic and are Muslims (Field, 1994; Khalili, 1993). Therefore, this study defines Arab Muslims as people who speak Arabic and are Muslim, which report their ancestries to be Algerian, Arab Bahraini, Bedouin, Berber, Egyptian, Emirati (UAE), Iraqi, Jordanian, Kuwaiti, Kurdish, Lebanese, Libyan, Middle Eastern, Moroccan, North African, Omani, Qatari, Palestinian, Saudi Arabia, Syrian, Tunisian, or Yemeni.

This study examines comparative study between Arab Muslim and non-Arab Muslim due to several reasons that are relevant to this study. First, halal and haram concepts are deeply rooted in the Arab-Muslims’ tradition and history, affecting the

Arabs" way of thinking and acting. Therefore, non-speakers of Arabic are often misunderstood, inadequately explained, and inaccurately translated into other languages (Bang Hae Won, 2016; Jallad, 2008). Thus, the understanding of halal concept differs between Arab Muslims and non-Arab Muslims (Jallad, 2008). Some hadith and verses of the Quran that mention about Arabic language are as follows.

“We have sent it down as an Arabic Quran in order that ye may learn wisdom.”
(Quran, 12:2)

“A Book whereof the verses are explained in detail, a Quran in Arabic for people who understand.” (Quran, 41:3)

“Learn Arabic for it is part of your religion, and learn how the estate of the deceased should be divided (fara“id) for these are part of your religion.” (narrated from „Umar [may Allah be pleased with him])

“Religion involves understanding words and actions. Understanding Arabic is the way to understand the words of Islam, and understanding the Sunnah is the way to understand the actions of Islam.” (Iqtida“ As-Sirat Al-Mustaqim, vol. 2, p. 207)

Second, generally, Rabasa (2004) stated that non-Muslims have often understood and generalised Islamic world as being Arabs, although actually the Arabs only comprise approximately 20% of the global Muslim population. Third, previous studies have shown significant differences between Arab-Muslims and non-Arab Muslims discussing the state of economic, social, political, and religious disorders (Ronald A. Lukens-Bull, 2016; Rizzo et al., 2007; Bley et al., 2004; Rabasa, 2004; Stepan and Robertson, 2003). Furthermore, non-Arab Muslims are generally assumed to be more secular compared to the Arab Muslims (Ronald A. Lukens-Bull, 2016; Rabasa, 2004).

Fourth, according to a report by the Malaysian Department of Islamic Development (JAKIM) in 2011, out of 74 international Islamic agencies recognised by JAKIM, only six bodies are from Arab countries (JAKIM, 2012). The differences occur due to different cultural backgrounds, and the way Muslims who live in predominantly Muslim countries are distinct from Muslims who come from non-Muslim countries (Lyons-Padilla, Gelfand, Mirahmadi, Farooq, and Egmond, 2015; Limage, 2000; Bergeaud-Blackler, 2005; Saint-Blancat, 2004; Ababou, 2005; Bergeaud-Blackler, Bonne, and Verbeke, 2007).

Therefore, it is important for Muslims to be aware of the approved Islamic bodies nationwide. JAKIM is a Malaysian government institution which is responsible for establishing, implementing, and enforcing the halal logo and certification in Malaysia. Muslims should be able to recognise the logos for international Islamic agencies to help them make decisions when purchasing halal food products. Table 2.12 presents a list of international Islamic agencies recognised by JAKIM

In addition, this also occurs because of dissimilar background and social structure, for instance, among the immigrants and different generations (Lyons-Padilla, Gelfand, Mirahmadi, Farooq, and Egmond, 2015; Tieman et. al, 2013; Bonne and Verbeke, 2006). At the same time, there are diverse school of thoughts in Islam that have different interpretations of halal (Jahangir et al., 2016; Mohd Noor et al., 2015; Nielsen, 2011; Lawrence, 2000; Rabasa, 2004; Waardenburg, 2004).

Therefore, studies that compare Arab Muslims and non-Arab Muslims are highly emphasised to prove the differences that exist between the populations (Rizzo et al., 2007). In this sense, it is critical for this study to achieve its objective to determine the dissimilarities between Arab Muslims and non-Arab Muslims regarding halal food (Bruil, 2011). This study provides a new finding concerning the halal perception among Arab Muslims and non-Arab Muslims in Australia and the United Kingdom.

2.5.3 Research gap in Muslim diversification literature

Research on Muslim diversification are limited, therefore it is suggested for researchers to perform a comparative study between different Muslim groups (Mohd, N., Abang, S., and Abang, S., 2016). Quantitative research are recommended to be conducted to confirm differences among Muslims particularly about consumer perception in non-Muslim countries (Tieman, 2013; Salman and Saddiqui, 2011). Therefore, it is time to conduct a comparative research between Arab Muslims and non-Arab Muslims in non-Muslim countries (Bruil, 2011).

Table 2.12: List of Islamic Bodies Approved by JAKIM

| No | Country | No of approved Islamic bodies | Status | No | Country | No of approved Islamic bodies | Status |
|----|--------------|-------------------------------|--------|----|--------------|-------------------------------|--------|
| 1 | Argentina | 2 | NAM | 25 | Mali | 1 | NAM |
| 2 | Australia | 8 | NAM | 26 | Morocco | 1 | NAM |
| 3 | Austria | 1 | NAM | 27 | Mozambique | 1 | NAM |
| 4 | Bangladesh | 1 | NAM | 28 | Netherlands | 3 | NAM |
| 5 | Belgium | 1 | NAM | 29 | New Zealand | 2 | NAM |
| 6 | Brazil | 2 | NAM | 30 | Oman | 1 | AM |
| 7 | Brunei | 1 | NAM | 31 | Pakistan | 1 | NAM |
| 8 | Burkina Faso | 1 | NAM | 32 | Philippines | 3 | NAM |
| 9 | Canada | 1 | NAM | 33 | Poland | 1 | NAM |
| 10 | Chile | 1 | NAM | 34 | Qatar | 1 | AM |
| 11 | China | 3 | NAM | 35 | Senegal | 1 | NAM |
| 12 | Egypt | 1 | AM | 36 | Singapore | 1 | NAM |
| 13 | France | 1 | NAM | 37 | South Africa | 3 | NAM |
| 14 | Gambia | 1 | NAM | 38 | Sri Lanka | 1 | NAM |
| 15 | Germany | 1 | NAM | 39 | Sudan | 2 | AM |
| 16 | Guinea | 1 | NAM | 40 | Switzerland | 1 | NAM |
| 17 | India | 2 | NAM | 41 | Taiwan | 3 | NAM |
| 18 | Indonesia | 1 | NAM | 42 | Thailand | 1 | NAM |
| 19 | Iran | 1 | NAM | 43 | Turkey | 2 | NAM |
| 20 | Italy | 1 | NAM | 44 | UAE | 1 | AM |
| 21 | Japan | 2 | NAM | 45 | UK | 2 | NAM |
| 22 | Kenya | 1 | NAM | 46 | USA | 2 | NAM |
| 23 | Korea | 1 | NAM | 47 | Vietnam | 1 | NAM |
| 24 | Kuwait | 1 | NAM | 48 | Yemen | 1 | AM |

Source: <http://www.halal.gov.my/>

NAM: Non-Arab Muslim

AM: Arab Muslim

2.6 An overview of the religiosity concept

According to Sojka and Tansuhaj (1995), there has been an increasing amount of consumer behaviour research across cultures over the last two decades. Nevertheless, many studies conducted in national and international settings have been based on establishing relationships between cultures and various aspects of consumer behaviour. Culture is the key determinant of consumer behaviour (De Mooij, 2004). Regardless the significance of allowing the concept of culture and its marketing connotations, empirical studies on consumer behaviour that focus on culture are underrepresented (Moklis, 2006).

Recent trend of published articles has shown that in the area of consumer behaviour, the majority of research on culture has focused on either broad values or other sub-cultural factors, such as ethnicity and nationality, with little concentration on religion (Moklis, 2006). According to Delener (1994), “although religion has been a significant force in the lives of many individuals, its role in consumer choice can be characterised as unclear or fuzzy”.

Countless marketing texts have identified that religion can have a significant effect on international marketing and within the consumer behaviour field. However, religion as a consumer trait in its own right has been relatively overlooked (Cateora and Graham, 1999; Terpstra and Sarathy, 2000; Cutler, 1991). Additionally, despite previous research that indicated that religion can be a significant factor in relation to consumer behaviour (Hirschman 1983; McDaniel and Burnett 1990; Delener 1990a, 1990b, 1994; Sood and Nasu 1995; Essoo and Dibb 2004), papers that study the role of religion are less common (Cutler, 1991).

Moklis (2006) argued that the limited amount of literature on religion may be due to several factors, including sensitivity of the subject, problem of measurement, gender of the participants, and methodological difficulties in obtaining valid and

reliable data. Subsequently, there have been at least three significant reasons for the study to investigate the potential relationship between religion and consumer behaviour.

In response to this, first of all, it is important to understand that religion is a central part of values in life that is often developed at an early age, and, therefore, plays a significant role in establishing consumption prescriptions and proscriptions for many individuals. Second, religion represents the most basic element of an individual's cognitive world. It is an inherent human value that serves to define ways to do things and to provide a series of tools for social behaviour. Religious individuals normally express their religious beliefs (internal) through consumer behavioural actions (external). Third, religion has the potential to be a socio-segmentation variable (Moklis, 2006).

Based on the discussion, there is an urgent need to incorporate the religiosity factor to the proposed model of the current study. This study used a two-pronged strategy. As a result, first, the findings of this study may add to the body of halal literature, and second, the study clarifies the marketing implications which act as a guide for marketers to consider when penetrating the local and international market.

2.6.1 What are religion and religiosity?

Religion is a broad concept comprising of texts, symbols, and traditions. It is practiced in the forms of rituals, individual habits, and other behaviours (Spilka, Hood, and Gorsuch, 1985), hence affecting the consumer behaviour. In this sense, consumers' purchasing behaviour depends on their religiosity level and commitment. From the anthropological view, religion is defined as an institution consisting of culturally patterned interaction with culturally postulated superhuman beings (Spiro, 1987).

Religiosity is defined as a belief in God accompanied by a commitment to follow principles that are believed to be set by God (McDaniel and Burnet, 1990).

Worthington et al. (2003) termed religiosity as religious commitment, which means the degree to which a person adheres to his or her religious values, beliefs, and practices, and uses them in daily living. The presumption is that a highly religious person evaluates the world through religious schemas and thus integrates his or her religion into much of his or her life.

Meanwhile, Johnson et al. (2001) defined religiosity as “the extent to which an individual’s commitment to the religion he or she professes and its teachings, such as the individual’s attitudes and behaviours reflect this commitment”. Stark and Glock (1968) opined that commitment is the heart of religion, while Delener (1994) described highly religious individuals as closed-minded or dogmatic because they are strongly committed to their faith. Nevertheless, Moklis (2006) posited that religious individuals are courageous towards their convictions and demonstrate their commitment in many aspects of life, including family, relationship, and consumer behaviour. However, generalisation concerning religion is hard and is not universally valid (Peterson, 2001). Table 2.13 illustrates different definitions of religion.

Table 2.13: Definition of religion

| Definition of Religion | Authors |
|---|---|
| A belief in God accompanied by a commitment to follow principles believed to be set forth by God. | McDaniel and Burnett (1990, p. 110) |
| A socially shared set of beliefs, ideas and actions that relate to a reality that cannot be verified empirically yet is believed to affect the course of natural and human events. | Terpstra and David (1991, p. 73) |
| An organised system of beliefs, practices, rituals and symbols designed (a) to facilitate closeness to the sacred or transcendent (God, higher power or ultimate truth/reality), and (b) to foster an understanding of one's relation and responsibility to others in living together in a community. | Koenig, McCullough, and Larson (2000, p. 18) |
| A social arrangement designed to provide a shared, collective way of dealing with the unknown and unknowable aspects of human life, with the mysteries of life, death and the different dilemmas that arise in the process of making moral decisions. | Johnson (2000, p. 259) |
| A cultural subsystem that refers to a unified system of beliefs and practices relative to a sacred ultimate reality or deity. | Arnould, Price, and Zikhan (2004, p. 517-518) |
| A system of beliefs about the supernatural and spiritual world, about God, and about how humans, as God's creatures, are supposed to behave on this earth. | Sheth and Mittal (2004, p. 65) |

2.6.2 Religiosity from the perspective of Muslim

Khraim (2000) defined Islamic religiosity as a basic tenet of Islam. According to Ashiq (2004), Muslims' religiosity is the consciousness and inclination to strive for harmony between worldly desires and to comply with God's divinity. It is achievable by the awareness of God, piety, and obligation practices to the Creator (Ashiq, 2004). The root of Muslims' religiosity is faith or "iman" in Arabic (Al-Bayuni, 1975). In other words, Muslims must comply with Islamic law by refraining themselves from what is forbidden, fear Allah, observe the supremacy of the creation and Creator through the love of Allah and Prophet Muhammad (PBUH), be true to their word, be patient, and always do good deeds (Al-Bayuni, 1975).

Haddad (2002) stated that Islam is not only a religion, but a way of life that combines politics, religion, and culture; a combination that has to be balanced. Haddad (2002) added that it is easy to differentiate the religious and less religious Muslims by

looking at their conviction to Islam. Furthermore, Syed Nisar and Eatzaz (2002) argued that Muslims are divided into those who truly practice the religion and those who are not genuinely practicing the religion. This makes all Muslims different from one and another.

2.6.3 Religiosity and consumer behaviour

As explained in the beginning of this thesis, this study examines religiosity and its influence towards the intention to purchase halal food products. Religion is a valuable construct to understand the significant role of religion in influencing social and consumer behaviour (Khraim, 2010; Kim et al., 2004). Religiosity also affects individual perceptions (Chai Lau, 2010). In this sense, there have been several discoveries concerning the relationship between religiosity and consumer behaviour. Wilkes, Burnett, and Howell (1986) found that religiosity influences the lifestyle of some consumers and their behaviour. In their study with 602 respondents, mostly Protestants, they found that people with a higher degree of religious commitment are inclined to be satisfied with their lives, have a more traditional sex-role orientation, and are likely to be opinion leaders. They are also found to make less use of credit and prefer to own national brand products.

Next, LaBarbera (1987) suggested that born-again Christians are distinguished by their lifestyle market behaviour and attitude as they live according to the teachings of Bible, making them different from others. She also reported that born-again Christians prefer spiritual qualities and not economic accomplishment that dictates their fundamental behaviour and are interpreted into their purchasing behaviour. On the other hand, Delener and Schiffman (1988) investigated the relationship between religiosity and the role structure of husbands and wives in the family decision-making process. For

example, it was shown in the study that husbands mostly influence the purchase intention for major durables in Catholic households.

However, Jewish households showed different results, in which husbands and wives make mutual decisions when exercising their purchasing power. Furthermore, in pro-religious households, husbands tend to hold a dominant influence in purchasing major durable goods, right from problem recognition until the final decision. Meanwhile, in non-religious households, husbands and wives share the purchasing decisions. Delener (1989) reported on the relationship between religiosity, external search information, and media usage patterns among the Catholics and Jews. There were significant differences in the external search information and media usage patterns among the Catholics and Jews when associated with religiosity and religious groups. Delener (1990a) also investigated religious influence on consumer innovativeness. The comparative study between Jews and Catholics found that Jews were keener than Catholics in trying out new products such as new movies, new books, and new magazines. This study also indicated that there were differences between religious Catholics, non-religious Catholics, religious Jews, and non-religious Jews. The religious Catholics possessed more brand innovation than non-religious Catholics, and the non-religious Jews possessed more brand innovation than religious Jews.

On the other hand, Delener (1990b) compared the Catholic and Jewish households in terms of purchasing new cars and microwave ovens. This study investigated the effects of religiosity on perceived risks and uncertainty in the purchase decision for durable goods. The findings confirmed that Catholics with a higher level of religiosity were more sensitive to any potentially negative consequences of their purchase decisions. Findings suggested that highly religious individuals were less secure and had low self-confidence.

Next, McDaniel and Burnett (1990) examined the importance of various retail department store attributes and the influence of religiosity by utilising religious commitment and religious affiliation. Religious commitment is prominent in forecasting the importance individuals place on certain retail evaluative criteria. Those with high religious commitment consider the friendliness of sales personnel, shopping efficiency, and product quality as important when choosing a retail store, compared to those with low in cognitive religious commitment. Meanwhile, LaBarbera and Stern (1990) argued that religiosity influences repeat purchase behaviour. The study examined the differences between orthodox and non-orthodox Jews. It was found that Orthodox and non-Orthodox Jews differ significantly in their repeat purchase behaviour for detergents, orange juice, aluminium foil, and toilet tissue.

The level of religiosity, age and social risk has been attributed to the purchase and price (Smith and Frankenberger, 1991). A study by Rodriguez (1993) reported the relationship between religiosity and purchasing patterns. The authors suggested that the degree of religiosity influences the purchasing patterns of the middle and lower socioeconomic groups among consumers in Peru. It was found that religiosity did not influence purchase behaviour for the upper class group.

On the other hand, Delener (1994) assessed the purchase decision-making process of an automobile and reported that husbands and wives have various role structures. Husbands were more dominant in choosing the best location to purchase automobile in pro-religious Jewish households and pro-religious households in general, while in pro-religious Catholic and non-religious Jewish households, husbands and wives mutually chose where and what colour to buy when purchasing automobile.

Sood and Nasu (1995) confirmed that the influence of religion varies from one culture or country to another, including consumer behaviour. They investigated the general purchasing behaviour and the influence of religion among the Japanese and the

Americans. The results showed that there was no difference for those who are devout and casually religious in respect of shopping behaviour in Japan. However, reverse results were found in the United States as there were significant differences between those who were devout and those who were casually religious in terms of shopping behaviour, for instance, in respect of economic, buying products on sale, and searching for lower prices.

Another comparative study among the Hindus, Muslims, and Catholics in Mauritius was conducted by Sood and Nasu (1995) and Essoo and Dibb (2004) who confirmed the relationship between the level of religiosity and shopping behaviour. Each religious group showed a significant difference between devout and casual. A consistent finding concerning the distinct impact of religiosity in different cultures or countries on consumer behaviour was also found by Siguaw, Simpson, and Joseph (1995; 1997). The study investigated the effects of religiosity on Sunday shopping behaviour in the United States and New Zealand.

Finally, Mokhlis (2006) examined the influence of religion on several chosen facets of consumer behaviour. The author employed the consumer behaviour model of retail patronage as a framework, and the influence of religion on the following aspects of consumer behaviour were examined: lifestyle, use of information sources, shopping orientation, store attribute importance, and store patronage. In the study, significant differences were found between different religious affiliation groups in terms of lifestyle, store attributes, and store patronage. Overall, the findings indicated that consumers' religiosity is useful in predicting various aspects of retail patronage activities. In this case, religiosity variable should be given consideration in future patronage behaviour model building and research efforts.

To summarise, previous research found a significant relationship between religiosity and consumer behaviour. Religiosity influences consumers' lifestyle, choice

of behaviour (Wilkes, Burnett, and Howell, 1986; Burnett and Howell, 1986; La Barbera, 1997), and purchase decision-making process (Delener, 1988; 1994). In this case, the comprehensive discussion has shown that religiosity is important and has a significant impact on consumer behaviour.

2.6.4 Muslims' religiosity and consumer behaviour

Khraim (2010) posited that it is clear that the role of religion as a variable in the model of consumer behaviour has not been established due to difficulties in measuring religiosity. In his study, he used various methods to measure Muslims' religiosity in order to help enhance the understanding of the relationship between religiosity and consumer behaviour. His study has indeed provided vital information concerning religion in the area of consumer behaviour via a three-dimensional approach (religious education, current issues of Islam, and sensitive products) as the finest grouping of dimensions to gauge the measurement of Islamic religiosity.

Next, Rehman et al. (2010) examined the relationship between differences in religiosity among Muslims and the effect on new product adoption. Religiosity as the independent variable was measured using five dimensions (ideological, ritualistic, intellectual, consequential, and experimental dimensions) and new product adoption as the dependent variable. The findings indicated that there was a relationship between religiosity and new product adoption; religiosity affected how and what new products Muslims adopt. More religious consumers tend to adopt a product that is in accordance with their spiritual and religious notation.

Rusnah (2005) studied the religiosity of Malaysian Muslims and how it could influence the perception of moral judgment and unethical business practices. The findings indicated that the degree of religiosity was able to influence individual perception of moral judgment and unethical business practices among Malaysian Malay

Muslims. According to her study, casually religious group has a more positive perception concerning unethical business practices in contrast to the devout group. This study found that respondents' religiosity, whether casual or devout, influence their behaviour.

Another study that investigated Muslims' religiosity and consumers was conducted by Esso and Dibb (2004). Relationship between the religiosity of Muslims and their behaviour was explored, in which Esco and Dibb (2004) compared between Islam, Hinduism, and Catholic. The study showed that Muslims' religiosity had a significant dissimilarity with the innovative shopper type, while casually religious respondents were found to vary in their shopping behaviour compared to the devout group. The study demonstrated that casually religious group tends to be "more innovative" in the sense that they like to try out new products and do not favour any particular brand, while devout group is "more practical" when shopping.

On the other hand, in the field of banking and finance, the adherence of Muslims to Islamic tenets remains the main motivator for them to use Islamic banking because they support that kind of non-conventional banking system (Bley and Kuehn, 2004). For instance, Bley et al. (2004) suggested that the preference for Islamic banking was largely based on religious aspect. Bley and Khuen (2004) further stated that religious sincerity was the strongest predictor of preference for Islamic banking services.

Contrary to Omer (1992), Metawa and Almosawi (1998) and Erol and El-Bdour (1989) found that religiosity was not an issue for consumers when selecting bank services. They argued that other factors, such as return expectation, were more important than Islamic finance principles and that consumers in Islamic countries would not differentiate between the services offered by conventional and Islamic banks (Erol et al., 1990). This was consistent with a study by Shaharudin (2010) who explored the religious factor and its influence on the purchase intention of organic food in Malaysia.

The findings showed that religious factor has less effect on consumers' intention to purchase organic food products, for the consumers may assume that the food products were prepared in permissible methods by their religion. The results were different than the results in previous literature that described religious factor as one of the most important factors in shaping consumers' food choice.

Taib et al. (2008) also suggested that religious and social influences were important in making decision. The authors identified the acceptance level of a diminishing partnership (DP), a new Islamic home financing concept in Malaysia. Rationale of the study was due to growing interest about Islamic financial products. This study was guided by the theory of reasoned action and a total of 300 postgraduate students from three public universities were involved. It was found that those with higher level of religiosity try to conform to Sharia law.

In short, the literature highlighted that there is a linkage between Muslims' religiosity and consumer behaviour, hence the previous literature supported and recommended that religiosity is a significant predictor of consumer behaviour.

2.6.5 Overview of the influence of religion on food consumption

Previous studies found that generally, religion affects consumer attitude and behaviour (Hirschman, 1983; Pettinger et al., 2004; Essoo and Dibb, 2004; Sood and Nasu, 1995; Delener, 1994; McDaniel and Burnett, 1990). This includes food-purchasing decisions in which religion plays one of the most influential roles in shaping food choices in many societies (Musaiger, 1993; Dindyal, 2003). The impact of religion on food consumption depends on the religion itself and to the extent where individuals interpret and follow the teachings of their religion. For example, most religions forbid certain foods except Christianity which has no restrictions on food consumption (Bonne et al., 2007). Table 2.14 presents an overview of common religious food practices.

However, although religion is a vital force in the lives of many individuals, the actual role of consumer food choice is still not clear (Delener, 1994).

| | ADV | BUD | EOX | HIN | JEW | MOR | MOS | RCA |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Beef | | A | | X | | | | |
| Pork | X | A | | A | X | | X | |
| All Meat | A | A | R | A | R | | R | R |
| Eggs/Dairy | O | O | R | O | R | | | |
| Fish | A | A | R | R | R | | | |
| Shellfish | X | A | O | R | X | | | |
| Alcohol | X | | | A | | X | X | |
| Coffee/Tea | X | | | | | X | A | |
| Meat & Dairy at Same Meal | | | | | X | | | |
| Leavened Foods | | | | | R | | | |
| Ritual Slaughter of Meats | | | | | + | | + | |
| Moderation | + | + | | | | | + | |
| Fasting* | | + | + | + | + | + | + | + |

Source: <http://www.asiarecipe.com/religion.html>

**Table 2.14: Common religious food practice
ADV: Seventh Day Adventist**

- BUD : Buddhist
- EOX : Eastern Orthodox
- HIN : Hindu
- JEW : Jewish
- MOR : Mormon
- MOS : Muslim
- RCA : Roman Catholic
- X : Prohibited or strongly discouraged
- A : Avoided by the most devout
- R : Some restrictions regarding types of foods or when foods are eaten
- O : Permitted, but may be avoided at some observances
- +

Islam has specific rules and customs built on five pillars, which the believers called as Muslims have to oblige to the “shahada” or declaration, prayer, “zakat” or charity, fasting, and pilgrimage (Bonne and Verbeke, 2009). It is a comprehensive religion that has sound fundamentals containing guidelines and teachings for every single detail in everyday life (Anwar, 2012). The whole concept of Islam is guided by Sharia law, which is shaped by Quran and Sunnah or the practices of the Prophet Muhammad (PBUH) (Zainul et al., 2004; Arham, 2010; Rice, 1999). Islam provides a

complete way of life, which includes the dietary aspects that require fulfilling the necessary conditions and the need to observe the sources of food and drink (Che Man et al., 2010; Hussaini and Sakr, 1984). Generally, Muslims' dietary foundation is based on halal food which underpins good health (Hussaini and Sakr, 1984).

2.6.6 Research gap in Muslims' religiosity literature

Muslims constitute a global market of 1.82 billion consumers (Pew Research Centre, 2011). Despite the large population, there is still a lack of literature on the empirical perspective to understand the differences in religiosity among population, to be specific on western religiosity, which differentiate Muslims' perspectives about religion (Krauss et al., 2006). Furthermore, it is noticed that there have been a very limited amount of empirical studies examining the issue of Muslims' religiosity to further explain the pattern among Muslim consumers' consumption (Mohd, N. and Abang, S., 2016, Varili et. al, 2016). It is important to understand Muslim consumers' food consumption, and in order to fill this gap, the current study examined Muslims' religiosity, a possible factor that influences the intention to purchase halal food products.

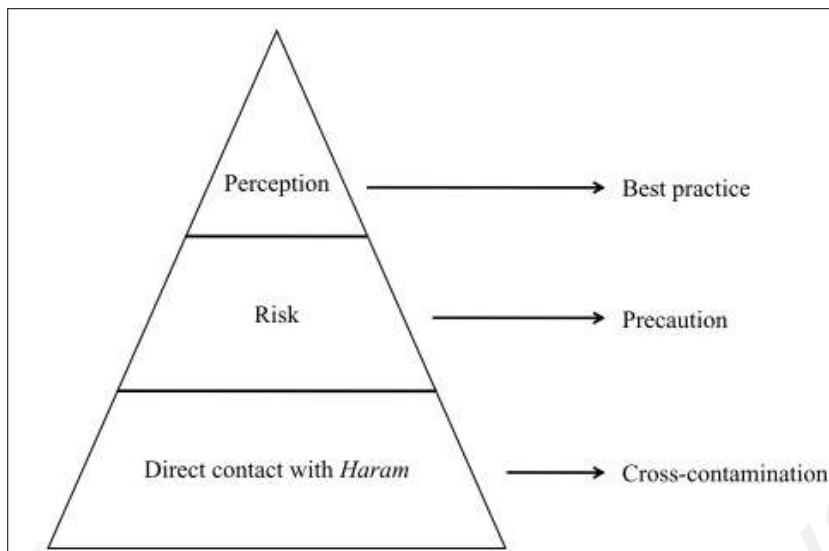
2.7 Halal perception

Perception is defined as "the process by which individual receives, selects and interprets stimuli to form a meaningful and coherent picture of the world" (Schiffman and Kanuk, 2007, p. 148). Perception is an individual's main source of cognitive contact and awareness with the world (Efron, 1969). It has implications for marketers because decisions are made based on what they perceive, rather than on the basis of objective reality. Consumers' perceptions affect how they make decisions and take actions based on what they perceive. Thus, it is important for marketers to understand

the whole notion of perception and its related concepts to be more ready in determining the factors that influence individuals to purchase (Schiffman and Kanuk, 2007).

Similarly, Muslim consumers have different perceptions depending on their Islamic school of thought, local fatwas (religious rulings), and local customs (Tieman, 2011). Level of religiosity also affects individuals' perceptions (Chai Lau, 2010). Since perception is a key success factor as an effective process consumer to buy, it is very important to meet the requirements of Muslim consumers' market. The perceptions concerning halal food constitute a vital factor in respect of the growth and recognition of global halal food industry. In this sense, halal perception involves an evaluation of the food products and their quality (Alhazmi, 2013).

Muslim consumers require assurance about what halal food products they consume. The model in figure 2.4 explains that perception is the best practice for Muslim consumers when dealing with any halal food issues to avoid risks based on the product characteristics (Tieman, 2013). For the purpose of this study, halal perception borrows the definition from Schiffman and Kanuk (2007) that is defined as the process by which an individual receives, selects, and interprets stimuli to form a meaningful and coherent picture about halal products. Halal perception is the views, feelings, and consumers' expectations about halal products. Figure 2.4 shows the importance of perception for Muslim consumers.



Source: Tiemen (2013)

Figure 2.4: The importance of perception of halal products among Muslim consumers

Previous studies on consumer perception of the halal concept have been identified for the purpose of this research (Nahdi, 2009; Dali, 2007; Aziz et al., 2010; Said et al., 2011). However, it seems that research on halal perception, which influences the intention to purchase halal food products, remains limited. Past literature on halal perception includes Dali et al. (2007). The research examined consumers' perceptions towards halal logo and ingredients, and the findings showed a positive relationship between Muslim perception, halal logo, and product ingredients. This study suggested that halal logo is significant among Muslims because they typically look for halal indication on the product label before buying any products.

Dali (2009) further argued that halal perception measures the perceptions towards halal products, particularly to see whether the products were perceived to be more expensive compared to non-halal certified products. The study analysed data from 1,075 respondents from Malaysia and Brunei with 11 factors affecting halal perception promotion, place, attractiveness, quality, halal certification, price, product

sample, market demand, SME producers, halal certification for Muslim companies, differences between halal certified and non-certified products and clean operation.

On the other hand, Rahman et al. (2011) investigated the perception of the young towards the importance of consuming halal products, level of knowledge about halal concept and logo, and to assess the level of acceptance or confidence concerning the halal status of food products that carry the halal logo. It was found that knowledge level concerning the concept of halal and halal logo did not significantly correlate with the perception of the importance of halal products or services. However, the perception concerning the importance of halal products or services significantly correlated with confidence level on halal logo. Finally, it was found that knowledge about halal concept and its logo influenced their confidence level in regard to the halal logo. Findings of this study have important implications for the government and business owners.

The recent exploratory research by Tieman (2013) aimed to establish the principles of halal logistics. This exploratory research paper was based on in-depth discussion among Muslims in Malaysia, and it was found that Muslims have different perceptions in respect of halal. This research also suggested that country of origin also contributed to the difference in halal perception; for example, consumers from Muslim and non-Muslim countries had differing views as to what constituted halal. It provided some insights into the minimum and preferred level of halal perception.

A study by Bruil (2010) revealed that there was a different perception between European Muslims and Asian Muslims. The research stated that the literature on halal perception among consumers was limited. The study on halal perception could have a significant impact on the potential of halal products in the near future. Consumers' perceptions help reveal their requirements and needs of halal products. Further empirical research are then needed to better understand and measure the halal

perceptions among Muslim consumer. Quantitative research is also needed to confirm this difference in consumer perception between Muslim consumers and their country-of-origin.

Therefore, this study establishes the halal perception constructs and produce empirical results to add to the body of halal food literature. The constructs of halal perception include halal knowledge, halal consciousness, halal cautiousness, and the importance of halal logo and products originated from Muslim countries. These constructs, which are explained in the next subsection, have been developed based on a qualitative study (focus group discussions and interviews) and recent literature with in regard to halal concept. Halal perception is the mediator of the model. This is consistent with previous studies (Dhruv Grewal, Kent B. Monroe, and R. Krishnan, 1998).

2.7.1 Research gap in halal perception literature

Future research is recommended in halal perception and areas that are important for Muslim consumer behaviour, and it is noticed that very few empirical research have been done on the influence of halal perception towards the intention to purchase halal food products (Mohd, N. and Abang, S., 2016; Bonne, 2008). This study is therefore advantageous to marketers to understand halal concept and strategies among different Muslim communities. No studies have also existed that provide a model that includes Muslims' religiosity, constructs labelled as halal perception, and the influence towards halal food products. This study examines halal perception to confirm the different halal perception between Muslim and non-Muslim consumers (Tieman 2013; Aziz et al, 2013).

2.7.2 Halal Knowledge

Knowledge acquisition is a cognitive process which consists of perception, communication, association, and reasoning, whereas knowledge is related to individual's capability of acknowledgment (Cavell, 2002). Knowledge can be defined as perception, true judgment, and true judgment with an account (Chappell, 2013). However, the definition of knowledge has been debated by scholars and Fine (2003) defined a much simpler definition that is justified true belief. Therefore, this study considers halal knowledge as "justified true beliefs concerning the halal concept". In other words, a person that possesses knowledge and understanding about halal concept.

Having product knowledge is important and significant to understand consumer behaviour (Ghalandari and Norouzi, 2012) because it has impacts on the perception of product assessments (Rao and Monroe, 1988). Consequently, many studies have been conducted on knowledge, such as energy, acid rain, and environmental issues (Md. Nor et al., 2004). Knowledge is commonly seen as a necessary precondition for a person's behaviour and successful action (Frick et al., 2004). In this case, knowledge-based campaign is a popular means of promoting certain behaviours in the general public (Boersching and De Young, 1993). For instance, campaigns that educate the general public in respect of conservation behaviour are ethical and good for the society.

Consistent with the discussion, it is essential for Muslims to have knowledge about halal concept. Similarly, it is important for marketers and food companies that identify Muslim population as their target segment to have knowledge concerning about halal food products (Regenstein et al., 2003). Knowledgeable consumers are more careful about the type of food they consume, hence encouraging food producers to be more careful and responsible in handling the manufacturing process. This is consistent with recent trend that has become more sophisticated concerning food issues, and

requires adequate information to identify the quality of food products (Shafie et al., 2006).

Muslim consumers must understand the basic definition of halal food. Food products are halal they are not made of items or ingredients that are considered as illegal or filth in Islamic law, namely the use of pork (non-halal animal), carrion, alcohol, blood, and urine (filth). Halal food products must be prepared, processed, and manufactured using “clean” equipment which means have zero contact with haram or filth items (Shafie et al., 2006, Riaz et al., 2004).

In addition, Islamic dietary laws emphasises on slaughtering process, in which there are criteria and guidelines that need to be followed and performed. Animal slaughterers must comply with certain criteria as follows: (i) slaughterer must be a Muslim of sound mind and maturity with good understanding of the slaughtering process; (ii) animal to be slaughtered must be alive at the time of slaughter; and (iii) sharp knife must be used in the process of slaughtering, in which something made out of bones, nails, or teeth is not allowed. The logistics process of the food products must also be taken into consideration, for example the storage, display, and preparation of the processed food products. During this process the meat cannot come into contact or be put close to any items considered as haram or filth (Shafie et al., 2006, Riaz et al., 2004).

In order to uphold the halal status of the processed food products, the premises must be maintained particularly in terms of hygiene and sanitation. The manufacturing, preparing, and selling of the processed food products must be hygienic and not polluted by any infestation or flies, rats, cockroaches, lizards, or other such pests (Tieman, 2013, Shafie et al., 2006). Finally, the workers involved in producing the processed food products must be healthy and wear clean, protective clothing to avoid contamination.

The equipment and washroom facilities must also be hygienic and maintain their cleanliness (Shafie et al., 2006).

In short, knowledge is a means to overcome psychological barriers, such as ignorance and misinformation. Subsequently, the understanding of halal concept is a cognitive process that helps individuals to interpret it into effective actions. Knowledge is viewed as a necessity, albeit generally insufficient, preconditioned for successful action. In other words, although knowledge does not always have the intended effect on the target behaviour itself, it may at least fuel other mechanisms that facilitate behavioural change (Pratkanis and Turner, 1994; Ronis and Kaiser, 1989; Schahn and Holzer, 1990).

a. The effect of halal knowledge and consumer behaviour

Knowledge is related to feelings, drives, and instincts which constitute the main force that stimulate behaviour (Battour, 2011). Knowledge and understanding gained from past behaviour help to shape a person's intention (Eagley and Chaiken, 1993; Fishbein and Ajzen, 1975). Consequently, experiences enhance a person's knowledge and memory. They are more significant once they contribute to the development of intentions (Ajzen and Fishbein, 1980; Fazio and Zanna, 1978; Regan and Fazio, 1977). Islam emphasises on understanding, consciousness, and encompasses every single conduct in our daily lives (AlMoharby, 2009).

Quran mentioned that "those truly fear Allah, among His Servants who have knowledge: for Allah is Exalted in Might, Oft-Forgiving." (35:28) The verse emphasises on the importance of knowledge and understanding to Muslims. Additionally, a hadith that encourages Muslims to enhance their knowledge and understanding is "a single learned Muslim is harder on the devil than a thousand worshippers." (Al-Tarmidhi as cited in Holland, 1982).

The verses and hadith have proven the importance of Muslims to have understanding and knowledge including that pertaining to the halal food concept. Muslims must understand and appreciate the concept of halal and haram in order to meet the demand and requirement of their religion (CAP, 2006). The right understanding and knowledge help consumers having a better picture of what constitutes halal food consumption and guide them in making better decisions when purchasing halal food products (Jamal, 1996).

Next, knowledge about halal is of the utmost interest and is considered a sensitive issue by Muslims in general (Zakaria, 2008). Halal Industry Development Corporation (2005) conducted a study and posited that out of 732 Muslim respondents, only 5% really understood the concept of halal, 38% had moderate understanding, and 6% had low level of understanding. This shows that not all Muslims really understand the concept of halal food and there is a need to enhance their knowledge.

On the other hand, Rahman (2011) investigated the perception of young consumers concerning the importance of consuming halal products and the level of knowledge concerning the halal concept. It was found that the level of knowledge concerning the concept of halal did not significantly correlate with the perception about the importance of halal products or services. However, the more knowledgeable the consumers were about halal concept and its logo, the lower their confidence level concerning the authenticity of halal logo. This is probably because there were numerous scams and frauds have conducted by unethical food producers.

Meanwhile, Abdullah (2009) evaluated the current level of awareness and knowledge about halal food laws with a special emphasis on alcohol, among food technology students of a public university in Malaysia. The majority of respondents (73%) admitted that they understood the halal concept in Islam and most of them (91%) agreed that the consumption of wine is forbidden. However, despite their initial

perceived understanding of halal concepts and issues, their responses in the questionnaire about halal limit of alcohol in food and halal status of food like grape juice, apple cider, tapai (fermented rice), and rum balls showed uncertainties and misconceptions. This is an indication that generally, the majority of food technology students do not fully understand the halal concept, especially in relation to alcohol in Islam.

In short, knowledge concerning halal food concept is important to help consumers make a wiser decision according to the Islamic dietary laws. In addition, knowledge is not only important for Muslims, but also to food manufacturers. They are expected to increase their level of awareness and knowledge about halal to determine the most efficient way of communicating marketing information to them (Rezai, 2010).

b. The relationship between Muslims' religiosity and halal knowledge

A religious person has a value system that differs from an unreligious person (Soesilowati, 2010). This is consistent with Rezai's (2008) findings that suggested those with knowledge of religion have a higher confidence level. In another study by the same author, the researcher explored essential determinants that influence non-Muslim perceptions and attitudes concerning halal food concept. In his study, a total of 400 non-Muslim respondents were interviewed. The purpose was to identify the awareness and attitude towards halal food products in the Malaysian food market among non-Muslims. The findings showed that religious belief is significant to determine the attitude towards understanding and awareness of halal food principles. The study further argued that those who are more religious appeared more likely to understand the principle (Rezai, 2010).

There is a related study that focuses on the importance of understanding the Islamic concept towards products' preferences. Bley and Kuehn (2004) studied the

knowledge and perception of 667 business graduate and undergraduate students concerning conventional and Islamic finance in the United Arab Emirates (UAE). Students who were more fluent in Arabic were more knowledgeable about Islamic financial concepts and products than those whose fluency were weak. Results suggested that the understanding of Islamic finance concept largely depends on traditional Arabic terminologies, which, in turn, require a certain level of familiarity and fluency. Hence, with specific knowledge, Islamic finance is their preference. This study showed that the understanding and knowledge about Arabic terminology would lead to specific preferences when choosing a product.

Arab Muslims are deemed to be more religious compared to the more secular, non-Arab Muslims (Rabasa, 2004). This has led to notable dissimilarities within the Muslim world in which Arab Muslims are different to non-Arab Muslims. At the same time, there are different schools of thought in Islam that lead to different interpretations of halal (Nielsen, 2011; Lawrence, 2000; Rabasa, 2004; Waardenburg, 2004). However, there is lack of research on Arab Muslim and non-Arab Muslim consumers, even though previous studies found significant differences between Arab-Muslims and non-Arab Muslims (Rizzo et al., 2007; Bley et al., 2004; Rabasa, 2004).

Therefore, a study that compares Arab Muslims and non-Arab Muslims is encouraged to prove the difference between these populations (Rizzo et al., 2007). This study gives a new finding concerning the relationship between Muslims' religiosity and halal knowledge among Arab Muslims and non-Arab Muslims in Australia and the United Kingdom. Furthermore, there is no research that studies the linkage between religiosity and halal knowledge between Arab Muslim, and non-Arab Muslim in non-Muslim countries.

c. Research gap in the literature of halal knowledge

There is a lack of research that discuss on halal knowledge and its influence towards the intention to purchase halal foods. This empirical research studies halal knowledge as one of the halal perception constructs and evaluates the linkage between Muslims' religiosity, halal knowledge as mediator, and the impact on the intention to purchase halal food products. Therefore, the following propositions are proposed.

P1ai

There is a positive relationship between Muslims' religiosity and halal knowledge among Arab Muslims and Non-Arab Muslims in the United Kingdom and Australia.

P1aii

There is a positive relationship between Muslims' religiosity and halal knowledge among Arab Muslims in the United Kingdom and Australia.

There is a positive relationship between Muslims' religiosity and halal knowledge among Non-Arab Muslims in the United Kingdom and Australia.

P1aiii

There is a positive relationship between Muslims' religiosity and halal knowledge among Arab Muslims and Non-Arab Muslims in Australia.

There is a positive relationship between Muslims' religiosity and halal knowledge among Arab Muslims and Non-Arab Muslims in the United Kingdom.



2.7.3 Halal consciousness

According to most behavioural researchers of cognitive psychology, consciousness is the best predictor of human behaviour in making decisions to perform the behaviour (Brehdahl, 1998). In the theory of reasoned action (TRA), consciousness

is important to reflect the consequences of alternative behaviours and choose the one that leads to the most desirable preference (Fishbein, 1980). In fact, Sharia law that is guided by the Quran and Sunnah of the Prophet Muhammad (PBUH) is consciously applied in our daily lives (Almoharby, 2007). The pre-set rules and regulations contained in Sharia law are used as the foundation for any affairs or businesses of every human being to comply with God's divine laws. Thus, in Islamic practice, consciousness is important to balance both worldly desires and the hereafter (Ashiq, 2004).

Next, Almorharby (2009) argued that consciousness is defined as sustainable development, transparency, ethical responsibility, and global networking for the wellbeing of humans. A much simpler definition was offered by Searle (1998) that consciousness means sentience or awareness. In the context of halal consciousness, the closest study to the current research is by Rulindo (2008). His study explored the concept and measures of Sharia's consciousness. The study looked at the intention of searching for halal label before consumption. The researcher defined Sharia-consciousness as a level of sensitivity towards the observance of Sharia's rules, especially Muslims in respect of the purchase or sales of a product.

Following the discussion, this study adopts and defines halal consciousness as individual awareness and sensitivity on halal consumption. Halal consciousness means individuals who are concerned about their food consumption (Shafie et al., 2006). The foods must be halal and as a Muslim, one should only consume halal food products (Nasir et al., 2008). To them halal food is very important and they must always eat food products with halal logo (Nasir and Pereira, 2008; Rajagopal, Ramanan, Visvanathan, and Satapathy, 2011; Shafie and Othman, 2006; Zakaria, 2008). If there is no halal logo, they will consciously check the food sources and always check the ingredients on the packaging of the processed food products (Nasir et al., 2008). Also, they will not

purchase any food products if they are placed next to non-halal foods on the supermarkets' shelves and always buy meat from Muslim operated premises (Ahmed, 2008). This definition is consistent with Wilson and Liu (2011) who proposed that halal-conscious consumer is hypersensitive which drives discerning and high-involvement behavioural traits.

a. The effect of halal consciousness and consumer behaviour

The global population of Muslims has increased and they are now more educated (Shafie, 2006; Yaakob et al., 2007, Che Man and Abdul Latif, 2003). Consequently, this has influenced the rapidly increasing global awareness concerning halal and the recent demand for halal products (Che Man and Abdul Latif, 2003). This global halal awareness is not only among Muslims in Arab countries, but also includes Southeast Asia, Europe, and Africa where they are now becoming more conscious of the status of halal food products (Husain, 2006).

In Singapore, Nasir et al. (2008) explored the relationship between the degree of religiosity and individual's concern about halal status. According to the study, devout Muslims took the issue of halal very seriously and seemed to have higher halal consciousness (Nasir et al., 2008). They would prefer to dine in a totally halal environment (Nasir, Mohamed, Pereira, Turner, 2008). Therefore, in order to cater to the Muslim market, the food marketers were forced to respond to this consciousness by acquiring formal halal certification (Nasir, 2008).

Another example is Indonesia, the biggest Muslim country in the world. As the number of halal-conscious consumers is getting bigger, the government drafted Halal Product Protection Act. Muslim for Indonesian consumers who were concerned about halal label and felt that it was important to display halal label or logo on food products.

The food and medicine producers and marketers in Indonesia have made the halal label their selling point (Salehudin, I. and Luthfi, B.A., 2010).

In addition, a study in Malaysia by Dahalan (2008) sought to identify the tendency of married UiTM Penang staff in respect of the malnutrition and nutritional effects of feeding their children. The results showed that the respondents had a high level of consciousness concerning how to provide and to ensure that the source of food for their family members is halal. This study suggested that it was essential that the halal concept be fully understood by the marketers. As a Muslim consumers become more religious or halal conscious, they will be looking for products that not only satisfy their needs, but also give them “peace of mind” (Shafie, 2006; Bogal, 2007; Zakaria, 2008).

However, a study by Rajagopal et al. (2011) in the UAE had contrasting findings. Although the respondents were familiar with the concept of halal, their awareness, and knowledge about halal-certified brands was extremely low. The results suggested that due to low halal consciousness, therefore products with halal certification is not a selling point in the country (Rajagopal et al., 2011). This was consistent with Wilson and Liu (2011), who found that the behaviour and perspectives of Muslim consumers towards halal were different, which is the challenge faced by marketers in order to understand and respond to the halal phenomenon. There are many factors influencing the perception of halal consciousness, for example, culture and environment (Wilson and Liu, 2011).

In short, the discussion has proven the existence of distinctive perceptions towards halal consciousness among Muslim consumers. This is indeed a huge challenge faced by the producers and marketers in order to understand and respond to the issues. Hence, there is a need for an empirical study to be conducted about halal consciousness and the impact on consumer behaviour.

b. The relationship between Muslims' religiosity and halal consciousness

Among the researchers who have studied the relationship between religiosity and halal consciousness are Nasir et al. (2008) and Shafie et al. (2006). In the study by Nasir et al. (2008), the relationship between religiosity and public dining practices in Singapore was observed. Singapore is known to be a secular, cosmopolitan, and multicultural society. A total of 20 Muslims were interviewed to explore their views on dining in public, such as in food courts and hawker stands. The findings showed that Muslims with higher religiosity in Singapore possessed a higher level of halal consciousness and would patronise halal certified restaurants or food court. This study further confirmed that Muslims were engaged in defensive dining strategies and possessed a high level of consciousness to accommodate their religious obligations.

Another study was conducted by Shafie et al. (2006) that suggested those who are more religious tend to have higher level of halal consciousness. Therefore, they would make sure the purchased items were halal and conformed to Islamic requirements. Furthermore, a study that attempts to understand halal-conscious behaviour suggested that faith in Islam was important. Faith is a dimension of Muslims' religiosity which influences the halal paradigm and conscious consumption among Muslim consumers. The study suggested that halal-conscious consumers possess high-involvement behavioural traits when purchasing food products for consumption (Wilson et al., 2011).

The concept of halal governs every aspect of a person's life, causing the Muslim consumers to be conscious in respect of dietary consumption. Since halal concept was originally rooted in the Arabic language (Nader Al-Jallad, 2008), it is generally perceived that Arab Muslims are unique and have a more restricted and conscious consumption (Rana Sobh and Russell Belk, 2009). Meanwhile, non-Arab Muslims are deemed to be more secular compared to the Arab Muslim community (Rabasa, 2004).

c. Research gap in the literature of halal consciousness

Literature on halal consciousness has recently been explored conceptually by few researchers (Nasir and Pereira, 2008; Rajagopal et al., 2011; Shafie and Othman, 2006; Wilson and Liu, 2011; Zakaria, 2008). However, there are limitations concerning the availability of literature that is specific to the empirical evidence of halal consciousness. Thus, halal consciousness is one of the constructs that has been developed for the current study. This study attempts to deliberate more on the concept of halal consciousness, the impact of religiosity and halal consciousness, and the impact of halal consciousness concerning the intention to purchase halal food products.

Although literature has proven that the more religious a person, the more he is halal-conscious, however, the relationship between Muslims' religiosity and halal consciousness has not been empirically tested. Therefore, based on the discussion, the following propositions are proposed.

P1bi

There is a positive relationship between Muslims' religiosity and halal consciousness among Arab Muslim and non-Arab Muslims in the United Kingdom and Australia.

P1bii

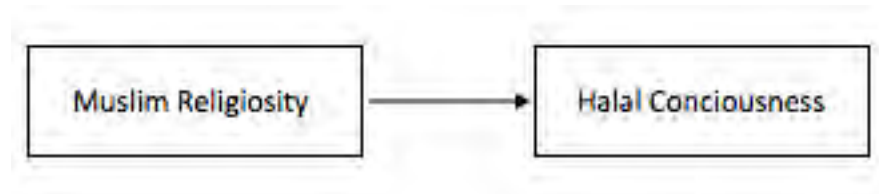
There is a positive relationship between Muslims' religiosity and halal consciousness among Arab Muslims in the United Kingdom and Australia.

There is a positive relationship between Muslims' religiosity and halal consciousness among non-Arab Muslims in the United Kingdom and Australia.

P1biii

There is a positive relationship between Muslims' religiosity and halal consciousness among Arab Muslims and non-Arab Muslims in Australia.

There is a positive relationship between Muslims' religiosity and halal consciousness among Arab Muslims and non-Arab Muslims in the United Kingdom.



2.7.4 Halal cautiousness

Cautiousness can be defined as the behaviour to avoid potential failure or disapproval experiences to achieve personal satisfaction (Moss, 1961). Wilson (1968) defined cautiousness as the first derivative with respect to consumption of the reciprocal of absolute risk aversion. A person will avoid risk by buying products based on their perception and own recommendation (Eves, Anita, and Cheng, 2007). The concept of cautiousness is very important among Muslim consumers as the religion teaches Muslims to be cautious when dealing with food consumption. It has to conform with the Islamic laws (Quran; Riaz, 2004).

The concept of cautiousness has been addressed in many verses in the Quran and hadith. Islam establishes certain legal principles in which all decisions are based on the concepts of halal and haram (Al-Qaradawi, 1995). A Muslim's way of life is extremely detailed, which is operationalised by the concepts of halal and haram, and, for that reason, they have to be cautious in any areas (CAP, 2006). Allah SWT said in the Quran (2:168) "Ye people! Eat of what is on earth lawful and good". Another Surah that urges people to eat the best type of food is in Quran (7:160) "Eat of the good things with which We have provided you..."

Another statement that touches on the importance of cautiousness in food selection is in Quran (6:119) "How should ye not eat of that over which the name of

Allah hath been mentioned, when He hath explained unto you that which is forbidden unto you unless ye are compelled thereto. But lo! many are led astray by their own lusts through ignorance. Lo! thy Lord, He is Best Aware of the transgressors.”

On the other hand, a hadith that urges Muslims to make their own wise decisions can be taken from the hadith reported by Al-Tarmidhi “Hasan bin Ali RA, he said, I memorize a word from Allah’s Messenger: Leave that which makes you in doubt for that which does not make you doubt”. This hadith emphasizes on the concept of being cautious among Muslim. Al-Qaradawi (1995), in his book titled “The Lawful and The Prohibited in Islam” provided a summary of the basic principles pertaining to halal and haram, of which one is the doubtful or grey area between the clearly halal and clearly haram. This grey area pertains to the things that are to be avoided.

A practising Muslim prevents himself from being involved in things that are considered “Shubha”, the concept of which is based on the hadith of the Prophet Muhammad (PBUH) reported by Al-Bukhari and Muslim saying “Halal (lawful) is clear and Haram (Prohibited) is clear; in between these two are certain things that are suspected (Shubha).”

Many people may not know if some items are halal or haram. Whosoever leaves that, he or she is innocent towards his or her religion and conscience. He or she is, therefore, safe. Anyone who gets involved in any of these suspected items, he or she may fall into the unlawful and the prohibition. This case is similar to the a man who wishes to raise his animals next to a restricted area, he may step into it. Indeed for every landlord there is a restricted area. Indeed the restrictions of Allah are the unlawful (Haram).

The aforementioned verses and hadith explained that Muslims should be diligent when selecting food for consumption, and, therefore, knowledge is important so that they are able to make a wise decision (Hussaini and Sakr, 1984). They are supposed to

check and judge the permissible and prohibitive nature of all the ingredients of any particular food or drink before consumption (Hussaini and Sakr, 1984). If there is no written statement in the Quran or hadith about the matter being halal or haram, a person must try his or her best to make decision by being cautious concerning the food content.

However, the halal guidelines do not only cover the prohibition of food consumption but also prescribe diligence in many other aspects. For example, the process of slaughtering animals for consumption and the trading of alcohol. There are many verses that have been mentioned in the Quran and hadith for example as follows.

“Verily Allah has prescribed proficiency in all things. Thus, if you kill, kill well; and if you slaughter, slaughter well. Let each one of you sharpen his blade and let him spare suffering to the animal he slaughters.” (Hadith reported by Muslim)

“In an incident narrated by Rafi bin Khadij, the Prophet told Muslims who wanted to slaughter some animals using reeds: use whatever causes blood to flow, and eat the animals if the Name of Allah has been mentioned on slaughtering them.” (Hadith reported by Bukhari)

“Allah’s Messenger forbade the eating of the meat of beasts having fangs.” (Hadith reported by Bukhari)

“Narrated Ibn Umar: The Prophet cursed the one who did Muthla to an animal (i.e. cut its limbs or some other part of its body while it is still alive.” (Hadith reported by Bukhari)

“The Prophet (PBUH) did not stop at prohibiting the drinking of alcohol, whether much or little, but he also forbade any trading in it, even with non-Muslims. It is not permissible for a Muslim to import or export alcoholic beverages, or to own or work in a place which sells them. In connection with alcohol, the Prophet (peace be on him) cursed ten categories of people saying: truly, Allah has cursed khamr and has cursed the one who produces it, the one for whom it is produced, the one

who drinks it, the one who serves it, the one who carries it, the one for whom it is carried, the one who sells it, the one who earns from the sale of it, the one who buys it, and the one for whom it is bought.” (Hadith reported by Al-Tirmidhi and Ibn Majah).

“The messenger of Allah said: Allah the Almighty is good and accepts only that which is good. Allah has commanded the faithful to do that which he commanded the messengers, and the Almighty has said: “O ye messengers! Eat of the good things and do right”. And Allah the Almighty has said: “O ye who believe! Eat of the good things wherewith We have provided you.” Then he mentioned (the case of) a man who, having journeyed far, is dishevelled and dusty and who spreads out his hands to the sky saying: “O Lord! O Lord!” – while his food is unlawful, his drink unlawful, his clothing unlawful, and he is nourished unlawfully, so how can he be answered!” (Hadith reported by Muslim)

All of the hadith explained the importance of consuming halal as an essential part of the religion, in which every Muslim has to be cautious, performs investigation, and be concerned about the aspect of food consumption to avoid any doubts and uncertainties (CAP, 2006). In the context of the teachings of Islam, a cautious approach is needed by Muslims to avoid doing what is doubtful in order to stay clear of doing something haram, Shubha and doubtful. This proves that Islamic law is very detailed and that it governs Muslims’ lives as a whole and that being diligent is important for Muslims.

Meanwhile, the last mentioned hadith is the evidence stressing the importance of finding halal food and drinks. Food from blood and flesh on the human body shapes the mind and soul, influencing the character and deeds of a person, therefore, food consumption affects a person’s prayer and the prayer may not be answered (CAP, 2006).

In this case, this study employs the definition for halal cautiousness as “the degree of care the Muslim consumers have in an attempt to avoid food that is, or potentially is haram and minimise the risk of consuming haram food”. In order to avoid the potential risk, they should always be cautious when purchasing food products to avoid eating haram or doubtful foods (CAP, 2006). Indeed, they would be extra cautious to ensure that the products are halal when buying new food products (Raju, 1980). In response to this, to avoid the risk of buying non-halal food, consumers would find alternative food products if they have doubts about the halal status of a food product (Shaari et al., 2010). They would avoid buying any food product for which the ingredients were in doubt (Teiman, 2013, Shaari et al., 2010) and prefer to choose food products made in Muslim countries (Bonne et al. 2007). They would usually take sufficient time to carefully shop for food products to ensure the halal status is guaranteed (Verbeke et al., 2003). In short, it is important to integrate the aspect of halal cautiousness. The next subsection further explains the effects of being halal-cautious and discussion about consumer behaviour.

a. The effect of halal cautiousness and consumer behaviour

It is a fact that Islam is associated with cautiousness, especially in the area of food consumption (Hussaini and Sakr, 1984). Although it is critical for the Muslim consumers to be cautious, there has been a lack of research on the area of halal cautiousness. It is noticeable that there is a lack of study concerning halal cautiousness and the influence of consumer behaviour especially those focusing on the purchase intention of halal food products.

Raju (1980) stated that a cautious person is someone who is afraid of taking risks or trying new products. They may seek information to reduce the risk of trying an unfamiliar product, and are eager to find out about new products. In a study by Verbeke et al. (2003), which explored the profile and effects of consumer involvement in fresh

meat, a cautious consumer was found to possess a strong perception of risks. Cautious consumers were diligent during the decision-making process. They spend a lot of time in comparing many alternatives, use a lot of information, consult the opinion of peers, and trust in family and friends when making decisions about meat consumption.

Another study on cautious consumers was conducted by Dahalan (2008). In his study, he explored the respondents' cautiousness towards halal food. The results showed that more than half of the respondents were taking food consumption for granted. This showed that they were not careful and cautious when purchasing food products. However, a study by Rezai et al. (2012) found that Muslim consumers were cautious when purchasing halal food products, even though the products carried a halal logo.

There are many factors that affect the level of cautiousness, including non-Muslim manufacturers, ethics, and scams on halal logo. In addition, there is no strict enforcement in monitoring the usage of certified halal food. This has caused Muslim consumers to be suspicious about halal logo or products that are claimed to be halal. Among the scams that have been revealed in the study are shown in Table 2.15.

Table 2.15: Examples of halal scams in Malaysia

| Issue | Source |
|--|--|
| JAKIM once confiscated two containers of a famous brand of chewing gum worth RM 2.3 million from a warehouse at Hicom Glenmarie in Subang, Selangor, believed to be using a fake halal logo. | Harian Metro, 8 th July 2004 |
| High 5, a Malaysian local bread products claimed that its bakery products were baked using 100% halal oil when in fact it was imported from Israel or Germany, whereby its halal status was being doubt. | The Malay Mail, 14 th September 2006 |
| Dinding poultry was also sued for not ensuring that its products were slaughtered according to the Islamic principle and thus the products were not considered as Halal, and this suit was settled for RM100 million | New Straits Times, 20 th January 2006 |

Source: Rezai et al. (2012)

A book published by the Consumer Association of Penang (CAP, 2006), surprisingly explained some of the scams and non-ethical behaviour in the food

industry. Some of the scams shared in the book concerned the additives used in foods, of which many were derived from animals or dubious sources, derivatives of human hair are added to bread and pizzas, dyes from crushed insects in foods, powdered blood plasma is used to make processed meat and gelatine is included in many food products. The book has influenced Muslim consumers to become more diligent and cautious to ensure that the products they consume are halal (Rezai et al., 2012).

This halal scenario alarmed many Muslims as they felt threatened. Additionally, numerous papers, local magazines, social and mass media exposed the issue of halal and haram food (Zakaria, 2008). They reported many cases based on experiences. With the overwhelming issues, the Muslim consumers' trust has slowly declined and led them to become cautious and particular when purchasing halal food products (Zakaria, 2008). Therefore, based on the above discussion, it is suggested to incorporate cautiousness in the model to assess consumer behaviour. Since cautiousness may influence consumer decision-making and intention to purchase, this study adopts halal cautiousness in order to check its impact on the intention to purchase halal food products.

b. The relationship between Muslims' religiosity and halal cautiousness

Although research on halal food has evolved, it has not been comprehensively studied. There are still many components that have yet to be tapped (Lada, 2008; Bonne et al., 2008). This includes the relationship between Muslims' religiosity and halal cautiousness. Islam influences the way consumers make purchase decisions. Based on research, Muslim consumers were very cautious when making purchase decisions compared to Western or secular cohorts (Muhamad and Mizerski, 2010). They tend to be cautious about what they have bought and ate (Rezai et al., 2012). In this sense, they are more diligent and careful in searching for and buying halal food products.

In this case, however, older generations were more cautious in dealing with the halal status of food products compared to the respondents of younger group (Rezai et al., 2012). There is a lack of empirical studies on the linkage of religiosity with halal cautiousness. The closest study that proved the influence of religiosity and cautiousness was by Abdullah (2003) and Khan (1984), and supported by the verses in the Quran and hadith by the Prophet Muhammad (PBUH).

Next, the aim of the study by Abdullah (2003) was to examine the influence of religiosity and cautious consumption, which leads to saving behaviour. A Muslim has the tendency to be more cautious in their economic dealings as it has been mentioned in the Quran to spend moderately. The findings of this study showed that religiosity has a significant impact on the respondents' cautious spending behaviour and leads to saving behaviour. Meanwhile, Khan (1984) argued that the level of religiosity within a Muslim determines his cautious consumption. He argued that the level of religiosity determines the consumption level and motivation to spend cautiously. The motivation to spend cautiously or less is able to be achieved from the religiosity level of individuals. Since spending moderately is said to be an important motivation for Muslims, whoever follows this consumption pattern because of religion is said to be God-conscious or God-fearing, and, consequently, a better Muslim (Khan, 1984). Cautious Muslims in respect of religious obligations are considered as extra religious (Abdullah, 2003).

Specific guidance from the Quran and hadith emphasising the discussion mentioned: "All good things of this world have been created for man. Muslims are not asked to abstain from them. The Prophet (peace be upon him) says that when Allah bestows the good things of the world upon one of His servants He likes to see them reflected in his appearance (of course without any intention of personal pride). The Prophet Muhammad (PBUH) is also reported to have objected to the act of abstention from the lawful enjoyment of material things. He is also reported "You don't really

possess of your wealth but only what you eat and use up, what you dress and wear up or what you spend on charity and preserve for the life hereafter.” (Quran, 7:32)

In another place in the Quran (6:141), “Eat of their fruits in their season, but render the dues that are proper on the day that the harvest is gathered. But waste not by excess: for Allah loveth not the wasters.”

Thus, to spend in the way of religion depends on the level of religiosity and the culture of the Muslim. Therefore, it is important to harmonise the culture and religious norms of the individual. Muslim countries, for example, Saudi Arabia has no difficulty in balancing the culture and religion compared to non-Muslim countries (Khan, 1984). Generally, the Middle Eastern culture has a more restricted sense and cautious culture that distinguishes it from the Western or non-Muslim culture (Sobh and Belk, 2009). Building on these observations, the present study seeks to establish linkages between Muslims’ religiosity and halal cautiousness among Arab Muslim and non-Arab Muslim.

c. Research gap in the literature of halal cautiousness

Consistent with the importance of halal food consumption, various literature on halal food consumption has been reviewed for the purpose of this study. However, to date, there is no available literature that has empirically studied halal cautiousness and the impact on consumer behaviour. Due to the lack of studies on the specific areas, this study explores what halal cautiousness is and its impact on consumer behaviour. Therefore, from the discussion, religiosity is shown to have a significant relationship with halal cautiousness. The following propositions are then presented.

P1ci

There is a positive relationship between Muslims’ religiosity and the halal cautiousness among Arab Muslims and Non-Arab Muslims in the United Kingdom and Australia.

P1cii

There is a positive relationship between Muslims' religiosity and the halal cautiousness among Arab Muslims in the United Kingdom and Australia.

There is a positive relationship between Muslims' religiosity and halal cautiousness among non-Arab Muslims in the United Kingdom and Australia.

P1ciii

There is a positive relationship between Muslims' religiosity and halal cautiousness among Arab Muslims and Non-Arabs Muslims in Australia.

There is a positive relationship between Muslims' religiosity and halal cautiousness among Arab Muslims and non-Arab Muslims in the United Kingdom.



2.7.5 The importance of Halal Logo.

A logo is a means of educating general thinking skills and a way to recognize anything that requires to be identified using a visual graphic (Delclos, Littlefield, and Bransford, 1985, Hardy, 2011). It identify products and help raise consumer awareness about the product they represent (Berry 1989, Bennett 1995). A logo can be defined as: "A series of words or an image that attempts to represent an institution or an individual in a way that is symbolic in some cases or parallels the person's identity. If it's for an individual, the logo is very often for their name itself. On the other hand, some logos are abstract, and others use literature or words to achieve their effect. In any case, what logos attempt to do is synthesize an individual or institution into an understandable visual form." (Hardy, 2011).

Consumers use logo in their process to identify and simplify their purchasing decisions of certain products (Angela Lynn Stahle, 2002), and constantly search for logos to ease their decision process as they serve as a “visual shorthand” for communicating a brand message and promise (Selame and Selame 1988, p. 92). Likewise, logo is used by the Muslims look for food products that comply with Sharia and religious guidelines and to comply with the religion.

The halal logo is a third-party certification given by an organisation that is authorised in halal matters (Kamins and Marks, 1991). It is a mark of trust on products considered permissible for use and consumption by Muslims (Tumin, 2004). The use of halal logo is effective to develop the subjects’ perceptions of a certain brand or product (Kamins and Marks, 1991).

According to Harran and Low (2008), halal logo has now become a symbol of quality and religious compliance and there is a need to ensure the halal status of products. Muslim consumers search for food products with the halal logo when making purchase decisions to ensure that the products comply with Islamic law (Quran; Riaz, 2004), especially when dealing with the labelling of ingredients in food products which usually causes conflict among Muslims, for example the E-code on food products (Wan Mohamad Sheikh Abdul Aziz, 2010).

Due to the conflicts among Muslims, the government of Malaysia initiated and has been at the forefront of halal logo and certification since 1974 (Melati Ariff, 2010). Malaysia is the pioneer country to recognise halal logo and is the leading authority on halal certification, auditing the halal standards, halal research, and halal training (Melati Ariff, 2010; Zainalabidin Mohamed, Golnaz Rezai, and Mad Nasir Shamsudin, 2008). The government of Malaysia has endorsed several guidelines with regards to the protection of halal food products. An example of the guidelines that have been endorsed in Malaysia are as stated in Table 2.16.

Since then, halal logo has expanded globally and is not the sole property of Muslims realm (Wan Mohamad Sheikh Abdul Aziz, 2010). The awareness of halal logo has made the producers and marketers realise the importance of halal certification (Melati Ariff, 2010; Zainalabidin Mohamed, Golnaz Rezai, and Mad Nasir Shamsudin, 2008). With halal logo, it is possible to select food without any doubt as to its halal status (Wan Mohamad Sheikh Abdul Aziz, 2010). Previously, halal sensitivity had been firmly rooted and a cause of conflict among Muslims (Wan Mohamad Sheikh Abdul Aziz, 2010).

Table 2.16: The development of halal logo in Malaysia

| Year | The development of halal logo in Malaysia |
|-------------|--|
| 1974 | JAKIM has been in the forefront of halal recognition in the country |
| 1982 | The Malaysian government established a “Committee on Evaluation of Food, Drinks and Goods utilised by Muslims” under the Department of Islamic Development Malaysia (JAKIM 2007). The objective of establishing the committee was to check and instil halal consciousness among food producers, distributors, and importers by issuing halal logo and certification. |
| 2003 | The government has set up a committee to encourage the growth of the halal food industry in Malaysia and the international market by establishing halal Industry Development Corporation (HIDC). HIDC is responsible to develop Halal standards in order to protect the halal integrity. |
| 2006 | The government of Malaysia issued a unified halal logo by JAKIM. However, the respective State Islamic Religious Departments (JAIN) is still issuing the halal certificate. |
| 2012 | Streamline to only the halal logo issued by the Malaysian Islamic Development Department (JAKIM) is applicable and recognised throughout the country. |

Source: Zainalabidin Mohamed, Rezai Rezai, and Mad Nasir Shamsudin (2008)

Hence, conferring trust onto the factors in the halal food chain, such as farmers and food manufacturers, as well as the trust in advertisements and halal logo, compensates for the lack of knowledge and information they have about the cultivation and production process of halal food (Andersen, 1994). In this regard, the roles of information, knowledge and Sharia-approved are crucial in halal food choice (Rezai et al., 2012).

From the above discussion, halal logo is identified as a new marketing tool. The halal logo has become a necessity for producers in today's consumer-driven market, and has become a way to inform and to reassure Muslims about which food products are permissible to be patronised by Muslims (Shafie, 2006). The establishment of halal logo has succeeded in awakening the producers and marketers to produce higher quality halal food products and plays an important role in their purchase decision.

a. The effect of the importance of halal logo and consumer behaviour

In the past, Muslim consumers faced a great challenge to find halal food, and had no choice but to avoid foods that they did not recognize (Riaz and Chaudry, 2004). However, nowadays Muslims want a direct social and political involvement, and demand for halal-certified food products (Riaz and Chaudry, 2004). Halal certified and halal logo are perceived as the labels they can rely on in determining the halal status of a product (Zakaria, 2008). Muslims highly consider to purchase food products with halal logo as they can be assured that the products have been prepared in accordance with Islamic law and are fit for consumption (Zakaria, 2008; Shahidan, and Md. Nor, 2006).

Consumers usually have limited time and product knowledge, thus, halal logo is the best method to satisfy them when purchasing food products (Zakaria, 2008). Accordingly, they are more concerned about halal logo than carrying quality certification (Shahidan and Md. Nor, 2006; Nuradli et al., 2007). Therefore, marketers, food producers, halal certification authorisation body, and policy makers need a better understanding about halal food consumption and certification (Karijn Bonne, Vermeir, Bergeaud-Blackler, and Verbeke, 2007). Halal certification enhances the marketability of food products and is an image booster to meet the needs of Muslims (Kambiz Heidarzadeh Hanzaee and Mohammad Reza Ramezani, 2011).

Companies are able to grow their market share by opening up new niche market by undertaking halal certification and its logo (Regenstein, Chaudry, and Regenstein, 2003). The impact of this third party certification is dramatic, and the best example is the adoption of Kosher certificate has increased the market share of many companies (Joe M Regenstein, Chaudry, and Regenstein, 2003). The halal logo is able to enhance the confidence among Muslims and reduce scepticism. For example, the significant increase of customers of McDonald's in Singapore within only a year after obtaining halal certification (Lada et al., 2009). To adopt the certification, the participating companies in the halal market need to have some knowledge about the dietary laws.

Many Muslim countries like Brunei, Malaysia and Indonesia, and Arab countries in the Middle East or North Africa have also started importing food products from non-Muslim countries like Europe and China (Nakyinsige, Man, Sazili, Zulkifli, and Fatimah, 2012). Halal certification is now a necessary step to export or import food products. It is able to determine the profitability of companies (Joe M Regenstein et al., 2003).

On the other hand, Dali et al. (2007) posited that Muslim perception concerning halal logo on the products was positive and significant. Shaari (2010), in his study on dimensions within factors associated with the halal purchase intention, revealed that halal logo is important in choosing a product. The consumers perceived that halal logo is important regardless of which certification body or country issued the logo (Shaari, 2010). Another study was conducted in Malaysia to assess the process of decision-making among Muslim consumers when they shop for halal foods. The study found that Muslims were very concerned about their consumption, and, thus, the halal logo was the most important factor in deciding to purchase any food product. The halal logo affects the consumers' perception of a food product as searching for halal is a way for them to observe the teachings of Islam (Abdul, Ismail., Hashim, and Johari, 2009).

Despite the importance of halal logo, as mentioned by various researchers, Omar et al. (2008), in their study, revealed that a certified halal logo also has a negative effect on Muslims' attitudes. The state of Kelantan is known as the "Corridor of Mecca", as most of the population practice Islam as their way of life including complying with laws pertaining to food consumption. Thus, the halal logo seemed to be a non-issue as they assumed that all food products were halal. Therefore, they tend to ignore the importance of halal logo when purchasing any food products (Omar et al., 2008).

Next, Anir et al. (2008) investigated the intention of Malaysian Muslims to patronise restaurants that are guided by Sharia and in accordance with Islamic rules. The results showed that they always questioned the authenticity of halal certificate received by manufacturers, as well as the authentication of the logo. They were not convinced of the certificate issued and the logo used by manufacturers to claim that the products were halal (Anir et al., 2008).

The scenario of distrust that arises concerning the halal logo and certification has impact on the unsuccessful previous attempts (Ramdani, 2005). This scenario was due to the lack of consistent global halal standards and the different guidelines for certification (Bonne and Verbeke, 2008; Hanzaee et al., 2011). The food producers and marketers have a lack of understanding in respect of the food purchasing and consumption behaviour of Muslims (Ramdani, 2005). These problems are expected to soon become important food policy issues in many countries (Karijn Bonne, Vermeir, Bergeaud-Blackler, and Verbeke, 2007). In Malaysia, the government appointed JAKIM (Department of Islamic Development Malaysia) to be as the sole agent for the halal certification in Malaysia to manage and reduce public concerns over halal certification and logos (Rezai, Mohamed, and Shamsudin, 2012).

b. The relationship between Muslims' religiosity and the importance of halal Logo

The research conducted by Rezai (2008) investigated confidence in halal-labelled food. The findings showed that the majority of Muslims were concerned about halal food and the halal logo on food products. However, the results further indicated that with the intention to improve their religious convictions, a person will be more careful to check the halal status of food products (Rezai et al., 2012; Rezai, 2008).

Another study by Shafie et al. (2006) found that new generation of Muslims is more religious and had gained a higher understanding in respect of their religion. They argued that those who were religious would make sure that their food consumption was according to the Islamic dietary guidelines and that it had to be halal. To ensure the halal status of food products, checking the information label on food products is essential to ensure that they are permissible according to religion (Shafie et al., 2006).

Meanwhile, Mutsikiwa and Basera (2012) examined the impact of socio-cultural variables on the perception of halal food products in Zimbabwe, where Christians generally dominate the large population in Zimbabwe. The authors suggested that socio-cultural factors including religion had little effect on an individual consumer's perception concerning the consumption of halal logo food products. Therefore, the relationship between religion and a food product that carried the halal logo was not significant (Mutsikiwa and Basera, 2012).

Another study was carried out in Indonesia and Australia to look into the aspect of religiosity and products with the halal logo. The study suggested that religion influences purchasing a food product with the halal logo. Consequently, the study recommended the food producers to provide clear and standard information regarding halal food due to the rising consciousness of Muslim community towards their food consumption information regarding halal food (Jusmalian and Hanny Nasution, 2009).

Despite the growing halal awareness, the main challenge is the inconsistency in the food standard (Riaz, 2010). Not all countries are concerned about the standards for halal food. For example, Thailand and Australia have their own halal certification systems, but not in certain Muslim countries, such as Saudi Arabia (Hanzaee et al., 2011). In regard to this, the Malaysian Department of Islamic Development (JAKIM) reported that out of 74 international Islamic agencies recognised by JAKIM, only six bodies are from Arab countries (JAKIM, 2012) due to difference in the concept and definition of halal among Arab-Muslims and non-Arab Muslims (Jallad, 2009).

c. Research gap in literature of the importance of halal logo

The literature in the context of halal has shown that halal logo is an important tool to guide Muslims to make decisions on purchases. However, the relationship has not been tested empirically. However, few researchers explored the relationship between religiosity and the importance of halal logo. Thus, a study that compares Arab Muslims and non-Arab Muslims is encouraged to prove that the differences between ethnicity exists between the populations (Rizzo et al., 2007). It is critical for this study to achieve its objective to determine the dissimilarities between Arab Muslims and non-Arab Muslims regarding halal food. This study provides a new finding concerning halal perception among Arab Muslims and non-Arab Muslims in Australia and the United Kingdom. Thus, based on the discussion, the following hypotheses are proposed.

P1ei

There is a positive relationship between Muslims' religiosity and the product originated from Muslim countries among Arab Muslims and Non-Arab Muslims in the United Kingdom and Australia.

P1eii

There is a positive relationship between Muslims' religiosity and the product originated from Muslim countries among Arab Muslims in the United Kingdom and Australia.

There is a positive relationship between Muslims' religiosity and the product originated from Muslim countries among non-Arab Muslims in the United Kingdom and Australia.

P1eiii

There is a positive relationship between Muslims' religiosity and the product originated from Muslim countries among Arab Muslims and non-Arab Muslims in Australia.

There is a positive relationship between Muslims' religiosity and the product originated from Muslim countries among Arab Muslims and non-Arab Muslims in the United Kingdom.

2.7.6 Products originated from Muslim countries

The literature in the area of country-of-origin has been well established and recognised as having an essential role in the marketing element in order to influence consumers' perceptions and behaviour. Over the past three decades, numerous articles have observed a variety of aspects pertaining to country-of-origin. The aspect includes that preferences for products made in some countries are more than others (Cattin et al., 1982; Papadopoulos et al., 1987; Schooler, 1965).

In this case, there are many definitions of country-of-origin, for instance Bilkey and Nes (1982) defined it as "the country of manufacture or assembly". Another definition given is "made in" or "manufactured in" labels (Bannister and Saunders, 1978; Chasin and Jaffe, 1979; Nagashima, 1970; 1977). Next, Cateora and Graham (2005) defined country-of-origin as "any influence that the country of manufacturer,

assembly, or design has on a consumer's positive or negative perception of a product".

Table 2.17 lists down the definitions of country-of-origin.

Table 2.17: The definitions of country-of-origin

| Author (s) | Definitions |
|--|--|
| Bilkey and Nes (1982) | The country of manufacture or assembly |
| Bannister and Saunders (1978), Chasin and Jaffe (1979), and Nagashima (1977) | "Made in" or "manufactured in" labels |
| Cateora and Graham, (2005) | Any influence that the country of manufacturer, assembly, or design has on a consumer's positive or negative perception of a product |

There are also studies that found country-of-origin affects different perception on the country-of-origin cue (Papadopoulos et al., 1987; Stephens et al., 1985) and the type of product (Nagashima, 1970; Wall and Heslop, 1986). The country-of-origin has the role as an extrinsic cue in order to influence the perception of certain products (Pappu et al., 2006). Different countries have distinct perceptions and attitudes to products and their country-of-origin (Eves, Anita, and Cheng, Li 2007). It also provides guidance for the consumers' mind to process before purchasing any particular products (Aaker, 1991; Keller, 1993). The consumer's purchasing process may involve many factors, for example, quality, price, and product.

Country-of-origin is used as a cue concerning perceived quality and being willing to pay a premium for certain products from certain countries (Knight, Holdsworth, and Mather, 2007). For example, "made in Germany", "made in Switzerland", and "made in Japan" express the impression of the quality of reputation (Nagashima, 1977). The use of displaying country-of-origin at food labels by food companies is a traditional mechanism to increase consumers' perceptions of trust and confidence (Fotopoulos and Krystallis, 2003). Country-of-origin may also be an effective way to differentiate between the production standard that differs between countries (Hoffmann, 2000) and has become a quality cue in consumer evaluation that

is frequently graded as important by consumers when purchasing food products (Hoffmann, 2000). It is also somewhat important in food service and manufacturing (Knight et al., 2007). For example, in the United Kingdom, country-of-origin is vital in grabbing attention, especially in respect of specialty foods and ethnic food products (Knight et al., 2007).

In regard to this, ethnic foods, which include halal food, hold certain cultural traditions in terms of beliefs, attitudes, values, and behaviours (Carrus, Maria, and Caddeo, 2009) and the association of these food products with the country-of-origin has an important influence on their perceptions based on tradition and their trust in the products from that country (Knight et al., 2007). However, although halal food is a must to be consumed by Muslims, there are no empirical research that focus on halal food product and the influence if it comes from Muslim countries.

The literature of country-of-origin is obviously lack of studies that are specifically on products that originate from Muslim countries. Thus, product originated from Muslim countries is a construct which has been developed for the purpose of this study. This construct is based on the country-of-origin literature. Thus, the current study follows the epistemology and adopt the definition of products originated from Muslim countries as “products that have been manufactured in Muslim countries”. Therefore, this study attempts to determine the relationship between products originated from Muslim countries, religiosity, and the intention to purchase halal food products.

a. The effect of products originating from Muslim countries and consumer behaviour

The influence of country-of-origin on consumer behaviour has been studied in the marketing literature for many years (Wong and Polonsky, 2008). Country-of-origin can affect perception including perceived social status, store or product choice, perceived risk, product quality, and attitude towards a product or consumers’ purchase

intention (Kaynak et al., 2000; Wong and Polonsky, 2008). In the global market today, companies compete with manufacturers from different countries across the globe, hence when consumers are aware of products' country-of-origin, it affects the products or brand image (Olsen and Olsson, 2002). This is consistent with the definition of country-of-origin itself, "any influence that the country of manufacturer, assembly, or design has on a consumer's positive or negative perception of a product" (Cateora and Graham, 2005).

Roth and Rome (1992) opined that consumers understand about a specific country based on his or her recognition of the advantages and disadvantages of manufactured and marketed products from a specific country in the past. Global marketers know that buyers hold distinct beliefs about brands or products from different countries (Kotler, 2003; Johansson, 1989). Certain countries enjoy a reputation for certain goods (Bilkey and Nes, 1982) and even sometimes country-of-origin perception can encompass an entire country's products (Cattin et al., 1982). For example, the Chinese in Hong Kong perceive American products as prestigious, Japanese products as innovative, and Chinese products as cheap (Sum Siu et al., 1997). This shows that the more favourable a country's image, the more prominent the "made in..." label should be displayed.

Country-of-origin is important in relation to other extrinsic product cues (price and packaging), decision-making process, and, importantly, in purchase decision (Schnettler et al., 2008; Yi Lin et al., 2009). Country-of-origin has a significantly positive effect on consumers' purchase decisions (Yi Lin et al., 2009). Thus, it is suggested that producers or companies to have an appropriate marketing strategy when exporting to attract consumers' attention and increase their purchase intention (Yi Lin et al., 2009). This is because each country embraces its own unique business competitive strategy.

In the area of food study, country-of-origin plays an important part in the decision marketing process. It said to be more important than either the price or packaging in order to make decision to purchase products (Schnettler et al., 2008). This case is more relevant to Muslims since they are guided by Islamic rules. In response to this, one study by Bonne et al. (2007) investigated the determinants of halal meat consumption. The study revealed that respondents preferred to consume food and halal meat from their own country-of-origin. Meanwhile, Ahmed et al. (2004) focused on the attitude to low-involvement products, such as bread and coffee. The results indicated that country-of-origin or country's positive image is still important although among the low-involvement products.

In Indonesia, country-of-origin has a positive significance in explaining behavioural intention for fast food franchises (Salehudin, I. and Luthfi, 2010). Indonesian consumers in general are very careful when it comes to foreign fast food franchise. Halal certification is vital in their purchase decision. Without halal certification, consumers prefer to purchase from local franchises. This is consistent with a study conducted by Karijn Bonne and Verbeke (2007). They argued that Muslims consumers in France are very particular when purchasing food products due to the Islamic dietary guidelines. They prefer to shop at Muslim premises, local, and familiar shops or those owned by someone from buyers' home country (Karijn Bonne and Verbeke, 2007; Ahmed, 2008). This preference indicated that Muslim consumers prefer and intend to buy food produced by Muslim food producers (Karim, Rahman, and Ariffin, 2011)

In short, this shows that country-of-origin is an important factor in making purchase decision especially for the Muslims who are confined to halal dietary guidelines. (Regenstein, Chaudry, and Regenstein, 2003; Riaz, 2004). Muslim consumers prefer to purchase food products from Muslim producers, local, and familiar

shops or those owned by someone from the buyers' home country (Karim et al., 2011; Bonne and Verbeke, 2007; Ahmed, 2008).

b. The relationship between religiosity and products originating from Muslim countries

Religiosity is very much related to the lifestyle and shopping behaviour (Wilkes et al., 1986). It plays a significant role in influencing the decision to purchase. Religiosity also influences the evaluation of the country-of-origin of a product and leads to purchase intention. It is either negative or positive towards certain countries and affects consumer behaviour (Rehman et al., 2010). Sood and Nasu (1995) found that religiosity is significant in determining consumer behaviour. The study conducted a cross-cultural comparison study of the effects of religiosity on general purchasing behaviour between American Protestants and the Japanese. It was found that religiosity does influence the purchasing behaviour in that they either prefer a national brand or are open to buy foreign-made goods or products (Sood and Nasu, 1995).

In another study, Wilkes et al. (1986) found that the higher the religiosity, the lower the preference for national brand. Additionally, there was a study that examined the relationship between religiosity and the perception of purchasing foreign goods by young Muslims in Malaysia. A total of 250 samples were carried out to measure the relationship from young Muslims in the Klang Valley area. The findings showed that the higher the Muslims' religiosity, the lower the intention to purchase foreign products (Haque et al., 2011).

On the other hand, Muslim population in Turkey has significantly different perceptions of product attributes for the products coming from a particular country. The more religious ones tend to prefer buying local or national products (Kaynak and Kara, 2002). It was also found that products made in the United States, Japan, and Germany

are the most favoured country-of-origin among Muslims in Arab countries (Masood A. Badri, Donald L. Davis, and Donna F. Davis, 1992). Other than that, Muslims in Saudi Arabia have a more positive evaluation of products from the United States, Japan, Germany, Italy, United Kingdom, and France (Bhuiyan, 1997). They also acknowledge the excellent quality of Israeli products but dislike them due to religious stigma and issues (Obermiller and Eric Spangenberg, 1988). Thus, it is expected that Muslims' religiosity has a significant relationship with products originated from certain countries.

c. Research gap in the literature of products originating from Muslim countries

Previous research were limited to foreign products in Muslim countries and ignored the attitude of Muslims towards products originating from Muslim countries in non-Muslim countries (Bhuiyan, 1997; Bonne et al., 2007; Salehudin, I., and Luthfi, 2010). Furthermore, there is still a lack of study that focuses on religiosity and products originated from Muslim countries. The relationship between Muslims' religiosity and products originated from Muslim countries was suggested due to the different religious-based sentiments towards certain countries (Rehman et al., 2010). Based on this discussion, this study attempts to empirically study Muslim consumers' attitude towards products originating from Muslim countries.

This study compares the different perceptions between Arab-Muslims and non-Arab Muslims because there have been general misunderstanding that only Arabs represent Islam (Rabasa, 2004). Significant differences were found between Arab-Muslims and non-Arab Muslims (Rizzo et al., 2007; Bley et al., 2004; Rabasa, 2004), in that the non-Arab Muslims are deemed to be more secular compared to the Arab Muslims (Rabasa, 2004). Building on these observations, a study that compares Arab Muslims and non-Arab Muslims is encouraged to prove the differences between Arab Muslims and non-Arab Muslims in terms of the relationship between Muslims'

religiosity and products originated from Muslim countries (Rizzo et al., 2007).

Therefore, based on the above discussion, the following propositions are proposed:

P1ei

There is a positive relationship between Muslims' religiosity and products originated from Muslim countries among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia.

P1eii

There is a positive relationship between Muslims' religiosity and products originated from Muslim countries among Arab Muslims in the United Kingdom and Australia. There is a positive relationship between Muslims' religiosity and products originated from Muslim countries among non-Arab Muslims in the United Kingdom and Australia.

P1eiii

There is a positive relationship between Muslims' religiosity and products originated from Muslim countries among Arab Muslim and non-Arab Muslims in Australia.

There is a positive relationship between Muslims' religiosity and the product originated from Muslim countries among Arab Muslim and Non-Arab Muslims in the United Kingdom.

2.8 Intention to purchase halal Food products

As explained at the beginning of this thesis, the objective of this report is to examine the intention to purchase halal food products. For the current study, the intention to purchase halal food products is tested as dependent variable in the proposed model. Intention is instructions people give to themselves to behave in certain ways (Triandis, 1980). McTaggart (2008) defined intention as a purposeful plan to perform an action that leads to an outcome. Behavioural intention refers to a person's intention

to perform various behaviours. According to Fishbein and Ajzen (1975; 1977; 1980), behavioural intention measures the performance of any voluntary actions.

Purchase intention is the possibility of consumers purchasing certain products or brands (Dodd, 1991). Burton et al. (1998) defined it as the probability of purchasing products. It is the probability that consumers in a certain purchasing situation choose a certain brand of a product category (Crosno et al., 2009). Fishbein and Ajzen (1975) stated that intention is the best single predictor of an individual's behaviour, which measures his or her intention to perform that behaviour. Accordingly, marketers and manufacturers have exhibited a growing interest in understanding the factors that affect the intention to purchase halal food products, hence the study on behavioural intention towards halal food is no exception (Alserhan, 2010). Table 2.18 summarises the studies on behavioural intention towards purchasing halal food.

The framework for the study was developed based on the theory of reasoned action (Ajzen and Fishbein, 1980). The intention to purchase halal food products is the as the dependent variable. This is consistent with the original model, in which behavioural intention is a common and widely used construct that includes planning, expectation, and willingness to consume (Ajzen, 1991). The present study empirically tested the intention to purchase halal food products among Muslims, employed religiosity and five hypothetical constructs of halal perception. The proposed linkages are discussed in the next sub-section.

Table 2.18: Halal food studies employing theories of intention

| Study | Country | Findings |
|---|-----------|---|
| Shaari et. Al (2010) | Malaysia | This paper proposed and validated dimensions associated to intention to purchase halal products. The dimensions are Solidity, Certainty, Universal, Brand Association, Purity, Conformity, Halalness, Place & Distribution, and Knowledge. |
| Alam & Sayuti (2011) | Malaysia | This paper applied Theory of Planned Behavior (TPB) to identify the factors affecting halal food purchasing behavior of Malaysian . It was found that TPB have positive and significant influence on halal food purchasing intention. |
| Aziz (2012) | Malaysia | This paper aimed to determine the relationships between halal awareness, halal certification, food quality, marketing promotion and brand with intention to purchase halal products among the non-Muslim community in Malaysia. It was found that the studied determinant was positively related to purchase intention. |
| Canavari, Besheer, & Wandschneider (2011) | Italy | This paper reported the importance of halal certification or logo on food products in the Italy market. The logo will influence the intention to purchase halal food products. |
| Rezai, Abidin, Nasir, & Chiew (2010) | Malaysia | Non-Muslim are aware of the existence of Halal food, Halal principles and the advantages of Halal way in slaughtering the animals. The awareness will influence their intention to purchase halal food products. |
| Lada, Tanakinjal, & Amin (2008) | Malaysia | Theory of reasoned action (TRA) is a valid model in the prediction of the intention to choose halal products among Malaysian . |
| Mohamed Omar, Kamariah Nik Mat, Ahmed Imhemed & Mahdi Ahamed Ali (2012) | Malaysia | Theory of planned behaviour (TPB) is a valid model in the prediction of intention to purchase halal food products with the addition of consumer confidence. |
| Mukhtar & Butt (2012) | Pakistan | Theory of reasoned action (TRA) is a valid model in predicting intention to choose halal products with subjective norm appears to be the strongest of all the predictors for choosing Halal products. |
| Nahdi, Ismai , Haron, & Islam 2009) | Malaysia | The results show that there is a relationship between attitude, Subjective Norm, Perceived Behavior Control and Ambiance toward the intention to patronage Halal Restaurants. |
| Salehudin, I. and Luthfi (2010) | Indonesia | Theory of Planned Behavior (TPB) is not completely valid to explain both the behavioral intention of Muslim in Indonesia. Muslim consumer in Indonesia prefers to seek information about the Halal certification of a product and to cancel their purchase if the product did not have Halal certification. |

a. The relationship between halal knowledge and intention to purchase halal food products

The increase of annual sales in halal food products has shown that halal awareness and knowledge has increased globally (Rezai et al., 2010) due to various easy access information tools and because the consumers have become more smart and knowledgeable (Said, Hasan, and Musa, 2011; Shafie et al., 2008). Muslims are insisting on products of better quality and variety; therefore, they tend to be more careful in their purchase choice and decision (Said et al., 2011). However, the extent to which individuals consume halal food also depends on their knowledge about halal (Soesilawati, 2010).

The knowledge and understanding towards halal concept is a significant predictor towards intention to purchase halal food (Rezai et al., 2010). With the complexity of manufacturing system, being knowledgeable enables the consumer to search for products that meet halal guidelines (Hanzaee et al., 2011). Halal knowledge is very important not only for the consumer, but also to the manufacturers (Shafie et al., 2006). The manufacturers should have knowledge and understanding to enable them to produce innovative and genuine halal products (Shafie et al., 2006). The best example is the halal status of meat cannot be determined by the consumer. The meat processing industry and certifying authorities should bear the responsibility and have the integrity to uphold the halal status. The integrity can be instilled and equipped by having halal knowledge (Nakyinsige et al., 2012).

Although the relationship between halal knowledge and intention to purchase halal food products has been conceptually discussed by several researchers, however, empirical studies on the relationship are still scarce (Shafie et al., 2006; Jukaku, 2006; Bonne et al., 2008). Research that focus on the relationship between halal knowledge and the intention to purchase halal products was previously done by Shaari and Ariffin

(2010). They explored dimensions associated with the intention to purchase halal products, and the findings validated that knowledge on halal is the main element to influence the purchase intention among Muslims. The dimension of knowledge looked at education and/or information label, which consists of: i) product is prohibited to be eaten by Muslims; and ii) from which country the halal logo originated from. Therefore, it is important to have a solid knowledge and understanding of Islamic teachings so that one is confident to purchase halal products. Please refer Table 2.19

Table 2.19: Halal food studies employing theories of intention and intention to purchase halal food products

| Study | Country | Findings |
|---------------------------|----------------|---|
| Shaari and Ariffin (2010) | Malaysia | This paper validated that knowledge on halal is the main element to influence purchase intention among Muslims. |

However, knowledge between the consumers and manufacturers concerning the concept of halal food varies (Jukaku, 2006), therefore, the various knowledge and understanding may lead to many challenges and disadvantages. This certainly influences the way people perceive about halal food concept and impact the intention to purchase halal food products. This is apparently due to the fundamental problems that arise within the confines of halal food consumption (Jukaku, 2006; Bonne et al., 2009).

There are a few challenges in the halal market, which include the interpretation of halal, halal certification and regulatory issues, and Muslim diversification (Bonne, 2008; Ponting et al., 2008; Lawrence, 2000; Rabasa, 2004). Muslims also have different interpretations of halal due to different cultural ethnics and practices, beliefs, languages, among others (Rabasa, 2004). These are their blueprint.

Previous studies found significant differences between Arab-Muslims and non-Arab Muslims (Rizzo et al., 2007; Bley et al., 2004; Rabasa, 2004), where the non-Arab Muslims are deemed to be more secular compared to the Arab Muslim community

(Rabasa, 2004). This may be due to the differences in the concept and definition of halal since the concept was originally discovered and incepted in Arabic (Jallad, 2009).

Building on these observations, the present study seeks to establish the relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims. It is encouraged to prove that a difference exists between the populations (Rizzo et al., 2007). It is critical for this study to achieve its objective to determine the dissimilarities between Arab Muslims and non-Arab Muslims regarding halal food. This study provides a new finding concerning halal perceptions among Arab Muslims and non-Arab Muslims in Australia and the United Kingdom. Thus, based on the discussion, the following hypotheses are proposed:

P2ai

There is a positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia.

P2aii

There is a positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims in the United Kingdom and Australia.

There is a positive relationship between halal knowledge and the intention to purchase halal food products among non-Arab Muslims in the United Kingdom and Australia.

P2aiii

There is a positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia.

There is a positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom.

b. The relationship between halal consciousness and intention to purchase halal food products

Islam is the world's second largest religion and is considered as the fastest growing religion with an increased awareness among Muslims to uphold the tenets of their religion (Alserhan, 2010). In this case, halal consciousness among Muslim consumers has also increased (Fischer, 2008). It was reported that the higher the Muslims' religiosity, the higher their halal consciousness would be (Shafie et al., 2006). Furthermore, according to Fischer (2008), the interest in halal food consumption has increased significantly, and the growing purchasing power of Muslims globally has increased the consumption of halal foods (Nakyinsige, 2012).

In response to this phenomenon, Muslim consumers tend to be extra careful before purchasing products that satisfy Islamic guidelines and requirements to provide them with "peace of mind" (Shafie et al., 2006). A study on Muslim consumers in Singapore found that generally Muslims with higher level of religiosity are also halal-conscious (Nasir et al., 2008). Thus, they are engaged in defensive strategies to accommodate their religious obligations, for instance, they only dine at halal outlets or halal-certified restaurants (Nasir et al., 2008).

Meanwhile, in Indonesia, Muslims in Banten, Indonesia are relatively halal-conscious and this obviously affects their behaviour in the consumption of halal food. It was found that respondents had a high level of halal consciousness and were very much concerned about halal and haram food. The respondents were very selective about

processed foods, especially meat-based food products. They placed high priority on halal issue and the intent to purchase only halal food products (Soesilowati, 2010).

Additionally, being halal-conscious was also practiced by Muslim consumers in Muslim-minority countries. Mukhtar and Butt (2012) argued that they have a very positive attitude towards halal products and this influences their intention to purchase halal products. Accordingly, marketers and food manufacturers are encouraged to design marketing campaigns that focus on enhancing the quality of halal food products to accommodate the halal-conscious Muslim consumers (Mukhtar and Butt, 2012).

Although the important role of halal consciousness in determining purchase intention has been recognised in the marketing literature, the empirical results of this relationship are still limited (Aziz and Chok, 2013). This can be referred in Table 2.20. Therefore, this study focused only on Muslims in non-Muslim countries with Arab Muslims and non-Arab Muslims as respondents (Rizzo et al., 2007).

Table 2.20: Halal food studies employing the relationship between halal consciousness and intention to purchase halal food products

| Study | Country | Findings |
|---|----------------|---|
| Soesilawati et al. (2010) | Indonesia | Respondents had a high level of halal consciousness and were highly concerned about halal and haram food. |
| Nasir et al. (2010) | Singapore | Muslim consumers in Singapore had a high level of halal consciousness and they were engaged in “defensive strategies”. |
| Awan, H. M., & Haider, A. N. S. Z. (2015) | Pakistan | Muslims in non-Muslim countries were highly conscious and had a positive attitude towards halal products. This influenced their intention to purchase halal products. |

Based on the discussion, the following hypotheses are proposed.

P2bi

There is a positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia.

P2bii

There is a positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims in the United Kingdom and Australia.

There is a positive relationship between halal consciousness and the intention to purchase halal food products among non-Arab Muslims in the United Kingdom and Australia.

P2biii

There is a positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia.

There is a positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom.

c. The relationship between halal cautiousness and intention to purchase halal food products

The concept and how halal cautiousness is derived was explained in detail in the previous section. Halal cautiousness among Muslim consumers has increased due to several lawsuits against food manufacturers and their malpractices (Ahmad, Kadir and Salehudin, 2013), including non-Muslim manufacturers, ethics, and scams concerning the halal logo since there are frequent cases of abuse on halal logo. In addition, there is no strict enforcement in monitoring the use of halal-certified food (Rezai et al., 2012).

However, it is difficult for Muslim consumers to ensure the halal status of food products other than by looking for halal certificate and logo displayed (Ahmad et al., 2013). Moreover, the media have reported many fraud cases done by food manufacturers that actually make the Muslims become more cautious (Zakaria, 2008).

In reality, halal-cautious consumers will examine halal logo, label, and ingredients of every product (Rezai et al. 2012), however, there are also Muslim consumers who go beyond by observing the premises, hygiene, and purity of certain food products (Ahmad et al., 2013).

In the context of Islam, Muslims who are consistently cautious are considered to be more religious than those who do otherwise (Naziruddin Abdullah and M. Shabri Abd. Majid, 2003). It is indeed recommended for Muslims to be cautious and perform an investigation to ensure the halal status of a food product and try to minimise any doubts of uncertain foods (CAP, 2006). According to Hussaini and Sakr (1984), Muslims are supposed to check and judge the permissible and prohibitive nature of all ingredients of any particular food or drink before consumption. From this discussion, it is vital for Muslim consumers to be cautious before intending to purchase any food products.

Next, a study on cautious consumers was conducted by Dahalan (2008), which explored the respondents' cautiousness towards halal food. The results showed that more than half of his respondents were taking food consumption for granted, and that they were not careful or cautious when purchasing food products. However, Rezai et al. (2012) found that Muslim consumers were still cautious when purchasing halal food products even though the products carried halal logo. Table 2.21 illustrates the summary of halal food studies that employed the relationship between halal consciousness and the intention to purchase halal food products

Table 2.21: Halal food studies employing the relationship between halal consciousness and the intention to purchase halal food products

| Study | Country | Findings |
|---------------------|----------|--|
| Dahalan (2008) | Malaysia | Muslim consumers were not careful and cautious when purchasing halal food products. |
| Rezai et al. (2012) | Malaysia | Muslim consumer were cautious when purchasing halal food products although the products have already carried halal logo. |

This study focuses on Muslims in non-Muslim countries in which the respondents are Arab Muslims and non-Arab Muslims to verify the differences that exist between the populations (Mukhtar, 2012; Rizzo et al., 2007). It is critical for this study to achieve its objective, which is to determine the dissimilarities between Arab Muslims and non-Arab Muslims regarding halal food. It provides a new finding concerning halal perception among Arab Muslims and non-Arab Muslims in Australia and the United Kingdom. Thus, the following hypotheses are proposed:

P2ci

There is a positive relationship between halal cautiousness and the intention to purchase halal food products between Arab Muslims and non-Arab Muslims in the United Kingdom and Australia.

P2cii

There is a positive relationship between halal cautiousness and the intention to purchase halal food products among Arab Muslims in the United Kingdom and Australia.

There is a positive relationship between halal cautiousness and the intention to purchase halal food products among non-Arab Muslims in the United Kingdom and Australia.

P2ciii

There is a positive relationship between halal cautiousness and the intention to purchase halal food products between Arab Muslims and non-Arab Muslims in Australia.

There is a positive relationship between halal cautiousness and the intention to purchase halal food products between Arab Muslims and non-Arab Muslims in the United Kingdom.

d. The relationship between the importance of halal logo and the intention to purchase halal food products

Many food choice studies mediated between the importance of perception and the intention to purchase food products (Knight et al., 2007) like a new marketing paradigm, in which marketers can use the certification to differentiate their products in the current competitive environment. This includes halal food products, which have its own guidelines to obtain halal certification. Halal certification can be a means of marketing and branding strategy to promote halal food products and boost sales (Rajagopal, 2011).

On the other hand, Shaari (2009) observed the elements related to halal purchase intention. Findings showed that halal certification and logo were important in choosing a product and that the certification and logo were associated with the intention to purchase halal food products. The results were consistent with other authors, who found that the halal logo significantly influenced the intention to purchase halal products (Abdul Latiff, Mohamed, Rezai, and Kamaruzzaman, 2013; Aziz et al., 2013; Ahmad et al., 2013).

Next, it is important to note that the appreciation of halal logo is not limited to Muslims, but also to non-Muslims. Non-Muslims in Malaysia also accept the halal logo as a means of identifying a wholesome, healthy and pure food, thus influencing their intention to purchase halal food products (Phuah, Jusoh, Siong, and Mesbahi, 2013). Meanwhile, in Italy, which is a non-Muslim country, it was found that respondents were willing to purchase Italian traditional food products with halal logo. This showed that halal logo is a great tool for Muslims living in non-Muslim countries as a minority, and that they accept the logo despite religious and cultural differences (Canavari et al., 2011).

However, the importance of halal logo is viewed differently in Arab countries. Muslims in the UAE do not emphasise on halal logo when purchasing food products (Rajagopal, 2011). Nevertheless, the results were not surprising, as out of 74 international Islamic agencies recognised by JAKIM in Malaysia, only six bodies were from Arab countries (JAKIM, 2012). This may be due to the differences in the concept and definition of halal among the Arab-Muslims and non-Arab Muslims, and the adherence and requirements for halal food consumption (Bonne, 2006; Jallad, 2009). Furthermore, differences may occur because of different cultural backgrounds, and the way Muslims who live in predominantly Muslim countries may be distinct from Muslims who come from non-Muslim countries (Bergeaud-Blackler, 2001; Ababou, 2005; Bergeaud-Blackler and Bonne, 2006). Table 2.22 portrays the studies on the importance of halal logo and the intention to purchase halal food products.

Table 2.22: Study on the importance of halal Logo and the intention to purchase halal food products

| Study | Country | Findings |
|---|----------|---|
| Phuah, Jusoh, and Siong, Mesbahi (2013) | Malaysia | Non-Muslims recognising halal logo on the food products have higher intention to purchase halal food products. |
| Abdul Latiff, Mohamed, Rezai, and Kamaruzzaman (2013) | Malaysia | The food label (halal logo) significantly influenced consumers' intention to purchase halal food products. |
| Aziz et al. (2013) | Malaysia | Halal certification was positively related to purchase intention. |
| Ahmad et al. (2013) | Malaysia | There was a positive and significant correlation between the use of halal logo and intention to purchase halal food products. |

This study provides a new finding concerning halal perception among Arab Muslims and non-Arab Muslims in Australia and the United Kingdom towards halal food consumption. Therefore, the following propositions are followed.

P2di

There is a positive relationship between the importance of halal logo and the intention to purchase halal food products among Arab Muslims and Non-Arab Muslims in the United Kingdom and Australia.

P2dii

There is a positive relationship between the importance of halal logo and the intention to purchase halal food products among Arab Muslims in the United Kingdom and Australia.

There is a positive relationship between the importance of halal logo and the intention to purchase halal food products among Non-Arab Muslims in the United Kingdom and Australia.

P2diii

There is a positive relationship between the importance of halal logo and the intention to purchase halal food products among Arab Muslims and Non-Arab Muslims in Australia.

There is a positive relationship between the importance of halal logo and the intention to purchase halal food products among Arab Muslims and Non-Arab Muslims in the United Kingdom.

e. The relationship between products originated from Muslim countries and the intention to purchase halal food products

Halal food products that originate from Muslim countries could be described as Islamic brands because these products are Sharia-compliant and they are targeted at the Muslim consumers (Alserhan, 2011). Generally, consumers prefer to purchase halal products or brands based on the country-of-origin to boost their confidence in products compliant with Shari'ah (Alserhan, 2010, Tieman, 2011). Previous studies found that

Muslims were more careful in assessing the halal status of the food products by considering the country-of-origin of a particular product or brand (Rezai, 2012). However, there is a lack of literature concerning the relationship between products originated from Muslim countries and the intention to purchase halal food products. The studies that look into the relationship are shown in Table 2.23.

Table 2.23: Halal food studies employing the relationship between products originated from Muslim countries and the intention to purchase halal food products

| Study | Country | Findings |
|---|----------|--|
| Phuah, Jusoh, Siong, and Mesbahi (2013) | Malaysia | Non-Muslims recognising halal logo on the food products have higher intention to purchase halal food products. |
| Abdul Latiff, Mohamed, Rezai, and Kamaruzzaman (2013) | Malaysia | The food labelling (halal logo) significantly influenced consumers' intention to purchase halal food products. |
| Aziz et al. (2013) | Malaysia | Halal certification was positively related to purchase intention. |
| Ahmad et al. (2013) | Malaysia | There was a positive and significant correlation between the use of halal logo and intention to purchase halal products. |

According to a study in Indonesia, which is the biggest Muslim country in the world, the halal-conscious consumer segment was getting larger and they carefully choose what they consume. It was found that product origin is significant towards behavioural intention. The Muslim consumers look at the country-of-origin variable of the products (imported or local products) if the product has no halal labelling, indicating that the origin of a food product does play a role in the consumers' purchase decision (Sallehudin et al., 2010).

Next, Bonne et al. (2007) investigated the determinants of halal meat consumption within a Muslim migrant population. The data were collected through a survey of 576 Muslims who mainly originated from North Africa and were currently living in France. North Africa has populations that are approximately 95% Muslim or

greater. Muslims in France preferred to maintain their original dietary behaviour, which is halal food. They chose to purchase food from their country, which they trusted to be halal food and purchased halal meat that originally came from Muslim countries (Bonne et al.,2007).

Said et al. (2011) also explored the influence of country-of-origin on the perception towards consumers' intention to purchase halal food products among Muslim consumers in Malaysia. It was found that the country-of-origin of a product would have an effect on product evaluation and consumers' subsequent purchase behaviour. Thus, country-of-origin is a significant determinant for the Muslim consumer to purchase halal food (Said et al., 2011).

On the other hand, Esposito (1996) argued that halal and haram concepts may be understood differently from one person to the next because Islamic law was not built on a single and monolithic set of laws. Therefore, differences may occur because of different cultural backgrounds, and the way Muslims who live in predominantly Muslim countries may be distinct from Muslims who come from non-Muslim countries (Limage, 2000; Bergeaud-Blackler, 2001; Saint-Blancat, 2004; Ababou, 2005; Bergeaud-Blackler and Bonne, 2006).

Building on the discussion, the present study seeks to establish the relationship between products originated from Muslim countries and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims. It is encouraged to prove that a difference exists between the populations (Rizzo et al., 2007). This study produces a new finding concerning halal perception among Arab Muslims and non-Arab Muslims in Australia and the United Kingdom. Thus, based on the above discussion, the following hypotheses are is proposed.

P2ei

There is a positive relationship between products originated from Muslim countries and the intention to purchase halal food products between Arab Muslims and non-Arab Muslims in the United Kingdom and Australia.

P2eii

There is a positive relationship between products originated from Muslim countries and the intention to purchase halal food products among Arab Muslims in the United Kingdom and Australia.

There is a positive relationship between products originated from Muslim countries and the intention to purchase halal food products between non-Arab Muslims in the United Kingdom and Australia.

P2eiii

There is a positive relationship between products originated from Muslim countries and the intention to purchase halal food products between Arab Muslims and non-Arab Muslims in Australia.

There is a positive relationship between products originated from Muslim countries and the intention to purchase halal food products between Arab Muslims and non-Arab Muslims in the United Kingdom.

f. The relationship between Muslims' religiosity and the intention to purchase halal food products

As discussed previously in this study, the food consumption of Muslims is different to other religions. Muslims follow a certain set of religious guidelines, which influence the behavioural intention and decision-making. However, the adherence to halal consumption depends on the perceptions of the consumer's religious beliefs and religious commitment (Salman and Siddiqui, 2011). The religious commitment is

found to be a very important factor that influences the intention to purchase halal food products (Mahdi Borzooei and Maryam Asgari, 2013).

Recently, although many researchers have discussed the concept of religiosity and halal food consumption, with reference to Table 3.17, very limited studies have conducted empirical research on that particular subject. Among such researchers, Bonne et al. (2007) performed a study on the determinants of halal meat consumption among the Muslim migrant population in France. This study was among the initial studies investigating the relationship between Muslims' religiosity and the intention to purchase halal food products using the theory of planned behaviour (TPB). It was found that the Muslims in France who uphold Islam as their way of life prefer food from their country of origin. They trust the halal status of food products originated from their own country as they perceived that the religious guidelines are important to follow (Bonne et al., 2007).

In Belgium, Bonne et al. (2009) investigated the Muslim migrant population and the impact of religion on halal meat consumption decision. The study looked at the validity of TPB in explaining halal consumption decisions among Muslim consumers in Belgium. The findings of this study indicated that, undeniably, religiosity affected the intention to purchase halal food products. They focused on upholding the halal consumption, and could be influenced by the opinion of other Muslims in their daily food consumption.

Another study that looked at the relationship between Muslims' religiosity and the intention to purchase halal food products was in Pakistan. The study used the theory of reasoned action (TRA) and found that it is a valid model in predicting the intention to purchase halal food products. The findings showed that personal Muslims' religiosity positively influences the attitude towards halal products, and, thus, affects the intention to purchase halal food products (Mukhtar and Butt, 2013).

Meanwhile, in Indonesia, the level of personal Muslims' religiosity and its relationship with behavioural intention to consume halal food have also been examined. Individual religiosity have become part of their self-identity as Muslims, and thus determined their intention to consume halal food products. The findings indicated that the higher the degree of respondent's religiosity, the greater their concern to consume halal food. The study also found that respondents with an Islamic education background tend to be more careful about their halal food consumption (Soesilowati, 2011).

Therefore, it can be assumed that Muslims' religiosity does play a role in the intention to purchase halal food products. Nevertheless, the studies are limited to a few countries and ethnicities. Based on research, Muslim consumers in Muslim countries were very cautious when making purchase decisions compared to those in Western or secular cohorts (Muhamad and Mizerski, 2013). As previously discussed, the non-Arab Muslims are deemed to be more secular compared to the Arab Muslim community (Rabasa, 2004). This can be referred to Table 2.24.

Table 2.24: Halal food studies employing the relationship between Muslims' religiosity and the intention to purchase halal food products

| Study | Country | Findings |
|-------------------------|-----------|--|
| Bonne et al. (2007) | France | Muslims in France have the intention to purchase halal food products as they perceived that the religious guideline is important to follow. |
| Bonne et al. (2009) | Belgium | Religiosity undeniably affected the intention to purchase halal food products. |
| Mukhtar and Butt (2013) | Pakistan | Muslims' religiosity positively influenced the attitude towards halal products and thus affecting the intention to purchase halal food products. |
| Soesilowati (2011) | Indonesia | Individuals' religiosity have become part of respondents' self-identity as a Muslim and thus determining their intention to consume halal food products. |

2.9 Proposed research framework

In view of the previous discussion, the researcher proposed the integration of theories in the proposed model as presented in Figure 2.5. The following sets of constructs were incorporated into the model due to their prevalence in the literature and their use in describing the basic process of halal food consumption. They are religiosity, halal knowledge, halal consciousness, halal cautiousness, the importance of halal logo, and products originated from Muslim countries.

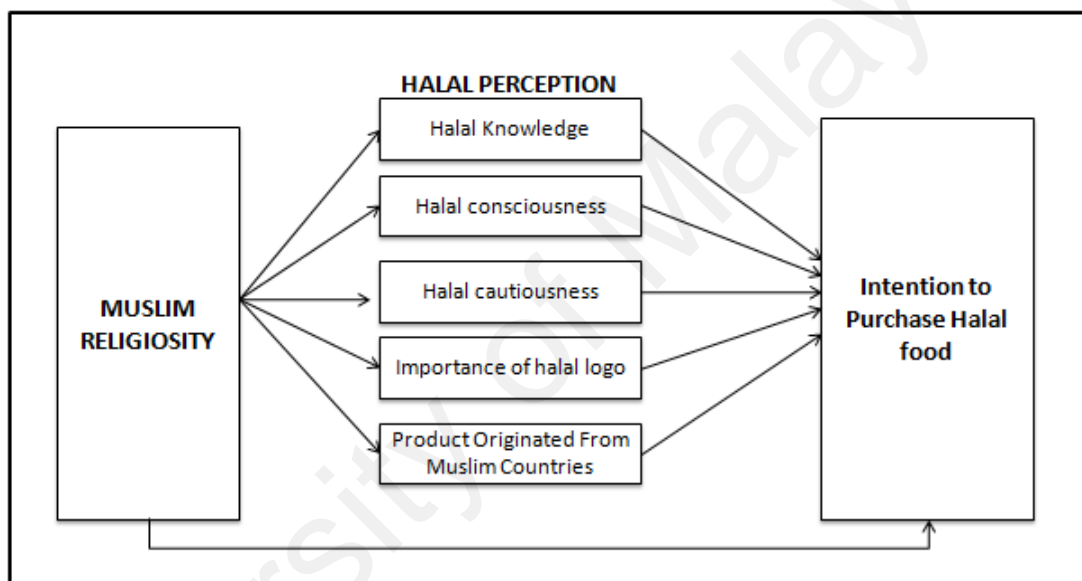


Figure 2.5: The integration of theories in the proposed model

The framework is developed based on the theory of reasoned action (Ajzen and Fishbein, 1980) as external variables. Previous empirical evidence provided support for the effects of religion on purchase intention and other consumer behaviour (Hirschman 1983; Wilkes, Burnett and Howell 1986; McDaniel and Burnett 1990; Delener 1990a, 1994; Bailey and Sood 1993; Sood and Nasu 1995; Siguaw and Simpson 1997; Essoo and Dibb, 2004).

The inclusion of other constructs is in accordance with the relevance to Islamic dietary laws and practices for a better understanding of halal food consumption.

Rationally, as explained in the earlier part of this thesis, based on the concept of halal food consumption, Muslims need to be selective in their food choices (Hussaini, 1984). Moreover, halal food consumption is rooted in Islam as a religion. Therefore, religiosity is likely to have a positive effect on consumers' perception and consumer behaviour (Delener, 1994; Wilkes, Burnett and Howell, 1986).

Consistent with the theory of reasoned action by Ajzen (1980), the religious construct is treated as the external variable. This is shown in the upper left portion of the model. It is proposed that the religiosity construct has a relationship with the five hypothetical constructs of halal perception, which includes halal knowledge, halal consciousness, halal cautiousness, the importance of halal logo, and products originated from Muslim countries.

The middle and right portion of the model presents relationships among the five constructs of halal perception and purchase intention of halal food products. Halal knowledge, halal consciousness, halal cautiousness, the importance of halal logo and products originated from Muslim countries have been proposed to have a direct influence on the purchase intention of halal food products.

Future research is recommended in halal perception and areas that are important for Muslim consumer behaviour (Mohd, N. and Abang, S., 2016, Wilson 2012). Furthermore, it is noticed that very few empirical research has been done on the influence of halal perception towards the intention to purchase halal food products (Mohd, N., Abang, S., and Abang, S., 2016; Bonne, 2008). This should be advantageous to marketers to understand halal concept and strategize among the Muslim community. Furthermore, no study currently exist that provides a model that include Muslims' religiosity, the constructs that labelled as halal perception, and the influence towards halal food products. Hence, the study examines halal perception to

confirm the difference halal perception between Muslim and non-Muslim countries (Tieman 2013; Aziz et al, 2013).

The proposed relationships are based on previous studies, which have recommended a modification of Ajzen's model (Saba et al., 1999; Bagozzi, 1990). According to Saba et al. (1999), several studies have suggested a modification of Fishbein and Ajzen's theory of reasoned action. This includes other determinants of behaviour in order to increase the predictive power of the model. Food choice behaviour is no exception because the complex phenomenon is influenced by a wide range of variables (Saba et al., 1999).

Consistent with Aziz and Chok, 2016 and Varinli et. al, 2016, the theory is modified because this study incorporated some of the basic assumptions of variables that are deemed to be important to influence the intention to purchase halal food products. Similarly, Bonne and Verbeke (2008) suggested a specific set of predictors for Muslim consumption and to include other variables. Therefore, this study includes five constructs in order to determine the impact on the purchase intention of halal food products.

The inclusion of religiosity and the five constructs as mediating variables in the halal food consumption model provides an understanding concerning the Islamic dietary concept. Furthermore, it has been suggested that there are mediating variables that influence the intention to purchase halal food products among Muslims (Lada et al., 2009; Bonne and Verbeke, 2007).

2.10 Conclusion

This chapter has focused on the behavioural intention in food consumption, which covers the study on behavioural intention towards purchasing halal food, theories of behavioural intention, and halal food studies employing theories of intention. This

chapter discussed about Muslim population and populations in the United Kingdom and Australia with a brief discussion about global halal food market and halal market in the United Kingdom and Australia. Subsequently, the chapter explained the constructs being studied and the proposed relationship. Finally, propositions for the study were also presented based on the relationships developed between the related constructs.

University of Malaya

CHAPTER 3 : METHODOLOGY AND RESEARCH DESIGN

3.1 Introduction

This chapter discusses the research methodology and research design for this study. The discussion starts with the research design followed by the procedure for developing the halal perception constructs. There are five constructs under halal perception, which consist of halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries. This chapter also discusses the data collection and data analysis used for the study.

3.2 Research Design

This study was designed to follow the official layout of the planned marketing research activity for management (Hair, 2010, p. 93). It covers the research problem, approach, research design, data collection methods, data analysis method and reporting methods. The steps of the marketing research process include the elements of literature review, research design, data collection, data analysis, and conclusions.

According to Sekaran (2003), research design is a plan of what data to gather, from whom, how and when to collect, and how to analyse the data obtained so that the hypotheses can be tested properly. Malhotra (2005) defined research design as a framework or blueprint for conducting the research project that specifies the details of the procedures necessary for obtaining the information needed to structure and solve the research problems. Zikmund (2000) defined research design as a master plan specifying the methods and procedures for collecting and analysing the needed information.

Research can be classified into two categories, quantitative and qualitative research. Both categories are equally justifiable, and to find the suitable methodology is quite challenging. According to Malhotra (2004), qualitative is an unstructured,

exploratory research methodology based on small samples that provide insights into the problem setting, while quantitative research quantifies data and applies statistical techniques (Malhotra, 2004). The quantitative proof of the causal nature of the variables cannot be investigated by the qualitative research. It values objective observation, precise measurement, statistical analysis and variable truth. The hallmarks of a good quantitative approach are reliability and validity.

This study uses mixed methods in which both qualitative and quantitative are utilized. This study has been designed to utilise two methods, qualitative and quantitative. This method is also called triangulation (Denzin, 1978: p. 291). Triangulation uses multiple techniques within a given method to gather the data and its interpretation (Jick, 1979). Triangulation is feasible and is an excellent way to obtain the benefits of both qualitative and quantitative methods (Olsen, 2004).

Triangulation can certainly improve the credibility of scientific knowledge by improving both the internal consistency and generalizability through combining both the quantitative and qualitative methods in the same study. Among the advantages of the triangulation methodology in research are the validation of the qualitative results by quantitative studies and the researcher's confidence with the results.

The qualitative study for this research consists of in-depth focus group discussions and individual interviews. The combination of FGDs and interviews has its advantages. It is important to discover the scope of halal perception from the FGDs (Morgan, 1996). FGDs are particularly useful when there is a power dissimilarity among the participants to explore the degree of consensus on a given topic (Morgan and Kreuger 1993), and are used to collect information through group interaction on a determined topic (Morgan, 1996).

Meanwhile, the individual interviews seek to describe the meanings of the selected subjects (Kvale, 1996), and identify the experiences of participants through

which the interviewer can pursue in-depth information around the topic (McNamara, 1999). Therefore, the FGDs and individual interviews provide the foundation for this study.

The second method is the quantitative research in which data are obtained from the primary source. This refers to the data, which are collected straight from the original source for a particular reason. The primary data used for this research were obtained through questionnaires to the chosen respondents. This is explained further in the next chapter.

Based on the above discussion, it is essential for the current study to use triangulation methods. This is appropriate since the current study developed constructs and measurements for halal perception. However, there are disadvantages of utilizing this method. Among the disadvantages are time and cost consumption, and difficulties in handling the data.

3.3 Sampling Design

This subsection will discuss qualitative and quantitative sampling design for the study.

3.3.1 Qualitative Sampling Design

This research started with the qualitative part through the collection of primary data from the individual focus group discussions and interviews. Four focus group discussions (FGDs) and four individual interviews were conducted following the most common rule of thumb. With the qualitative approach, high face validity and fast results can be assembled through the consistency in responses recorded during several repetitive focus groups.

In the qualitative method, the focus group discussions served as a preliminary step prior to conducting the quantitative method, in particular, surveys. The focus group findings were then used as a design and guideline in preparing the content of the questionnaire (Morgan, 1996). The main purpose was to decide and confirm the constructs and validity of the dimensions since the model and the constructs for halal perception were self-developed.

The data for qualitative research for this study were collected within three months. The participants were selected based on their willingness to provide information. According to Cavana et al. (2008), the participant's willingness is important as the information represents that of the target population (Cavana et al., 2008). The participants for the qualitative research of the current study were selected based on the purposive sampling approach. The approach of the non-probability methods is said to have an advantage to access participants to provide rich information. The approach basically involves collecting information from the population members who are conveniently available to give it (Cavana et al., 2008).

It has been argued that the issue of representativeness is less important in qualitative research than in quantitative research because its focus is to obtain an in-depth analysis. For example, according to Malhotra (2007, p. 140), groups of less than eight are not likely to drive the group dynamics. Smaller groups are probably better when the participants are interested in the subject (Cavana et al., 2008, p. 155). Nevertheless, groups with twelve or more participants are too crowded and may not be conducive (Malhotra, 2007, p. 140). Larger groups require the ability to manage the group discussion (Cavana et al., 2008, p. 155). Therefore, the rule of thumb range is between eight and twelve members (Malhotra, 2007, p. 140) or six and nine (Cavana et al., 2008, p. 155).

Based on the above discussions, the rule of thumb for interview participants is between six and twelve members. The purposive approach was deemed to be a good method. Moreover, the current study investigates and develops new instruments for halal perception. This is perhaps the best way of collecting basic information rapidly and efficiently (Cavana et al., 2008).

3.3.2 Quantitative Sampling Design

Sekaran (2003) defined the unit of analysis as the level of aggregation of the data collected during the subsequent data analysis stage. In business research, it often deals with the choice of testing relationships between individuals" (people) perceptions versus between organizations. It is necessary to decide on the unit of analysis since the data collection method, sample size, and even the variables included in the framework may sometimes be determined or guided by the level by which data are aggregated for analysis (Sekaran, 2003).

This study was conducted by employing Muslims as the unit of analysis. Here, the unit of analysis is the individual. The target population is Muslim adults, over 18 years old in the general population. The sampling technique is quota sampling. Data were collected from Muslims from cities in the United Kingdom and Australia. This was in an effort to provide generalisable evidence from different ethnicities concerning the factors influencing halal food consumption as well as to be representative of the Arab Muslim and non-Arab Muslim community. The main data collection consists of a target of 1000 respondents. The populations of interest are Arab Muslims and non-Arab Muslims in the United Kingdom and Australia.

This study utilizes the non-probability quota sampling method using the self-administered and drop off techniques. Cross-sectional data were collected through a survey. The reasons for adopting this method were because of the lengthy questions,

time and cost limitations, as well as the geographical selection and the respondents chosen for the purpose of this study. The respondents were Muslims since the objective was to explain the determinants of halal food consumption. The countries and areas are shown in Table 3.1.

Table 3.1: Country and Area of Survey Sampling

| Country | Area |
|----------------|--------------------------------|
| United Kingdom | London, Manchester, Colchester |
| Australia | Perth, Melbourne |

An appropriate representation of gender and country was collected for this survey so as to ensure proper representation of the sample. According to Hair et al. (2010) and Mundfrom Shaw and Tian (2005), there are no common criteria in determining a specific sample size to be based on any statistical theory. However, recommendations from different sources vary greatly. According to Malhotra (2007), the requisite sample size depends on the factors or the projected data analysis techniques. Other examples are 3 to 20 times the number of variables used, or absolute numbers of 100 to 1000 (Mundfrom et al., 2005).

According to Hair et al. (2010), 100 is the practical minimum size for using SEM (Hair et al., 2010). Meanwhile, Cliff (1987) suggested a sample size of 150 for 40 variables (item statements) in a scale. Pallant (2005) suggested that the sample size should be at least five times the number of indicators for structural equation modeling using AMOS. Therefore, the calculation of sample size for this study is as below in Table 3.2.

Table 3.2: The Calculation of Sample Size for this Study

| | |
|---|------------------------------------|
| Total variables for the proposed model | Seven |
| Total indicators for the proposed model | 87 indicators |
| Total required sample size | $87 \times 5 = 435$ participants * |

*Sample size based on number of variables and number of indicators (Pallant, 2005)

From the above calculation, and based on the seven variables and 87 indicators in the proposed model, the total required sample size for the current study is 435. The variables are religiosity (20 indicators), halal knowledge (20 indicators), halal consciousness (10 indicators), halal cautiousness (9 indicators), the importance of the halal logo (10 indicators), products originating from Muslim countries (10 indicators), and, lastly, intention to purchase halal food product (8 indicators).

3.4 Data Collection

In the following subsections the discussion on qualitative and quantitative data collection are presented.

3.4.1 Qualitative Data Collection

The qualitative study for this research consisted of in-depth focus group discussions and individual interviews. The combination of FGDs and interviews has its advantages. It is important to discover the scope of halal perception from the FGDs (Morgan, 1996). In the qualitative method, focus group discussions served as preliminary capacity prior to conducting the quantitative method, in particular, surveys. The focus group findings were then used as a design and guideline in preparing the content of the questionnaire (Morgan, 1996). The quantitative survey was then conducted in order to verify the results of the qualitative research. The method and process of acquiring qualitative data for this study is presented in this subsection.

This research began with the use of the qualitative approach through the collection of primary data from the focus group discussions. Four focus group discussions were conducted in accordance with the most common rule of thumb suggested by previous literature. Since the model and most of the constructs were self-developed, it was vital to obtain a broader view on halal perception. With the qualitative approach, high face validity and fast results could be assembled through consistency in the responses recorded during several repetitive focus groups.

The participants of the focus groups discussion (FGDs) were Arab Muslims and non-Arab Muslims. Two groups were international PhD students currently studying in Malaysia in different areas of research. Another two groups were Malaysian students and non-students. The method used was the „purposive sampling method“ by contacting the participants through a phone call.

The participants in FGD 1 consisted of eight males from Saudi Arabia, Palestine, Yemen, Egypt and Sudan. The duration of FGD 1 was two hours. The participants for FGD 2 consisted of four males and three females from Iran. The duration of FGD 2 was one hour. FGD 3 consisted of four females and three males. The duration was 1 hour. FGD 4 consisted of seven males and the duration was one hour. All respondents were Muslim and the objective was to explain the determinants of halal food consumption (Table 3.3). A questionnaire guide was developed for the focus group discussion.

Table 3.3: Participation in the Focus Group Discussion

| Group | Country | Total | Duration |
|--------------------------|---|-------------------------|-----------------|
| FGD 1 (Arab Muslims) | Saudi Arabia Palestine Yemen Sudan | 8 (Males) | 2 hours |
| FGD 2 (Non-Arab Muslims) | Iran | 4 (Males) 3 (Female) | 1 hour |
| FGD 3 (Non-Arab Muslims) | Malaysia | 3 (Males) 4 (Female) | 1 hour |
| FGD 4 (Non-Arab Muslims) | Malaysia | 7 (Males) | 1 hour |

A pilot study was conducted on four colleagues to check the items of the semi-structured questions. The questions should be easily understood and sensible. Furthermore, the pilot study was to determine the length of the questions and to prepare probing questions. Another reason for the pilot study was to test the validity of the proposed questions. The participants were asked questions relating to why they consumed halal food. In addition, they were asked about the requirement before purchasing food products. This was followed by probing questions to discover in detail the specific range of halal perception and consumption.

Apart from the FGDs, this study conducted interviews. A total of four interviews were conducted. The interview sessions were conducted in the Klang Valley. Two of the interviewees were Arab Muslims and the other two were non-Arab Muslims (Table 3.4). The purpose of conducting semi-structured interviews was to acquire individual in-depth information. It was to further explore and identify a range of halal perceptions. Table 3.5 shows the interview guideline questions.

Table 3.4: The Participation of the Interview Sessions

| Interviewees | Country | Duration |
|---------------------|----------------|-----------------|
| Male (Arab Muslim) | Yemen | 1 hour |
| Male (Arab Muslim) | Egypt | 1 hour |
| Male (Arab Muslim) | Malaysia | 45 minutes hour |
| Male (Arab Muslim) | Malaysia | 1 hour |

Table 3.5: Semi-Structured Questions for Interviews

| INTERVIEW SEMI STRUCTURED QUESTION |
|--|
| What do you understand by the term halal? |
| What are the criteria before a product can be considered halal? |
| What are the determinants to purchase halal food products? |
| What are the strategies when you want to purchase food products? |
| What are the strategies to minimize the consumption of non-halal products? |

All FGDs and interview sessions were recorded. The demographic information of the participants was asked during the sessions. The digital recordings of the interviews

were transcribed into text. This study targeted to discontinue conducting in-depth interviews when the participants gave no additional information. From the interviews and FGDs, items were generated to develop the measures for halal perception. The items generated as a result of the FGDs and interviews provided the opportunity to develop the measures for the halal perception constructs.

3.4.2 Quantitative Data Collection

The second stage of the research technique utilized to collect data for this study was a structured questionnaire. Data were collected from the respondents using the self-administered questionnaire approach. A self-administered questionnaire is appropriate for the present study for several reasons. First, it is a relatively cheap method that can enhance the response rate (Sekaran, 2003). Second, the scale used is easy to understand and manage. Third, it gives brief and clearly written instructions. Research assistants were employed to assist in data collection.

Prior to the actual fieldwork, a briefing was provided on the research purpose, objective, and procedure. The research assistants were trained to establish a rapport with the respondents and to encourage responses from them. Most importantly, all the research assistants were given a clear definition of all the constructs and specific terms used in the present study. All the respondents were informed that their participation in the study was voluntary and without any obligation, and that all the information and feedback provided would be kept confidential and only used for academic purposes. The research assistants were to first introduce themselves and explain the purpose of the survey to the prospective respondents.

The data for this study were collected using the self-administered survey and drop off method. This type of survey does not involve personal interviews, only a short briefing to the respondents about the questionnaire. The method was chosen to ensure a

higher response rate, and because it is flexible and efficient in respect of time and cost limitations. The respondents were given a contact number and address in the questionnaires should the respondents need further clarification. The respondents must be Muslim as the questions pertain to Muslim religiosity and halal consumption. The questionnaire took about 20 minutes to complete. The interviewer assured the anonymity of the respondent during the data collection.

The questionnaires were given to those respondents who agreed to participate in this research and the completed questionnaires were collected from the respondents on the spot. As a token of appreciation, a gift (worth approximately RM5 each) was given to each participant. Since the questionnaires were distributed outside Malaysia, a pen with 1Malaysia logo was given as a souvenir as well as to promote Malaysia overseas. Giving a token of appreciation was considered as an encouragement technique to increase the response rate.

The questionnaires were distributed over a period of five months. The survey was done in two countries, the United Kingdom (London, Manchester and Colchester) and Australia (Perth and Melbourne). Both of the countries, Australia and the United Kingdom, were chosen because of the significant proportion of Muslim population. Furthermore, the United Kingdom has been targeted in halal markets because of its high significant purchasing power (Agriculture and Agri Food of Canada, 2011), while the government of Australia is open and keen to be involved in the halal market and prioritizes the systems and the quality of the halal market (Z.M. Shariff, 2006). Respectively, this has given a major opportunity to the United Kingdom and Australia in the halal food market (Agriculture and Agri Food of Canada, 2011).

In addition, it is important to see the differences in the consumer situation in non-Muslim countries and the challenge to buy halal food. In non-Muslim countries, halal food is not easily available in many grocery stores and restaurants. As such, Muslims

generally employ certain strategies to minimize the consumption of non-halal products, such as buying food originating from Muslim countries or buying kosher food. In addition, the consumer resorts to examining the ingredients printed on the package.

3.5 Procedures for Developing the Halal Perception Constructs

As mentioned in the previous section, this study develops new constructs and instruments to measure halal perception. Halal perception consists of halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries. To develop an appropriate instrument to measure a particular construct in a research process, a researcher should follow a number of steps (Churchill, 1979, Malholtra, 2008). This study has closely followed the steps recommended by Churchill (1979), Malholtra (2008), and Chen and Paulraj (2004). The proposed steps in developing the new constructs are specifying the domain of the construct, generating sample of items, purifying the measures and continuous improvement cycle.

a. Specifying the Domain of the Construct

The initial step in the proposed procedure to develop a new measure is to specify the construct's domain. A comprehensive review of the literature is important when identifying the construct domain. It is suggested that it should be precise in its definition by delineating what it should and should not include. It is recommended to have a detailed statement of the reasons and indications of the newly developed measures (Churchill, 1979).

b. Generate Sample of Items

The next procedure to develop better measures is to generate items, which are confined within the specified domain. This stage follows the typical techniques in exploratory research, for example, literature searches and focus groups for item generation. This phase is important for developing a set of items that explore each of the dimensions of the specified construct. Next, is to focus on item editing. The wording for each of the compiled statements should be precise and not include double-barreled statements. In addition, the items have to be “socially acceptable” by the respondents. Once compiled and vigilantly edited, the items will be refined for actual data (Churchill, 1979).

c. Purify Measures

The suggested measure to ensure the internal consistency of the set of items is by checking the coefficient alpha. This will provide an assumption of the domain sampling model and ought to be the first measure to calculate and evaluate the quality of the instrument. A low score for the coefficient alpha indicates that the sample of items is poor and a high alpha indicates high correlation. Factor analysis is another suggested statistic to perform to purify the measures. After running factor analysis, it can be confirmed whether the number of dimensions conceptualized can be verified empirically (Churchill, 1979).

d. Continuous Improvement Cycle

According to Churchill (1979), the next step after purifying the measures is collecting data, assessing for reliability and validity, and then developing norms. This step was summarized by Chen and Paulraj (2004) as the continuous improvement cycle. The cycle includes testing for internal consistency using Cronbach’s Alpha, testing for

construct validity using exploratory factor analysis, and, lastly, testing for unidimensional, construct validity and discriminant validity using confirmatory factor analysis. The instrument can be used when the measure is considered as reliable and valid. The steps are reflected in Figure 3.1.

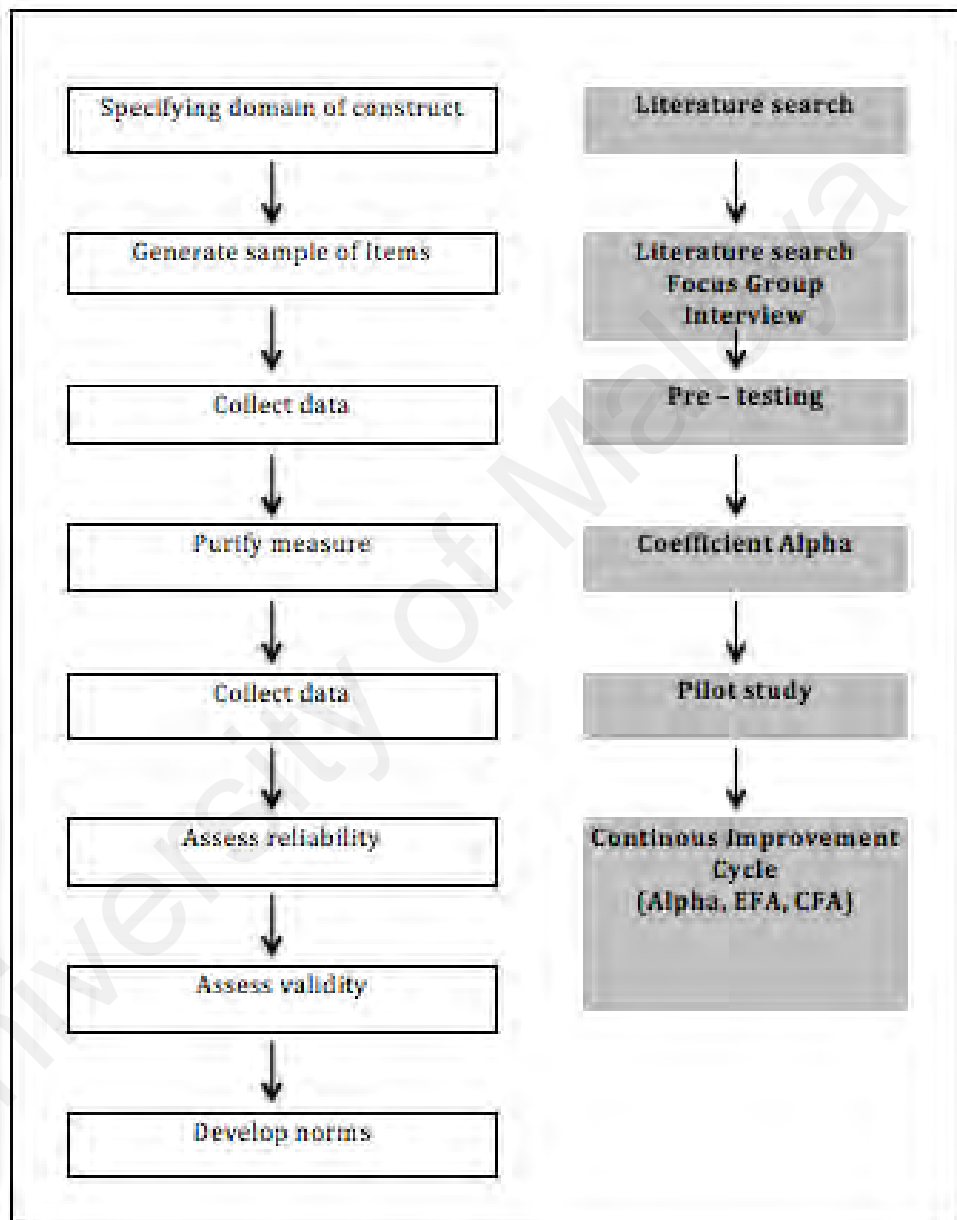


Figure 3.1: Procedures for Developing Constructs

From the literature, the study identified the halal perception domain of the halal perception constructs. Next, based on the literature and qualitative output, the study generated the items. A total of 59 items were generated from content analysis for halal

perception. The constructs under halal perception include halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries (figure 3.2). The constructs have been reviewed by experts (scholars and academicians) to give content validity to the items. This process seeks to see the relevance, clarity and conciseness of the items in measuring all of the constructs. Table 3.6 shows the items generated to measure halal perception constructs.

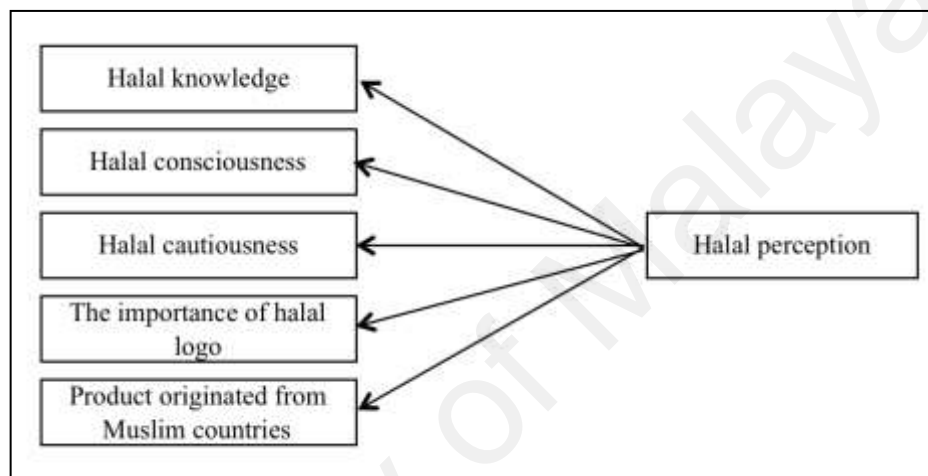


Figure 3.2: The Constructs for Halal Perception

Purifying the measures and continuous improvement cycle was done during the pre-test and pilot study for data and test reliability. The coefficient alpha is suggested to gauge the internal consistency of a set of items. It is recommended to be the first measure in order to evaluate the quality of the instrument. This chapter covers purifying the measures and the continuous improvement cycle stage.

Table 3.6: Items Generated for Halal Perception

| Constructs | Reference | Keywords | | Questions |
|---------------------|--|---|---------|---|
| Halal consciousness | Shafie (2006), Zakaria (2008), Nasir (2008). | Search for Halal logo | Cons 1 | I will always eat food products with Halal logo. |
| | | Halal is important and must eat Halal | Cons 2 | Eating Halal food is not important to me. |
| | | | Cons 3 | Eating Halal food is very important to me. |
| | | Commit sin | Cons 4 | I will always buy food products that come from Halal sources. |
| | | Will avoid from non-halal shelf. | Cons 5 | I will not purchase food if it is placed next to non-Halal food on the supermarket shelf. |
| | | Halal food consumption is Muslim responsibility | Cons 6 | I am concerned about my food consumption. It has to be Halal food. |
| | | Check the Ingredient | Cons 7 | If there is no Halal logo, I will always check the ingredients on the packaging of the processed food products. |
| | | Searching for Halal food | Cons 8 | As a Muslim, I have to consume only Halal food. |
| | | | Cons 9 | I consume only Halal food products. |
| | | Prefer to buy from Muslim seller or Muslim premises | Cons 10 | I will always buy meat from Muslim operated premises. |
| Halal Cautiousness | Hussaini and Sakr (1984), CAP (2006). | Being cautious especially new and unfamiliar products | Cau 1 | I am always cautious when purchasing food products to avoid eating Haram or questionable food. |
| | | | Cau 2 | I am usually extra cautious to ensure that products are Halal when buying new food products. |
| | | Look at the ingredient | Cau 3 | Investigating the ingredient of food products is generally a waste of time. |
| | | Check the premises | Cau 4 | I never buy food that I don't know to avoid the risk of buying non-Halal food. |
| | | Will not buying if doubted | Cau 5 | I will find alternative food products if I have doubts about the Halalness of the food products. |
| | | Familiar manufacturer and brand | Cau 6 | I will avoid buying any food products if I am not sure of the ingredients. |
| | | Seek for information | Cau 7 | I take the time to shop carefully for Halal food. |

Table 3.6: Continued

| Constructs | Reference | Keywords | | Questions |
|------------------------------|--------------------------------|--|--------|---|
| Halal Cautiousness | | Packaging | Cau 8 | I am always make careful purchase on food products to ensure the Halalness. |
| | | Seek for products that originated from Muslim countries | Cau 9 | I am always choosing food product that is made in Muslim countries. |
| The importance of Halal logo | Shaari (2009), Rezai (2010) | Indicator as Halalness | Logo 1 | When purchasing processed food products, the first thing I will ensure is that it has the Halal logo. |
| | | The halal logo is not important because they are expensive | Logo 2 | I do not mind paying extra to buy any food product with Halal Logo. |
| | | To relieve guilt | Logo 3 | I do not mind to buy food products without the Halal logo. |
| | | To Avoid doubt | Logo 4 | I buy food products with the Halal logo to avoid feeling doubtful about the Halalness. |
| | | To Avoid doubt | Logo 5 | I will search for the Halal Logo on the food product before purchasing the food product. |
| | | Easy way to search for halal product | Logo 6 | The Halal logo is important when deciding to buy any food products. |
| | | Confident with Halal logo | Logo 7 | The Halal logo is sufficient for me to feel confident when purchasing food products. |
| | | Trusted logo | Logo 8 | I trust food products with the Halal Logo and purchase it without doubt. |
| | | Halal logo is important due to time and information constraints | Logo 9 | I prefer to buy products with Halal logo. |
| Check the packaging | Logo 10 | I will definitely look at other cues (for example ingredients) before buying any food products without Halal logo. | | |

Table 3.6: Continued

| Constructs | Reference | Keywords | | Questions |
|--|---|--|--------|--|
| Product Originated From Muslim Countries | Bonne et. al (2007), Sallehudin et. al (2010) | Trust products which originated from Muslim countries | COO 1 | I trust the Halalness of food products originating from Muslim countries. |
| | | Will buy products from Muslim countries | COO 2 | I would prefer to purchase products manufactured in Muslim countries. |
| | | Trust food product which originated from Arab countries | COO 3 | My confidence level in purchasing food products will depend on whether the food products are manufactured in Muslim countries. |
| | | Prefer to purchase food product which originated from Arab countries | COO 4 | It is important for me to make sure the food products that I purchase come from Muslim countries. |
| | | | COO 5 | I am confident to buy food products that originate from Muslim countries. |
| | | Country-of-origin is more important than halal logo | COO 6 | It is important for me to check the country-of-origin before purchasing food products. |
| | | Look for the label of country of manufactured if there is no Halal Logo in the packaging | COO 7 | If the food products originate from a Muslim country, I will definitely purchase it without looking at other cues. |
| | | Halal logo is not important | COO 8 | It is not important to me to purchase food products that originate from Muslim countries. |
| | | Have no doubt on products which came from Arab countries | COO 9 | I do not hesitate to purchase food products that originate from Muslim countries. |
| | | Prefer countries with reliable logo for example Malaysia | COO 10 | Food products originating from Muslim countries are more reliable in terms of the Halalness. |

*According to keyword from qualitative phase are cross referred to literature

3.6 Questionnaire Development

The questionnaire was developed in accordance with Malholtra (2003) in which the aims of the questionnaire are to (i) ensure it is simple to administer, (ii) ensure the data obtained are reliable, and (iii) make a simple and straightforward coding, analysis and interpretation of data. These are the rules of thumb to reduce the failure of respondents to answer certain items in the questionnaire. To encourage the respondents to answer the questionnaire, the cover was made attractive through the use of colour and high quality paper.

The questionnaire consisted of 10 pages (please refer to Appendix A) excluding the cover page and took approximately 20 minutes for the respondents to complete. Two pages were allocated for the cover page and a letter to the respondents with instructions on answering the questionnaire and assurance concerning the confidentiality of the information obtained. The questionnaire was divided into five sections. Section A and Section C covered the items comprising the constructs proposed in the theoretical model. Instructions were clearly and precisely stated for each of the sections. Itemized scale ratings by means of Likert scales were employed for this questionnaire except for halal knowledge, which employed a knowledge scale.

The questions measuring the religiosity, halal perception and intention to purchase halal food products were mixed with each other and not grouped together according to the constructs. The purpose of mixing the questions was to ensure that the respondents read each line and answered each item of the question carefully, and to ensure the respondents answered without bias.

The first section of the questionnaire consisted of 20 questions for the respondents to respond to multiple-choice questions. These questions were intended to measure the respondent's knowledge concerning the concept of halal food. Only one answer was considered as correct. In the second section, the respondents were asked to label the

importance of halal when buying selected food products. A total of 29 food products were listed. Each respondent was asked to indicate their responses on the most appropriate column when purchasing those items using the given scale.

Section 3 of the questionnaire consisted of 87 statements to measure the seven constructs used in this study. The items were intended to measure the constructs of religiosity, halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo, products originating from Muslim countries and intention to purchase halal food. The fourth section of the questionnaire contained six questions requesting the respondents to answer based on their halal food-purchasing behaviour. The questions in this section were developed using multiple questions and ranking scale. In the last section, the respondents were asked to select the best answer that described them. In this subsection, the respondents were required to tick only one answer behaviour when buying food products. For the last section of the questionnaire, the respondents were asked to fill in information about themselves, for instance, gender, marital status and age. The scales employed were multiple choice and open-ended questions. The next subsection will discuss the measurement of the constructs used for this study.

3.7 Measurement of Constructs

This study tries to measure seven constructs. The constructs are Muslim religiosity, halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo, products originating from Muslim countries and intention to purchase halal food products. Five of the constructs were self-developed (halal knowledge, halal consciousness, halal cautiousness, the importance of halal knowledge and products originating from Muslim countries). The other two constructs were taken from the established literature (Muslim religiosity and intention to purchase halal food products).

Extensive reviews of the related literature have been made pertaining to the seven constructs. This study employed individual interviews, focus group discussions and a structured set of self-administered questionnaires for the data gathering process. The constructs for Muslim religiosity and the intention to purchase halal food products were taken from established measures. Halal perception, which includes halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries used self-developed instruments. (See Table 3.7).

Table 3.7: Self-developed Constructs (Halal Perception)

| Variable | Number of items | Sources |
|--|------------------------|-----------------|
| Halal Knowledge | 20 items | Newly developed |
| Halal Consciousness | 10 items | Newly developed |
| Halal Cautiousness | 9 items | Newly developed |
| The importance of Halal Logo | 10 items | Newly developed |
| Product Originated from Muslim countries | 10 items | Newly developed |

The vital part of this research is to develop the instruments for the constructs of halal perception. Although a large amount of literature has been published on the subject of halal, there are limited instruments to measure the halal perception. The literature for the constructs under halal perception is limited and there is no appropriate instrument that can be used to measure these constructs. This section will discuss the measurement of the constructs used in this research.

The list of questions for the constructs of halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries were based on previous literature, observations, focus group discussions and discussions with the halal expert from the Department of Islamic Development Malaysia (JAKIM). JAKIM has been the authorized body responsible for the standardization of halal certification since August 2009.

A discussion was held with the Assistant Director of the Halal Hub (Monitoring and Enforcing), Ustaz Mohd Amri bin Abdullah. He has worked in JAKIM for eight

years in the enforcement division to oversee the integrity of halal certification by conducting inspection and audits on companies in Malaysia. He has also been a speaker in many seminars conducted by the private and government sectors regarding halal matters.

Next, the listed questions for the constructs of halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries were summed up for the purpose of operationalization. These constructs were labeled as halal perception. A total of 59 items were generated from the qualitative analysis to capture halal perception. The list of items generated for halal perception was sent to a panel of experts for validity as they have deep knowledge concerning fiqh, halal, Muslim religiosity and marketing. Five experts were chosen to examine the list of items for the purpose of content validity (See Figure 3.3).

The list of questions was discussed individually with the experts. Comments and suggestions from the experts were noted in order to ensure the clarity of the items. From there, modifications were made to the initial list of the items.

1. Mr. Shahidan Shafie

Education: B. Sc. (South Carolina), MBA (South Carolina).

Position: Senior Lecturer at School of Management, University Science Malaysia

Mr. Shahidan Shafie was among the pioneer researcher on Halal area. He has written and spoken at many international and local conferences on Halal issues. Currently, he is pursuing his doctoral degree on Halal area.

2. Dr Sharifah Faridah bt Syed Alwi

Education: PhD in Marketing (Manchester Business School), Msc In Marketing, (Salford University, Salford, UK), Bsc In Business & Management (Salford University, Salford, UK)

Position: Senior Lecturer at Brunel Business School, Brunel University, London

Former Senior Lecturer at the Faculty of Business & Accountancy, University of Malaya, Malaysia. Dr Sharifah Faridah has written papers and her publication appears in top journals, e.g. European Journal of Marketing, Journal of Product & Brand Management, Journal of Brand Management and Corporate Reputation Review.

3. Associate Professor Ustazah Dr Anisah Abdul Ghani

Education: PhD University Of Malaya, MA, University Of Al-Azhar, Cairo, BA, Yayasan Pelajaran Tinggi Islam, Nilam Puri, University Of Malaya.

Position: Associate Professor of Department of Fiqh and Usul, Academy of Islamic Studies.

Senior Lecturer of Department of Fiqh and Usul, Academy of Islamic Studies

Former Head of Department of Fiqh and Usul (Akademi Pengajian Islam)

Former Advisory Committee member of the LEMBAGA URUSAN TABUNG HAJI

Former Academic Advisor of the KOLEJ ISLAM SELANGOR DARUL EHSAN (KISDAR), Academic Advisor

Ustazah Dr Anisah's areas of expertise are on Islamic consumerism and Fiqh al- ibadat. She has written and contributed her works on many academic journals and books on her specialized areas.

4. Mr. Dzulkifly bin Hashim

Position: Head of Laboratory, Products and Process Innovation, Halal Product Research Institute, University Putra Malaysia

Senior Lecturer at Faculty of Science and Food Technology.

Mr. Dzulkifly bin Hashim is an expert in the field of Food Engineering, Food Technology, Food Processing as well as Halal Product Processing and Innovation. He has written numerous articles and spoken on the various international and national forums, seminars and conferences. He has also achieved many awards on international and local expos and exhibitions.

5. Associate Profesor Dr. Rusnah Binti Muhamad

Education: PhD University Of Malaya, Msc, Stirling University, UK, Bacc (Hons), UM

Position : Associate Profesor at Department of Financial Accounting and Audit, UM

Appointed member Of Association Of Shariah Advisors In Islamic Finance Kuala Lumpur And Selangor (ASAS). Dr. Rusnah binti Muhammad is an expert of the field of Muslim religiosity area. She has written chapter in books, academic articles, and proceedings and spoken at many international and national conferences.

Figure 3.3: Profile of Experts Consulted to Assess the Content Validity of the Selected Construct

In addition to the halal perception constructs, the Muslim religiosity construct (20 items) and the intention to purchase halal food products construct (eight items) were

included. The instruments to measure Muslim religiosity and the intention to purchase halal food products constructs were adopted and adapted from established scales (See Table 3.8). The Muslim religiosity construct was taken from Khairul (2010), while the intention to purchase Halal food products was taken from Sabbe et al. (2008), Baker et al. (1977) and Dodd et al. (1991).

Table 3.8: Sources of Measurement Items

| Variable | Number of items | Sources |
|---|------------------------|--|
| Muslim Religiosity | 20 items | Khairul (2010) |
| Intention to Purchase Halal Food Products | 8 items | Sabbe et al. (2008) Baker et al. (1977) Dodd et al. (1991) |

All items from the constructs of Muslim religiosity, halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo, products originating from Muslim countries and the intention to purchase halal food products was listed. The questions were given to 20 respondents for the pre-test stage. This stage was to ensure the understanding of the respondents. Minor modifications were made in accordance with the feedback gained from the pre-test. The modifications were made based on the feedback.

Basically, the modification concerned the language and negatively worded questions. In sum, 87 scale items were used to measure the construct in the model.

The questionnaire was structured in such a way that the respondents would be able to answer it easily. The items comprised in Section A included the halal knowledge scale and using multiple-choice questions, while the set of questions in Sections B and C measured Muslim religiosity, halal perception and the intention to purchase halal food products. These sections were structured using the Likert format with a seven-point response scale. A Likert scale is a rating scale that requires the subject to indicate his or her degree of agreement or disagreement to a statement. In this type of questionnaire,

the respondents were given seven response choices. These selections provided the quantification of the participants' agreement or disagreement for each question item. Table 3.9 presents the designated quantification used in the questionnaires.

Table 3.9: Seven-Point Likert scale

| No | Item |
|----|-------------------|
| 1 | Strongly Disagree |
| 2 | Quite Disagree |
| 3 | Slightly Disagree |
| 4 | Moderate |
| 5 | Slightly agree |
| 6 | Quite Agree |
| 7 | Strongly agree |

3.7.1 Measuring the Muslim Religiosity Construct

It is stated in the literature that religion and religiosity are the key cultural elements that shape the behaviour and decisions to purchase (Assadi, 2003; Esso and Dibb, 2004; Delener, 1994; Wilkes, et al., 1986). According to Moklis (2006), it is difficult to construct a measurement for religiosity due to the sensitivity of the subject and methodological difficulties in obtaining valid and reliable data. There have been several discoveries concerning the relationship and measurement between religiosity and consumer behaviour (Wilkes et al., 1986, Delener, 1992, McDaniel et al., 1990).

In view of Muslim religiosity, Muslims are both instructed and obliged to consume halal food (Bonne et al., 2007). This will govern a Muslim individual's behaviour and decision to purchase halal food (Soesilowati, 2010). However, the scales used by McFarland (1984), which were designated specifically for Christianity, are not suitable for measuring the psychological aspects of Islam. This is for various reasons, for example, the gender of participants, what is applicable to ask men may not be so for women (Khraim, 2010).

Among the researchers who have produced measurements for Muslim religiosity are Wilde et al. (1997), Khraim (2010), Rusnah (2010) and Khairul (2010). Khraim (2010) tried to investigate different methods used in the measurement of religiosity. The scale included forty-one items to measure Islamic religiosity, which loaded significantly onto seven factors. The results indicated three factors with a Cronbach's Alpha coefficient of 0.5 or higher, which means only three factors (Current Islamic issues, religious education, and sensitive products) among the seven factors were suitable for use in the Muslim religiosity measurement construct.

Wilde and Joseph (1997) tried to develop a "Muslim Attitude Towards Religion" (MARS) scale (see Table 3.10). This scale included 14 items. Each item was rated by the respondents on a 5-point Likert scale ranging from 1= strongly disagree to 5=strongly agree. However, the scale did not differentiate between gender, for example "I fast the whole month of Ramadan," and "I observe my daily prayer in the mosque. Therefore, it is difficult to evaluate this measure, especially as the sample to test the scale was small, and the validity evidence was not reported.

Rusnah (2005) studied the religiosity of Malaysian Muslims and how it can influence the perception of moral judgment and unethical business practices. The Muslim religiosity scale was adapted from Wilde et al.(1997). As presented in Table 5.8, the original 14 items were modified to match her study and two new items were added to the scale. Khairul (2010) adapted Wilde et al. (1997) and Rusnah (2005). He added additional items and did some modifications (see Table 3.11).

**Table 3.10: Muslim Attitudes Towards Religion (MARS) Scale
(Wilde and Joseph, 1997)**

| No | Items |
|----|---|
| 1 | I find it inspiring to read the Qur'an |
| 2 | Allah helps me |
| 3 | Saying my prayers helps me a lot |
| 4 | Islam helps me lead a better life |
| 5 | I like to learn about Allah very much |
| 6 | I believe that Allah helps people |
| 7 | The five prayers help me a lot |
| 8 | The supplication (dua) helps me a lot |
| 9 | I think Al Quran is relevant and applicable to modern day |
| 10 | I believe that Allah listens to prayers |
| 11 | Mohammed (peace be upon him) provides a good mode of conduct for me |
| 12 | I pray five time a day |
| 13 | I fast the whole month of Ramadan |
| 14 | I observe my daily prayers in the Mosque |

Table 3.11: Measurement Items for Muslim Religiosity (Rusnah, 2005)

| No | Items |
|----|---|
| 1 | Do you believe, beyond a shadow of doubt, that Islam is God's religion and that Prophet Muhammad is His Messenger |
| 2 | Do you consider yourself religious? |
| 3 | I read the Quran for inspiration and motivation |
| 4 | I believe Allah helps me |
| 5 | Saying my prayers helps me a lot |
| 6 | Islam helps me lead a better life |
| 7 | I like to learn about Allah very much |
| 8 | I believe that Allah helps people |
| 9 | The five prayers help me a lot |
| 10 | The supplication (dua) helps me a lot |
| 11 | Qur'an is relevant and applicable to modern day |
| 12 | Allah listens to prayers |
| 13 | Mohammed (peace be upon him) provides a good mode of conduct for me |
| 14 | I pray five time a day |
| 15 | I fast the whole month of Ramadan |
| 16 | I observe my daily prayers in the Mosque |

According to Khairul (2010), the modification of items was appropriate to capture the most appropriate and important items to measure Muslim religiosity. Two items from Rusnah (2005) were dropped (items 1 and 2) since they were considered as leading and sensitive questions. A total of 21 items were used by Khairul (2010) to measure

Muslim religiosity using a 7-point Likert scale ranging from 1= strongly disagree to 7= strongly agree. (see Table 3.12).

Table 3.12: Measurement Items for Muslim Religiosity (Khairul, 2010)

| No | Items |
|----|--|
| 1 | I read the Quran for inspiration and motivation. |
| 2 | Muhammad (peace be upon him) inspires me with good conduct. |
| 3 | Islam helps me to lead a better life. |
| 4 | The Quran is relevant and applicable to modern day. |
| 5 | I cover my aurat properly. |
| 6 | I perform the obligation of zakat maal (zakat for asset/ income) annually. |
| 7 | I do the optional fasting on Monday and Thursday regularly. |
| 8 | I believe that Allah helps people. |
| 9 | Saying my prayers helps me a lot. |
| 10 | I fast the whole month of Ramadhan sincerely. |
| 11 | I perform the obligation of zakat fitrah annually. |
| 12 | The supplication (dua') helps me. |
| 13 | I always perform other optional prayers (i.e. sunnat prayer such as Dhuha and others). |
| 14 | I believe that Allah helps me. |
| 15 | I will continuously seek to learn about Allah. |
| 16 | I believe that Allah listens to prayers. |
| 17 | I pray five times a day. |
| 18 | I read the Quran every day. |
| 19 | I will perform hajj after I fulfill all the necessary conditions. |
| 20 | The five prayers help me a lot. |
| 21 | I perform my daily prayers in the mosque/ Muslim praying room regularly. |

This study adopted items from Khairul (2010) to measure Muslim religiosity since it was found to be the most significant for the current study. The scale also covered the aspect of belief and practice elements, as suggested by Khairul (2010). See table 3.13 for the measurement items for Muslim religiosity for this study.

Table 3.13: Measurement Items for Muslim Religiosity for this Study

| No | Items |
|----|--|
| 1 | I read the Quran for inspiration and motivation. |
| 2 | Muhammad (peace be upon him) inspires me with good conduct. |
| 3 | Islam helps me to lead a better life. |
| 4 | The Quran is relevant and applicable to modern day. |
| 5 | I dress according to Islamic requirements. |
| 6 | I perform the obligation of zakat maal (zakat for asset/ income) annually. |
| 7 | I do the optional fasting on Monday and Thursday regularly. |
| 8 | I believe that Allah helps people. |
| 9 | Saying my prayers helps me a lot. |
| 10 | I fast the whole month of Ramadan sincerely. |
| 11 | I perform the obligation of zakat fitrah annually. |
| 12 | The supplication (dua') helps me. |
| 13 | I always perform other optional prayers (i.e. sunnat prayer such as Dhuha and others). |
| 14 | I believe that Allah helps me. |
| 15 | I will continuously seek to learn about Allah. |
| 16 | I believe that Allah listens to prayers. |
| 17 | I pray five times a day. |
| 18 | I read the Quran every day. |
| 19 | I will perform hajj after I fulfill all the necessary conditions. |
| 20 | The five prayers help me a lot. |
| 21 | I perform my daily prayers in the mosque/ Muslim praying room regularly. |

3.7.2 Measuring the Halal Knowledge Construct

The initial steps involved the development of a conceptual framework and identification of halal knowledge concepts. The questions used to measure individual halal knowledge were self-developed and generated based on valid sources (AlQaradawi, 2005; Che Man et al., 2010; Hussaini and Sakr, 1984). The initial draft was made carefully to ensure that the questions were appropriate for all schools of thought professed by Muslims. There are four schools of thought in Islamic law, the Hanafi, the Maliki, the Shafi'i and the Hanbali.

Twenty multiple-choice questions were used to measure the halal knowledge. This scale was followed closely using the procedure for developing the knowledge scale (Whati et al., 2005; Parmenter and Wardle, 2000). This scale was verified by a halal

expert and also anon-halal expert (see section 5.7 on pre-testing) to ensure that the text was correct and reliable. This was done to ensure the face validity of the items. Each item has only one correct answer since the format is that of multiple choice (a, b, c, d, e). Items to which a participant failed to respond (blank values) or answered wrongly were regarded as incorrect responses. Each correct response was allocated 1 point and each incorrect or no response was allocated 0 points. Minor changes to wording were made in response to the comments by the halal expert and non-halal expert. Table 3.14 shows the list of questions on halal knowledge.

Table 3.14: Measurement Items for Halal Knowledge

| No | Statement | Answer |
|----|--|--|
| 1 | The meaning of Halal is? | Permissible item |
| 2 | The meaning of Haram is? | Prohibited item |
| 3 | Alcohol is an example of? | Prohibited item |
| 4 | Pork is an example of? | Prohibited item |
| 5 | The term Makrooh means? | Dislikeable item |
| 6 | The term Mashbooh or „Syubhah“ means? | Doubtful item |
| 7 | A meat animal which dies without being slaughtered is? | Prohibited item |
| 8 | Meat slaughtered by the People of the Book (Ahl-Kitab) is? | Permissible item |
| 9 | Adding wine in the cooking of food is? | Prohibited item |
| 10 | Muslims must eat Halal food... | Very true |
| 11 | Halal Food should conform to Islamic laws? | Very true |
| 12 | The prohibition of pork is restricted to meat? | Very false |
| 13 | The blood of the slaughtered animal must be thoroughly drained immediately upon slaughter? | Very true |
| 14 | The equipment to process pork meat can be used immediately to process Halal food? | Very false |
| 15 | Halal sourced ingredients include? | All the above |
| 16 | Which of the following is not considered as filthy (najis) according to Shari'ah law? | Halal animals slaughtered according to Shari'ah law. |
| 17 | Which of the following are NOT considered as an Islamic method of slaughtering an animal? | Cut off the head or break the neck of an animal before its life is completely departed |
| 18 | Which of the following are considered as Halal food? | I, II & III |
| 19 | As most land animals is Halal as food, which of the following are not considered Halal? | I & II only |
| 20 | The term حلال (in Arabic), in English means? | Halal |

Next, the items were analysed for item difficulty, item discrimination and internal consistency. Kline (1993) suggested that items are not beneficial if more than 80% are correct or there are less than 20% of respondents. However, the items can be considered for testing, as they are basic aspects and not covered elsewhere in the questionnaire (Parmenter & Wardle, 1999). Item discrimination is a way to achieve content validity and is measured by correlating the score on each item. An item-to-total-score correlation of 0.2 has been cited as the cut-off point below which items should be removed (Parmenter & Wardle, 1999). Cronbach's alpha is used for subsequent checking of the internal consistency, for which the minimum requirement has been suggested as being 0.7 (Kline, 1993). The details are shown in the next chapter.

3.7.3 Measuring the Halal Consciousness Construct

The halal consciousness construct measures the level of awareness of the Muslim consumer towards the intention to purchase halal food products. Muslim consumers that possess halal consciousness are always concerned about their food consumption. Eating halal food is very important to them and they will make sure that they only consume halal food. They will always eat food products with the halal logo and buy meat from Muslim operated premises. If there is a case of a food product with no halal logo, they will usually check the ingredients on the packaging. Generally, they will not purchase food if it is placed next to non-halal food on the supermarket shelf.

The halal consciousness construct items are a newly developed construct formed by the researcher for the purpose of this study. A comprehensive literature review and focus group discussion was done to measure halal consciousness. Among the studies that have discussed halal consciousness are Shafie (2006), Zakaria (2008) and Nasir (2008). Ten items have been developed to measure halal consciousness. The points on

the Likert range from strongly disagree (1) to strongly agree (7). Table 3.15 shows the measure for the halal consciousness construct.

Table 3.15: Measurement Items for the Halal Consciousness Construct

| No | Statement |
|----|---|
| 1 | I will always eat food products with Halal logo. |
| 2 | Eating Halal food is not important to me. * |
| 3 | Eating Halal food is very important to me. |
| 4 | I will always buy food products that come from Halal sources. |
| 5 | I will not purchase food if it is placed next to non-Halal food on the supermarket shelf. |
| 6 | I am concerned about my food consumption. It has to be Halal food. |
| 7 | If there is no Halal logo, I will always check the ingredients on the packaging of the processed food products. |
| 8 | As a Muslim, I have to consume only Halal food. |
| 9 | I consume only Halal food products. |
| 10 | I will always buy meat from Muslim operated premises. |

*Reverse- coded item

3.7.4 Measuring the Halal Cautiousness Construct

The halal cautiousness construct measures the extent to which a person is careful when purchasing halal food products. Muslim consumers who possess halal cautiousness, will always be cautious when purchasing food products in order to avoid eating haram or questionable food. They will be extra cautious to ensure that the food products are halal, especially when buying new food products or any food product that they are not sure of the ingredients, to avoid the risk of buying non-halal food. They always choose food products that are made in Muslim countries. Therefore, they usually take the time to shop carefully for halal food products.

Halal consciousness and halal cautiousness are two different constructs. The halal consciousness construct measures the level of awareness and the Muslim consumer towards the intention to purchase halal food products. On the other hand, halal cautiousness measures the extent to which a person is extra careful and cautious when

purchasing halal food products. Muslim consumers with higher faith and piety will usually possess halal cautiousness.

Halal cautiousness is a newly developed item under the halal perception constructs. To date, there is almost nothing in the literature on halal cautiousness. This construct is considered to be essential to discover the cautiousness among Muslim consumers in searching for halal food products. Therefore, focus group discussions were held to provide insights and generate appropriate items to measure this construct. Nine items were used to measure halal cautiousness. The points on the Likert range from strongly disagree (1) to strongly agree (7). Table 3.16 shows the measure for halal cautiousness.

Table 3.16: Measurement Items for Halal Cautiousness

| No | Statement |
|----|--|
| 1 | I am always cautious when purchasing food products to avoid eating Haram or questionable food. |
| 2 | I am usually extra cautious to ensure that products are Halal when buying new food products. |
| 3 | Investigating the ingredient of food products is generally a waste of time. * |
| 4 | I never buy food that I don't know to avoid the risk of buying non-Halal food. |
| 5 | I will find alternative food products if I have doubts about the Halalness of the food products. |
| 6 | I will avoid buying any food products if I am not sure of the ingredients. |
| 7 | I take the time to shop carefully for Halal food. |
| 8 | I am always make careful purchase on food products to ensure the Halalness. |
| 9 | I am always choosing food product that is made in Muslim countries. |

*Reverse- coded item.

3.7.5 Measuring the Importance of the Halal Logo Construct

The importance of the halal logo construct is that it is a newly developed construct in the current study. Recently, although there have been many studies regarding the halal logo, very few have conducted empirical research or developed measures to gauge

the importance of the halal logo. This construct was developed to measure the importance of the halal logo when making purchases of halal food products. Muslims who perceive that the halal logo is important will prefer to purchase processed food products with the halal logo. They do not mind paying extra to buy any food product with the halal logo. Food products with the halal logo are sufficient for them to feel confident and are important when deciding to buy any food product to avoid feeling doubtful about the “halalness”. They prefer to look for other cues (for example ingredients) before buying any food products without the Halal logo.

For the purpose of this study, the initial draft to measure the halal logo construct was examined for face validity by the selected panel of experts. The construct consists of ten items. The points on the Likert scale ranged from strongly disagree (1) to strongly agree (7). The questions are shown in Table 3.17

Table 3.17: Measurement Items for the Importance of the Halal Logo Construct

| No | Statement |
|----|--|
| 1 | When purchasing processed food products, the first thing I will ensure is that it has the Halal logo. |
| 2 | I do not mind paying extra to buy any food product with Halal Logo. |
| 3 | I do not mind to buy food products without the Halal logo. * |
| 4 | I buy food products with the Halal logo to avoid feeling doubtful about the Halalness. |
| 5 | I will search for the Halal Logo on the food product before purchasing the food product. |
| 6 | The Halal logo is important when deciding to buy any food products. |
| 7 | The Halal logo is sufficient for me to feel confident when purchasing food products. |
| 8 | I trust food products with the Halal Logo and purchase it without doubt. |
| 9 | I prefer to buy products with Halal logo. |
| 10 | I will definitely look at other cues (for example ingredients) before buying any food products without Halal logo. |

* Reverse- coded item

3.7.6 Measuring the Products Originating from Muslim Countries Construct

Products originating from Muslim countries is another newly self-developed construct for the purpose of the current study. This construct was based on the country-

of-origin literature. The measurement scale used in the country-of-origin literature was reviewed to suit the area of halal perception. Among the researchers who have produced measures for Muslim religiosity are Pisharodi and Parameswaran (1992); Parameswaran and Pishrodi (1994); Yi Lin et al. (2006); and Ahmed et al. (2004).

Pisharodi et al. (1992) developed a scale comprising 24 items scored on a 10-point scale ranging from not at all appropriate (1) to most appropriate (10). A total of 678 adults from the Midwestern metropolitan area responded to the questionnaire. The scale consisted of a six-factor model, which indicated good unidimensionality and an acceptable Cronbach's alpha (>0.70). The factors were general country attitude 1 (5 items), general country attitudes 2 (3 items), general product attitudes 1 (5 items), general product attitudes 2 (4 items), general product attitudes 3 (3 items) and specific product attitudes (4 items).

In 1994, Parameswaran et al. (1994) modified the same scale thereby resulting in an eight-factor model. Using the same samples as in Pisharodi et al. (1992), the scale achieved an acceptable Cronbach's alpha (>0.60) for each of the factors. The final scale resulted in an eight-factor model that indicated unidimensionality and good Cronbach's alpha (>0.70). However, there is no appropriate country-of-origin measurement scale that can be used in this study. Therefore, products originating from Muslim countries is a newly self-developed construct for the purpose of the current study. This study explores the attitude of Muslim consumers when purchasing halal food products, and whether the country-of-origin is important for them to ensure "halalness". This construct focuses on whether Muslim consumers emphasize products originating from Muslim countries before purchasing food products. The confidence level in purchasing food products will depend on the manufacturing countries. This construct will also determine whether or not Muslim consumers trust and prefer halal food that originated from Muslim countries.

Ten items have been generated for this construct. These items were sent to the panel of experts for face validity. Each item was rated by the respondents on a 7-point Likert scale ranging from 1= strongly disagree to 7=strongly agree. Table 3.18 shows the scale to measure the construct for products originating from Muslim countries.

Table 3.18: Measurement Items for Products originating from Muslim Countries

| No | Statement |
|----|--|
| 1 | I trust the Halalness of food products originating from Muslim countries. |
| 2 | I would prefer to purchase products manufactured in Muslim countries. |
| 3 | My confidence level in purchasing food products will depend on whether the food products are manufactured in Muslim countries. |
| 4 | It is important for me to make sure the food products that I purchase come from Muslim countries. |
| 5 | I am confident to buy food products that originate from Muslim countries. |
| 6 | It is important for me to check the country-of-origin before purchasing food products. |
| 7 | If the food products originate from a Muslim country, I will definitely purchase it without looking at other cues. |
| 8 | It is not important to me to purchase food products that originate from Muslim countries. * |
| 9 | I do not hesitate to purchase food products that originate from Muslim countries. |
| 10 | Food products originating from Muslim countries are more reliable in terms of the Halalness. |

* Reverse- coded item

3.7.7 Measuring the Intention to Purchase Halal Food Products Construct

The purchase intention scale has been used widely and in a variety of contexts. Several established scales on purchase intention have been studied to see the appropriateness in developing purchase intention towards halal food. It is important to ensure that the scale is compatible with the area of halal food. This is because halal food dietary laws are unique, in that they are mandatory for every Muslim and must be followed.

Among the researchers who have produced a measurement for intention scale are Michael J. Baker and Gilbert A. Churchill, Jr. (1977), Dodd, Monroe & Grewal (1991),

Martin & Steward (2001), Baker, Parasuraman, Grewal and Vos (2002), and Sabbe, Verbeke, Damm (2008). Michael J. Baker and Gilbert A. Churchill, Jr. (1977) developed three behavioural intention scales using a seven-point scale (Definitely Not to Definitely Yes) – See Table 3.19. This study assessed whether this general finding applies to people's perceptions of advertisements. The samples were 48 male and 48 female undergraduate students at the University of Wisconsin. The coefficient alpha and item-to-total correlation were calculated once the data collection task was completed. The results for the item-to-total correlation were indeed above the acceptable value with more than 0.7.

Table 3.19: Measurement Items for the Purchase Intention Scale (Baker et al., 1977)

| No | Statement |
|----|--|
| 1 | Would you like to try this product? |
| 2 | Would you buy this product if you happened to see it in a store? |
| 3 | Would you actively seek out this product in a store in order to purchase it? |

Dodd, Monroe & Grewal (1991) produced a willingness to buy indicator, which consisted of five items evaluated on a multi-item 7-point scale. The sample was 585 undergraduate students enrolled in marketing courses at a large state university. The scale was developed following the suggestion of Churchill (1979). The indicators were assessed for internal/external consistency by using correlation analysis, factor analysis, and Cronbach's alpha. The values of coefficient alpha were above 0.8. The results for item-to total correlation were indeed above the acceptable value with more than 0.7- See Table 3.20

Table 3.20: Measurement Items for the Purchase Intention Scale (Dodd et al., 1991)

| No | Statement |
|----|--|
| 1 | The likelihood of purchasing this product is |
| 2 | If I were going to buy this product, I would consider buying this model at the price shown |
| 3 | At the price shown, I would consider buying the product |
| 4 | The probability that I would consider buying the product is: |
| 5 | My willingness to buy the products is |

Sabbe et al. (2008) in Table 3.21 used two items for the purchase intention scale in a question-based survey with 290 respondents in Belgium. The purpose of the study was to gain insights concerning their perceptions. The questionnaire was pretested before the actual survey and analysed using SPSS12.0. The two items were evaluated using a seven-point scale and the items had a high Cronbach's alpha value of more than 0.90.

Table 3.21: Measurement Items for Purchase Intention Scale (Sabbe et al., 2008)

| No | Statement |
|----|---|
| 1 | I intend to buy fresh tropical fruit/processed tropical fruit products. |
| 2 | I expect to buy fresh tropical fruit/processed tropical fruit products. |

Table 3.22 summarizes the studies on behavioural intention towards purchasing halal food and the scale employed in their studies. Based on the table, the previous findings verified that behavioural intention is applicable in predicting intention to purchase halal food products.

The questions used to measure the intention to purchase halal food products were adapted from Baker et al. (1977), five items from Dodd et al. (1991) and two items from Sabbe et al. (2008). The questions were found to be the most significant for this study with some modifications to make it compatible with the concept of halal food (Table 3.23).

**Table 3.22: Intention as Dependant Dependent Variable
(Example from previous Halal Product studies)**

| Researcher | Items | Scale |
|------------------------|---|--|
| Lada et al. (2009) | I plan to choose Halal products in the forthcoming month | Likert Scale (Strongly Disagree/ Strongly Agree) |
| | I am likely to choose Halal products in future | |
| | I will choose Halal products | |
| Bonne et al. (2007) | How many times do you intend to eat Halal meat in the next seven days, today included | Eight Point Scale (Ranging From 0 To 7) |

Table 3.23: Measurement Items for the Intention to Purchase Halal Food Products

| Source | Original Items | Modified items |
|--|--|--|
| Dodd, Monroe & Grewal (1991) | The likelihood of purchasing this product is | My likelihood of purchasing Halal products is very low |
| | If I were going to buy this product, I would consider buying this model at the price shown | If I were to purchase Halal food products, I would consider purchase at the price shown. |
| | At the price shown, I would consider buying the product | At the price shown, I would consider to purchase the Halal food products. |
| | The probability that I would consider buying the product is: | The probability that I would purchase Halal food is very high. |
| | My willingness to buy the products is | My intention of purchasing Halal food products is very low. |
| Sabbe, Verbeke, Damm (2008) | I intend to buy fresh tropical fruit/processed tropical fruit products. | I intend to purchase Halal food products. |
| | I expect to buy fresh tropical fruit/processed tropical fruit products. | I expect to purchase Halal food products. |
| Baker and Gilbert A. Churchill, Jr. (1977), | Would you actively seek out this product in a store in order to purchase it? | I will actively seek out Halal food products (in a store in order to purchase it. |

A seven-point Likert scale was employed to measure the intention to purchase halal food products construct ranging from 1= strongly disagree to 7=strongly agree. The questions measuring the intention to purchase halal food products are shown in Table 3.24

Table 3.24: Final Measurement Items for the Intention to Purchase Halal Food Products

| No | Statement |
|----|--|
| 1 | My intention of purchasing Halal food products is very low * |
| 2 | I will actively seek out Halal food products (in a store in order to purchase it). |
| 3 | I expect to purchase Halal food products. |
| 4 | My likelihood of purchasing Halal products is very low * |
| 5 | I intend to purchase Halal food products. |
| 6 | If I were to purchase Halal food products, I would consider purchase at the price shown. |
| 7 | At the price shown, I would consider to purchase the Halal food products. |
| 8 | The probability that I would purchase Halal food is very high. |

3.8 Data Analysis

In the following subsections the discussion on data analysis for qualitative and quantitative are presented.

3.8.1 Qualitative Data Analysis

The purpose of conducting semi-structured interviews was to acquire individual in-depth information and further explore and identify a range of halal perceptions. Therefore, four focus group discussions (FGDs) were conducted followed by four individual interviews to acquire further in-depth information.

Content analysis was used to analyse the qualitative output (Myers, 2009, p. 172). Content analysis is a scientific, objective, systematic, quantitative and generalizable description of communication content (Kassarjian, 2011). This study followed the steps to analyse the qualitative output according to the characteristics of content analysis – objective, systematic and quantification.

Firstly, the researcher has to decide the criteria of the content unit used in the study. In this study, the criteria were based on the words and themes used pertaining to halal perception, for example halal logo and ingredients. Secondly, the researcher is concerned with comparison being stated. According to Cavana et al. (2008, p. 171), the

constant comparative method describes the process of conducting content analysis. In this stage, the relevant data were secured according to the subject (Kassarjian, 2011).

The third stage is quantification, the researcher reviews the raw data and distinct the identified a critical point. The process of distinction is continued and keep searching for more, always, increases, often words or theme used. The process involved coding the prescribed and parsimonious the summary or findings. The researcher interpreted and drew inferences concerning the participants' comments with a concise summary statement that delineated the halal perception subject. Please refer to Appendix D: Focus Group Discussion findings and Appendix E: Interview findings for the qualitative output.

3.8.2 Quantitative Data Analysis

Data analysis for the survey was conducted by applying statistical techniques. The instrument validation process was based on Hair et al. (2010). These techniques involved descriptive statistics, assumptions for data analysis (for example, normality and linearity), quantitative data analysis using exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and partial least squares (PLS). These are explained in the following sub-sections.

3.8.2.1 Factor Analysis

Factor analysis is a multivariate technique (Sekaran, 2000). This technique helps the researcher to reduce a vast number of variables to a meaningful and manageable set of factors. At the same time, factor analysis is used to summarize the information included in a large number of variables into a smaller number of factors (Zikmund, 2003). In the current study, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were utilized. The explanation is discussed in the next section.

3.8.2.2 Exploratory Factor Analysis

Firstly, exploratory measurement assessment was carried out using corrected item-total correlation, exploratory factor analysis, and the reliability test for internal consistency. Factor analysis is frequently used in data reduction to categorize a small number of factors that explain most of the variance observed in a much larger number of manifested variables (Hair et al., 2010). Pallant (2005) argued that exploratory factor analysis includes three major steps: (a) assessment of suitability of data for factor analysis, (b) factor extraction, and (c) factor rotation. As such, some assumptions should be included to check for suitability of the data set for conducting EFA. A summary of the assumptions is presented in Table 3.25.

Table 3.25: Summary of EFA Requirements on Data Set

| Condition | Requirement | Reference |
|---------------------------------|-------------------------------------|--|
| Outliers | No outliers accepted | Hair et al., 2010 |
| Linearity | No multicollinearity VIF < 10 | Hair et al., 2011 |
| Normality | Normal Distribution | Hair et al., 2012 |
| Sample size | At least 5 Cases to each study item | Pallant, 2005; Tabachnick & Fidell, 2007 |
| Bartlett's Test of Sphericity | $p < .05$ | Tabachnick & Fidell, 2007 |
| Kaiser-Meyer- Olkin (KMO) Index | ≥ 0.5 | Hair et al., 2010; Malhotra, 2007 |

3.8.2.3 Confirmatory Factor Analysis (CFA) / Measurement Model

Secondly, is the confirmatory factor analysis (CFA), which is a part of the structural equation modeling (SEM). A measurement model is created and subjected to a series of validity checks prior to hypothesis testing in the structural model. These measurement model validity assessments include fit indices and unidimensionality assessment, convergent validity, and discriminant validity. Prior to the measurement model, the item purification process is applied through multiple iterations of CFA, with

the maximum likelihood estimation (MLE) method. Items that are unfitted have to be deleted from the measurement model.

Hair et al. (2010) explain that modification of the initially hypothesized model is performed where it is seen to be applicable. The suggested indicators for the purpose of modifications are modification indices (MI), standardized residuals, path estimates, squared multiple correlations, and qualitative review. The cut-off points in the CFA process are presented in Table 3.26. Table 3.27 shows the types of fit measures and the thresholds recommended by Hair et al. (2010). Below are brief descriptions of the fit measures.

Table 3.26: Model Diagnostic in Confirmatory Factor Analysis

| Model Diagnostic | Requirement | Reference |
|---|--|-------------------|
| Modification Index (MI) | ≥ 4 | Hair et al., 2010 |
| Standardized Residuals | < 2.5 - alright > 4.0 - not alright | Hair et al., 2010 |
| Path Estimates (Construct to Indicator) | ≥ 0.5 ; ideally ≥ 0.7 - significant | Hair et al., 2010 |
| Squared Multiple Correlations (SMC) or Reliability | ≥ 0.3 | Hair et al., 2010 |

Table 3.27: Fit Indices for Model Fit in Confirmatory Factor Analysis

| Fit Indices | Acceptable level |
|--|------------------|
| Chi square(X ²) | >0.05 |
| Normed Chi Square (CMIN/df) | <3.00 |
| Goodness-of-fit index (GFI) | ≥ 0.90 |
| Adjusted Goodness-of-fit index (AGFI) | ≥ 0.90 |
| Normed fit index (NFI) | ≥ 0.90 |
| Tucker-Lewis Index (TLI) | ≥ 0.90 |
| Comparative Fit Index (CFI) | ≥ 0.90 |
| Root Mean Square Error of Estimation (RMSEA) | ≤ 0.08 |

a. Chi square (χ^2)

The important measure of all fits is the chi square (χ^2). Any value that is lower than 0.05 is considered significant and indicated as a good fit. However, chi-square (χ^2) is considered very sensitive especially with large sample size or exceeds 250 respondents (Hair et al., 2010). As sample size increases, this value of chi-square (χ^2) has the possibility to increase as well.

b. Normed Chi Square (CMIN/df)

This is a simple ratio of χ^2 to the degree of freedom for a model. The order of 3.00 or less indicates better fitting models. However, a larger sample (greater than 750) and complex model may affect the fitting.

c. Goodness-of-fit index (GFI)

Goodness-of-fit index attempts to produce a fit statistic that is less to sample size. The possible range of GFI values is 0 to 1 which indicates a good value (Hair, 2010).

d. Adjusted Goodness-of-fit Index (AGFI)

The Adjusted Goodness-of-Fit Index (AGFI) is an extension of GFI but adjusted by the ratio of degrees of freedom for the proposed model to the degrees of freedom for the null model. AGFI with value 0.90 or greater indicates a good fit (Hair, 2010).

e. Normed-fit Index (NFI)

The Normed-fit index (NFI) is a ratio of the difference in the χ^2 value for the fitted model and a null model divided by the χ^2 value for the null model. It ranges between 0 and 1. An ideal fit would generate an NFI of 1 (Hair, 2010).

f. Tucker-Lewis Index (TLI)

Tucker-Lewis index (TLI) is conceptually similar to the NFI. However, it varies in comparison of the normed chi-square values for the null and specified model. The values can be below 0 or above 1. Models with good fit have values that draw near 1, and a model with a higher value proposes a better fit than a model with a lower value (Hair, 2010).

g. Comparative Fit Index (CFI)

The Comparative Fit Index (CFI) is an incremental fit index that is an improved version of the normed fit index. The index is normed and therefore the value ranges between 0 and 1 with higher value indicating better fit (Hair, 2010).

h. Root Mean Square Error of Estimation (RMSEA)

Root Mean Square Error of Estimation (RMSEA) is the discrepancy per degree of freedom of the average of the residual between the observed and estimated input matrices (Hair, 2010). The values can be from 0 to 1. Value with less than 0.08 is deemed acceptable and good fit (Hair, 2010).

3.8.3 Techniques for Assessing Measurement Model

According to Churchill (1979), the measurement model is regularly employed to check on construct validity. It generally involves content or face validity, reliability, convergent validity, and discriminant validity. In this study, face validity has been achieved (see section 5.5) which does not require any statistical test. The next chapter discusses the result of unidimensionality, reliability, followed by convergent validity and discriminant validity analysis.

a. Reliability

Reliability refers to the extent to which a scale produces consistent results if repeated measures are made (Malhotra, 2004). This means the extent to which measures are free from error, thus, being able to create consistency between the measurements of a variable (Hair et al., 2010). Reliability is a necessary but not sufficient condition for validity (Churchill and Labobucci, 2002). Reliability can be achieved by testing the Cronbach's Alpha value, for which the threshold is 0.70 or higher, as recommended by Hair et al. (2010). By using CFA, we test the construct reliability (CR) or composite reliability. Composite reliability means the internal consistency of indicators measuring the underlying factors (Fornell and Larcker, 1981). The CR value should be 0.7 or higher to show good reliability (Hair et al., 2010). However, while there is no common agreement as to what represents a good or very good level of Cronbach's alpha, Nunnally (1978) suggested that alpha values higher than 0.5 can be considered as sufficient.

b. Unidimensionality

Unidimensionality refers to a set of items, which can be explained by a single underlying construct (Hair et al., 2010). Unidimensionality can be achieved when the indicator variables load on only one construct with a factor loading of ± 0.5 in EFA and the regression weights are 0.5 or higher with their significant t-values ($t\text{-value} \geq 1.96$ at $\alpha=0.05$) in CFA (Hair et al., 2010).

c. Convergent validity

Convergent validity is an instrument designed to measure the same construct related to each other (Malhotra, 2007). There are several ways to estimate the

convergent validity (Hair et al., 2010); namely, factor loading, average variance extracted (AVE) and reliability.

Factor Loading: The first way to estimate convergent validity is to use the factor loading. High loadings on a factor would indicate that they have convergent validity in common. As a rule of thumb, a standardized loading estimated should be 0.50 or higher and ideally is 0.70 or higher. However, indicators above 0.40 are also considered as a reasonable benchmark (Hatcher, 1994).

Average Variance Extracted: The second way of estimating convergent validity is by looking at the average variance extracted (AVE), which is calculated by the indicators corresponding to each of the study constructs. AVE is the amount of variance that is captured by the construct in relation to the amount of variance due to measurement error. AVE reflects convergent validity by examining the loading paths of all items, which should be statistically significant and exceed 0.50. However, Hatcher (1994) suggested that any value of AVE that is less than 0.50 does not cause concern since it is quite frequent from the previous studies with such estimation (Klien, 1998; Nijssen and Douglas, 2004; Sood and Nasu, 1995). It is not uncommon for the variance-extracted estimation to be less than 0.5 (Hatcher, 1994).

Convergent Reliability: The third way to estimate convergent validity is reliability, which is also an indicator of convergent validity. In SEM models, construct reliability is often used. The rule of thumb for reliability estimation is 0.70 or higher. However, it may also be acceptable between 0.6 to 0.7, to indicate that internal consistency exists (Hair et al., 2010, p. 709)

d. Discriminant validity

Discriminant validity is the extent to which a construct is truly distinct from other constructs. In CFA, there are a few ways of how to estimate discriminant validity (Hair

et al., 2010). First is the correlation between any two constructs, second is to compare the average variance extracted (AVE) and third is by the cross-loadings between the indicators and the constructs.

Correlation between any two constructs: First, the fit of the two constructs model is significantly different from that of the one-construct model. The procedures to assess the construct discriminant validity for this study have been adapted from Chen, Aryee and Lee (2005). Discriminant validity exists if the fit indices for each construct are distinct from each other. This is explained in the next chapter.

Compare Average Variance Extracted (AVE): Second, is to compare the average variance extracted (AVE) with the square of the correlation estimate between these two constructs. Cross-loadings between Indicators and the Constructs: The third method of assessing discriminant validity is by looking at the cross-loadings between the indicators and the constructs. This can be assessed by running the SmartPLS program. If the indicators for its own latent constructs are higher than other latent constructs, it is said that it has achieved its discriminant validity.

3.9 Conclusion

Generally, this chapter provided a detailed discussion of research methodology and research design used in the current study. First, this chapter discussed the methodology for qualitative study. Next is the discussion on the process of developing halal perception constructs, quantitative sampling design and questionnaire development. The discussion followed with the measurement of constructs for quantitative data collection. The main statistical analysis techniques used in the study were also discussed including exploratory factor analysis, and partial least squares (PLS) to test the framework and proposed relationship.

CHAPTER 4 : DATA ANALYSIS

4.1. Introduction

This chapter presents the results for the qualitative and quantitative research survey. It begins with qualitative results from the focus group and interviews session. Subsequently, the results for descriptive statistics for the studied constructs are presented. This chapter also discusses the relationship between the demographic variables and the studied constructs. Next, the testing assumptions for the multivariate analysis are presented. Subsequently, the results for exploratory factor analysis (EFA), and establishing equivalence are discussed. Lastly is the analysis of the structural model and testing the hypotheses using SmartPLS 3.0 are discussed.

4.2. Qualitative Results

This study attempts to explore the perceptions that influence the intention to purchase halal food products. For this reason, focus group discussions (FGD) were conducted and followed up with interviews to explore the perceptions in more depth. The combination of the FGD and the interviews has its advantages. Firstly, it is to explore the depth and nuances of opinions regarding halal food consumption. Secondly, it is to understand the differences in the perspectives between the Arab Muslims and non-Arab Muslims. Thirdly, it is to understand what factors might influence the intention to purchase halal food products.

Four focus group discussions were conducted in which the participants were Muslims. The method used was the „purposive sampling method“ by contacting them personally. There were 29 participants in total for the focus groups discussions (FGD) and interviews. Four focus groups were conducted each comprising six participants. Twenty of them were male and nine were female. Eighteen of the participants were

married and eleven were single. Seven of them were between 18 and 29 years old, eighteen participants were 30 and 39 years old and four of them were above 40 years old. Among the participants, sixteen of them were degree holders and thirteen were postgraduates.

The participants for FGD1 consisted of four females and two males from Malaysia. The duration was one hour. The participants for FGD2 consisted of six males from Malaysia. The duration was one and a half hours. The participants for FGD3 consisted of six males from Middle Eastern countries. The participants for FGD4 consisted of two males and four females, also from Middle Eastern countries. The FGDs were categorized into two groups according to their ethnicity (Arab Muslim and non-Arab Muslim).

All FGD participants were involved with purchasing food products. A total of five interviews were conducted in the Klang Valley area (Selangor, Kuala Lumpur and Cyberjaya) in July 2010. One of the interviewees was a halal expert from the Malaysian Department of Islamic Development (JAKIM). JAKIM is the Malaysian government institution that is responsible for enforcing halal logo and certification in Malaysia. Please refer to Table 4.1, Table 4.2 and Table 4.3 for Focus Group Discussion Guidelines, Focus Group findings and interview findings.

Table 4.1: FGD Guidelines

| START- WELCOME NOTES AND BACKGROUND INFORMATION OF THE RESPONDENTS | | | | |
|---|---|--|---|---|
| PART | CONSTRUCT | PROPOSED QUESTIONS | POSSIBLE PROBING QUESTION | POSSIBLE ANSWER |
| A | PERSONAL OPINION ON HALAL FOOD | | | |
| 1 | Halal knowledge | 1. Do you fully understand the concept of Halal Food? | | Yes/ No |
| | | 2. What do you understand on the concept of Halal food? | a. Food according to Al Quran and Sunnah ? | |
| | | | b. The permissible and prohibited animals to eat? | |
| | | | c. The Islamic manner of slaughtering the animal? | The Islamic mode of slaughtering an animal has to follow certain conditions |
| | | | | It is lawful for the Muslim to eat meat slaughtered by the People of the Book (Ahl-Kitab) |
| | | | | The name of Allah should be pronounce while slaughtering the animal |
| | | | d. Unlawful foods and drinks and drink? | Flesh and swine including all the products and by- product prepared by swine are unlawful |
| | | Intoxicants is unlawful including all types and varieties of alcohol or intoxicating drugs | | |
| | All raw materials and ingredients must from Halal source. | | | |

Table 4.1: Continued

| START- WELCOME NOTES AND BACKGROUND INFORMATION OF THE RESPONDENTS | | | | |
|---|------------------------|--|--|--|
| PART | CONSTRUCT | PROPOSED QUESTIONS | POSSIBLE PROBING QUESTION | POSSIBLE ANSWER |
| | Halal Consciousness | <p>3. Do you think it is important to understand the concept of Halal Food</p> <p>1. Do you think that, it is important for the Muslim to purchase Halal food for consumption.</p> <p>2. When you want to purchase food product, what will be the criteria of your decision?</p> | <p>Probe, if yes, why? Probe, if no, why?</p> <p>Probe, if yes, why? Probe, if no, why?</p> <p>Probe, you can describe it in your own term</p> | Muslims need to understand and appreciate the concept of halal and haram, namely food and beverages that meet religious requirements |
| | | | | the product must have Halal logo |
| | | | | check at the ingredient listing, if there isn't Halal logo |
| | | | | purchase food product which is free from any Haram (i.e unlawful) or syubhah |
| | | | | will purchase the food product as long as I am not was- was (in doubt) of its ingredients |
| | | | | purchase food product as long it is nutritious, delicious or of reasonable price |
| | | | | food that manufactured/ products cooked / produced by Muslim. food product that comes from Halal sources |
| 3 | Halal Cautiousness | 1. In your opinion, should Muslim should make choice carefully and be cautious in search of Halal consumption? | Probe, you can describe it in your own term | |

Table 4.1: Continued

| START- WELCOME NOTES AND BACKGROUND INFORMATION OF THE RESPONDENTS | | | | |
|---|---------------------------|--|---|--|
| PART | CONSTRUCT | PROPOSED QUESTIONS | POSSIBLE PROBING QUESTION | POSSIBLE ANSWER |
| | | 2. What will be the most likely a person who Halal cautious would do? | Probe, you can describe it in your own term | Searching for Halal logo purchase food product which are sold / issued by the Muslim choosing the premises of purchasing food product to avoid syubhah eg 7/11 selling beers choosing the premises of purchasing meat product to avoid haram meat (eg. Meat = hypermarket vs Muslim shop) careful in buying / consuming the below as to prevent from haram and syubhah items: i. meat-based products ii products imported iii. Products cooked / produced by non-Muslims Refrain from purchasing product that contain a Syubhah or doubtful ingredient and go for other alternatives. Call up the manufacturer if I realized that any food products contains a Syubhah or doubtful ingredient purchase the product only if they claim that the ingredient is of Halal origin. |
| 4 | Importance Of Halal Logo | 1. Do you think Halal logo is importance? 2. What will you do if the product doesn't have Halal logo If no Halal logo | Probe, if yes, why? Probe, if no, why? | as a easy guide in finding Halal Food for Muslim consumption as an indication of the Halalness as an assurance it does not contain anything that is haram or doubtful Halal logo means the quality the food is wholesome, nutritious, hygienic and safe for consumption look at other cues (e.g. ingredient and country-of-origin) |
| END | APPRECIATION NOTES | | | |

Table 4.2: Focus Group Discussion Findings

| Title | Non Arab 1 | Non Arab 2 | Non Arab - iran | Arab |
|---------------------|--|--|---|--|
| Halal knowledge | <ol style="list-style-type: none"> 1. Mental 2. Worship 3. Health | <ol style="list-style-type: none"> 1. Anything with Halal logo 2. Slaughtering - not sure 3. Trust the competent authority | <ol style="list-style-type: none"> 1. Asking other Muslim 2. Anything with Halal logo | <ol style="list-style-type: none"> 1. Goes with the principle of syariah 2. Brought definition (main: no pork and wine) 3. To protect our self 4. stick to religion 5. Slaughtering 6. Purification 7. For good health |
| Halal Consciousness | <ol style="list-style-type: none"> 1. Searching for Halal food 2. Halal logo 3. Ingredient 4. Own product 5. Manufacturer 6. Processing 7. Confident premise/ muslim store 8. Important and must Halal | <ol style="list-style-type: none"> 1. Search for Halal Logo 2. Buy only familiar (confident) product 3. Reasonable price 5. Muslim seller | <ol style="list-style-type: none"> 1. What to buy 2. What kind of food and meat 3. Country-of-origin/ Muslim premises 4. Habit 5. Quality 6. Cleanliness 7. Price 8. Halal Logo 9. Seek for information 10. Avoid non Halal section | <ol style="list-style-type: none"> 1. Search for Halal logo 2. To avoid from being guilt 3. Choose what you want to eat. 4. Muslim responsibility 5. Commit sin |
| Halal Cautiousness | <ol style="list-style-type: none"> 1. Established manufacturer 2. Established brand 4. The staff 5. Company's track record 6. Not buying if doubt 7. No time, just halal logo 8. Vegetarian 3. If doubt, not to purchase | <ol style="list-style-type: none"> 1. Cautiousness 2. local product - trust and no doubt 3. Selling premise 4. Established brand 6. Seeking for information 7. Company's track record 8. Packaging 9. Cautious only on new product/ unfamiliar product 10. Country-of-origin - Muslim countries 12. Trust the seller | <ol style="list-style-type: none"> 1. To be careful when buying 2. seeking information 3. established brand 4. buy from Muslim 5. Reliability 6. Look at the ingredient | <ol style="list-style-type: none"> 1. Need to be careful 2. Halal Logo is very important 3. trust and believing the community 4. ingredient 5. Doubt 6. instinct 7. experience 8. Coding- but no time 9. packaging info |

Table 4.2: Continued

| Title | Non Arab 1 | Non Arab 2 | Non Arab - iran | Arab |
|---|--|--|---|---|
| The importance of Halal Logo | <ol style="list-style-type: none"> 1. Avoid doubt 2. Not confuse 3. Standard control 4. Trust 5. Follow law 6. Confident | <ol style="list-style-type: none"> 1. time constraints- just seek for logo 2. Government responsibility 3. Indicator as Halalness 4. Easy way for halal product. So there's no need to be cautious | <ol style="list-style-type: none"> 1. reliability 2. true halalness 3. Trust 4. no so important coz expensive 5. Government responsibility 6. don't believe | <ol style="list-style-type: none"> 1. perceived as it has been as it has been supervised 2. Guaranteed halal 3. to relieved guilt 4. Indicator as halalness 5. Halal Logo is not significant to the Arab Muslim. |
| If no Halal Logo | <ol style="list-style-type: none"> 1. Country-of-origin 2. Buy Malaysian product 3. If doubt, x buy- search for alternatives. 4. the ingredient 5. Search for Malaysian product | | <ol style="list-style-type: none"> 1. Not buy meat based 2. ingredients 3. Country-of-origin 4. Muslim shop 5. go for alternative <p>Halal logo is not significant to them</p> | |
| Country-of-origin | <ol style="list-style-type: none"> 1. If no logo, will look at the COO 2. Buy Malaysian | <ol style="list-style-type: none"> 1. Trust own product/ local products | <ol style="list-style-type: none"> 1. Prefer Arab Muslim countries (eg Egypt) 2. COO is more important than Halal Logo | <ol style="list-style-type: none"> 1. trust Muslim countries 2. No doubt from Muslim countries - especially Arab country |
| Religion influence halal food consumption | Yes | Not necessary | No | Yes and No |

Table 4.3: Interview Findings

| Title | Arab 1 (Yemen) | Non Arab 1 (Malaysia) | Non Arab 2 (Malaysia) | Arab 2 (Egypt) |
|------------------------------|---|---|--|--|
| Halal Knowledge | 1. Alcohol 2. Pork 3. other related that we cannot eat eg. Dead meat and etc 4. Not properly slaughter | 1. not only on slaughtering but Halal and Tayyiban 2. does not harm the individual 3. must follow Al Quran and hadith | 1. Know the basic 2. Type of animal 3. Slaughter 4. Processing 5. Equipment 6. The producer | It's said in the religion we have to follow. |
| Halal Consciousness | 1. Very important 2. first is Halal then followed by Price and quality and nutritious. | 1. Muslim entrepreneurs 2. Ingredients 3. Halal Logo | 1. The caterer 2. Logo 3. Find alternative 4. Muslim Product | Depends on the price (cheaper), availability and convenience. |
| Halal Cautiousness | 1. Ingredients 2. confident with the government 3. no double check 4. Don't buy if doubt, seek for alternative | 1. Muslim entrepreneurs 2. Seek from internet | | 1. label and Muslim shop. 2. Vegetables and non meat food 3. not normally eat outside 4. packaging, ingredient 5. doubt, I don't take it 6. Take kosher |
| The importance of Halal Logo | Yes. But normally avoid from non halal shelf. | 1. Trust the Muslim entrepreneurs, even though no halal logo. | trust the brand and product | Very important but don't trust the logo |
| If no Halal Logo | Confidence with the sellers. | Muslim product | Muslim product | ingredient |
| Country-of-origin | Normally no but would prefer form Muslim countries | Prefer countries with reliable Halal Logo | | Products from Muslim country is more reliable. If from non Muslim will dig for logo and the ingredients. |

4.2.1 Focus Groups and Interviews Results

As a result, the FGDs provided an indication of different perceptions concerning the halal food concept between Arab Muslims and non-Arab Muslims. Non-Arab Muslim respondents seemed to be more careful compared to the Arab Muslims in terms of halal consumption. The results of the analysis were categorized into five major aspects – halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries. The next subsection presents the result from the qualitative data collection.

4.2.1.1. Halal Knowledge

All the respondents agreed that halal knowledge is vital for each Muslim. This can be shown by the following responses:

“To understand the concept of halal is important for every Muslim because it will reflect the future generations as the food consumed will become our flesh and blood. This is considered as a lineage issue.” (FGD No. 2 Malaysia, non-Arab Muslim).

“As a Muslim, it is our obligation to consume halal products. We have been given by God a sane mind to determine the soundness of halal and haram.” (FGD No. 2 Malaysia, non-Arab Muslim).

“Understanding halal among consumers is important in order to ensure halal food consumption. Besides that, the understanding of halal food among traders or sellers is also important as this may prevent scams”. (FGD No. 2 Malaysia, non-Arab Muslim).

“It is very important for us as consumers to understand the halal food concept. This is because we cannot rely one hundred per cent on the halal logo.” (FGD No. 3, Middle East Arab Muslim).

“Yes, it is important as it is part of the religion and of course it affects the body.” (FGD No. 3 Middle East, Arab Muslim).

“Halal knowledge is definitely important as it is stated in the religion. So we have to follow and oblige.” (Int. No. 3, Bangladesh, non-Arab Muslim).

“The criteria and awareness for selecting food are fundamental for Muslims. Consuming halal food is very important because it will become our flesh and blood. Moreover, Prophet Muhammad (pbuh) emphasizes halal food, and, therefore, we should be concerned and should not take the matter for granted. At the same time, we have to remember that it is a prerequisite for families, especially when serving food for families. We strive to be perfect and always in the grace of God.” (Int. No. 4, Malaysia, non-Arab Muslim).

“We care about it and when we talk about halal food, the first thing that comes to mind are alcoholic beverages, pork meat and some other related things that we cannot eat. For example, carcasses, foods containing pork origins and meats that are not properly slaughtered. It has also been mentioned in the hadith about the basic rules in Islam about halal things: “...if a small quantity of alcohol is so submerged in something else that it has no tangible or theoretical effect, then the substance keeps the ruling that is in accordance with its own attributes.” [Majmu` al-Fatawa (4/260)]

Another hadith mentioned that: “...whatever intoxicates in large quantities, then a small quantity of it is forbidden, this refers to a certain beverage that intoxicates when someone drinks a lot of it but not when he drinks a little. It is unlawful to drink a small quantity of such a beverage, because even though a small quantity cannot make a person drunk, it can lead to drinking larger quantities”. [Majmu` al-Fatawa (4/260)]

"Therefore, it is clear that halal and haram foods do affect individuals and the society as a whole. We have to avoid those (haram food) as it may bring damage to the society." (Int. No.1, Yemen, Arab Muslim).

“Halal food is not only about the slaughtering method, but it also covers „Halal Thayyibah“, which means the food product will not cause any harm to a person. For

instance, some chemical ingredients are also considered as non-halal in Islam. Every Muslim must know the concept of halal and haram. Even in the modern life style, we still have to live according to Al-Qur'an and Shari'ah. But now, many Muslims take the halal food consumption matter for granted." (Int No. 2 Malaysia, non-Arab Muslim).

Based on the focus group discussion, all respondents agreed with the conformity to halal food consumption. It is essential for Muslim consumers to understand the concept of halal food. With understanding and knowledge about the concept, consumers will have a better picture regarding halal food consumption. With that, the consumers will be able to make wiser choices and in accordance with the Islamic laws.

4.2.1.2. Halal Consciousness

It is reported that all respondents agree that it is important to search for halal food products and purchase them. It is noticeable from the discussions that halal consciousness influenced the intention to purchase halal food products. The respondents had a high level of awareness and sensitivity towards searching for halal products for consumption.

"Keep in mind, the meaning of halal does not only mean "no pork". It is beyond that. It is also about cleanliness and safety of the food products. The metaphor is 'from farm to table'. Halal portrays confidence to the consumers. However, the issue is not about the guidelines, it is about how to create awareness and consciousness among consumers. The level of awareness among people regardless of Muslims or non-Muslims in Malaysia is very poor. This could be due to the fact that Malaysia is an Islamic country. The consumers believe that food products originating from Malaysia are halal. They do not even think about reading the labels on the packaging of the food products. Therefore, JAKIM and the government should do a joint halal campaign so as

to raise awareness among the consumers. Muslims should be conscious and cautious in order to avoid purchasing non halal products.” (Int. from JAKIM).

“We have to be conscious and must only eat and buy halal food. It has been stated in Al Qur’an and I believe that it will affect our behaviour and thinking.” (FGD No. 4, Iran, non-Arab Muslim).

“Of course, we need to be conscious about food. It has to be halal.” (FGD No. 4, Iran, non-Arab Muslim).

“Consciousness is very important. Halal is very important because it will be a part of the body. Muslims are supposed to follow the teachings of Islam and the Prophet. Therefore, we cannot take it for granted. We need to provide food for the family.” (Int, No. 4, Malaysia, non-Arab Muslim).

“When you want to buy food products, you have to be concerned about what to buy, what kinds of food, and the source of the products. Then how were they processed, who is the provider, and from which country...” (FGD No.3, Middle East, Arab Muslim).

“...Consciousness relates to a person's eating habits. Quality, cleanliness, and price are also important. And of course, I will look for the halal logo...” (FGD No.3, Middle East, Arab Muslim).

“For me, halal logo is enough. For example, in Carrefour, there is a non-halal section. So, I will not buy food products from the non-halal shelf.” (FGD No.4, Iran, non-Arab Muslim).

“I will avoid food with wine and pork. But, sometimes we do not even understand the ingredient labels” (FGD No. 3, Middle East, Arab Muslim)

“We buy meat from Muslim entrepreneurs. Although the price is higher, we are confident and have trust in Muslim entrepreneurs. And I know they normally do not apply for the halal certificate due to bureaucracy and cost...” (Int. No 2, Malaysia).

“We need to be conscious about food consumption. But, I do not really look for the halal logo. I would prefer to look at the label and buy from Muslim shop or store...” (Int. No 3, Bangladesh, non-Arab Muslim).

“Many consumers understand the Islamic halal food concept, but understanding alone is not sufficient without having halal consciousness. When in the supermarket, people do not bother to look for the logo when buying snacks or food products. There are not many people in Malaysia who constantly check the food ingredient labels. Although the food products originated from Muslim countries that does not guarantee that the products came from Muslim entrepreneurs. The case is different for Saudi Arabia as most of the food products are manufactured by Muslim manufacturers, and, of course, there is no need for the halal logo.”(FGD No.1, Malaysia, non-Arab Muslim).

The participants have highlighted a few important cues when purchasing halal food products. To name a few, buy products with the halal logo and products that are not mixed with the non-halal products on the halal shelf. Moreover, they prefer to buy food products from Muslim stores or premises, especially meat-based products. These practices are among their strategies and efforts to avoid from purchasing non-halal food products.

4.2.1.3. Halal Cautiousness

Most of the participants are cautious when purchasing food products. Halal cautiousness is important to avoid foods that are or potentially haram and minimize the risk of consuming haram foods.

“... Depending on the type of food. Normally, I will check the ingredients for ice cream and cake mixed with whisky. But if something is clear, I do not check.” (FGD No. 3, Middle East, Arab Muslim).

“.. I am a very cautious type of person. For instance, wine brings harm and we must obey that.” (FGD No. 3, Middle East, Arab Muslim).

“I will read the information on the packaging, and I will check the product's country of origin.” (FGD No. 3, Middle East, Arab Muslim).

“I am cautious when it comes to a new product range. If I want to try a new product or product that I am not familiar with, I will be extra careful. Consumers should be cautious when purchasing food. One of the ways is by checking the ingredients and halal logo.” (FGD No. 2, Malaysia, non-Arab Muslim).

“I will check for the halal logo and who manufactured the food. Normally, I will purchase food that I am familiar with.” (FGD No. 2, Malaysia, non-Arab Muslim).

“I will look at the packaging to see the halal logo, ingredients, and the manufacturers. As Muslims, we must look at the ingredients, especially when purchasing new food products.” (FGD No. 2, Malaysia, non-Arab Muslim).

“Info via email, paper, and articles about fake logos. I will take that into consideration, and also the manufacturer's track record.” (FGD No. 2, Malaysia, non-Arab Muslim).

“All Muslims must be cautious when purchasing food products. We must check the ingredients or labeling. The food product should have halal logo issued by qualified certification agencies. Also, it is recommended to buy food products from Muslim manufacturers.” (FGD No. 2, Malaysia, non-Arab Muslim).

“It is obligatory for each Muslim to look for halal food. It is not the responsibility of JAKIM only. The current challenge is that the majority of people think that since Malaysia is an Islamic country with a majority Muslim population, they believe that most of the food products are halal. However, they should keep in mind about emerging technologies. The technological revolution has caused many Muslims to not have the ability to check and confirm the halal status physically unless done by the

experts. Muslims should be conscious and be cautious not to get caught by buying products that are not halal. The closest examples are sausages.” (Int. from JAKIM).

“Consumers should be cautious about their food consumption. It has to be halal” (Int. No. 4, Malaysia, non-Arab Muslim).

“Most Malaysian Muslims especially the Kelantanese people will look for Muslim entrepreneurs that sell halal food products. If there is uncertainty with regards to its ingredients, I will check for the halal logo...” (Int. No 2, Malaysia, non-Arab Muslim).

“I am a cautious type of person. I will search for food products produced by Muslim entrepreneurs. I would assume they produce halal and slaughtered meat, which is in accordance with the Islamic regulations. On top of that, we have to look at the ingredients. With regards to the coding issue, sometimes we do not know the meaning, therefore we will rely on the information from the Internet and the halal logo. My family normally purchases food products from Muslim entrepreneurs in Kelantan. I believe and have trust in them. I know they normally do not apply for the halal certificate due to bureaucracy and costing issues...” (Int. No 2, Malaysia, non-Arab Muslim).

“When I was in the US and Hong Kong, I carefully checked every single ingredient for the food that I bought.” (Int. No. 1, Yemen, Arab Muslim).

“For example in the UK, normally the Muslims will not eat outside. When we want to purchase food, we will see the packaging, ingredients, contents and what is inside the packaging.” (Int. No. 3, Bangladesh, non-Arab Muslim).

“If I feel uncertain about a certain food product, I will certainly find an alternative. I will check the ingredients or I will purchase Malaysian food products” (FGD No. 1, Malaysia, non-Arab Muslim).

“I will not buy non-Malaysian canned food. I have high doubt about meat-based products. However, for non-meat based products, for example pasta, I will buy and eat

them even without the halal logo. Also, I am concerned about the company's track record and the history of the food manufacturer, for instance bread products. I will not buy products from hi-5 (a Malaysian brand) because there are many bad stories concerning the products." (FGD No.1, Malaysia, non-Arab Muslim).

"I will check the information on the packaging, whether it has a halal logo or not, who is the manufacturer, what are the ingredients or food source." (FGD No.1, Malaysia, non-Arab Muslim).

"Halal food is for the religion. We need to be careful when buying things." (FGD No. 4, Iran, non-Arab Muslim)

"I am cautious about new products. I will rather find an alternative for products that I am not familiar with." (FGD No. 2, Malaysia, non-Arab Muslim)

"Due to cultural differences, Muslims need to be careful. If I am not sure, I will not purchase them. I come from an Islamic country, everything in the market is halal." (FGD No. 3, Middle East, Arab Muslim).

"If I have any doubt or concern, I will not buy those food products." (FGD No. 1, Malaysia, non-Arab Muslim).

"If I want to buy something from Chinese sellers, and I do not know whether it is halal or not, the best is to not buy from them. Trust is very important. We have to ask around to ensure its halal status. If I have doubt, I will try to get information from friends, be selective when deciding which brand to buy or opt for Muslim seller." (FGD No. 4, Iran, non-Arab Muslim).

Most of the participants are cautious and careful when purchasing food products as they try to avoid purchasing non-halal foods. According to the participants, it is important for Muslim consumers to be cautious when purchasing food products. There are also participants being cautious about new products or brands. They will purchase

products with which they are familiar. Should they have doubts about a particular product, they will avoid purchasing it and find an alternative product.

4.2.1.4. The Importance of the Halal Logo

Most of the participants agree that the halal logo is important and that it acts as a confirmation tool to purchase any food product. The halal logo is an indicator that ensures that particular products are halal and Shari‘ah compliant. It is a signal to show that the food products are permissible for Muslims to consume.

“The halal logo continues to be important in the present and future. It is important to enable the Muslims to recognize and get halal food. At the same time, it is important for the traders or manufacturers to produce genuine halal products that are Shari‘ah compliant.” (Int. from JAKIM).

“Yes, the halal logo is important and the government should control and confirm the logo. As long as the products have the certificate, the products are consumable by Muslims. This will be an easy guide and indicator for the Muslims to purchase halal products...” (FGD No. 3, Middle East, Arab Muslim).

“Sometimes, I do not believe the halal logo, for example the slaughtering method is something beyond our control and knowledge. However, I prefer to buy from Malay and Muslim people.” (FGD No.3, Middle East, Arab Muslim).

“I will make sure that meat-based products have the halal logo before I purchase them.” (FGD No.4, Iran, non-Arab Muslim).

“Halal food consumption is a part of our religion. Thus, we need to be careful about what we purchase. That is why the logo is so important.” (FGD No. 4, Iran, non-Arab Muslim)

“Since the government endorsed the logo, it means it has been seen by the authority, so I will assume it is permissible to be consumed.” (FGD No. 3, Middle East, Arab Muslim).

“Because of our tight and busy schedule, the opportunity to check for information is less due to the limited time. Due to the lack of time, sometimes we have no opportunity to review all cues. Therefore, we are relying on the halal logo or halal certification. Meaning, we do not mind to pay more just to get a product with the halal logo. Regarding the authenticity of the logo, it is the authority's responsibility. In the search for halal products, we look at halal logo as it is the easiest way.” (FGD No. 3, Middle East, Arab Muslim).

“The halal logo is important to all Muslim consumers. Usually I will locate the non-halal section. The rest sections are halal to me. However, still, the halal logo is important. Nonetheless, not every product has the halal logo. For example, there is pasta with halal logo and another packet of pasta without the halal logo. I will take the one with the halal logo. The halal logo assures the halal status.” (Int. No. 1, Yemen, Arab Muslim).

“If the food products came from non-Muslim country, I will search for the halal logo and check the ingredients.” (Int. No. 4, Malaysia, non-Arab Muslim).

“I have trust in countries with majority of Muslim population and to me the halal logo acts as the indicator for the halal status.” (FGD No.3, Middle East, Arab Muslim).

“Although the products came from non-Muslim countries, they have the halal logo, I will still buy them. To me, that is considered as the government's issue.” (FGD No.3, Middle East, Arab Muslim).

“When I buy any food product, I would prefer with halal logo. I trust JAKIM more. To me, once it has halal logo, it is trusted to be purchased by the consumers.” (FGD No.1, Malaysia, non-Arab Muslim).

“In selecting any food product to purchase, I will normally ensure that the manufacturers are well established. Besides having the halal logo, With that, I have no doubt as a guarantee of halal status.” (FGD No.1, Malaysia, non-Arab Muslim).

“I will search for the halal logo. I do not have any preferences which Islamic bodies issued the halal logo or status. I would are not from well known brands. To me the halal logo is very important. Strict monitoring should be done on food manufacturers. So there will be no doubt about the authenticity of the logo. Furthermore, buyers will not have any doubt and confusion.”(FGD No.1, Malaysia, non-Arab Muslim).

“There are many types of halal logo. Government bodies need to educate the consumers as to which logo is recognized by the government to avoid being cheated. However, it goes back to the individuals themselves, the initiative taken by them is important.” (FGD No.2, Malaysia, non-Arab Muslim).

“I will check the ingredients and halal logo as a tool to confirm the halal status.” (FGD No.2, Malaysia, non-Arab Muslim).

“To relieve the feeling of guilt, I will search for the halal logo.” (FGD No.3, Middle East, Arab Muslim).

“If there is no halal logo, I will look for alternative products.” (FGD No.2, Malaysia, non-Arab Muslim).

“For imported food products, I will make sure that the products are certified as halal and I will not buy food products without the halal logo” (FGD No. 2, Malaysia, non-Arab Muslim).

“If the information is limited, I will look at the halal logo. However, I do not have doubts concerning the brands or products that I buy currently. Then, in this case, the halal logo is not important.” (Int. No. 4, Malaysia, non-Arab Muslim).

“If there is no halal logo on meat-based foods, I will not buy them. Apart from meat products, if there is no halal logo, I will look at the ingredients and the country of origin. I am more inclined to buy food produced by Muslim countries. Country of origin is very important and I will prefer buying products from Egypt.” (FGD No.3, Middle East, Arab Muslim).

“I will try to find a Muslim shop and ask Muslim people for information. I like to check the country of origin and the halal logo as well. I trust products from Muslim countries more even if the products do not have the halal logo. The logo is important for products manufactured from non-Muslim countries.”(FGD No. 4, Iran, non-Arab Muslim).

“I do not trust the halal logo from Malaysia because the local media has revealed many cases of fake halal logo. Therefore, I do not trust the halal logo” (Int No. 2, Malaysia, non-Arab Muslim).

Most of the participants highlighted that they will search for the halal logo when purchasing food products. According to them, the halal logo is important when making the purchase decision. The halal logo will provide trust and confidence in any particular food product and prevent consumers from feeling doubtful.

4.2.1.5. Products originating from Muslim Countries

The majority of the participants reported that a product originating from a Muslim country is one of the important cues in deciding which food products to purchase. Products manufactured from Muslim countries are considered as an indicator that the food products are permissible for Muslims to consume.

“If there is no halal logo on the packaging of the food product, I will identify the country of origin. I prefer products from Arab countries, or any other Muslim country.” (FGD No. 4, Iran, non-Arab Muslim).

“Country of origin is important. I would prefer if the food products came from Arab country.” (FGD No. 4, Iran, non-Arab Muslim).

“If there is no halal certificate, I will not buy the product. Or else, I focus on the product's country of origin.” (Int. No. 4, Malaysia, non-Arab Muslim).

“I do not check the country of origin on a regular basis. But I prefer products from Muslim countries” (Int. No. 1, Yemen, Arab Muslim).

“I prefer food products from countries with reliable halal logo.” (Int. No. 2, Malaysia, non-Arab Muslim).

“I trust countries with a majority Muslim population, for example, Pakistan. Besides, I look for the halal logo as the halal indicator. I will definitely buy it.” (FGD No. 3, Middle East, Arab Muslim).

“If the food products were produced from Muslim countries, I have no doubt. If they came from non-Muslim countries, then I need to check for the logo” (FGD No. 3, Middle East, Arab Muslim).

“I come from Saudi Arabia, so I will buy foods from the Arab countries with confidence and without doubt.” (FGD No. 3, Middle East, Arab Muslim).

“The halal logo is not important to me. This is because food products manufactured and produced from Muslim countries should be halal.” (Int. No. 4, Malaysia, non-Arab Muslim).

“The label for country of origin is very important because I do not trust the halal logo. If I have doubt, I will not buy it. Products from Muslim countries are more reliable. If the food products are from non-Muslim countries, I will look for the halal logo and the ingredients.” (Int. No. 2, Malaysia, non-Arab Muslim).

According to most of the participants, it is important to check the product's country of origin before purchasing it, especially if the product is without the halal logo. They prefer to purchase food products originating from Muslim countries. They have

trust and confidence in the products and will purchase them without any doubt or hesitation.

Finally, all the items generated to build the structure for the halal perception are shown in Table 4.1. The items were generated from the qualitative analysis with reference to the literature. Consequently, all of the items were sent to the panel of experts for validation (Figure 3.3: List of the experts). Then, the list of items was pre-tested to check for errors (Section 4.9). Once validated, the subsequent step was the quantitative method, which started with a pilot study.

4.3 Pre-testing

Before proceeding with the later stage (pilot study and main data collection), a pre-testing was carried out. The pre-testing process closely followed the suggestions of Hunt, Sparkman and Wilcox (1982). The pre-test is defined as “a trial run with a group of respondents used to screen out problems in the instructions or design of a questionnaire” (Zikmund, 2003: 229). The questionnaire was pre-tested on a sample that resembles the actual research. The sample consisted of Arab Muslim and non-Arab Muslim consumers. The main purpose of this stage was to get feedback pertaining to the questionnaires in terms of phrasing, the understanding and the design of the questionnaire. At the same time, this pre-test was used to measure and examine whether the participants were able to understand the questions given to them and whether they were understood by different ethnic groups.

The questionnaires were distributed to 20 selected respondents who met the required criteria. The respondent profiles are shown in Table 4.4. The respondents were almost distributed in terms of gender. A purposive sampling technique was used for this stage. The test was not for statistical purposes, but comments and feedback were noted for appropriate modification. The test was conducted on a one-to-one basis.

The comments, feedback and suggestions from the respondents were taken into consideration. The comments were repetitive, lengthy and vague for some of the questions. Minor modifications were made to the questionnaire based on the response of the pre-test feedback. Next, the questions were sent for proofreading to check the grammar and language. Finally, all the questions were tested in a pilot study.

Table 4.4: Respondent Profiles (Pre-Testing)

| | ARAB MUSLIM | | NON-ARAB MUSLIM | |
|--|-------------|-------|-----------------|-------|
| | Frequency | % | Frequency | % |
| By Gender | | | | |
| Male | 5 | 50.00 | 5 | 50.00 |
| Female | 5 | 50.00 | 5 | 50.00 |
| By Marital Status | | | | |
| Single | 2 | 44.8 | 3 | 62.6 |
| Married | 8 | 51.6 | 7 | 34.5 |
| By Age | | | | |
| 20- 29 | 1 | 10.00 | 2 | 20.00 |
| 30- 39 | 7 | 70.00 | 7 | 70.00 |
| 40- 49 | 1 | 10.00 | 1 | 10.00 |
| 50 And Above | 1 | 10.00 | 0 | 0.00 |
| By education level | | | | |
| Higher Edu. Below Degree Or Equivalent | 1 | 10.00 | 2 | 20.00 |
| Postgraduate | 2 | 20.00 | 3 | 30.00 |
| | 7 | 70.00 | 5 | 50.00 |

4.4 Pilot Study Results

This section discusses the process of the pilot study in which the main aim was to test the constructs for halal perception. There were five hypothetical constructs under halal perception, namely halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo, and products originating from Muslim countries.

A total of 211 responses were utilized to meet the purpose of pilot testing. The main purpose of the pilot testing was to determine the construct reliability of the instruments. The pilot testing was also to see the relationship between the proposed

relationships. Once the instrument indicates its reliability and the relationship, the actual research is carried out. The results for the pilot study are explained in the next chapter.

a. Data Screening and Cleaning

Data screening and cleaning is required prior to statistical techniques, which includes several steps – checking for errors and missing data, checking for outliers and checking for negatively worded questions. These steps are essential, for example, the outliers are very sensitive and may affect the analysis (Pallant, 2005). Outliers can occur as either unusually high or low values in the variable (Hair, 2005). This could be an error during data entry or coding. Hair (2006) suggested to eliminate or to record the outliers as missing values during the data cleaning stage.

b. Checking for Errors and Missing Data

There is a possibility of entering a wrong value for the data in the database. SPSS software is used for the purpose. Therefore, once all the data are entered into the software it is important to detect the incorrect and missing data in the software. This can be done in the SPSS software using „descriptive statistics“. There are several ways to treat the errors and missing data by the researcher. Any weird or out of range value in the data is corrected by checking the original questionnaire. In this situation, Hair (2010) recommended to either return to the field to get better data, assign missing values or discard them.

c. Negatively Worded Question

Once the data are entered, the next step is transforming the negatively worded questions. The purpose of negatively worded questions is to prevent biased responses from the respondents; this needs to be reversed prior to performing the statistical

analyses. The seven-point Likert scales for the negatively worded questions were reversed accordingly. The range of seven-point Likert scale for the negatively worded questions is transformed from 1 (Strongly Disagree) – 7 (Strongly Agree) to 1 (Strongly Agree) – 7 (Strongly Disagree). The list of negatively worded questions is presented in Table 4.5.

Table 4.5: Negatively Worded Questions

| No | Statement | Construct |
|----|---|---|
| 1 | Eating Halal food is not important to me. | Halal Consciousness |
| 2 | Investigating the ingredient of food products is generally a waste of time. | Halal Cautiousness |
| 3 | I will not mind to buy food products without the Halal logo. | The importance of Halal Logo |
| 4 | It is not important to me to purchase food products that originate from Muslim countries. | Product Originated from Muslim Countries |
| 5 | My intention of purchasing Halal food products is very low | Intention to purchase halal food products |
| 6 | My likelihood of purchasing Halal products is very low | Intention to purchase halal food products |

4.4.1 Assessing the Reliability of the Measures Constructs Using the EFA

Approach.

Assessing the reliability of the measures is required in order to have purified measures. Cronbach's Alpha is the most widely used technique to assess reliability. A total of 211 usable questionnaires have been used to calculate the Cronbach's Alpha for the proposed constructs. The next sub-section presents the Cronbach's Alpha result for halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries. Halal knowledge is measured by 20 items, halal consciousness by ten items, halal cautiousness by nine items, the importance of the halal logo with ten items and products originating from Muslim countries with ten items.

a. Cronbach's Alpha

The results of the Cronbach's alpha are presented in Table 4.6. The Cronbach's Alpha values for all of the constructs were within acceptable range value. The Cronbach's Alpha values for the constructs are shown in Table 4.26, halal knowledge (0.740), halal consciousness (0.846), halal cautiousness (0.878), the importance of the halal logo (0.863) and products originating from Muslim countries (0.794).

Table 4.6: Cronbach's Coefficient Alpha for the Halal Perception Constructs

| Constructs | Number of item | Cronbach coefficient alpha |
|--|-----------------------|-----------------------------------|
| Halal knowledge | 20 | 0.74 |
| Halal Consciousness | 10 | 0.85 |
| Halal Cautiousness | 9 | 0.88 |
| The Importance Of Halal Logo | 10 | 0.86 |
| Product Originated From Muslim Countries | 10 | 0.79 |

b. Item Correlation

Firstly, the inter-item correlations of the 59 items measuring the constructs were examined. According to De Vellis (2003), the higher the correlation among the items, the higher the individual item reliabilities, which means they are related to measuring what they are intended to measure. Next, the strength of the item to total correlation of all the items was also examined. The individual items measuring a particular construct should correlate substantially with a set of highly inter-correlated items (De Vellis, 2003).

The first aim of developing the halal knowledge construct was to determine each item for its inclusion in the questionnaire or item analysis. This can be determined by checking the internal consistency reliability or Cronbach's coefficient alpha value (Whati et al., 2005; Parmenter and Wardle, 2000).

Based on Table 4.7, the result indicates that the value of Cronbach's coefficient alpha has achieved a satisfactory value (0.74), and the inter-item correlation were between 0.26 – 0.53. The minimum item total correlation should be 0.2 or 0.3 (Parmenter and Wardle, 2000). Items that do not meet the minimum item-total correlation criteria should be discarded. The items can be considered for testing, moreover they are a basic aspect and not covered elsewhere in the questionnaire (Parmenter & Wardle, 1999). Thus, this construct is considered to have achieved its reliability and is high enough to proceed for further analysis.

Based on Table 4.8, the item total correlation value for halal consciousness ranges between 0.60 to 0.83. The value of the Cronbach's coefficient alpha is 0.846. The result indicates that the item total correlation and Cronbach's coefficient alpha were above the benchmark level. Therefore, the results suggest that those items met the satisfactory value.

Table 4.9 presents the reliability analysis results for the halal cautiousness construct. The value for item total correlation for all items is between 0.55 to 0.76. The value of the Cronbach's coefficient alpha is 0.878. Therefore, the results indicate that the scale had achieved the satisfactory value.

Table 4.10 presents the results for the reliability analysis for the importance of the halal logo construct. The values for the item total correlation for all items in this construct range between 0.59 to 0.83. The value of the Cronbach's coefficient alpha is 0.863. Hence, this result further indicates that these items have met the satisfactory value.

Table 4.11 presents the results for the reliability analysis for the products originating from Muslim countries construct. As a result, the values for the item total correlation for all items range between 0.58 to 0.64. The value of the Cronbach's

coefficient alpha is 0.794. Therefore, the results indicate that the items for products originating from Muslim countries have achieved a satisfactory value.

Table 4.7: Reliability Analysis for the Halal Knowledge Construct

| Construct | Item | Item total correlation |
|------------------------------------|----------|------------------------|
| Halal knowledge α : 0.74 | KNOW_1a | 0.41 |
| | KNOW_3a | 0.44 |
| | KNOW_4a | 0.44 |
| | KNOW_7a | 0.33 |
| | KNOW_8a | 0.23 |
| | KNOW_9a | 0.48 |
| | KNOW_10a | 0.53 |
| | KNOW_11a | 0.36 |
| | KNOW_12a | 0.28 |
| | KNOW_13a | 0.30 |
| | KNOW_14a | 0.39 |
| | KNOW_15a | 0.31 |
| | KNOW_16a | 0.49 |
| | KNOW_17a | 0.32 |
| | KNOW_18a | 0.26 |
| | KNOW_20a | 0.31 |

Table 4.8: Reliability Analysis for the Halal Consciousness Construct.

| Construct | Item | Item total correlation |
|--|--------|------------------------|
| Halal Consciousness α : 0.85 | CONS_2 | 0.68 |
| | CONS_3 | 0.60 |
| | CONS_5 | 0.76 |
| | CONS_7 | 0.79 |
| | CONS_8 | 0.84 |
| | CONS_9 | 0.83 |

Table 4.9: Reliability Analysis for the Halal Cautiousness Construct.

| Construct | Item | Item total correlation |
|---------------------------------------|-------|------------------------|
| Halal Cautiousness α : 0.88 | CAU_1 | 0.62 |
| | CAU_2 | 0.68 |
| | CAU_3 | 0.61 |
| | CAU_4 | 0.66 |
| | CAU_5 | 0.57 |
| | CAU_6 | 0.68 |
| | CAU_7 | 0.76 |
| | CAU_8 | 0.54 |
| | CAU_9 | 0.55 |

Table 4.10: Reliability Analysis for the Importance of the Halal Logo Construct.

| Construct | Item | Item total correlation |
|------------------------------|--------|------------------------|
| The importance of Halal Logo | LOGO_1 | 0.59 |
| α : 0.86 | LOGO_4 | 0.72 |
| | LOGO_5 | 0.83 |
| | LOGO_6 | 0.72 |

Table 4.11: Reliability Analysis for Products Originating from Muslim Countries Construct.

| Construct | Item | Item total correlation |
|--|-------|------------------------|
| Product Originated From Muslim Countries | COO_2 | 0.65 |
| α : 0.79 | COO_3 | 0.58 |
| | COO_4 | 0.64 |
| | COO_5 | 0.57 |

c. Factor Analysis for the Constructs of Halal Perception

This section will discuss the results of factor analysis for the constructs of halal perception, which includes halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries. The analysis will start with the test of sphericity and measure of sampling adequacy. These are followed by factor extraction, factor rotation for the halal perception constructs.

The Kaiser-Meyer-Olkin measure of sampling adequacy and the Bartlett's test of Sphericity were examined to determine the appropriateness of factor analysis of the scale. According to Tabachnick and Fidell (2007), data is acceptable when the Bartlett's test is significant, when the p value is less than 0.5, and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is at least 0.50.

As a result of the pilot study, the Kaiser-Meyer-Olkin measure of sampling adequacy score is 0.845, 0.907, 0.792 and 0.777, respectively, for halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries. Hence, the results suggest that all the items for the given constructs

are suitable for factor analysis. The results for each of the constructs for halal perception are presented in Tables 4.12, 4.13, 4.14 and 4.15.

Table 4.12: Test of Sphericity and Measure of Sampling Adequacy for Halal Consciousness Construct

| KMO and Bartlett's Test | | Value |
|--|--------------------|--------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.846 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 918.577 |
| | df | 15 |
| | Sig. | 0.000 |

Table 4.13: Test of Sphericity and Measure of Sampling Adequacy for Halal Cautiousness Construct

| KMO and Bartlett's Test | | Value |
|--|--------------------|--------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.907 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 789.954 |
| | df | 36 |
| | Sig. | 0.000 |

Table 4.14: Test of Sphericity and Measure of Sampling Adequacy for the Importance of the halal logo Construct

| KMO and Bartlett's Test | | Value |
|--|--------------------|--------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.792 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 428.546 |
| | df | 6 |
| | Sig. | 00.000 |

Table 4.15: Test of Sphericity and Measure of Sampling Adequacy Products Originating from Muslim Countries Construct

| KMO and Bartlett's Test | | Value |
|--|--------------------|--------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.777 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 248.391 |
| | df | 6 |
| | Sig. | 0.000 |

Principal component analysis (PCA) was used in this study for factor extraction and to discover or to reduce the dimensionality of the data set. Based on the results, the percentages of the variance explained for the constructs are 69.31%, 51.99%, 71.22% and 62.28%, respectively. The summary is presented in Table 4.16.

Table 4.16: Principal Component Analysis Extraction Results

| Constructs | Variance explained (%) |
|--|-------------------------------|
| Halal Consciousness | 69.31% |
| Halal Cautiousness | 51.99% |
| The Importance Of Halal Logo | 71.22% |
| Product Originated From Muslim Countries | 62.28% |

d. Factor Loading

According to Hair (2010) a factor loading value higher than 0.40 is considered statistically significant at an alpha level of 0.5. The results of the factor loading scores for halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries are presented in Tables 4.17, 4.18 and 4.19. The results for the item loading for all constructs were greater than 0.40. This indicates that the scale for the given constructs is significant.

Table 4.17 presents the results of the factor loading for halal consciousness. The values for the factor loading scores range from 0.692 to 0.905. Therefore, the scores indicate statistically significant results.

Table 4.17: Factor Loadings for the Halal Consciousness Construct

| Halal Consciousness | | Factor Loading |
|---------------------|---|----------------|
| CONS_2 | Eating Halal food is not important to me. | 0.778 |
| CONS_3 | Eating Halal food is very important to me. | 0.692 |
| CONS_5 | I will not purchase food if it is placed next to non-Halal food on the supermarket shelf. | 0.832 |
| CONS_7 | If there is no Halal logo, I will always check the ingredients on the packaging of the processed food products. | 0.879 |
| CONS_8 | As a Muslim, I have to consume only Halal food. | 0.905 |
| CONS_9 | I consume only Halal food products. | 0.889 |

Table 4.18 presents the results of factor loading scores for halal cautiousness. The values for factor loading range from 0.632 to 0.834. Hence, this indicates that the results are statistically significant.

Table 4.18: Factor Loading for the Halal Cautiousness Construct

| Halal Cautiousness | | Factor Loading |
|--------------------|--|----------------|
| CAU_1 | I am always cautious when purchasing food products to avoid eating Haram or questionable food. | 0.720 |
| CAU_2 | I am usually extra cautious to ensure that products are Halal when buying new food products. | 0.771 |
| CAU_3 | Investigating the ingredient of food products is generally a waste of time. | 0.64 |
| CAU_4 | I never buy food that I don't know to avoid the risk of buying non-Halal food. | 0.696 |
| CAU_5 | I will find alternative food products if I have doubts about the Halalness of the food products. | 0.752 |
| CAU_6 | I will avoid buying any food products if I am not sure of the ingredients. | 0.662 |
| CAU_7 | I take the time to shop carefully for Halal food. | 0.757 |
| CAU_8 | I am always make careful purchase on food products to ensure the Halalness. | 0.834 |
| CAU_9 | I am always choosing food product that is made in Muslim countries. | 0.632 |

Table 4.19 presents the results for the factor loading for the importance of the halal logo. The values for factor loading range from 0.748 to 0.916, which indicates statistically significant results.

Table 4.19: Factor Loading for the Importance of Halal Logo Construct

| The Importance Of Halal Logo | | Factor Loading |
|-------------------------------------|---|-----------------------|
| LOGO_1 | When purchasing processed food products, the first thing I will ensure is that it has the Halal logo. | 0.748 |
| LOGO_4 | I buy food products with the Halal logo to avoid feeling doubtful about the Halalness. | 0.849 |
| LOGO_5 | I will search for the Halal Logo on the food product before purchasing the food product. | 0.916 |
| LOGO_6 | The Halal logo is important when deciding to buy any food products. | 0.853 |

In addition, Table 4.20 presents the results of the factor loading for products originating from Muslim countries. The values for factor loading range from 0.748 to 0.916. This indicates a statistically significant result.

Table 4.20: Factor Loading for Products originating from Muslim Countries

| Product Originated From Muslim Countries | | Factor Loading |
|---|--|-----------------------|
| COO_2 | I would prefer to purchase products manufactured in Muslim countries. | 0.821 |
| COO_3 | My confidence level in purchasing food products will depend on whether the food products are manufactured in Muslim countries. | 0.763 |
| COO_4 | It is important for me to make sure the food products that I purchase come from Muslim countries. | 0.814 |
| COO_5 | I am confident to buy food products that originate from Muslim countries. | 0.757 |

4.4.2 Assessment of Reliability and Validity using the CFA Approach

The next analysis is confirmatory factor analysis (CFA), which is used to further assess the reliability and validity of the measurement. Gebing and Anderson (1988) suggested that confirmatory factor analysis (CFA) is used for a more rigorous procedure. Confirmatory Factor Analysis (CFA) was applied to the constructs of halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries.

A total of 211 usable questionnaires were used in the CFA approach. Composite Reliability (CR) and Average Variance Extracted (AVE) were employed in this study to establish reliability and validity by the using CFA approach. It has been suggested that the rule of thumb of good composite reliability is 0.70 and higher (Nunnally and Bernstein, 1994). However, values below 0.7 or 0.6 have been considered to be acceptable (Hair et al., 1998; Bagozzi, 1995). Construct reliability or internal consistency reliability can be achieved using the formula as below:

$$CR = \frac{(\sum_{i=1}^n Li)^2}{(\sum_{i=1}^n Li)^2 + (\sum_{i=1}^n Ei)}$$

L = represents the standardized factor loadings
 e = sum of the error variance terms for a construct
 n = the number of items

Average Variance extracted is calculated for the constructs using the formula suggested by Hair et al. (2010). Hair et al. (2010) suggested that a variance extracted greater than 0.5 is the rule of thumb and suggesting sufficient convergent validity. The formula for average variance extracted is as below:

$$AVE = \frac{\sum_{i=1}^n Li^2}{n}$$

L = standardized factor loadings
 n = the number of items

As a result, the internal consistency or construct reliability value for halal consciousness, halal cautiousness, the importance of the halal logo, and products originating from Muslim countries are 0.729, 0.737, 0.733 and 0.574, respectively. While, the AVE extracted are 0.62, 0.52, 0.627 and 0.50, respectively. Therefore, the study is considered to achieve construct reliability or internal consistency. The results further accomplish convergent validity by achieving standardized loading estimated values higher than 0.5. The summary of the composite reliability and AVE is presented

in Table 4.21 and the summary for the CFA fit measures for the halal perception constructs is presented in Table 4.22.

Table 4.21: Composite Reliability And AVE

| Measures | Halal Consciousness | Halal Cautiousness | The importance of Halal Logo | Product Originated From Muslim Countries |
|-----------------------|----------------------------|---------------------------|-------------------------------------|---|
| AVE | 0.62 | 0.52 | 0.63 | 0.50 |
| Composite reliability | 0.73 | 0.74 | 0.73 | 0.57 |

The techniques to measure the developed scales for the constructs of halal perception have shown adequate in terms of reliability and fit measures in the CFA model. However, halal consciousness does not meet the acceptable level for the measures of RMSEA and normed Chi-Square, as some of the constructs are not significant. As suggested by Pallant (2005), statistically, this study requires a sample size of at least 435 (at least five times the number of indicators).

The total of sample size may contribute as the factor for that reason. The sample size for this pilot study is only 211. The composite reliability and AVE for products originating from Muslim countries were less than 0.6. However, Hatcher (1994) suggested that any value of AVE that is less than 0.50 does not cause concern since it is quite frequent from the previous studies with such estimation (Klien, 1998; Nijssen and Douglas, 2004; Sood and Nasu, 1995). It is not uncommon to get a variance-extracted estimation of less than 0.5 (Hatcher, 1994).

Table 4.22: CFA Fit Measures of the Halal Perceptions Construct

| Fit Indices | Acceptable level | Estimates | | | |
|--|------------------|---------------------|--------------------|------------------------------|--|
| | | Halal Consciousness | Halal Cautiousness | The importance of Halal Logo | Product Originated From Muslim Countries |
| Chi square(X2) | | 8.654 | 62.694 | 1.596 | 4.257 |
| Degree of freedom (df) | | 2.000 | 27.000 | 2.000 | 2.000 |
| p | >0.05 | 0.013 | 0.000 | 0.450 | 0.119 |
| Normed Chi Square (CMIN/df) | <3.00 | 4.327 | 2.322 | 0.798 | 2.128 |
| Goodness-of-fit index (GFI) | ≥ 0.90 | 0.980 | 0.936 | 0.996 | 0.990 |
| Adjusted Goodness-of-fit index (AGFI) | ≥ 0.90 | 0.902 | 0.893 | 0.982 | 0.951 |
| Normed fit index (NFI) | ≥ 0.90 | 0.981 | 0.922 | 0.996 | 0.830 |
| Tucker-Lewis Index (TLI) | ≥ 0.90 | 0.955 | 0.938 | 1.003 | 0.972 |
| Comparative Fit Index (CFI) | ≥ 0.90 | 0.985 | 0.954 | 1.000 | 0.991 |
| Root Mean Square Error of Estimation (RMSEA) | ≤ 0.08 | 0.126 | 0.079 | 0.000 | 0.073 |

4.4.3 Techniques for Structural Model Assessment and Hypothesis Testing (Using the SmartPLS 3.0).

The partial least squares (PLS) technique was chosen to examine the structural model estimation and evaluation with SmartPLS 3.0 for the study. In general, PLS is a prediction model (Chin, 1998). The current study does provide some new measures and relationships, which have not been adequately tested. Additionally, PLS is also well known for which multi-item measures are not available for latent constructs (Hair et al., 2010). This is relevant for the development of the halal knowledge construct for the purpose of the research. The halal knowledge construct has been developed with multi-choice scale items, which closely follow the procedure of developing the knowledge scale

Looking at the issue of the theory base, PLS does not require a sound base theory because the method supports both exploratory and confirmatory theory (Gefen et al., 2000). This is another motivation for using PLS in that the suggested existence of a relationship has not been established, and, therefore, can be considered as insufficient grounding in theory (Acedo and Jones, 2007). Since the model for the current study has no strong relationship between variables, it is recommended for analyzing with PLS (Falk and Miller, 1992).

PLS is also well known for its less stringent requirement on the issue of sample size (Gefen et al., 2000). The sample size for the current study is from non-Arab Muslims (N= 406) and Arab Muslims (N= 382). As such, based on the discussion, the utilization of the partial least squares (PLS) in the structural measurement model estimation for the current study is justified. The summarization of the proposed hypotheses is shown in Table 4.23

Table 4.23: The summarization of the Proposed Hypotheses

| Hypotheses | | | |
|------------|--|--------|---------|
| H1a | There is a positive relationship between Muslim religiosity and the halal knowledge among Arab Muslim and Non-Arab Muslims in UK and Australia. | H1ai | Overall |
| | | H1aai | Ethnic |
| | | | Arab |
| | | H1aiii | Country |
| UK | | | |
| H1b | There is a positive relationship between Muslim religiosity and Halal consciousness among Arab Muslim and Non-Arab Muslims in UK and Australia. | H1bi | Overall |
| | | H1bii | Ethnic |
| | | | Arab |
| | | H1biii | Country |
| UK | | | |
| H1c | There is a positive relationship between Muslim religiosity and the importance of Halal Logo among Arab Muslim and Non-Arab Muslims in UK and Australia. | H1ci | Overall |
| | | H1cii | Ethnic |
| | | | Arab |
| | | H1ciii | Country |
| UK | | | |
| H1d | There is a positive relationship between Muslim religiosity and products originated from Muslim countries among Arab Muslim and Non-Arab Muslims in UK and Australia. | H1di | Overall |
| | | H1dii | Ethnic |
| | | | Arab |
| | | H1diii | Country |
| UK | | | |
| H2a | There is a positive relationship between halal knowledge food and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | H2ai | Overall |
| | | H2aai | Ethnic |
| | | | Arab |
| | | H2aiii | Country |
| UK | | | |
| H2b | There is a positive relationship between halal consciousness and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia in UK and Australia. | H2bi | Overall |
| | | H2bii | Ethnic |
| | | | Arab |
| | | H2biii | Country |
| UK | | | |
| H2c | There is a positive relationship between the importance of halal logo and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | H2ci | Overall |
| | | H2cii | Ethnic |
| | | | Arab |
| | | H2ciii | Country |
| UK | | | |
| 2d | There is a positive relationship between products originated from Muslim countries and the intention to purchase halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | H2di | Overall |
| | | H2dii | Ethnic |
| | | | Arab |
| | | H2diii | Country |
| UK | | | |
| 3 | The higher the Muslim religiosity, the higher will be the intention to purchase Halal food product among Arab Muslim and Non-Arab Muslims in UK and Australia. | H3i | Overall |
| | | H3ii | Ethnic |
| | | | Arab |
| | | H3iii | Country |
| UK | | | |

4.5 Testing Assumptions for the Multivariate Analysis

As discussed in the previous chapter in section 4.12.2, some assumptions should be assessed to check for suitability of the data set for conducting EFA. Before proceeding with the analysis relating to multivariate analysis, the assumption of normality using skewness and kurtosis, multicollinearity and normality must be tested. The outliers concerned were discussed in section 4.11.

The results for normality can be examined using the normal probability-plot (P-P) to determine the normality of the independent variables. The results of the normal probability-plot (P-P) are presented in Appendix B. The results illustrated that the plotted data values do not stray much from the straight diagonal line. Hence, the results indicated that the independent variables of the current study were considered to be normal. The study examined the skewness and kurtosis values to evaluate the normality. Based on Table 4.24 the skewness values were between -1 and +1 (Hair et al., 2010). The estimated Kurtosis range values were within the recommended values.

Table 4.24: Testing for Normality using Skewness and Kurtosis

| Constructs | Skewness | Kurtosis |
|---|-----------------|-----------------|
| Religiosity | -0.974 | 0.405 |
| Halal Consciousness | -0.583 | -0.345 |
| Halal Cautiousness | -0.491 | -0.232 |
| The Importance of Halal Logo | -0.388 | -0.354 |
| Products originated from Muslim countries | -0.143 | 0.081 |
| Intention to purchase Halal food products | -0.405 | -0.629 |

The variance-inflating factor (VIF) was applied to test the multicollinearity. The calculated values of VIF are presented in Table 4.25, which indicated that there is no problem of multicollinearity since the values are less than 10. The condition index cut-off point is 30. As such, based on the given results, all of the values indicated that there was no problem of multicollinearity among the variables.

Table 4.25: Multicollinearity Test Results

| Constructs | VIF | Condition Index |
|---|-----|-----------------|
| Religiosity | 1 | 13.589 |
| Halal Consciousness | 1 | 13.751 |
| Halal Cautiousness | 1 | 13.176 |
| The Importance of Halal Logo | 1 | 11.994 |
| Products originated from Muslim countries | 1 | 9.746 |

4.5.1 The Response Rate

Data collection was done over a period of five months. The questionnaires were distributed in various universities in the United Kingdom and Australia. Table 4.26 presents the response rate for the United Kingdom and Table 4.27 presents the response rate for Australia.

Table 4.26: Response Rate for the United Kingdom

| Country | Area | Distributed questionnaire | % | Returned questionnaire | % |
|----------------|------------|---------------------------|-----|------------------------|-----|
| United Kingdom | London | 250 | 42 | 167 | 42 |
| | Manchester | 200 | 33 | 122 | 31 |
| | Colchester | 150 | 25 | 106 | 27 |
| Total | | 600 | 100 | 395 | 100 |

Table 4.27: Response Rate for Australia

| Country | Area | Distributed questionnaire | % | Returned questionnaire | % |
|-----------|-----------|---------------------------|-----|------------------------|-----|
| Australia | Perth | 300 | 50 | 210 | 53 |
| | Melbourne | 300 | 50 | 183 | 47 |
| Total | | 600 | 100 | 393 | 100 |

A total of 1200 questionnaires were distributed to the targeted respondents, of which 838 were completed and returned. The response rate was 70 percent. A total of 788 questionnaires, giving a response rate of 66 per cent, were completed and shown to

be consistent and deemed eligible for further analysis. The analyses were performed using SPSS version 18, AMOS Version 19 and SmartPLS 3.0.

4.5.2 Respondents' Profile

This section presents the general information about the respondents. It begins with the respondents' country-of-origin, and, subsequently, the respondents' profile. Table 4.28 shows the respondents' country-of-origin. There were forty-six nationalities representing the respondents' country-of-origin. The majority of the Arab Muslim respondents originated from Saudi Arabia while the non-Arab Muslims were from Malaysia. The respondents' profile is shown in Table 4.29. The respondents were almost distributed in terms of country, ethnicity, and gender. A total of 50.1 per cent of the respondents were collected in the UK and 49.9 per cent in Australia. The percentage was almost equally divided between Australia and the UK. The distribution by gender in both countries showed that 50.4 per cent were female and 49.6 per cent were male.

For the respondents' profile for the Arab Muslims in the UK, there were more male respondents than female respondents with 53.1 per cent and 46.9 per cent, respectively. This result was expected since, generally, the females in the Arab culture are confined within a restricted private space. However, there were more female respondents for non-Arab Muslims with 51.7 per cent and 48.3 percent. By marital status, Arab Muslims showed that 44.8 per cent were single, 51.6 per cent were married and the rest were divorced, separated or widowed. The majority of Arab Muslims were single with 62.6 percent.

The majority of the respondents were between 20 and 39 years old, with Arab Muslims representing 80.8 per cent and non-Arab Muslims with 78.3 per cent. The majority of the Arab Muslims and non-Arab Muslim were holding degrees and above

with 74.4 per cent and 67 per cent, respectively. Lastly, most of the respondents for both Arab Muslims and non-Arab Muslims were earning less than GBP1999 per month.

In Australia, there were more Arab Muslim female respondents than male respondents with 51.1 per cent and 48.9 percent, respectively. For non-Arab Muslims, there were more female respondents than male respondents with 51.7 per cent and 48.3 percent, respectively. For marital status, the Arab Muslims showed that 56.3 per cent were single, 43.7 per cent were married and the rest were divorced, separated or widowed. The majority of non-Arab Muslims were married with 62.1 percent.

Looking at the distribution by age, 92.1 per cent of Arab Muslims and 71.4 percent of non-Arab Muslims were aged between 20 and 39 years old. The majority of the Arab Muslims and non-Arab Muslims were holding a degree and above with 94.8 per cent and 61.1 per cent, respectively. Lastly, most of the Arab Muslim and non-Arab Muslim respondents were earning less than GBP1999.

Table 4.28: Respondents' Country-of-origin

| Country | Respondent | Country | Respondent |
|-------------|------------|----------------|------------|
| Afghanistan | 3 | Malaysia | 231 |
| Algeria | 6 | Mauritius | 1 |
| Australia | 19 | Morocco | 8 |
| Bangladesh | 11 | New Zealand | 2 |
| Bosnia | 1 | Nigeria | 3 |
| Brunei | 2 | Oman | 8 |
| China | 1 | Pakistan | 25 |
| Conggo | 1 | Qatar | 3 |
| Egypt | 14 | Russia | 1 |
| Eritia | 1 | Saudi Arabia | 164 |
| France | 3 | Singapore | 13 |
| Ghana | 1 | Somalia | 19 |
| Holland | 1 | South Africa | 2 |
| India | 4 | Sri Lanka | 6 |
| Indonesia | 43 | Sudan | 5 |
| Iran | 7 | Syria | 35 |
| Iraq | 29 | The Netherland | 1 |
| Jordan | 6 | Tunisia | 2 |
| Kazakhstan | 1 | Turkey | 7 |
| Kenya | 1 | UAE | 8 |
| Kuwait | 8 | UK | 21 |
| Latvian | 1 | Vietnam | 1 |
| Lebanon | 22 | TOTAL | 788 |
| Libya | 36 | | |

Table 4.29: Respondents Profile

| Profile | UNITED KINGDOM | | | | AUSTRALIA | | | |
|---------------------------|----------------|------|------------------|------|--------------|-----------|------------------|------|
| | ARAB MUSLIMS | | NON-ARAB MUSLIMS | | ARAB MUSLIMS | | NON-ARAB MUSLIMS | |
| | Frequency | % | Frequency | % | Frequency | Frequency | % | |
| By Gender | | | | | | | | |
| Male | 102 | 53.1 | 98 | 48.3 | 93 | 48.9 | 98 | 48.3 |
| Female | 90 | 46.9 | 105 | 51.7 | 97 | 51.1 | 105 | 51.7 |
| By Marital Status | | | | | | | | |
| Single | 86 | 44.8 | 127 | 62.6 | 107 | 56.3 | 70 | 34.5 |
| Married | 99 | 51.6 | 70 | 34.5 | 83 | 43.7 | 126 | 62.1 |
| Divorce/ Separated | 5 | 2.6 | 5 | 2.5 | 0 | 0 | 6 | 3 |
| Widowed | 2 | 1 | 1 | 0.5 | 0 | 0 | 1 | 0.5 |
| By Age | | | | | | | | |
| Below 20 | 12 | 6.3 | 25 | 12.3 | 5 | 2.6 | 14 | 6.9 |
| 20- 29 | 89 | 46.4 | 108 | 53.2 | 84 | 44.2 | 64 | 31.5 |
| 30- 39 | 66 | 34.4 | 51 | 25.1 | 91 | 47.9 | 81 | 39.9 |
| 40- 49 | 21 | 10.9 | 17 | 8.4 | 10 | 5.3 | 42 | 20.7 |
| 50 And Above | 4 | 2.1 | 2 | 1 | 0 | 0 | 2 | 1 |
| By Education Level | | | | | | | | |
| Primary (or less) | 6 | 3.1 | 5 | 2.5 | 0 | 0 | 11 | |
| Secondary | 9 | 4.7 | 5 | 2.5 | 5 | 2.6 | 2 | 1 |
| Higher Edu. Below | 34 | 17.7 | 57 | 28.1 | 5 | 2.6 | 33 | 16.3 |
| Degree | | | | | | | | |
| Degree Or Equivalent | 26 | 13.5 | 63 | 31 | 67 | 35.3 | 44 | 5.4 |
| Postgraduate | 117 | 60.9 | 73 | 36 | 113 | 59.5 | 113 | 55.7 |
| By Income | | | | | | | | |
| Less than 1000 | 159 | 82.8 | 153 | 75.4 | 130 | 68.4 | 159 | 78.3 |
| 1000 - 1999 | 20 | 10.4 | 20 | 9.9 | 41 | 21.6 | 23 | 11.3 |
| 2000 - 2999 | 9 | 4.7 | 10 | 4.9 | 4 | 2.1 | 4 | 2 |
| 3000 - 4999 | 2 | 1 | 5 | 2.5 | 0 | 0 | 7 | 3.4 |
| 5000 and over | 2 | 1 | 15 | 7.4 | 15 | 7.9 | 10 | 4.9 |

4.6 Descriptive statistics of the studied constructs.

This section explains the descriptive statistics of the studied constructs. The constructs are Muslim religiosity, halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo, product originating from Muslim countries and the intention to purchase halal food products.

4.6.1 Descriptive Statistics for the Religiosity Construct

The descriptive statistics on religiosity for the respondents in the United Kingdom are shown in Table 4.30. Based on the table, the highest level of agreement for religiosity among the respondents was for the belief system, which included the belief that Allah helps people, Allah listens to prayers, and that Allah helps them. Furthermore, the respondents believed that Islam helps them to lead a better life and Muhammad (pbuh) inspires through good conduct. Nevertheless, they did not fast on Mondays and Thursdays regularly.

The descriptive statistics on religiosity for the respondents in Australia are shown in Table 4.31. Based on the results, the highest agreement level of religiosity among the respondents was “I will perform hajj after I fulfill all the necessary conditions” and “I will continuously seek to learn about Allah”. Once again, “I do the optional fasting on Monday and Thursday regularly” had the lowest mean. This is not surprising since the practice of fasting on Mondays and Thursdays is considered as optional to the followers.

**Table 4.30: Descriptive Statistics of the Religiosity Construct
(in the United Kingdom)**

| Questions | | Mean | S.D. |
|-----------|---|------|------|
| 1 | I believe that Allah helps people. | 6.92 | 0.49 |
| 2 | I believe that Allah listens to prayers. | 6.89 | 0.62 |
| 3 | I believe that Allah helps me. | 6.88 | 0.56 |
| 4 | Islam helps me to lead a better life. | 6.86 | 0.69 |
| 5 | Muhammad (peace be upon him) inspires me with good conduct. | 6.85 | 0.53 |
| 6 | The Quran is relevant and applicable to modern day. | 6.80 | 0.75 |
| 7 | I will continuously seek to learn about Allah. | 6.77 | 0.72 |
| 8 | I fast the whole month of Ramadan sincerely. | 6.76 | 0.80 |
| 9 | Saying my prayers helps me a lot. | 6.74 | 0.81 |
| 10 | The five prayers help me a lot. | 6.72 | 0.91 |
| 11 | The supplication (dua') helps me. | 6.67 | 0.98 |
| 12 | I pray five times a day. | 6.62 | 1.03 |
| 13 | I read the Quran for inspiration and motivation. | 6.43 | 1.06 |
| 14 | I will perform hajj after I fulfill all the necessary conditions. | 6.42 | 1.22 |
| 15 | I perform the obligation of zakat fitrah annually. | 6.30 | 1.47 |
| 16 | I perform the obligation of zakat maal (zakat for asset/income) annually. | 6.02 | 1.67 |
| 17 | I dress according to Islamic requirements. | 5.95 | 1.43 |
| 18 | I always perform other optional prayers (i.e. sunnat prayer such as Dhuhā). | 5.39 | 1.61 |
| 19 | I read the Quran every day. | 5.34 | 1.67 |
| 20 | I do the optional fasting on Monday and Thursday regularly. | 3.43 | 1.76 |

Table 4.31: Descriptive Statistics of the Religiosity Construct (in Australia)

| Questions | | Mean | S.D. |
|-----------|--|------|------|
| 1 | I will perform hajj after I fulfill all the necessary conditions. | 5.76 | 0.97 |
| 2 | I will continuously seek to learn about Allah. | 5.69 | 0.99 |
| 3 | I believe that Allah helps me. | 5.65 | 1.05 |
| 4 | Saying my prayers helps me a lot. | 5.64 | 1.01 |
| 5 | I believe that Allah listens to prayers. | 5.64 | 1.03 |
| 6 | The five prayers help me a lot. | 5.64 | 1.03 |
| 7 | I believe that Allah helps people. | 5.62 | 1.08 |
| 8 | The Quran is relevant and applicable to modern day. | 5.61 | 1.10 |
| 9 | Islam helps me to lead a better life. | 5.58 | 1.09 |
| 10 | Muhammad (peace be upon him) inspires me with good conduct. | 5.58 | 1.13 |
| 11 | I fast the whole month of Ramadhan sincerely. | 5.54 | 1.10 |
| 12 | I read the Quran for inspiration and motivation. | 5.51 | 1.19 |
| 13 | I perform the obligation of zakat maal (zakat for asset/income) annually. | 5.51 | 1.17 |
| 14 | The supplication (dua') helps me. | 5.50 | 1.11 |
| 15 | I pray five times a day. | 5.48 | 1.22 |
| 16 | I perform the obligation of zakat fitrah annually. | 5.44 | 1.21 |
| 17 | I dress according to Islamic requirements. | 5.26 | 1.45 |
| 18 | I always perform other optional prayers (i.e. sunnat prayer such as Dhuha and others). | 5.02 | 1.32 |
| 19 | I read the Quran every day. | 4.89 | 1.43 |
| 20 | I do the optional fasting on Monday and Thursday regularly. | 3.43 | 1.65 |

* Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

4.6.2 Descriptive Statistics for the Halal Knowledge Construct

The descriptive statistics for halal knowledge in the UK and Australia are presented in Tables 4.32 and 4.33. Based on Table 4.32, the respondents from the UK generally understand the basic concept of halal food consumption. This can be seen by looking at their answers on halal knowledge questions. However, questions with more detailed statements regarding halal food achieved a lower level of agreement, especially for the question “The prohibition of pork is restricted to meat”. Hence, this indicated that not all Muslims understand the concept of halal food. For this reason, the

differences in terms of understanding will lead them to a different understanding and perception of the halal food concept.

Table 4.32: Descriptive Statistics of the Halal Knowledge Construct (in the United Kingdom)

| Questions | | Answer | Frequency | % |
|-----------|---|---------|-----------|------|
| 1 | The meaning of Haram is | Correct | 391 | 99.5 |
| 2 | The meaning of Halal is | Correct | 389 | 99 |
| 3 | Alcohol is an example of | Correct | 389 | 99 |
| 4 | Pork is an example of | Correct | 389 | 99 |
| 5 | The term حلال (in Arabic), in English means | Correct | 384 | 97.7 |
| 6 | Muslims must eat Halal food | Correct | 359 | 91.3 |
| 7 | Halal sourced ingredients include | Correct | 357 | 90.8 |
| 8 | Which of the following are NOT considered as an Islamic method of slaughtering an animal | Correct | 348 | 88.5 |
| 9 | A meat animal which dies without being slaughtered is | Correct | 335 | 85.2 |
| 10 | Adding wine in the cooking of food is | Correct | 332 | 84.5 |
| 11 | Which of the following is not considered as filthy (najis) according to Shariah law | Correct | 325 | 82.7 |
| 12 | Halal Food should conform to Islamic laws | Correct | 318 | 80.9 |
| 13 | The term Makrooh means | Correct | 297 | 75.6 |
| 14 | Meat slaughtered by the People of the Book (Ahl-Kitab) is | Correct | 297 | 75.6 |
| 15 | The term Mashbooh or „Syuhba“ means | Correct | 293 | 74.6 |
| 16 | The equipment to process pork meat can be used immediately to process Halal food. | Correct | 287 | 73 |
| 17 | As most land animals are Halal as food, which of the following are not considered Halal | Correct | 244 | 62.1 |
| 18 | The blood of the slaughtered animal must be thoroughly drained immediately upon slaughter | Correct | 242 | 61.6 |
| 19 | Which of the following are considered as Halal food | Correct | 214 | 54.5 |
| 20 | The prohibition of pork is restricted to meat | Correct | 126 | 32.1 |

Table 4.33: Descriptive Statistics of the Halal Knowledge Construct (in Australia)

| Questions | Answer | Frequency | % | |
|-----------|---|-----------|-----|------|
| 1 | The meaning of Haram is | Correct | 391 | 99.5 |
| 2 | The meaning of Halal is | Correct | 389 | 99.0 |
| 3 | Alcohol is an example of | Correct | 389 | 99.0 |
| 4 | Pork is an example of | Correct | 389 | 99.0 |
| 5 | The term حلال (in Arabic), in English means | Correct | 384 | 97.7 |
| 6 | Muslims must eat Halal food | Correct | 359 | 91.3 |
| 7 | Halal sourced ingredients include | Correct | 357 | 90.8 |
| 8 | Which of the following are NOT considered as an Islamic method of slaughtering an animal | Correct | 348 | 88.5 |
| 9 | A meat animal which dies without being slaughtered is | Correct | 335 | 85.2 |
| 10 | Adding wine in the cooking of food is | Correct | 332 | 84.5 |
| 11 | Which of the following is not considered as filthy (najis) according to Shariah law | Correct | 325 | 82.7 |
| 12 | Halal Food should conform to Islamic laws | Correct | 318 | 80.9 |
| 13 | The term Makrooh means | Correct | 297 | 75.6 |
| 14 | Meat slaughtered by the People of the Book (Ahl-Kitab) is | Correct | 297 | 75.6 |
| 15 | The term Mashbooh or „Syuhba“ means | Correct | 293 | 74.6 |
| 16 | The equipment to process pork meat can be used immediately to process Halal food. | Correct | 287 | 73.0 |
| 17 | As most land animals are Halal as food, which of the following are not considered Halal | Correct | 244 | 62.1 |
| 18 | The blood of the slaughtered animal must be thoroughly drained immediately upon slaughter | Correct | 242 | 61.6 |
| 19 | Which of the following are considered as Halal food | Correct | 214 | 54.5 |
| 20 | The prohibition of pork is restricted to meat | Correct | 126 | 32.1 |

Similarly, the respondents from Australia also understand the basic concept of halal food consumption. The meaning of halal and haram achieved a high number of correct answers. Again, similar to the respondents in the UK, questions with more detailed statements regarding halal food achieved a lower level of agreement, especially for the question “The prohibition of pork is restricted to meat”. This confirmed that not

all Muslims understand the concept of halal food. Thus, this scenario will inevitably direct them to a contradictory understanding and perception of halal food concept among the Muslims. In general, Muslims are aware of what is halal and haram.

4.6.3 Descriptive statistics for the Halal Consciousness Construct

The descriptive statistics for halal consciousness in the UK and Australia are presented in Tables 4.34 and 4.35. The statistics indicated that the respondents in the UK perceived that halal food is very important and that Muslims must only consume halal food. According to the score, the respondents were very concerned about what they eat and would always buy food products that come from a halal source. In addition, the respondents would always buy meat from Muslim operated premises to ensure the “halalness” as well as check the ingredients of any food products. The low level score for “eating halal food is not important to me” supported the halal consciousness among the respondents.

The respondents in Australia were generally conscious about their food consumption. Although the level of agreement was not very high compared to the respondents in the UK, they still mainly adhered to Islamic dietary rules. This can be seen from the lowest score, which was “eating halal food is not important to me”. This result supported the halal consciousness among of the respondents. The respondents believed that as a Muslim halal food is very important and that they should only consume halal food.

Table 4.34: Descriptive Statistics for the Halal Consciousness (in the United Kingdom)

| | Questions | Mean | S.D. |
|----|---|-------------|-------------|
| 1 | Eating Halal food is very important to me. | 6.74 | 0.72 |
| 2 | As a Muslim, I have to consume only Halal food. | 6.62 | 0.96 |
| 3 | I consume only Halal food products. | 6.46 | 1.13 |
| 4 | I will always buy food products that come from Halal sources. | 6.40 | 1.14 |
| 5 | I am concerned about my food consumption. It has to be Halal food. | 6.36 | 1.25 |
| 6 | I will always buy meat from Muslim operated premises. | 6.34 | 1.26 |
| 7 | If there is no Halal logo, I will always check the ingredients on the packaging of the processed food products. | 6.32 | 1.35 |
| 8 | I will always eat food products with Halal logo. | 5.62 | 1.73 |
| 9 | I will not purchase food if it is placed next to non-Halal food on the supermarket shelf. | 3.46 | 2.18 |
| 10 | Eating Halal food is not important to me. ** | 1.32 | 0.88 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

Table 4.35: Descriptive Statistics for the Halal Consciousness (in Australia)

| | Questions | Mean | S.D. |
|----|---|-------------|-------------|
| 1 | As a Muslim, I have to consume only Halal food. | 5.66 | 1.07 |
| 2 | Eating Halal food is very important to me. | 5.62 | 1.09 |
| 3 | I am concerned about my food consumption. It has to be Halal food. | 5.56 | 1.16 |
| 4 | I will always buy meat from Muslim operated premises. | 5.55 | 1.13 |
| 5 | I will always buy food products that come from Halal sources. | 5.54 | 1.08 |
| 6 | If there is no Halal logo, I will always check the ingredients on the packaging of the processed food products. | 5.52 | 1.13 |
| 7 | I consume only Halal food products. | 5.49 | 1.13 |
| 8 | I will always eat food products with Halal logo. | 5.17 | 1.16 |
| 9 | I will not purchase food if it is placed next to non-Halal food on the supermarket shelf. | 3.87 | 1.89 |
| 10 | Eating Halal food is not important to me. ** | 1.64 | 0.96 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

4.6.4 Descriptive statistics for the Halal Cautiousness Construct

The descriptive statistics on halal cautiousness in the UK and Australia are presented in Tables 4.36 and 4.37. The scores in Table 4.36 indicated that the respondents in the UK had a high level of halal cautiousness. This can be seen in their level of agreement “to be extra cautious to ensure that products are halal when buying new food products”. They were cautious and careful when purchasing food products to avoid eating haram or questionable food. The scores also indicated that respondents would find alternative food products if they had doubts about the “halalness” of the food products. Based on the lowest score, which was for “Investigating the ingredients of food products is generally a waste of time”, the respondents confirmed that they were undoubtedly cautious in their effort to minimize the risk of consuming haram food.

Meanwhile, the scores in Table 4.37 indicated that the respondents in Australia had a high level of halal cautiousness although the score was not as high as the respondents in Australia. However, they were still relatively cautious in their consumption. This can be seen in the highest level of agreement for “I am always cautious when purchasing food products to avoid eating haram or questionable food”. The respondents always made careful purchases of food products to ensure the “halalness” as well as being extra cautious when purchasing new food products.

The respondents in Australia provided similar feedback to the respondents in the UK. Based on the results, the lowest score was “Investigating the ingredients of food products is generally a waste of time”. This score confirmed that they were also undoubtedly cautious in order to minimize the risk of consuming haram food.

Table 4.36: Descriptive Statistics for Halal Cautiousness (in the United Kingdom)

| Questions | | Mean | S.D. |
|-----------|--|------|------|
| 1 | I am usually extra cautious to ensure that products are Halal when buying new food products. | 6.49 | 1.03 |
| 2 | I am always cautious when purchasing food products to avoid eating Haram or questionable food. | 6.47 | 1.04 |
| 3 | I am always made careful purchases on food products to ensure the Halalness. | 6.39 | 1.14 |
| 4 | I will find alternative food products if I have doubts about the Halalness of the food products. | 6.29 | 1.25 |
| 5 | I take the time to shop carefully for Halal food. | 6.06 | 1.38 |
| 6 | I will avoid buying any food products if I am not sure of the ingredients. | 5.62 | 1.86 |
| 7 | I never buy food that I don't know to avoid the risk of buying non-Halal food. | 5.21 | 2.04 |
| 8 | I am always chosen food product that is made in Muslim countries. | 4.55 | 1.93 |
| 9 | Investigating the ingredient of food products is generally a waste of time. ** | 1.98 | 1.68 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

Table 4.37: Descriptive Statistics of the Halal Cautiousness (in Australia)

| Questions | | Mean | S.D. |
|-----------|--|------|------|
| 1 | I am always cautious when purchasing food products to avoid eating Haram or questionable food. | 5.72 | 0.97 |
| 2 | I am always made careful purchases on food products to ensure the Halalness. | 5.61 | 1.05 |
| 3 | I am usually extra cautious to ensure that products are Halal when buying new food products. | 5.6 | 1.06 |
| 4 | I will find alternative food products if I have doubts about the Halalness of the food products. | 5.54 | 1.19 |
| 5 | I take the time to shop carefully for Halal food. | 5.35 | 1.18 |
| 6 | I will avoid buying any food products if I am not sure of the ingredients. | 5.15 | 1.44 |
| 7 | I never buy food that I don't know to avoid the risk of buying non-Halal food. | 4.83 | 1.43 |
| 8 | I am always chosen food product that is made in Muslim countries. | 4.48 | 1.51 |
| 9 | Investigating the ingredient of food products is generally a waste of time. ** | 2 | 1.6 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

4.6.5 Descriptive Statistics for the Importance of the Halal Logo Construct

The descriptive statistics on the importance of the halal logo in the UK and Australia are presented in Tables 4.38 and 4.39.

Table 4.38 showed that the descriptive statistics indicated that the respondents in the UK placed a high emphasis on the availability of the halal logo. The respondents would definitely look at other cues (for example, ingredients) before buying any food products without the halal logo. They also did not mind paying extra to buy any food product with the halal logo. To them, the halal logo was sufficient and gave them confidence when purchasing food products. The lowest score was “I do not mind to buy food products without the halal logo”. Thus, supporting the importance of the halal logo among Muslims in the UK.

Generally, the score for the importance of the halal logo in Australia in Table 4.39 was not as high as in the UK. However, Muslims in Australia still relatively perceived that the halal logo was important. This can be seen by looking at the score of the agreement level. They preferred to buy products with the halal logo and would definitely look at other cues (for example, ingredients) before buying any food products without the halal logo. Again, the lowest score was “I do not mind buying food products without the halal logo”. Thus, this confirmed that the halal logo was important for Muslims.

Table 4.38: Descriptive Statistics for the Importance of the Halal Logo (in the United Kingdom)

| | Questions | Mean | S.D. |
|----|--|-------------|-------------|
| 1 | I will definitely look at other cues (for example ingredients) before buying any food products without Halal logo. | 6.51 | 1.05 |
| 2 | I prefer to buy products with Halal logo. | 6.41 | 1.16 |
| 3 | I do not mind paying extra to buy any food product with Halal Logo. | 6.21 | 1.44 |
| 4 | The Halal logo is sufficient for me to feel confident when purchasing food products. | 6.00 | 1.44 |
| 5 | I trust food products with the Halal Logo and purchase it without doubt. | 5.95 | 1.43 |
| 6 | When purchasing processed food products, the first thing I will ensure is that it has the Halal logo. | 5.82 | 1.54 |
| 7 | I will search for the Halal Logo on the food product before purchasing the food product. | 5.71 | 1.58 |
| 8 | I buy food products with the Halal logo to avoid feeling doubtful about the Halalness. | 5.68 | 1.68 |
| 9 | The Halal logo is important when deciding to buy any food products. | 5.58 | 1.63 |
| 10 | I do not mind to buy food products without the Halal logo. | 3.72 | 2.20 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

Table 4.4.39: Descriptive Statistics for the Importance of the Halal Logo (in Australia)

| | Questions | Mean | S.D. |
|----|--|-------------|-------------|
| 1 | I prefer to buy products with Halal logo. | 5.68 | 1.04 |
| 2 | I will definitely look at other cues (for example ingredients) before buying any food products without Halal logo. | 5.59 | 1.05 |
| 3 | I trust food products with the Halal Logo and purchase it without doubt. | 5.56 | 1.04 |
| 4 | I buy food products with the Halal logo to avoid feeling doubtful about the Halalness. | 5.48 | 1.2 |
| 5 | The Halal logo is sufficient for me to feel confident when purchasing food products. | 5.44 | 1.17 |
| 6 | I do not mind paying extra to buy any food product with Halal Logo. | 5.37 | 1.38 |
| 7 | When purchasing processed food products, the first thing I will ensure is that it has the Halal logo. | 5.36 | 1.15 |
| 8 | The Halal logo is important when deciding to buy any food products. | 5.31 | 1.3 |
| 9 | I will search for the Halal Logo on the food product before purchasing the food product. | 5.28 | 1.2 |
| 10 | I do not mind to buy food products without the Halal logo. | 4.30 | 1.92 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

4.6.6 Descriptive Statistics for Products Originating from Muslim Countries

Construct

The descriptive statistics on the products originating from Muslim countries in the UK and Australia are presented in Tables 4.40 and 4.41. In general, the respondents in the UK, trusted the “halalness” of food products originating from Muslim countries although the level of agreement was not very high. They were still relatively confident in buying food products that originated from Muslim countries. However, the level of agreement for “It is important for me to make sure the food products that I purchase come from Muslim countries” had the lowest score.

Table 4.40: Descriptive Statistics for Products Originating from Muslim Countries (in the United Kingdom)

| | Questions | Mean | S.D. |
|----|--|------|------|
| 1 | I trust the Halalness of food products originating from Muslim countries. | 5.81 | 1.47 |
| 2 | I am confident to buy food products that originate from Muslim countries. | 5.51 | 1.62 |
| 3 | Food products originating from Muslim countries are more reliable in terms of the Halalness. | 5.47 | 1.71 |
| 4 | I would prefer to purchase products manufactured in Muslim countries. | 5.43 | 1.69 |
| 5 | I do not hesitate to purchase food products that originate from Muslim countries. | 5.25 | 1.68 |
| 6 | It is important for me to check the country-of-origin before purchasing food products. | 4.20 | 2.00 |
| 7 | My confidence level in purchasing food products will depend on whether the food products are manufactured in Muslim countries. | 4.19 | 1.99 |
| 8 | If the food products originate from a Muslim country, I will definitely purchase it without looking at other cues. | 4.11 | 2.08 |
| 9 | It is not important to me to purchase food products that originate from Muslim countries. | 4.06 | 1.86 |
| 10 | It is important for me to make sure the food products that I purchase come from Muslim countries. | 3.97 | 1.92 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

Generally, the level of agreement for products originating from Muslim countries among respondents in Australia was also not very high. However, the respondents, in general, trusted the “halalness” of food products originating from Muslim countries. They perceived that food products originating from Muslim countries were more reliable in terms of the “halalness”. The statistic also indicated that they did not hesitate to purchase food products that originated from Muslim countries. Similar to the results for the UK, the level of agreement for “It is important for me to make sure the food products that I purchase come from Muslim countries” had the lowest score.

Table 4.41: Descriptive Statistics for Products Originating from Muslim countries (in Australia)

| Questions | | Mean | S.D. |
|-----------|--|------|------|
| 1 | I trust the Halalness of food products originating from Muslim countries. | 5.40 | 1.15 |
| 2 | Food products originating from Muslim countries are more reliable in terms of the Halalness. | 5.20 | 1.40 |
| 3 | I do not hesitate to purchase food products that originate from Muslim countries. | 5.18 | 1.26 |
| 4 | I am confident to buy food products that originate from Muslim countries. | 5.02 | 1.42 |
| 5 | I would prefer to purchase products manufactured in Muslim countries. | 5.01 | 1.36 |
| 6 | It is important for me to check the country-of-origin before purchasing food products. | 4.21 | 1.53 |
| 7 | My confidence level in purchasing food products will depend on whether the food products are manufactured in Muslim countries. | 4.19 | 1.61 |
| 8 | It is not important to me to purchase food products that originate from Muslim countries. | 4.02 | 1.66 |
| 9 | It is important for me to make sure the food products that I purchase come from Muslim countries. | 3.78 | 1.59 |
| 10 | If the food products originate from a Muslim country, I will definitely purchase it without looking at other cues. | 3.72 | 1.75 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

4.6.7 Descriptive Statistics for the Intention to Purchase Halal Food Products

Construct

The descriptive statistics for the UK and Australia are presented in Tables 4.42 and 4.43. The results indicated that the probability that the respondents in the UK would purchase halal food was very high. The score for the intention and expect to purchase halal food products was also high. The results showed consistency, as the lowest score for the level of agreement was “My intention for purchasing halal food products is very low”.

Table 4.42: Descriptive Statistics for Purchase Intention (in United Kingdom)

| | Questions | Mean | S.D. |
|---|--|------|------|
| 1 | The probability that I would purchase Halal food is very high. | 6.65 | 0.88 |
| 2 | I intend to purchase Halal food products. | 6.30 | 1.37 |
| 3 | I expect to purchase Halal food products. | 6.03 | 1.66 |
| 4 | I will actively seek out Halal food products (in a store in order to purchase it). | 5.89 | 1.49 |
| 5 | At the price shown, I would consider to purchase the Halal food products. | 5.84 | 1.66 |
| 6 | If I were to purchase Halal food products, I would consider purchase at the price shown. | 5.40 | 1.95 |
| 7 | My likelihood of purchasing Halal products is very low | 1.88 | 1.56 |
| 8 | My intention of purchasing Halal food products is very low | 1.65 | 1.24 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

Generally, the results reflected that the respondents in Australia have a high probability of purchasing halal food. The score for the intention to purchase halal food products was also considered high. Similar to the UK results, the results showed consistency, as the lowest score for the level of agreement was “My intention for purchasing halal food products is very low”.

Table 4.43: Descriptive Statistics for Purchase Intention (in Australia)

| | Questions | Mean | S.D. |
|---|--|-------------|-------------|
| 1 | The probability that I would purchase Halal food is very high. | 5.52 | 1.07 |
| 2 | I intend to purchase Halal food products. | 5.50 | 1.26 |
| 3 | At the price shown, I would consider to purchase the Halal food products. | 5.40 | 1.11 |
| 4 | I will actively seek out Halal food products (in a store in order to purchase it). | 5.25 | 1.29 |
| 5 | I expect to purchase Halal food products. | 5.24 | 1.48 |
| 6 | If I were to purchase Halal food products, I would consider purchase at the price shown. | 5.04 | 1.54 |
| 7 | My intention of purchasing Halal food products is very low | 1.91 | 1.49 |
| 8 | My likelihood of purchasing Halal products is very low | 1.76 | 1.55 |

*Using a scale of 1- 7 (Strongly Disagree to Strongly agree).

** Negatively Worded Question

4.7 The Relationship between Demographic Variables and the Study Constructs

This section looks at the relationship between the study constructs and the demographic variables. This analysis examines whether there is a relationship between the dependent variable and the independent variables for the demographic variables. The most frequently used techniques to determine this kind of relationship are the independent sample t-test and the one-way analysis of variance (ANOVA).

This study employed the independent sample t-test and one-way ANOVA to analyse the group mean differences. The independent sample t-test compares a dependent variable across two groups and the one-way ANOVA for more than two groups. These tests are to determine the differences of all the constructs within the demographic variables. The constructs include religiosity, halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo, products originating from Muslim countries and purchase intention.

4.7.1 The Relationship between Gender and the Study Constructs

The analysis started with the relationship between gender of the respondents in the UK and the study constructs. An independent sample t-test was conducted to test the significant differences between the male and female respondents to their means for the study constructs.

Table 4.44 shows that only the intention to purchase halal food products was found to be significant between the male and female respondents. The relationship was significant at the 0.05 level. The results suggested that male respondents were found to have a higher intention to purchase halal food products. The other variables, which included religiosity, halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries, indicated a p-value of above 0.05. Clearly, there was no significant difference between gender for those constructs. An independent sample t-test was conducted to test the significant differences between the male and female respondents in Australia for their means for the study constructs.

Table 4.44: The Relationship between Gender and the Study Constructs (in the United Kingdom)

| Constructs | Mean | | t-value | Sig. |
|---|--------|--------|---------|--------|
| | Male | Female | | |
| Religiosity | 125.57 | 127.97 | -2.261 | 0.054 |
| Understanding the concept of Halal logo | 16.03 | 16.41 | -1.576 | 0.623 |
| Halal Consciousness | 55.06 | 56.23 | -1.747 | 0.548 |
| Halal Cautiousness | 48.27 | 49.89 | -2.238 | 0.391 |
| The Importance Of Halal Logo | 57.01 | 58.19 | -1.46 | 0.545 |
| Product Originated From Muslim Countries | 47.42 | 48.59 | -1.171 | 0.149 |
| Intention to purchase halal food products | 40 | 39.3 | 1.263 | 0.011* |

- significant at $p \leq 0.05$

** - significant at $p \leq 0.01$

Table 4.45 shows that only the intention to purchase halal food products was found to be significant between the male and female respondents in Australia. The

relationship was significant at the 0.05 level. The results suggested that the male respondents had a higher intention to purchase halal food products.

Meanwhile, the other variables – religiosity, halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries – indicated a p-value of above 0.05. Thus, there was no significant difference between gender for those constructs.

Table 4.45: The Relationship between Gender and the Study Constructs (in Australia)

| Constructs | Mean | | t-value | Sig. |
|---|-------|--------|---------|---------|
| | Male | Female | | |
| Religiosity | 107.1 | 108.81 | -0.95 | 0.168 |
| Understanding the concept of Halal logo | 16.15 | 16 | 0.632 | 0.010* |
| Halal Consciousness | 49.15 | 50.1 | -1.196 | 0.017* |
| Halal Cautiousness | 44.45 | 44.1 | 0.542 | 0.172 |
| The Importance Of Halal Logo | 52.75 | 53.93 | -1.453 | 0.002** |
| Product Originated From Muslim Countries | 46.12 | 45.37 | 0.887 | 0.77 |
| Intention to purchase halal food products | 35.81 | 35.44 | 0.632 | 0.203 |

- significant at $p \leq 0.05$

** - significant at $p \geq 0.01$

4.7.2 The Relationship between Age and the Study Constructs

The one-way ANOVA was used to test the relationship between age and the studied constructs. Table 4.46 shows that there was no significant mean difference among the age groups of the respondents. This indicated that the respondents did not vary for any of the constructs. Therefore, it can be concluded that age was not a significant indicator for the study constructs for the respondents in the UK.

Table 4.47 shows that age had a significant relationship with religiosity, halal consciousness, halal cautiousness, the importance of the halal logo and purchase intention. For religiosity, age was found to be significant ($F= 8.016, p= 0.000$). Older

respondents (above 50) were found to have a higher mean score for religiosity. For halal consciousness, age was found to be significant ($F= 10.735, p= 0.000$).

The mean score showed that older people (Above 50) tended to have higher halal consciousness compared to the younger generation. Similar to halal cautiousness and the importance of the halal logo, age was found to be significant ($F= 9.834, p= 0.000$ and $F= 6.456, p= 0.000$). Again, older people (Above 50) tended to have a higher mean score for both, halal cautiousness and importance of the halal logo. Age was also found to have a significant relationship with purchase intention ($F= 7.642, p= 0.000$). However, the mean score showed that the younger generation aged below 26 had the highest mean value.

Finally, halal knowledge and products originating from Muslim countries were found to have no significant mean difference among the age groups of the respondents. This indicated that age was not an indicator of the halal knowledge and products originating from Muslim countries.

Table 4.46: The Relationship between Age and the Study Constructs (in the United Kingdom)

| Constructs | Age | Mean | F | Sig. |
|---|----------|--------|-------|-------|
| Religiosity | Below 20 | 125.41 | 1.164 | 0.326 |
| | 20- 29 | 126.14 | | |
| | 30- 39 | 127.21 | | |
| | 30- 49 | 128.95 | | |
| | Above 50 | 132.17 | | |
| Understanding the concept of Halal logo | Below 21 | 15.70 | 1.163 | 0.327 |
| | 20- 30 | 16.15 | | |
| | 30- 59 | 16.53 | | |
| | 30- 69 | 16.18 | | |
| | Above 51 | 15.33 | | |
| Halal Consciousness | Below 22 | 56.78 | 2.319 | 0.056 |
| | 20- 31 | 55.12 | | |
| | 30- 79 | 55.40 | | |
| | 30- 89 | 56.87 | | |
| | Above 52 | 62.00 | | |

Table 4.46: Continued

| Constructs | Age | Mean | F | Sig. |
|---|------------|-------------|----------|-------------|
| Halal Cautiousness | Below 23 | 49.59 | 1.843 | 0.120 |
| | 20- 32 | 48.36 | | |
| | 30- 99 | 49.69 | | |
| | 30- 109 | 49.39 | | |
| | Above 53 | 55.17 | | |
| The Importance Of Halal Logo | Below 24 | 59.70 | 1.110 | 0.351 |
| | 20- 33 | 57.08 | | |
| | 30- 119 | 57.40 | | |
| | 30- 129 | 58.34 | | |
| | Above 54 | 60.33 | | |
| Product Originated From Muslim Countries | Below 25 | 45.41 | 2.209 | 0.067 |
| | 20- 34 | 47.86 | | |
| | 30- 139 | 48.03 | | |
| | 30- 149 | 49.71 | | |
| | Above 55 | 57.17 | | |
| Intention to purchase halal food products | Below 26 | 40.73 | 1.334 | 0.257 |
| | 20- 35 | 39.87 | | |
| | 30- 159 | 39.04 | | |
| | 30- 169 | 38.95 | | |
| | Above 56 | 42.33 | | |

* - Significant at $p \leq 0.05$ **

** - Significant at $p \geq 0.01$

Table 4.47: The Relationship between Age and the Study Constructs (Australia)

| Constructs | Age | Mean | F | Sig. |
|---|------------|-------------|----------|-------------|
| Religiosity | Below 20 | 115.26 | 8.016 | 0.000** |
| | 20- 29 | 102.64 | | |
| | 30- 39 | 109.13 | | |
| | 30- 49 | 116.08 | | |
| | Above 50 | 125.50 | | |
| Understanding the concept of Halal logo | Below 20 | 15.79 | 1.457 | 0.215 |
| | 20- 29 | 16.22 | | |
| | 30- 39 | 15.90 | | |
| | 30- 49 | 16.21 | | |
| | Above 50 | 19.50 | | |
| Halal Consciousness | Below 20 | 54.89 | 10.735 | 0.000** |
| | 20- 29 | 46.84 | | |
| | 30- 39 | 50.47 | | |
| | 30- 49 | 52.58 | | |
| | Above 50 | 59.50 | | |

Table 4.47: Continued

| Constructs | Age | Mean | F | Sig. |
|---|------------|-------------|----------|-------------|
| Halal Cautiousness | Below 20 | 47.47 | 9.834 | 0.000** |
| | 20- 29 | 42.25 | | |
| | 30- 39 | 44.65 | | |
| | 30- 49 | 47.27 | | |
| | Above 50 | 53.00 | | |
| The Importance Of Halal Logo | Below 20 | 56.84 | 6.456 | 0.000** |
| | 20- 29 | 51.09 | | |
| | 30- 39 | 53.98 | | |
| | 30- 49 | 56.15 | | |
| | Above 50 | 60.50 | | |
| Product Originated From Muslim Countries | Below 20 | 49.32 | 2.332 | 0.055 |
| | 20- 29 | 44.35 | | |
| | 30- 39 | 46.16 | | |
| | 30- 49 | 46.79 | | |
| | Above 50 | 49.50 | | |
| Intention to purchase halal food products | Below 20 | 40.21 | 7.642 | 0.000** |
| | 20- 29 | 34.01 | | |
| | 30- 39 | 36.02 | | |
| | 30- 49 | 37.12 | | |
| | Above 50 | 38.00 | | |

*- significant at $p \leq 0.05$

** - significant at $p \geq 0.01$

4.7.3 The Relationship between Marital Status and the Study Constructs

This section explains the statistics for the mean differences among the groups with regard to marital status. Table 4.48 shows that there was a significant mean difference among the marital status groups of respondents with purchase intention ($F= 4.705$, $p= 0.003$) among the UK respondents. The results indicated that single respondents had the highest mean score. However, marital status was found to have no significant relationship with religiosity, halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries.

Table 4.48: The Relationship between Marital Status and the Study Constructs (in the United Kingdom)

| Constructs | Marital | Mean | F | Sig. |
|---|--------------------|--------|-------|---------|
| Religiosity | Single | 126.01 | 2.312 | 0.076 |
| | Married | 127.15 | | |
| | Divorce/ Separated | 133.40 | | |
| | Widowed | 134.67 | | |
| Understanding the concept of Halal logo | Single | 16.17 | 1.449 | 0.228 |
| | Married | 16.27 | | |
| | Divorce/ Separated | 16.90 | | |
| | Widowed | 13.67 | | |
| Halal Consciousness | Single | 55.40 | 1.578 | 0.194 |
| | Married | 55.63 | | |
| | Divorce/ Separated | 59.50 | | |
| | Widowed | 59.67 | | |
| Halal Cautiousness | Single | 48.97 | 2.581 | 0.053 |
| | Married | 48.80 | | |
| | Divorce/ Separated | 55.20 | | |
| | Widowed | 51.00 | | |
| The Importance Of Halal Logo | Single | 57.45 | 1.653 | 0.177 |
| | Married | 57.40 | | |
| | Divorce/ Separated | 61.90 | | |
| | Widowed | 64.00 | | |
| Product Originated From Muslim Countries | Single | 47.65 | 1.852 | 0.137 |
| | Married | 47.96 | | |
| | Divorce/ Separated | 55.00 | | |
| | Widowed | 51.33 | | |
| Intention to purchase halal food products | Single | 40.06 | 4.705 | 0.003** |
| | Married | 39.52 | | |
| | Divorce/ Separated | 33.60 | | |
| | Widowed | 38.67 | | |

* - significant at $p \leq 0.05$

** - significant at $p \leq 0.01$

Table 4.49 shows the relationship between marital status and the study constructs among the respondents in Australia. From the Table, it was found that marital status had a significant relationship with religiosity, halal consciousness, halal cautiousness, the importance of the halal logo, products originating from Muslim countries and purchase intention. For religiosity, age was found to be significant at $F= 11.302$, $p= 0.000$. Older respondents (above 50) were found to have a higher mean score for religiosity. For halal consciousness, age was found to be significant at $F= 12.778$, $p= 0.000$. The mean score showed that older people (above 50) tended to have higher halal

consciousness compared to the younger generation. Similar to halal cautiousness and the importance of the halal logo, age was found to be significant at $F= 6.700$, $p= 0.000$ and $F= 8.093$, $p= 0.000$). Older people (above 50) tended to have a higher mean score for halal cautiousness. For the importance of the halal logo divorced/ separated possess the highest mean score. Age was also found to have a significant relationship with products originating from Muslim countries and purchase intention ($F= 3.297$, $p= 0.021$ and $F= 10.173$, $p= 0.000$).

The highest mean score showed that widowed respondents had the highest mean value for products originating from Muslim countries. For purchase intention, married respondents had the highest mean value score. Halal knowledge was found to have no significant mean difference among the age groups of respondents. Obviously, this indicated that marital status was not an indicator of halal knowledge.

Table 4.49: The Relationship between Marital Status and the Study Constructs (in Australia)

| Constructs | Marital | Mean | F | Sig. |
|---|-----------------------|--------|--------|---------|
| Religiosity | Single | 102.48 | 11.302 | 0.000** |
| | Married | 112.31 | | |
| | Divorce/ Separated | 117.50 | | |
| | Widowed | 120.00 | | |
| Understanding the concept of Halal logo | Single | 15.71 | 2.447 | 0.063 |
| | Married | 16.37 | | |
| | Divorce/ Separated | 16.50 | | |
| | Widowed | 16.00 | | |
| Halal Consciousness | Single | 47.03 | 12.778 | 0.000** |
| | Married | 51.79 | | |
| | Divorce/ Separated | 50.67 | | |
| | Widowed | 55.00 | | |
| Halal Cautiousness | Single | 42.74 | 6.700 | 0.000** |
| | Married | 45.49 | | |
| | Divorce/ Separated | 46.17 | | |
| | Widowed | 49.00 | | |

Table 4.49: Continued

| Constructs | Marital | Mean | F | Sig. |
|---|-----------------------|-------------|----------|-------------|
| The Importance Of Halal Logo | Single | 51.22 | 8.093 | 0.000** |
| | Married | 55.07 | | |
| | Divorce/ Separated | 56.17 | | |
| | Widowed | 55.00 | | |
| Product Originated From Muslim Countries | Single | 44.60 | 3.297 | 0.021* |
| | Married | 46.80 | | |
| | Divorce/ Separated | 40.50 | | |
| | Widowed | 53.00 | | |
| Purchase Intention | Single | 33.92 | 10.173 | 0.000** |
| | Married | 37.03 | | |
| | Divorce/ Separated | 36.50 | | |
| | Widowed | 36.00 | | |

* - significant at $p \leq 0.05$

** - significant at $p \geq 0.01$

4.7.4 The Relationship between Education Level and the Study Constructs

This section explains the results of the mean differences among groups with regard to education level. Table 4.50 showed the relationship between education level and the constructs of the study among the respondents in the United Kingdom. From the Table, it was found that education level had a significant relationship with halal consciousness, halal cautiousness and the importance of the halal logo.

For halal consciousness, education level was found to be significant ($F= 4.207$, $p= 0.002$). The primary level of education was found to have a higher mean score for halal consciousness. For halal cautiousness, the education level was found to be significant ($F= 2.469$, $p= 0.044$). The mean score showed that respondents with a degree or equivalent tended to have higher halal cautiousness. The importance of the halal logo was also found to be significant ($F= 5.813$, $p= 0.000$). The current study found that respondents with primary education level had the highest score of all.

With regards to religiosity, halal knowledge, products originating from Muslim countries and purchase intention, the study found no significant differences among the five groups in the education level variable. Table 4.51 shows the relationship between education level and the study constructs among the respondents in Australia. Only religiosity was found to be significant with regards to the education level of the respondents. The relationship was significant at the 0.05 level. The results suggested that respondents with primary education level had a higher level of religiosity. On the other hand, the other variables, which included halal knowledge, halal consciousness, halal cautiousness, the importance of the halal logo, products originating from Muslim countries and purchase intention, indicated a p-value of above 0.05. Thus, there were no significant differences between education level and those constructs.

Table 4.50: The Relationship between Education Level and the Study Constructs (in the United Kingdom)

| Constructs | Education | Mean | F | Sig. |
|------------------------------------|--------------------------------|--------|-------|---------|
| Religiosity | Secondary | 121.55 | 2.080 | 0.083 |
| | Primary | 126.64 | | |
| | Higher education, below degree | 124.86 | | |
| | Degree or equivalent | 128.51 | | |
| | Postgraduate | 127.15 | | |
| Understanding the concept of Halal | Secondary | 14.73 | 1.635 | 0.165 |
| | Primary | 16.00 | | |
| | Higher education, below degree | 16.54 | | |
| | Degree or equivalent | 16.31 | | |
| | Postgraduate | 16.11 | | |
| Halal Consciousness | Secondary | 52.64 | 4.207 | 0.002** |
| | Primary | 57.71 | | |
| | Higher education, below degree | 55.76 | | |
| | Degree or equivalent | 57.69 | | |
| | Postgraduate | 54.63 | | |
| Halal Cautiousness | Secondary | 45.27 | 2.469 | 0.044* |
| | Primary | 49.43 | | |
| | Higher education, below degree | 49.26 | | |
| | Degree or equivalent | 50.76 | | |
| | Postgraduate | 48.38 | | |

Table 4.50: Continued

| Constructs | Education | Mean | F | Sig. |
|---|--------------------------------|-------------|----------|-------------|
| The Importance Of Halal Logo | Secondary | 53.09 | 5.813 | 0.000** |
| | Primary | 60.93 | | |
| | Higher education, below degree | 57.11 | | |
| | Degree or equivalent | 60.56 | | |
| | Postgraduate | 56.45 | | |
| Product Originated From Muslim Countries | Secondary | 43.18 | 1.290 | 0.273 |
| | Primary | 50.21 | | |
| | Higher education, below degree | 47.22 | | |
| | Degree or equivalent | 49.21 | | |
| | Postgraduate | 47.92 | | |
| Intention to purchase halal food products | Secondary | 38.09 | 0.793 | 0.530 |
| | Primary | 40.36 | | |
| | Higher education, below degree | 40.00 | | |
| | Degree or equivalent | 40.17 | | |
| | Postgraduate | 39.28 | | |

* - significant at $p \leq 0.05$

** - significant at $p \geq 0.01$

Table 4.4.51: The Relationship between Education Level and the Study Constructs (in Australia)

| Constructs | Education | Mean | F | Sig. |
|------------------------------------|--------------------------------|-------------|----------|-------------|
| Religiosity | Secondary | 107.06 | 3.447 | 0.009** |
| | Primary | 118.50 | | |
| | Higher education, below degree | 114.03 | | |
| | Degree or equivalent | 103.41 | | |
| | Postgraduate | 109.18 | | |
| Understanding the concept of Halal | Secondary | 15.19 | 2.138 | 0.076 |
| | Primary | 19.00 | | |
| | Higher education, below degree | 16.66 | | |
| | Degree or equivalent | 16.23 | | |
| | Postgraduate | 15.93 | | |
| Halal Consciousness | Secondary | 50.06 | 2.376 | 0.052 |
| | Primary | 55.50 | | |
| | Higher education, below degree | 52.55 | | |
| | Degree or equivalent | 48.32 | | |
| | Postgraduate | 49.71 | | |
| Halal Cautiousness | Secondary | 45.81 | 1.724 | 0.144 |
| | Primary | 48.50 | | |
| | Higher education, below degree | 45.84 | | |
| | Degree or equivalent | 43.30 | | |
| | Postgraduate | 44.34 | | |

Table 4.51: Continued

| Constructs | Education | Mean | F | Sig. |
|---|--------------------------------|-------------|----------|-------------|
| The Importance Of Halal Logo | Secondary | 54.44 | 0.701 | 0.592 |
| | Primary | 59.00 | | |
| | Higher education, below degree | 54.61 | | |
| | Degree or equivalent | 52.77 | | |
| | Postgraduate | 53.30 | | |
| Product Originated From Muslim Countries | Secondary | 47.63 | 0.492 | 0.741 |
| | Primary | 43.00 | | |
| | Higher education, below degree | 44.53 | | |
| | Degree or equivalent | 45.55 | | |
| | Postgraduate | 45.91 | | |
| Intention to purchase halal food products | Secondary | 37.13 | 2.117 | 0.078 |
| | Primary | 40.50 | | |
| | Higher education, below degree | 36.32 | | |
| | Degree or equivalent | 34.45 | | |
| | Postgraduate | 35.92 | | |

* - significant at $p \leq 0.05$

** - significant at $p \geq 0.01$

4.8 Exploratory Factor Analysis (EFA) Results

Factor analysis is an essential technique, especially in the development stage of measurement. The primary purpose of factor analysis is to define the underlying structure among the variables in the analysis (Hair et al., 2006). It is crucial for the research to determine the underlying structure of the proposed variables since the research has developed new items. The assumption of multivariate analysis was discussed in the previous section. Then the KMO index and Bartlett's test of sphericity need to be assessed.

The constructs were divided into three groups, independent variables, intermediary variable and dependent variable. This is consistent with Rummel (1970), who divided the constructs into three groups so that factor analysis is useful for placing the variables into meaningful categories. The results showed that all the KMO index

values were higher than 0.5 and that the results for Bartlett's test of sphericity were significant. The details of the results are presented in the next section.

4.8.1 Factor Analysis on Muslim Religiosity

The initial testing of the internal reliability of the factors was performed using Cronbach's coefficient alpha. The Cronbach's coefficient alpha for the factors was above 0.50 (Nunnally, 1978). The Bartlett's test of sphericity shows that the results are significant ($p=0.000$). The KMO measure of sampling adequacy is 0.959, which was considered as very high. Thus, factor analysis was considered as suitable for analysing the Muslim religiosity construct. The eigenvalue for these factors was above 1, which was significant. Table 4.52 shows the examination results for the variables for EFA suitability.

Table 4.52: Examination Result of Variables for EFA Suitability

| Variable | Muslim Religiosity |
|--|--------------------|
| No. Of item | 18 |
| KMO index | 0.959 |
| p- value (Bartlett's Test of Sphericity) | 0.000 |
| Remark | Suitable |

The study was analysed using principal component analysis (PCA) and varimax rotation. Two factors were extracted as expected. The factors were faith (factor 1) and worship (factor 2). The result was consistent with Khairul (2010). The factors represented 65.3% of the total variance with faith 52% and worship 13.35%. Table 4.53 shows the results of EFA conducted on the 20 items measuring Muslim religiosity. The results indicated a reasonable loading for 18 items loading items, with those loading less than 0.5 being deleted from the data set (RELI 5 and RELI 6) (Hair et al., 2011). However, the research proceeded with Faith factor since worship only consisted of three

items (Hair et al., 2010). Therefore, the 15 remaining items for Muslim religiosity were used for the next stage.

Table 4.53: Results for EFA for the Muslim Religiosity Construct

| Religiosity | Loading | Variance explained |
|---|---------|--------------------|
| Faith | | 52.001 |
| I read the Quran for inspiration and motivation | 0.596 | |
| Muhammad (peace be upon him) provides a good conduct for me. | 0.823 | |
| Islam helps me lead a better life. | 0.892 | |
| Quran is relevant and applicable to modern day. | 0.881 | |
| I do the optional fasting on Monday and Thursday regularly. | 0.981 | |
| I pray five times a day. | 0.879 | |
| I believe that Allah helps people. | 0.825 | |
| Saying my prayers helps me a lot. | 0.576 | |
| I fast the whole month of Ramadhan sincerely. | 0.814 | |
| The supplication (dua') helps me. | 0.942 | |
| I always perform other optional prayer (i.e. sunnat prayer such as Isra', Dhuha and others) | 0.880 | |
| I will continuously seek to learn about Allah. | 0.939 | |
| I believe that Allah listens to prayers. | 0.687 | |
| I will perform hajj after I fulfilled all the necessary conditions. | 0.584 | |
| The five prayers help me a lot. | 0.839 | |
| Worship | | 13.347 |
| I believe that Allah helps me. | 0.678 | |
| I perform the obligation of zakat fitrah annually. | 0.729 | |
| I read the Quran every day. | 0.743 | |
| Total variance explained: | | 65.348 |

* Using principal component analysis with a varimax rotation

4.8.2 Factor Analysis on Halal Perception

The KMO result of more than 0.9 and the significant Bartlett's test of sphericity indicated the appropriateness of using factor analysis. The results are shown in Table 4.54.

Table 4.54: Examination Results for Variables for EFA Suitability

| Variable | Halal Perception |
|--|-------------------------|
| No. Of item | 35 |
| KMO index | 0.939 |
| p- value (Bartlett's Test of Sphericity) | 0.000 |
| Remark | Suitable |

The alpha coefficients for factor 1, factor 2, factor 3 and factor 4 indicated an acceptable benchmark of 0.5. However, factor 5, factor 6 and factor 7 were less than 0.5. The principal component analysis of the four constructs indicated seven factors with 59.87% explained. In factor 1, 16 items with factor loadings of more than 0.5 were loaded (labeled as halal consciousness), which explained 33.01% of the total variance. The Cronbach's Alpha for this factor was 0.946.

In factor 2, five items with factor loadings of more than 0.5 were loaded (labeled as products originating from Muslim countries), which explained 9.33% of the total variance. This factor has a satisfactory Cronbach's coefficient alpha of 0.946. While in factor 3, six five items factor loadings more than 0.5 were loaded (labeled as the importance of halal logo), which explained 5.21% of the total variance. The Cronbach's coefficient alpha was 0.601.

The other four factors had less than three items (Factor 4, Factor 5, Factor 6 and Factor 7). In this regard, these factors were merged. This is consistent with the recommendation of Churchill (1995) who stated that the deletion and merger of a particular item can be justified when the items are conceptually related. Thus, the four factors were combined into one factor.

A total of eight items with factor loadings of more than 0.5 were merged. However, this factor was considered weak since the Cronbach's coefficient alphas were below the acceptable cut-off point. Therefore, it was decided to eliminate these weak items from the final analysis.

The results of the EFA conducted on the 39 items measuring halal perception, which consisted of halal consciousness, halal cautiousness, the importance of the halal logo and products originating from Muslim countries, are shown in Table 4.55.

Table 4.55: Factor Analysis Results for Halal Perception Constructs

| Label | Halal Perception | Loading | Variance explained |
|--------------|--|----------------|---------------------------|
| | Factor 1: Halal Consciousness | | 33.055 |
| CONS 3 | Eating Halal food is very important to me. | 0.853 | |
| CONS 9 | I consume only Halal food products. | 0.822 | |
| CAU 8 | I am always make careful purchase on food products to ensure the Halalness. | 0.796 | |
| CONS 8 | As a Muslim, I have to consume only Halal food. | 0.786 | |
| CAU 1 | I am always cautious when purchasing food products to avoid eating Haram or questionable food. | 0.784 | |
| LOGO 10 | I will definitely look at other cues (for example ingredients) before buying any food products without Halal logo. | 0.777 | |
| CONS 4 | I will always buy food products that come from Halal sources. | 0.763 | |
| CONS 6 | I am concerned about my food consumption. It has to be Halal food. | 0.761 | |
| CAU 2 | I am usually extra cautious to ensure that products are Halal when buying new food products. | 0.758 | |
| LOGO 9 | I prefer to buy products with Halal logo. | 0.715 | |
| CONS 7 | If there is no Halal logo, I will always check the ingredients on the packaging of the processed food products. | 0.689 | |
| CONS 10 | I will always buy meat from Muslim operated premises. | 0.657 | |

Table 4.55: Continued

| Label | Halal Perception | Loading | Variance explained |
|--------------|--|----------------|---------------------------|
| CAU 5 | I will find alternative food products if I have doubts about the Halalness of the food products. | 0.653 | |
| CAU 7 | I take the time to shop carefully for Halal food. | 0.635 | |
| LOGO 7 | The Halal logo is sufficient for me to feel confident when purchasing food products. | 0.538 | |
| LOGO 2 | I do not mind paying extra to buy any food product with Halal Logo. | 0.521 | |
| | Factor 2: Product Originated From Muslim Countries | | 9.325 |
| LOGO 6 | It is important for me to check the country-of-origin before purchasing food products. | 0.725 | |
| POMC 3 | My confidence level in purchasing food products will depend on whether the food products are manufactured in Muslim countries. | 0.716 | |
| LOGO 4 | It is important for me to make sure the food products that I purchase come from Muslim countries. | 0.674 | |
| LOFO 2 | I would prefer to purchase products manufactured in Muslim countries. | 0.593 | |
| CAU 9 | I am always choosing food product that is made in Muslim countries. | 0.59 | |
| | Factor 3: The importance of Halal Logo | | 5.212 |
| CONS 2 | I will always eat food products with Halal logo. | 0.725 | |
| LOGO 3 | I do not mind to buy food products without the Halal logo. | 0.607 | |
| LOGO 4 | I buy food products with the Halal logo to avoid feeling doubtful about the Halalness. | 0.601 | |
| LOGO 1 | When purchasing processed food products, the first thing I will ensure is that it has the Halal logo. | 0.6 | |
| LOGO 5 | I will search for the Halal Logo on the food product before purchasing the food product. | 0.594 | |
| LOGO 6 | The Halal logo is important when deciding to buy any food products. | 0.588 | |
| | Factor 4 | | 3.487 |
| POMC 7 | If the food products originate from a Muslim country, I will definitely purchase it without looking at other cues. | 0.673 | |
| POMC 9 | I do not hesitate to purchase food products that originate from Muslim countries. | 0.673 | |

Table 4.55: Continued

| Label | Halal Perception | Loading | Variance explained |
|--------|---|---------|--------------------|
| | Factor 5 | | 3.208 |
| POMC 1 | I trust the Halalness of food products originating from Muslim countries. | 0.695 | |
| CONS 5 | I will not purchase food if it is placed next to non-Halal food on the supermarket shelf. | 0.65 | |
| | Factor 6 | | 2.94 |
| POMC 8 | It is not important to me to purchase food products that originate from Muslim countries. | 0.723 | |
| CAU 3 | Investigating the ingredient of food products is generally a waste of time. | 0.671 | |
| | Factor 7 | | 2.641 |
| CAU 4 | I never buy food that I don't know to avoid the risk of buying non-Halal food. | 0.534 | |
| CONS 2 | Eating Halal food is not important to me. | 0.508 | |
| | Total variance explained | | 59.868 |

* Using principal component analysis with a varimax rotation

4.8.3 Factor Analysis of Intention to Purchase Halal Food Products

For the purchase intention constructs, principal component analysis with a varimax rotation was conducted. The KMO results showed more than 0.9 and the significant Bartlett's test of sphericity indicated the appropriateness of using factor analysis. The results are shown in table 4.56.

Table 4.56: Examination Results for Variables for EFA Suitability

| Variable | Intention to purchase halal food products |
|--|---|
| No. Of item | 5 |
| KMO index | 0.752 |
| p- value (Bartlett's Test of Sphericity) | 0.000 |
| Remark | Suitable |

The factor analysis was performed and two factors were extracted. The factors represented 54.42% of the total variance explained. Factor 1 and 2 explained 36.53%

and 17.89% of the total variance. Both of the factors achieved a satisfactory Cronbach's coefficient alpha benchmark. The coefficient alpha value for factor 1 was 0.747 and factor 2 was 0.627. However, factor 2, which contained only two items, was dropped due to the number of items being less than three. Factor 1 contained six items and was retained for subsequent analysis. The results for factor analysis on the intention to purchase halal food products are shown in Table 4.57.

Table 4.57: Factor Analysis Results for the Intention to Purchase Halal Food Products

| Intention to purchase halal food products | Loading | Variance explained |
|---|----------------|---------------------------|
| Factor 1 | | 36.530 |
| If I were to purchase Halal food products, I would consider purchase at the price shown | 0.784 | |
| My intention to purchase Halal food products is very high | 0.720 | |
| I expect to purchase Halal food products. | 0.702 | |
| I intend to purchase Halal food products. | 0.682 | |
| My likelihood of purchasing Halal food products is very low | 0.603 | |
| I do not have the intention to purchase Halal food products | 0.527 | |
| Factor 2 | | 17.894 |
| I will actively seek out Halal food products (in store in order to purchase it) | 0.804 | |
| I will not purchase Halal food products. | 0.802 | |
| Total variance explained: | | 54.424 |

* Using principal component analysis with a varimax rotation

4.8.4 Analysing the Halal Knowledge Concept Construct

The overall aim was to produce a combination of items that would result in the highest possible Cronbach's coefficient alpha value for all the items (Whati et al., 2005). Based on Table 6.35, the value for KR-20 achieved a satisfactory value (0.61). On the inspection of reliability, to achieve a satisfactory KR-20, two questions were

deleted “The term Makrooh means...” and “The blood of the slaughtered animal must be thoroughly drained immediately upon slaughter ...” (please refer to Table 4.58).

Table 4.58: Cronbach's Alpha if Deleted Item – Halal knowledge

| Halal knowledge | Cronbach's Alpha if Deleted Item |
|--|---|
| The meaning of Haram is | 0.61 |
| The term الحلال (in Arabic) , in English means | 0.61 |
| Pork is an example of | 0.61 |
| The meaning of Halal is | 0.60 |
| Alcohol is an example of | 0.60 |
| A meat animal which dies without being slaughtered is | 0.59 |
| Halal Food should conform to Islamic laws | 0.58 |
| Halal sourced ingredients include | 0.61 |
| Adding wine in the cooking of food is | 0.58 |
| Muslims must eat Halal food | 0.59 |
| Which of the following is not considered as filthy (najis) according to Shariah law | 0.58 |
| The prohibition of pork is restricted to meat | 0.60 |
| Which of the following are NOT considered as an Islamic method of slaughtering an animal | 0.61 |
| Meat slaughtered by the People of the Book (Ahl-Kitab) is | 0.60 |
| As most land animals are Halal as food, which of the following are not considered Halal | 0.61 |
| The term Mashbooh or „Syuhba“ means | 0.60 |
| The equipment to process pork meat can be used immediately to process Halal food. | 0.59 |
| Which of the following are considered as Halal food | 0.59 |

Finally, there were 18 items for the halal knowledge construct. Each item only had one correct answer since the format was multiple choice. The items to which a participant failed to respond (blank values) or answered wrongly were regarded as incorrect responses. Each correct response was allocated 1 point and each incorrect or

no response was allocated 0 points. Since this type of scale was not appropriate to use in EFA and CFA, the results were used for further data analysis using SmartPLS 3.0.

4.9 Structural Equation Modelling (SEM)

SEM is a combination of factor analysis and multiple regression that includes a series of statistical methods that allow complex relationships between one or more independent variables and one or more dependent variables. SEM can conceptually be used to answer any research question involving the indirect or direct observation of one or more independent variables or one or more dependent variables. However, the primary goal of SEM is to determine and validity a proposed causal process and/or model.

Therefore, SEM is a confirmatory technique. The structural equation modeling process centers around two steps: validating the measurement model and fitting the structural model. The former is accomplished primarily through confirmatory factor analysis, while the latter is accomplished primarily through path analysis with latent variables. PLS analysis is separated into two parts: (i) the measurement model that concerns the validation (i.e. reliability and validity) of the constructs and (ii) the structural model that focuses on the substantive relationships of the validated constructs

4.9.1 Measurement Model (Outer Model)

The measurement model requires the rules governing how the latent variables are measured based on the observed variables, and it describes the measurement properties of the observed variables. That is, measurement models are concerned with the relations between observed and latent variables. Such models specify hypotheses about the relations between a set of observed variables, such as ratings or questionnaire items, and the unobserved variables or constructs they were designed to measure. The

measurement model is important as it provides a test for the reliability of the observed variables employed to measure the latent variables. A measurement model that offers a poor fit to the data suggests that at least some of the observed indicator variables are unreliable, and precludes the researcher from moving to the analysis of the structural model.

Assessment of reflective measurement models includes composite reliability (CR) to evaluate internal consistency, individual indicator reliability, and average variance extracted (AVE) to evaluate convergent validity. In addition, the Fornell-Larcker criterion and cross loadings are used to assess discriminant validity. In the following sections, the above mentioned criteria for measurement model was assessed based on reflective measurement models.

Convergent Validity

Convergent validity is the way to evaluate a measure associate positively with alternative measures of the same construct (Hair et al 2014). Convergent validity can be evaluated at the construct level via the average variance extracted (AVE). This criterion is described as the grand mean value of the squared loadings of the items associated with the construct.

The convergent validity can be assessed in several ways, the common measures used are the composite reliability and average variance extracted (AVE). AVE is the amount of variance confined by the construct in relation to the amount of variance attributed to the measurement error. AVE reflects the convergent validity by examining the loading paths for all items, which should be statistically significant and exceed 0.50. The factor loading and average variance extracted were assessed using SmartPLS for the model. AVE includes the variance of its indicators captured by the construct relative to the total amount of variance, including the variance due to measurement error.

The common method for measuring the internal consistency is Cronbach's alpha, which provides an estimate of the reliability based on the inter-correlations of the observed indicator variables but it is sensitive to the number of items in the scale and lead to underestimate the internal consistency reliability. Therefore it is recommended to use a different measure of internal consistency reliability, which is referred to as composite reliability (CR). This type of reliability takes into account the different outer loadings of the indicator variables and is calculated using the following formula:

$$\rho_c = \frac{\left(\sum_i l_i \right)^2}{\left(\sum_i l_i \right)^2 + \sum_i \text{var}(e_i)},$$

Composite Reliability (CR) larger than 0.7 is acceptable, then, the CR following the improvement of the reliability of the questionnaire is possible via removing the statements increasing error.

High outer loadings on a construct shows that the related item of each construct have much contribution with the construct. This characteristic is also commonly called indicator reliability

The indicator reliability specifies which part of an indicator's variance can be explained by the underlying latent variable. A common threshold criterion is that more than 50% of the indicator's variance should be explained by the latent construct. This implies that λ loadings of the latent constructs on an indicator variable >0.50 is acceptable, which also explains that the shared variance between a construct and its indicator is larger than the variance of the measurement error (Vinzi, Trinchera, & Amato, 2010).

According to the results all items had a loading above 0.5 except 6 items (RELI_13, RELI_18, RELI_7, LOGO_3, INT_4 and INT_6) which had a loading less

than 0.5 , therefore all these items were removed from the model furthermore seven items including CAU_5, CONS_10, CONS_3, CONS_7, CONS_8, LOGO_2 and LOGO_7 were removed from halal consciousness construct due to cross loading issues with other constructs. Table 4.59 shows that the lowest λ is 0.509, which explained that the indicator is greater than the threshold >0.50 and implied that indicator reliability was established.

The composite reliability should show results above the acceptable value of ≥ 0.70 (Hair et al., 2013; Tenenhaus et al., 2005). Regarding to the findings of this study Composite Reliability (CR) is between 0.859 and 0.954. In addition, in this study, AVE is around above 0.5 (Table 4.59). Thus, the results prove that convergent validity (AVE) and Composite Reliability (CR) exist for the constructs of this study (Table 4.59).

The results showed that the lowest CR is 0.859 (Product Originated From Muslim Countries) and the highest was 0.954 (Muslim Religiosity), while for AVE the lowest was 0.551 (Product Originated From Muslim Countries) and the highest 0.69 (Intention to Purchase), which explained that more variance is explained in the variable associated with a given latent variable (Falk & Miller, 1992); hence, convergent validity was established. Table 4.59 present the results for convergent validity.

Table 4.59: Results for Convergent Validity

| Construct | Item | Initial model | Modified model | Composite Reliability | Average Variance Extracted (AVE) |
|----------------------------|-------------|----------------------|-----------------------|------------------------------|---|
| HALAL CONSCIOUSNESS | CAU_1 | 0.806 | 0.829 | 0.941 | 0.641 |
| | CAU_2 | 0.794 | 0.823 | | |
| | CAU_5 | 0.624 | deleted | | |
| | CAU_7 | 0.681 | 0.713 | | |
| | CAU_8 | 0.837 | 0.852 | | |
| | CONS_10 | 0.716 | deleted | | |
| | CONS_3 | 0.854 | deleted | | |
| | CONS_4 | 0.793 | 0.807 | | |
| | CONS_6 | 0.775 | 0.776 | | |
| | CONS_7 | 0.654 | deleted | | |
| | CONS_8 | 0.802 | deleted | | |
| | CONS_9 | 0.85 | 0.865 | | |
| | LOGO_10 | 0.755 | 0.751 | | |
| | LOGO_2 | 0.615 | deleted | | |
| | LOGO_7 | 0.553 | deleted | | |
| | LOGO_9 | 0.775 | 0.778 | | |
| FAITH | RELI_1 | 0.681 | 0.674 | 0.954 | 0.64 |
| | RELI_10 | 0.844 | 0.85 | | |
| | RELI_11 | 0.68 | 0.678 | | |
| | RELI_12 | 0.822 | 0.827 | | |
| | RELI_13 | 0.347 | deleted | | |
| | RELI_14 | 0.93 | 0.938 | | |
| | RELI_18 | 0.451 | deleted | | |
| | RELI_2 | 0.811 | 0.821 | | |
| | RELI_20 | 0.87 | 0.873 | | |
| | RELI_4 | 0.883 | 0.888 | | |
| | RELI_5 | 0.609 | 0.597 | | |
| | RELI_6 | 0.515 | 0.509 | | |
| | RELI_7 | 0.2 | deleted | | |
| | RELI_8 | 0.908 | 0.916 | | |
| | RELI_9 | 0.885 | 0.893 | | |
| ORIGIN | CAU_9 | 0.704 | 0.699 | 0.859 | 0.551 |
| | COO_2 | 0.807 | 0.813 | | |
| | COO_3 | 0.758 | 0.756 | | |
| | COO_4 | 0.789 | 0.787 | | |
| | COO_6 | 0.647 | 0.643 | | |

Table 4.59: Continued

| Construct | Item | Initial model | Modified model | Composite Reliability | Average Variance Extracted (AVE) | |
|---------------------------|----------------------|----------------------|-----------------------|------------------------------|---|--|
| HALAL LOGO | CONS_1 | 0.744 | 0.74 | 0.903 | 0.651 | |
| | LOGO_3 | -0.41 | deleted | | | |
| | LOGO_4 | 0.812 | 0.818 | | | |
| | LOGO_5 | 0.852 | 0.855 | | | |
| | Table 4.69 continued | | | | | |
| | LOGO_6 | 0.846 | 0.847 | | | |
| | LOGO_1 | 0.768 | 0.769 | | | |
| PURCHASE INTENTION | INT_2 | 0.759 | 0.775 | 0.898 | 0.689 | |
| | INT_3 | 0.814 | 0.816 | | | |
| | INT_4 | -0.16 | deleted | | | |
| | INT_6 | 0.468 | deleted | | | |
| | INT_7 | 0.817 | 0.811 | | | |
| | INT_8 | 0.901 | 0.913 | | | |
| KNOWLEDGE | KNOW | 1 | 1 | 1 | 1 | |

Construct Reliability

Construct reliability requires indicators assigned to the same construct to reveal a strong mutual association. Construct reliability is assessed using two measures – composite reliability (cr) and Cronbach’s alpha (α). Composite reliability is used to check how well the assigned indicators measure a construct. It can vary between 0 to 1. Values larger than 0.7 are frequently judged as acceptable (Hair et al., 2013; Tenenhaus, Vinzi, Chatelin, & Lauro, 2005).

The reliability test was performed to observe the internal consistency of the constructs. The alpha value is crucial to verify the consistency of items for each of the factors. The internal consistency can be measured in a number of ways and the common statistical technique is by using Cronbach’s coefficient alpha. Cronbach’s alpha is used to measure the construct’s reliability, which includes the actual factor loading with equal weight, comes from the alpha. Indicators showing weak correlations with the measurement model’s remaining indicators have to be eliminated.

Cronbach's alpha quantifies how well a set of indicators measures the unidimensional latent construct. A common threshold for sufficient values of Cronbach's alpha is ≥ 0.70 , which is the applicable benchmark for satisfactory reliability. According to Hair et al. (2010), the threshold value is 0.7. However, Nunnally (1978) suggested that 0.5 is still acceptable. The Cronbach's alpha was assessed using the final measurement items in SmartPLS 3.0.

Table 4.60 shows the results of the reliability assessment, the Cronbach's alpha for each construct. Hence, the values indicated the internal consistency of the constructs. The results suggested that all the constructs were good indicators of their respective components and were able to continue for the validity test.

Table 4.60: Assessment of Construct Reliability

| Constructs | Cronbach Alpha |
|---|-----------------------|
| Muslim Religiosity | 0.954 |
| Halal Consciousness | 0.929 |
| The Importance Of Halal Logo | 0.866 |
| Product Originated From Muslim Countries | 0.811 |
| Intention To Purchase Halal Food Products | 0.849 |

Discriminant Validity

Discriminant validity is defined as the dissimilarity in a measurement tool's measurement of different constructs (Hair et al., 2013). Discriminant validity is the extent to which a construct is truly distinct from other constructs. There are a few ways of assessing discriminant validity (Hair et al., 2010, p. 710). A necessary condition for discriminant validity is that the shared variance between the latent variable and its indicators should be larger than the variance shared with other latent variables (Hair et al., 2013).

In examining discriminant validity, the common measures used are AVE and the square root of AVE. The results of AVE should be >0.5 (Hair et al., 2013; Tenenhaus et al., 2005) and the square root of AVE should be compared with the correlation among the constructs, which can be seen in the off-diagonal elements, and should exceed the correlation between the constructs in order to demonstrate discriminant validity.

Discriminant validity is established if the square root of the average variance extracted (AVE) is higher than the intercorrelation of the given constructs (Fornell and Larcker, 1981). The square root of the average variance extracted (AVE) should be greater than the intercorrelation of the constructs in the model.

Table 4.61 shows the result of AVE, which confirmed that each construct differed sufficiently from other constructs. The square roots of the AVE values were bigger than the correlation coefficients; hence, discriminant validity was established.

Total score for knowledge was calculated after validation by KR 20, therefore it is rational to use of all items as a single item construct with square root of AVE=1 (Whati et al., 2005; Parmenter and Wardle, 2000).

Table 4.61: Results for Discriminant Validity (Fornell Larcker)

| | 1 | 2 | 3 | 4 | 5 | 6 |
|--|--------------|--------------|--------------|----------|--------------|-------------|
| 1.Muslim Religiosity | 0.800 | | | | | |
| 2.Halal Consciousness | 0.777 | 0.801 | | | | |
| 3.The Importance Of Halal Logo | 0.452 | 0.649 | 0.807 | | | |
| 4.Knowledge | 0.198 | 0.265 | 0.092 | 1 | | |
| 5.Product Originated From Muslim Countries | 0.277 | 0.361 | 0.548 | -0.017 | 0.742 | |
| 6.Intention To Purchase Halal Food Products | 0.739 | 0.782 | 0.536 | 0.2 | 0.332 | 0.83 |

Note: Bold diagonal elements are the square roots of AVE. Off diagonal elements are the correlations between constructs

Discriminant validity of reflective constructs also was evaluated using Heterotrait-Monotrait ratio of correlations. If the HTMT value is more than 0.9 then there is an issue of discriminant validity. In this study all HTMT values Table 4.62 were below 0.9 and indicates there is no any issue related to discriminant validity.

Table 4.62: Results for Discriminant Validity(HTMT)

| | 1 | 2 | 3 | 4 | 5 |
|--|----------|----------|----------|----------|----------|
| 1.Muslim Religiosity | | | | | |
| 2.Halal Consciousness | 0.822 | | | | |
| 3.The Importance Of Halal Logo | 0.495 | 0.721 | | | |
| 4.Knowledge | 0.205 | 0.275 | 0.096 | | |
| 5.Product Originated From Muslim Countries | 0.285 | 0.374 | 0.644 | 0.127 | |
| 6.Intention To Purchase Halal Food Products | 0.808 | 0.869 | 0.617 | 0.213 | 0.352 |

The output of cross loading between variable (latent variable) and item (indicators) is shown in Table 4.63. According to these results, it can be found that all items loaded higher against their respective intended latent variable compared to other latent variables and therefore concludes that the measurement model has proven its discriminant validity

Table 4.63: Assessment of Constructs Cross-loadings and Factor Loadings

| | Religiosity | Halal consciousness | Halal logo | Knowledge | Origin | Purchase intention |
|---------|--------------|---------------------|--------------|-----------|--------------|--------------------|
| RELI_1 | 0.674 | 0.476 | 0.341 | 0.169 | 0.161 | 0.444 |
| RELI_10 | 0.85 | 0.66 | 0.367 | 0.158 | 0.223 | 0.615 |
| RELI_11 | 0.678 | 0.505 | 0.3 | 0.144 | 0.232 | 0.47 |
| RELI_12 | 0.827 | 0.635 | 0.358 | 0.183 | 0.197 | 0.626 |
| RELI_14 | 0.938 | 0.734 | 0.408 | 0.154 | 0.225 | 0.723 |
| RELI_2 | 0.821 | 0.62 | 0.326 | 0.132 | 0.161 | 0.617 |
| RELI_20 | 0.873 | 0.686 | 0.398 | 0.169 | 0.249 | 0.638 |
| RELI_4 | 0.888 | 0.727 | 0.432 | 0.222 | 0.237 | 0.689 |
| RELI_5 | 0.597 | 0.51 | 0.282 | 0.19 | 0.359 | 0.443 |
| RELI_6 | 0.509 | 0.36 | 0.27 | 0.072 | 0.245 | 0.329 |
| RELI_8 | 0.916 | 0.721 | 0.405 | 0.145 | 0.195 | 0.69 |
| RELI_9 | 0.893 | 0.687 | 0.408 | 0.148 | 0.229 | 0.665 |
| RELI_8 | 0.916 | 0.721 | 0.405 | 0.145 | 0.195 | 0.69 |
| RELI_9 | 0.893 | 0.687 | 0.408 | 0.148 | 0.229 | 0.665 |
| CAU_1 | 0.673 | 0.829 | 0.484 | 0.21 | 0.292 | 0.651 |
| CAU_2 | 0.674 | 0.823 | 0.505 | 0.242 | 0.308 | 0.633 |
| CAU_7 | 0.466 | 0.713 | 0.547 | 0.201 | 0.33 | 0.53 |
| CAU_8 | 0.619 | 0.852 | 0.577 | 0.203 | 0.325 | 0.697 |
| CONS_4 | 0.608 | 0.807 | 0.58 | 0.218 | 0.294 | 0.628 |
| CONS_6 | 0.615 | 0.776 | 0.512 | 0.138 | 0.309 | 0.631 |
| CONS_9 | 0.662 | 0.865 | 0.517 | 0.274 | 0.27 | 0.681 |
| LOGO_10 | 0.631 | 0.751 | 0.425 | 0.234 | 0.169 | 0.556 |
| LOGO_9 | 0.624 | 0.778 | 0.546 | 0.189 | 0.314 | 0.61 |
| CONS_1 | 0.28 | 0.428 | 0.74 | 0.049 | 0.4 | 0.343 |
| LOGO_1 | 0.36 | 0.525 | 0.769 | 0.092 | 0.41 | 0.437 |
| LOGO_4 | 0.344 | 0.484 | 0.818 | 0.041 | 0.483 | 0.412 |
| LOGO_5 | 0.401 | 0.587 | 0.855 | 0.114 | 0.439 | 0.481 |
| LOGO_6 | 0.416 | 0.572 | 0.847 | 0.066 | 0.478 | 0.47 |
| KNOW | 0.198 | 0.265 | 0.092 | 1 | -0.017 | 0.2 |
| CAU_9 | 0.151 | 0.204 | 0.431 | -0.078 | 0.699 | 0.15 |
| COO_2 | 0.328 | 0.383 | 0.424 | 0.112 | 0.813 | 0.358 |
| COO_3 | 0.138 | 0.219 | 0.373 | -0.044 | 0.756 | 0.227 |
| COO_4 | 0.184 | 0.266 | 0.476 | -0.099 | 0.787 | 0.248 |
| COO_6 | 0.102 | 0.146 | 0.336 | -0.097 | 0.643 | 0.112 |
| INT_2 | 0.52 | 0.616 | 0.514 | 0.167 | 0.351 | 0.775 |
| INT_3 | 0.601 | 0.597 | 0.382 | 0.163 | 0.208 | 0.816 |
| INT_7 | 0.525 | 0.565 | 0.394 | 0.116 | 0.265 | 0.811 |
| INT_8 | 0.774 | 0.788 | 0.481 | 0.205 | 0.277 | 0.913 |

Establishing Equivalence

There are several techniques in establishing equivalence in the literature. Among those include construct equivalence, instrument equivalence, and measurement equivalence (Smith and Reynolds, 2001). In this regard, this study employs measurement equivalence, which aims to deal with the issue whether the same model embraced across different populations. The most common technique used in the literature is traditional psychometric analysis (Craig and Douglas, 2000). This analysis evaluates the reliability coefficients of the instrument and compare between the two sample groups by using Cronbach Alpha or composite reliability (Vijver and Leung, 1997, Steenkamp and van Trijp, 1991). The formula is: $C = (1 - \alpha_1) / (1 - \alpha_2)$.

Table 4.64 shows the result of Traditional Psychometric Analysis (by ethnic). The composite reliability is derived from Table 5.54. It has been noted that most of the constructs have a value smaller than 1.26 (F with $p < 0.05$ equals of 1.26). It may conclude that there are no significant differences between the reliability coefficients. Thus, equivalence has been established. Table 4.65 shows the result of Traditional Psychometric Analysis (By country). It has been noted that all of the constructs have a value smaller than 1.26 (based on Table of F with $p < 0.05$ equals of 1.26). Therefore, it may conclude that there is no significant difference between the reliability coefficients. Thus, measurement equivalence has been established.

Table 4.64: Traditional Psychometric Analysis (By Ethnic)

| Constructs | Non Arab Muslim (N= 406) CR** | Arab Muslim (N= 382) CR** | Statistic C= (1-CR1)/ (1-CR2) | Differences |
|---|--|--|--|--------------------|
| Muslim Religiosity | 0.956 | 0.919 | 0.543 | No |
| Halal Consciousness | 0.919 | 0.923 | 1.052 | No |
| The Importance Of Halal Logo | 0.842 | 0.867 | 1.188 | No |
| Product Originated From Muslim Countries | 0.789 | 0.826 | 1.213 | No |
| Intention To Purchase Halal Food Products | 0.850 | 0.802 | 0.758 | No |

Table 4.65: Traditional Psychometric Analysis (By Country)

| Constructs | AUSTRALIA (N= 393) CR** | UK (N= 395) CR** | Statistic C= (1-CR1)/ (1-CR2) | Differences |
|---|--|---------------------------------|--|--------------------|
| Muslim Religiosity | 0.961 | 0.818 | 0.214 | No |
| Halal Consciousness | 0.949 | 0.873 | 0.402 | No |
| The Importance Of Halal Logo | 0.85 | 0.869 | 1.145 | No |
| Product Originated From Muslim Countries | 0.795 | 0.821 | 1.145 | No |
| Intention To Purchase Halal Food Products | 0.882 | 0.763 | 0.498 | No |

4.10. Analysis of the Structural Model and Testing of Hypotheses

From the final measurement model, the data were found to be valid and more reliable. Thus, it can be used in the hypotheses testing and in evaluating structural models. This section discusses the structural model assessment (inner model), ethnic comparison between Arab and non-Arab Muslims and country comparison between Muslims in Australia and the United Kingdom and testing the mediating effect.

4.10.1 Structural Model Assessment (Inner Model)

The structural model covers the relationships among the hypothetical constructs. Since the primary objective of PLS is prediction, the goodness of a theoretical model is established by the strength of each structural path and the combined predictiveness (R^2) of its exogenous constructs (Chin, 1998). The variance explained, which is the R squared (R^2) for the endogenous, should be >0.1 (Falk & Miller, 1992). The variance explained for each dependent construct is shown in Table 6.48.

The final dependent construct, that is, INT had an R^2 value of 0.660 in general model while it was 0.604 for Arab, 0.693 for non-Arab, 0.810 for Australia and 0.402 for UK sub-samples which were considered satisfactory, taking into account the complexity of the model. The final R^2 was the important indicator to explain the strength of the structural path, which also showed good predictability, reaching an explained variance (R^2) of the dependent variable. Table 4.66 shows the construct variance for all sub-samples.

Table 4.66: Construct Variance Explained

| Constructs | R Square | | | | |
|---|----------|-------|----------|-----------|-------|
| | General | Arab | Non-Arab | Australia | UK |
| Halal Consciousness | 0.603 | 0.49 | 0.718 | 0.75 | 0.25 |
| The Importance Of Halal Logo | 0.204 | 0.126 | 0.226 | 0.486 | 0.06 |
| Halal Knowledge | 0.039 | 0.051 | 0.014 | 0.034 | 0.084 |
| Product Originated From Muslim Countries | 0.077 | 0.067 | 0.069 | 0.156 | 0.044 |
| Intention To Purchase Halal Food Products | 0.660 | 0.604 | 0.693 | 0.810 | 0.402 |

In predicting the relevance of the PLS model, the model fit of PLS analysis uses the Stone-Geisser test (Q^2) that measures how well the observed values are reconstructed by the model and its parameter estimates (Chin, 1998). The Stone-Geisser Q^2 test can be obtained through the underlying latent variable score case from which the cross-validated communality is obtained, or through those latent variables that predict the block in question from which the cross-validated redundancy is obtained.

The Q^2 measures the capacity of the model to predict the endogenous manifest variables using the latent variables that predict the block in question, and serve as a sign of the quality of the structural model. Table 4.67 shows the results for Q^2 for general model and also sub-samples which indicated that the structural model are a quality model.

Table 4.67: Results of Stone-Geisser test (Q^2)

| Constructs | Q2 | | | | |
|--|---------|-------|----------|-----------|-------|
| | General | Arab | Non-Arab | Australia | UK |
| Halal Consciousness | 0.361 | 0.277 | 0.384 | 0.497 | 0.112 |
| The Importance Of Halal Logo | 0.123 | 0.07 | 0.134 | 0.284 | 0.033 |
| Halal Knowledge | 0.036 | 0.047 | 0.002 | 0.033 | 0.075 |
| Product Originated From Muslim Countries | 0.033 | 0.025 | 0.031 | 0.068 | 0.017 |
| Intention To Purchase Halal Food Products | 0.425 | 0.385 | 0.413 | 0.561 | 0.211 |

4.10.2 General Model

The hypotheses were tested by examining the magnitude of the standardized parameter estimates (beta) between the constructs together with the corresponding t-values that indicate the level of significance. The p-values were obtained through bootstrap simulation.

According to the results of general model, the Muslim Religiosity had a positive and significant effect on all variables. The highest effect of Muslim Religiosity was observed on Halal Consciousness ($\beta=0.777$, $p<0.001$) followed by The Importance of Halal Logo ($\beta=0.452$, $p<0.001$) and the lowest effect of Muslim Religiosity was seen on Product Originated from Muslim Countries ($\beta=0.277$, $p<0.001$) and Halal Knowledge ($\beta=0.198$, $p<0.001$). The direct effect of Muslim Religiosity on Purchase Intention also was positive and significant ($\beta=0.341$, $p<0.001$) while among all intervening variables in the structural model only Halal Consciousness had a positive and significant effect on Purchase Intention ($\beta=0.463$, $p<0.001$). Please refer to Figure 4.1, Table 4.68 and Table 4.69.

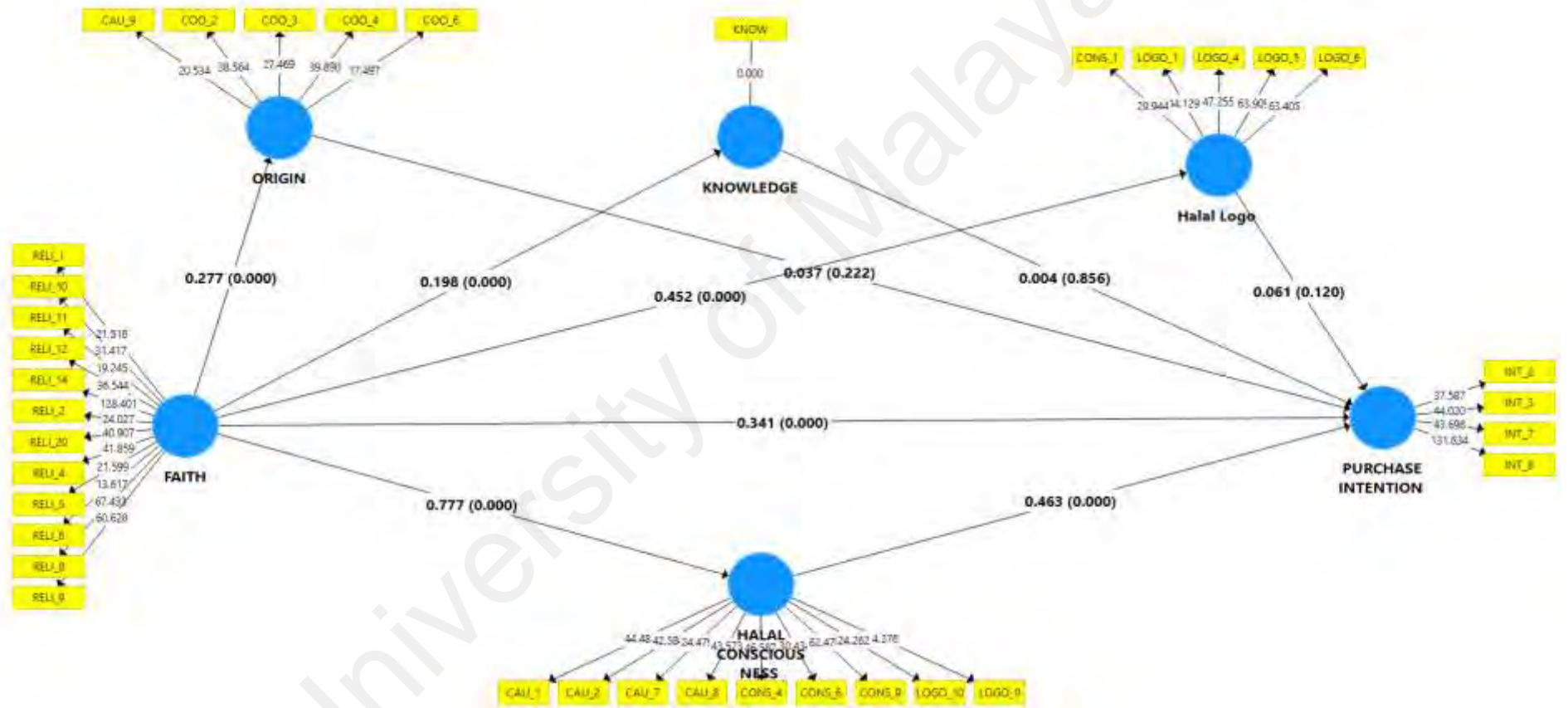


Figure 4.1: Path Coefficients for general model

Table 4.68: PLS Results for Structural Model (General Model)

| Path | Hypo | β | SE | T value | P Values |
|--------------|-------|---------|-------|----------|----------|
| RELI -> KNOW | H1ai | 0.198 | 0.038 | 5.189** | <0.001 |
| RELI -> CONS | H1bi | 0.777 | 0.026 | 29.562** | <0.001 |
| RELI -> LOGO | H1ci | 0.452 | 0.033 | 13.739** | <0.001 |
| RELI -> COO | H1di | 0.277 | 0.03 | 9.253** | <0.001 |
| KNOW -> INT | H2ai | 0.004 | 0.025 | 0.182 | 0.856 |
| CONS -> INT | H2 bi | 0.463 | 0.071 | 6.511** | <0.001 |
| LOGO -> INT | H2 ci | 0.061 | 0.039 | 1.555 | 0.12 |
| COO -> INT | H2di | 0.037 | 0.03 | 1.222 | 0.222 |
| RELI -> INT | H3 | 0.341 | 0.066 | 5.174** | <0.001 |

*Significant at 5% ,

**Significant at 1%

Table 4.69: Summary of PLS Results for Structural Model (General Model)

| Hypotheses | | Result |
|------------|---|-----------------|
| H1ai | There is a positive relationship between Muslim religiosity and the halal knowledge food among Arab Muslim and Non-Arab Muslims in UK and Australia. | Significant |
| H1bi | There is a positive relationship between Muslim religiosity and Halal consciousness among Arab Muslim and Non-Arab Muslims in UK and Australia. | Significant |
| H1ci | There is a positive relationship between Muslim religiosity and the importance of Halal Logo among Arab Muslim and Non-Arab Muslims in UK and Australia. | Significant |
| H1di | There is a positive relationship between Muslim religiosity and products originated from Muslim countries among Arab Muslim and Non-Arab Muslims in UK and Australia. | Significant |
| H2ai | There is a positive relationship between halal knowledge food and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | Not-Significant |

Table 4.69: Continued

| Hypotheses | | Result |
|------------|--|-----------------|
| H2 bi | There is a positive relationship between halal consciousness and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia in UK and Australia. | Significant |
| H2 ci | There is a positive relationship between the importance of halal logo and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | Not-Significant |
| H2di | There is a positive relationship between products originated from Muslim countries and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | Not-Significant |
| H3i | The higher the Muslim religiosity, the higher will be the intention to purchase Halal food product among Arab Muslim and Non-Arab Muslims in UK and Australia. | Significant |

4.10.3 Ethnic Comparison between Arab and Non-Arab Muslims

The second structural model studied the relationship among variables for Arab and Non-Arab samples. According to the results of bootstrapping of these two model, for Arab subsample it was found that the Muslim Religiosity had a positive and significant effect on all variables. The highest effect of Muslim Religiosity was observed on Halal Consciousness ($\beta=0.700$, $p<0.001$) followed by The Importance of Halal Logo ($\beta=0.345$, $p<0.001$) and the lowest effect of Muslim Religiosity was seen on Product Originated From Muslim Countries ($\beta=0.258$, $p<0.001$) and Halal Knowledge ($\beta=0.225$, $p<0.001$). The direct effect of Muslim Religiosity on Purchase Intention also was positive and significant ($\beta=0.369$, $p<0.001$) while among all intervening variables in the structural model only Halal Consciousness had a positive and significant effect on Purchase Intention ($\beta=0.412$, $p<0.001$).

These results for Non-Arab sample showed that the Muslim Religiosity had a positive and significant effect on all variables except Halal Knowledge. The highest effect of Muslim Religiosity was observed on Halal Consciousness ($\beta=0.847$, $p<0.001$) followed by The Importance of Halal Logo ($\beta=0.475$, $p<0.001$) and the lowest effect of Muslim Religiosity was seen on Product Originated From Muslim Countries ($\beta=0.262$, $p<0.001$). The effect of Muslim Religiosity on Halal Knowledge was not statistically significant ($\beta=0.120$, $p=0.096$). The direct effect of Muslim Religiosity on Purchase Intention also was positive and significant ($\beta=0.233$, $p=0.002$). Among all intervening variables in the structural model Halal Consciousness ($\beta=0.572$, $p<0.001$). and The Importance of Halal Logo ($\beta=0.093$, $p=0.013$) had a positive and significant effect on Purchase Intention.

Considering the fitness of both models which was tested using squared multiple correlations (R^2) of the main dependent variable for both ethnic groups. For Arab Muslims, 60.4% ($R^2=0.604$) of the variation in the Purchase Intention was explained by the independent variables, while for non-Arab Muslims, 69.3% ($R^2=0.693$) of the variation in the Purchase Intention was explained by the independent variables. The hypotheses were tested by examining the magnitude of the standardized parameter estimates between constructs together with the corresponding t-values that indicate the level of significance. The summary for ethnic comparison between Arab and non-Arab Muslims is presented in Table 4.70, 4.71, 4.72, Figure 4.2 and Figure 4.3.

Table 4.70: PLS Results for Structural Model (Arab and Non-Arab Muslims)

| Path | Path Coefficients-diff (Arab - Non Arab) | t-Value | p-Value |
|---------------|---|---------|---------|
| RELI -> KNOW | 0.105 | 1.206 | 0.229 |
| RELI -> CONS | 0.147 | 3.083** | 0.002 |
| RELI -> LOGO | 0.12 | 1.775 | 0.077 |
| RELI -> PODMC | 0.004 | 0.062 | 0.95 |
| KNOW -> INT | 0.055 | 1.054 | 0.292 |
| CONS -> INT | 0.159 | 1.289 | 0.198 |
| LOGO -> INT | 0.089 | 1.057 | 0.291 |
| PODMC -> INT | 0.106 | 1.574 | 0.116 |
| RELI -> INT | 0.136 | 1.214 | 0.226 |

Table 4.71: Summary of the PLS Results for Structural Model (Arab and Non-Arab Muslims)

| Hypotheses | | Result | |
|------------|--|----------------|------------------|
| | | Arab Muslim | Non- Arab Muslim |
| H1aai | There is a positive relationship between Muslim religiosity and the halal knowledge | Supported | Not- Supported |
| H1bii | There is a positive relationship between Muslim religiosity and Halal consciousness | Supported | Supported |
| H1cii | There is a positive relationship between Muslim religiosity and the importance of Halal Logo | Supported | Supported |
| H1dii | There is a positive relationship between Muslim religiosity and products originated from Muslim countries | Supported | Supported |
| H2aai | There is a positive relationship between halal knowledge food and the intention to purchase Halal food products | Not- Supported | Not- Supported |
| H2bii | There is a positive relationship between halal consciousness and the intention to purchase Halal food products | Supported | Supported |
| H2cii | There is a positive relationship between the importance of halal logo and the intention to purchase Halal food products | Not- Supported | Supported |
| H2dii | There is a positive relationship between products originated from Muslim countries and the intention to purchase Halal food products | Not- Supported | Not- Supported |
| H3ii | The higher the Muslim religiosity, the higher will be the intention to purchase Halal food product | Supported | Supported |

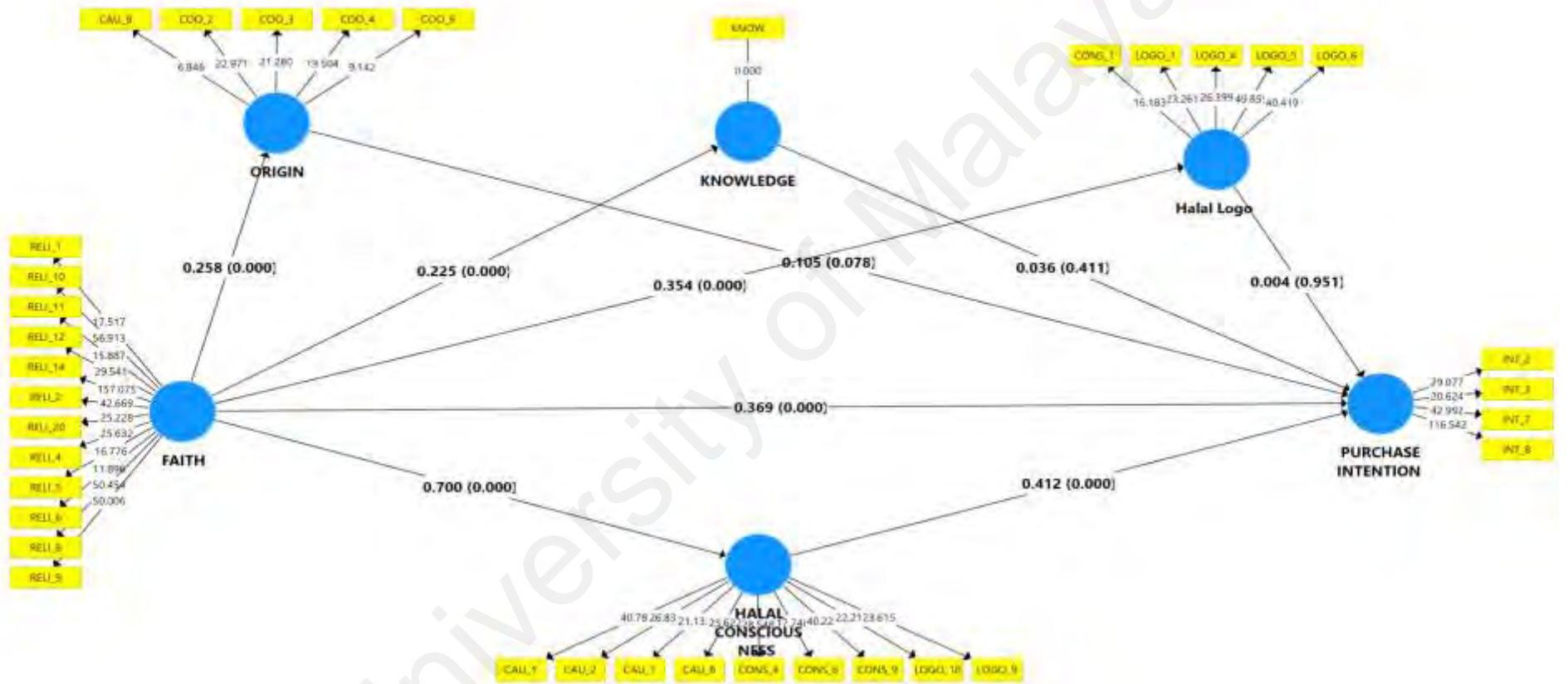


Figure 4.2: Statistical Significance of Path Coefficients for Arab

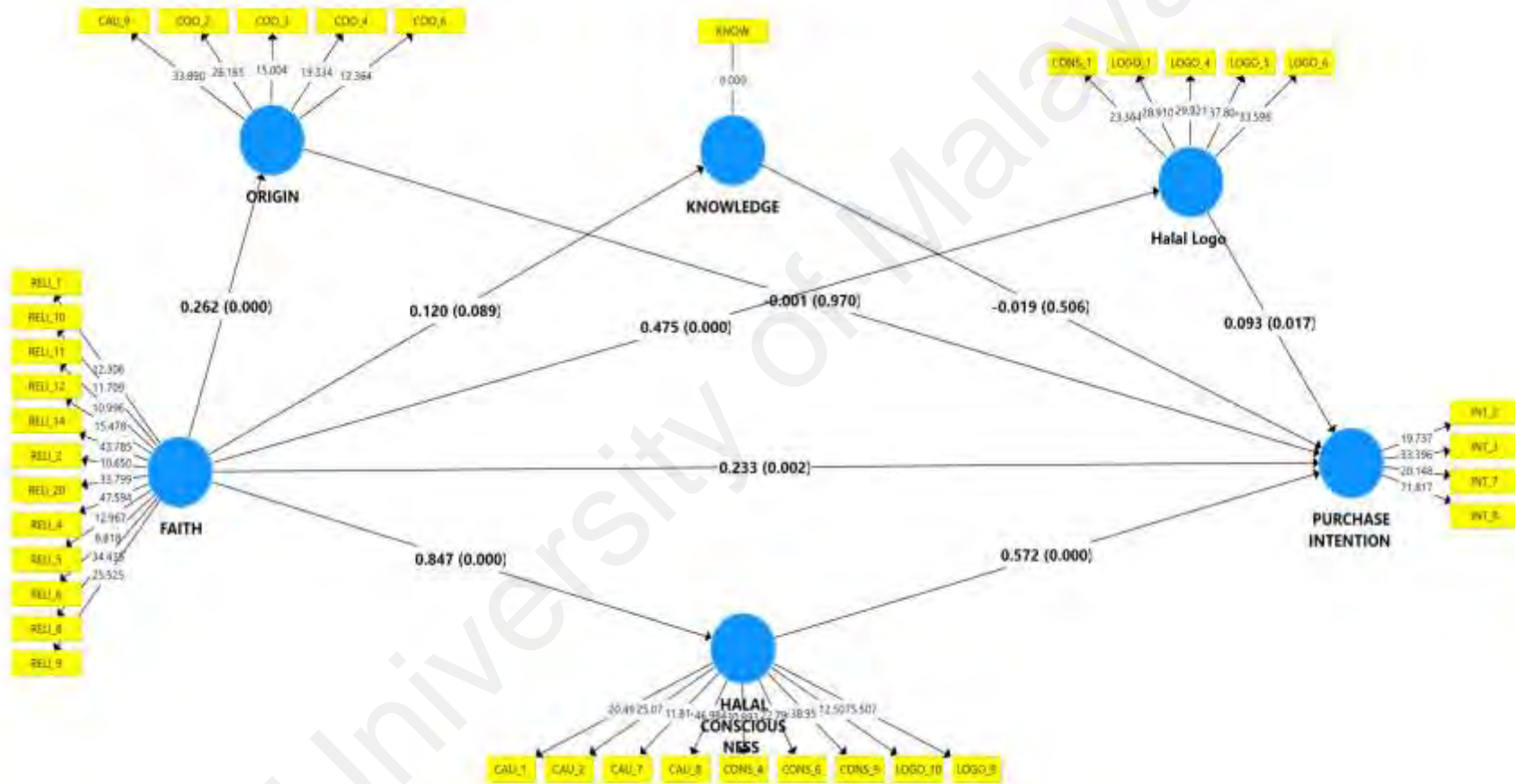


Figure 4.3: Statistical Significance of Path Coefficients for Non-Arab

Table 4.72: Results of Hypotheses for Ethnic Comparison between Arab and Non-Arab Muslims

| Path | Hypo | ARAB MUSLIM | | | | NON-ARAB MUSLIM | | | |
|---------------|-------|-------------|-------|----------|---------|-----------------|-------|----------|---------|
| | | β | SE | T value | P Value | β | SE | T value | P Value |
| RELI -> KNOW | H1aii | 0.225 | 0.05 | 4.491** | <0.001 | 0.120 | 0.072 | 1.665 | 0.096 |
| RELI -> CONS | H1bii | 0.700 | 0.041 | 16.918** | <0.001 | 0.847 | 0.024 | 35.177** | <0.001 |
| RELI -> LOGO | H1cii | 0.354 | 0.047 | 7.574** | <0.001 | 0.475 | 0.049 | 9.632** | <0.001 |
| RELI -> PODMC | H1dii | 0.258 | 0.045 | 5.721** | <0.001 | 0.262 | 0.038 | 6.909** | <0.001 |
| KNOW -> INT | H2aii | 0.036 | 0.044 | 0.826 | 0.409 | -0.019 | 0.028 | 0.663 | 0.508 |
| CONS -> INT | H2bii | 0.412 | 0.096 | 4.285** | <0.001 | 0.572 | 0.078 | 7.351** | <0.001 |
| LOGO -> INT | H2cii | 0.004 | 0.075 | 0.06 | 0.952 | 0.093 | 0.037 | 2.493* | 0.013 |
| PODMC -> INT | H2dii | 0.105 | 0.062 | 1.694 | 0.091 | -0.001 | 0.027 | 0.039 | 0.969 |
| RELI -> INT | H3ii | 0.369 | 0.084 | 4.378** | <0.001 | 0.233 | 0.074 | 3.127** | 0.002 |

*Significant at 5% ,

**Significant at 1%

4.10.4 Country Comparison between Muslims in Australia and Muslims in the United Kingdom

The third structural model studied the relationship among variables for Muslims in Australia and Muslims in the United Kingdom samples. According to the results of bootstrapping of these two model, for Australia sub-sample it was found that the Muslim Religiosity had a positive and significant effect on all variables. The highest effect of Muslim Religiosity was observed on Halal Consciousness ($\beta=0.866$, $p<0.001$) followed by The Importance of Halal Logo ($\beta=0.697$, $p<0.001$) and Product Originated From Muslim Countries ($\beta=0.396$, $p<0.001$) and the lowest effect of Muslim Religiosity was seen on Halal Knowledge ($\beta=0.053$, $p<0.001$). The direct effect of Muslim Religiosity on Intention to Purchase also was positive and significant ($\beta=0.585$, $p<0.001$) while among all intervening variables in the structural model only The Importance of Halal Logo ($\beta=0.190$, $p<0.001$) and Halal Knowledge ($\beta=0.053$, $p=0.036$) had a positive and significant effect on Intention to Purchase .

These results for UK sub-sample showed that the Muslim Religiosity had a positive and significant effect on all variables. The highest effect of Muslim Religiosity was observed on Halal Consciousness ($\beta=0.500$, $p<0.001$) followed by Halal Knowledge ($\beta=0.290$, $p<0.001$) and The Importance of Halal Logo ($\beta=0.246$, $p<0.001$) and the lowest effect of Muslim Religiosity was seen on Product Originated From Muslim Countries ($\beta=0.210$, $p<0.001$). The direct effect of Muslim Religiosity on Intention to Purchase also was not significant ($\beta=-0.002$, $p=0.977$). Among all intervening variables in the structural model Halal Consciousness ($\beta=0.608$, $p<0.001$) and Product Originated From Muslim Countries ($\beta=0.122$, $p<0.001$) had a positive and significant effect on Intention to Purchase.

Considering both models based on their squared multiple correlations (R^2) of the main dependent variable for both groups. For Australian Muslims, 81% ($R^2=0.810$) of

the variation in the Intention to Purchase was explained by the independent variables, while for UK Muslims, 40.2% ($R^2=0.402$) of the variation in the Intention to Purchase was explained by the independent variables. The hypotheses were tested by examining the magnitude of the standardized parameter estimates between constructs together with the corresponding t-values that indicate the level of significance. The summary for ethnic comparison between Australian and UK Muslims is presented in Table 4.73, 4.74, 4.75 and Figure 4.4 and 4.5.

Table 4.73: PLS Results for Structural Model (Australia and UK)

| Path | Path Coefficients-diff (Australia - UK) | t-Value | p-Value |
|---------------|--|---------|---------|
| RELI -> KNOW | 0.107 | 1.228 | 0.22 |
| RELI -> CONS | 0.366 | 5.336** | <0.001 |
| RELI -> LOGO | 0.451 | 7.652** | <0.001 |
| RELI -> PODMC | 0.186 | 2.856** | 0.004 |
| KNOW -> INT | 0.055 | 0.963 | 0.336 |
| CONS -> INT | 0.428 | 3.04** | 0.002 |
| LOGO -> INT | 0.230 | 2.857** | 0.004 |
| PODMC -> INT | 0.139 | 2.022* | 0.044 |
| RELI -> INT | 0.587 | 4.804** | <0.001 |

Table 4.74: Summary of the PLS Results for the Structural Model (Australia and UK)

| Hypotheses | | Result | |
|------------|--|---------------|----------------|
| | | AUSTRALIA | UK |
| H1aiii | There is a positive relationship between Muslim religiosity and the halal knowledge | Supported | Supported |
| H1biii | There is a positive relationship between Muslim religiosity and Halal consciousness | Supported | Supported |
| H1diii | There is a positive relationship between Muslim religiosity and the importance of Halal Logo | Supported | Supported |
| H1eiii | There is a positive relationship between Muslim religiosity and products originated from Muslim countries | Supported | Supported |
| H2aiii | There is a positive relationship between halal knowledge food and the intention to purchase Halal food products | Supported | Not- Supported |
| H2biii | There is a positive relationship between halal consciousness and the intention to purchase Halal food products | Not-Supported | Supported |
| H2ciii | There is a positive relationship between the importance of halal logo and the intention to purchase Halal food products | Supported | Not- Supported |
| H2diii | There is a positive relationship between products originated from Muslim countries and the intention to purchase Halal food products | Not-Supported | Supported |
| H3iii | The higher the Muslim religiosity, the higher will be the intention to purchase Halal food product | Supported | Not- Supported |

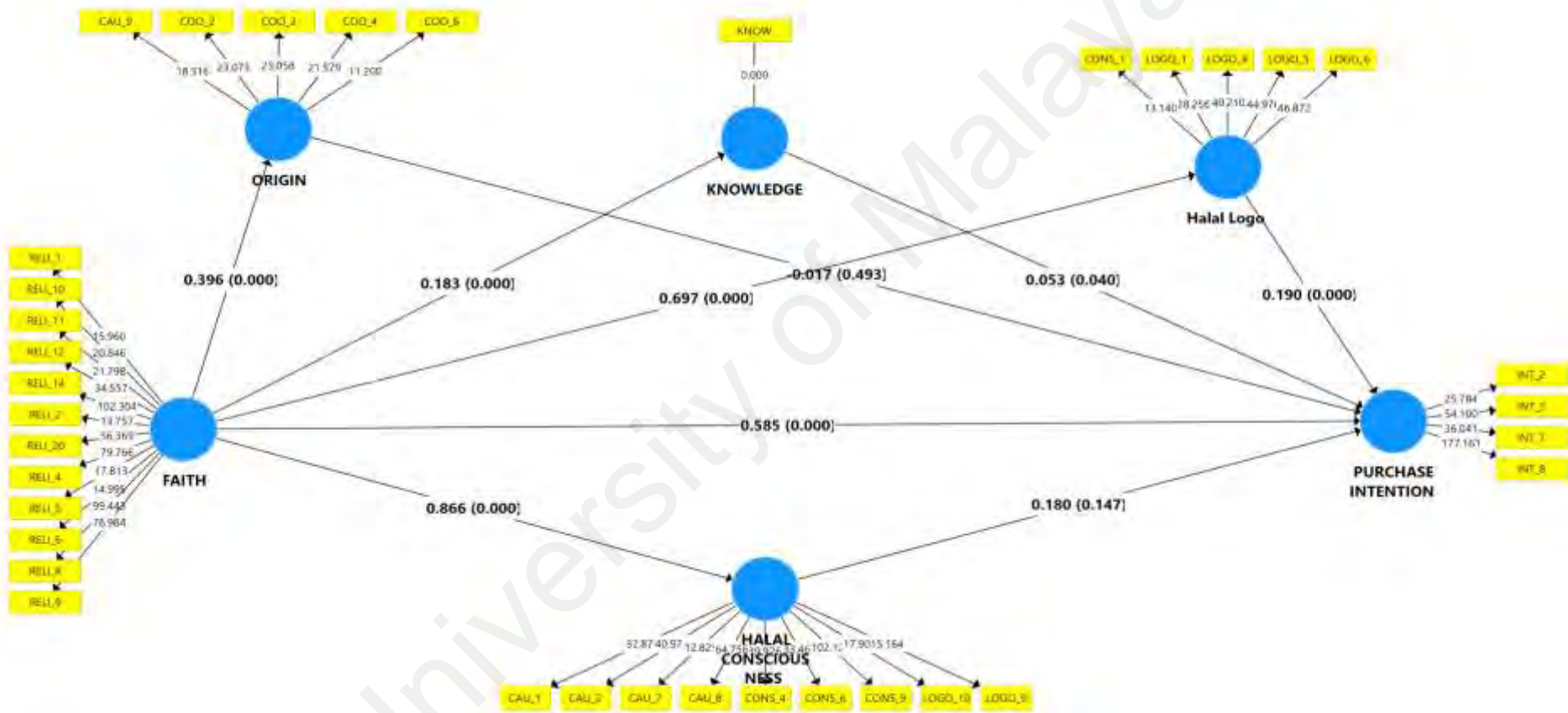


Figure 4.4: Statistical Significance of Path Coefficients for Australia Muslim

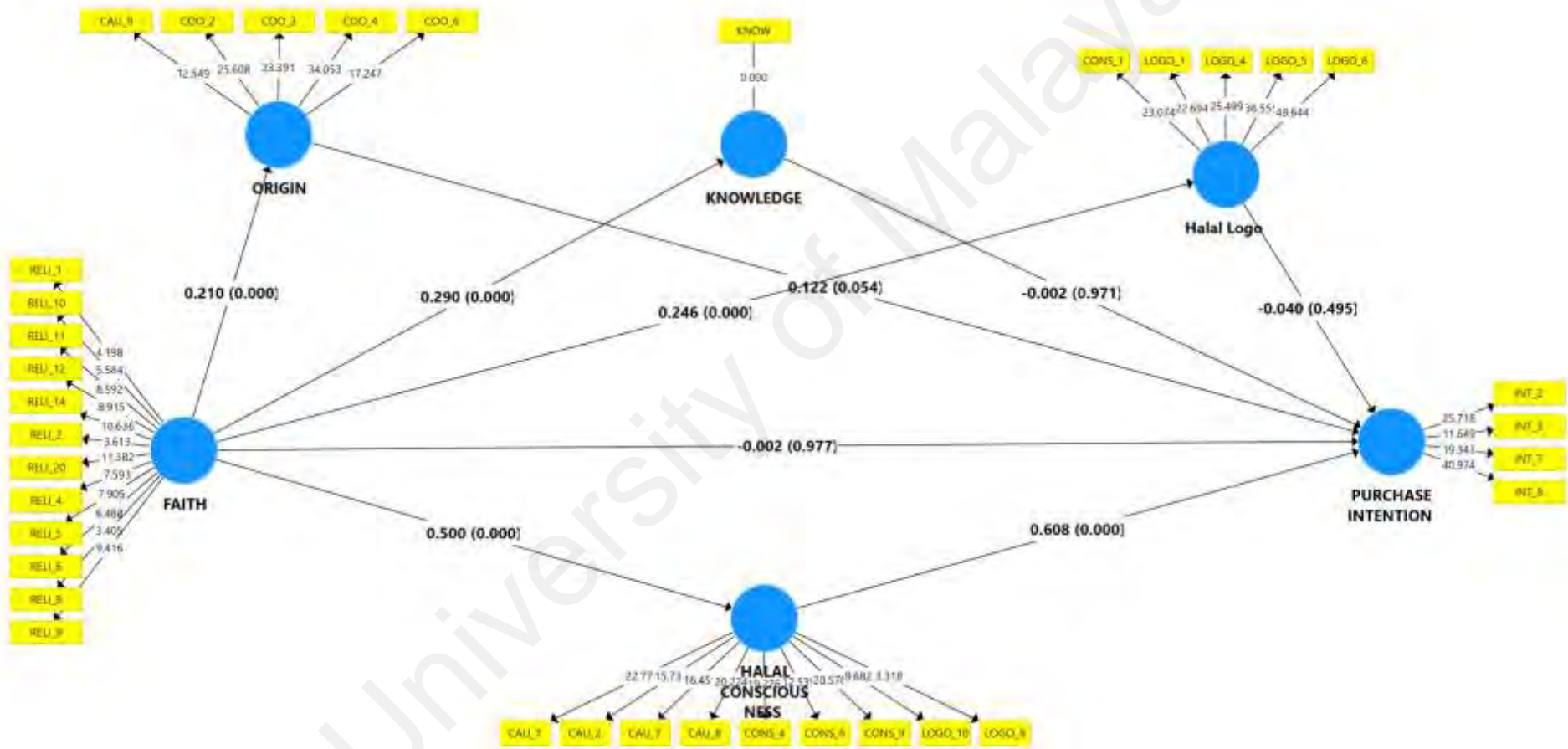


Figure 4.5: Statistical Significance of Path Coefficients for UK Muslim

Table 4.75: Results of Hypotheses for Country Comparison between Muslims in Australia and Muslims in the United Kingdom

| Path | Hypo | AUSTRALIA MUSLIM | | | | UNITED KINGDOM MUSLIM | | | |
|---------------|--------|------------------|-------|----------|---------|-----------------------|-------|---------|---------|
| | | β | SE | T value | P Value | β | SE | T value | P Value |
| RELI -> KNOW | H1aiii | 0.183 | 0.046 | 3.966** | <0.001 | 0.290 | 0.077 | 3.763** | <0.001 |
| RELI -> CONS | H1biii | 0.866 | 0.026 | 33.698** | <0.001 | 0.500 | 0.064 | 7.809** | <0.001 |
| RELI -> LOGO | H1ciii | 0.697 | 0.028 | 24.664** | <0.001 | 0.246 | 0.049 | 4.972** | <0.001 |
| RELI -> PODMC | H1diii | 0.396 | 0.038 | 10.533** | <0.001 | 0.210 | 0.054 | 3.895** | <0.001 |
| KNOW -> INT | H2aiii | 0.053 | 0.026 | 2.048* | 0.041 | -0.002 | 0.053 | 0.036 | 0.971 |
| CONS -> INT | H2biii | 0.180 | 0.122 | 1.47 | 0.142 | 0.608 | 0.066 | 9.271** | <0.001 |
| LOGO -> INT | H2ciii | 0.190 | 0.049 | 3.847** | <0.001 | -0.04 | 0.061 | 0.652 | 0.514 |
| PODMC -> INT | H2diii | -0.017 | 0.025 | 0.676 | 0.499 | 0.122 | 0.062 | 1.979* | 0.048 |
| RELI -> INT | H3iii | 0.585 | 0.108 | 5.427** | <0.001 | -0.002 | 0.053 | 0.029 | 0.977 |

*Significant at 5% ,

**Significant at 1%

Table 4.76 explains the summary of the hypotheses between the constructs using the partial least squares program. The model estimated the relationship between Muslim religiosity, the constructs of halal perception (halal knowledge, halal consciousness, the importance of the halal logo and products originating from Muslim countries) towards the intention to purchase halal food products. The hypotheses were divided into three groups, general, ethnicity (non-Arab Muslim and Arab Muslim) and country (Australia and United Kingdom). This study proposed three main hypotheses with a total of 45 sub-hypotheses, which compared between the general model, between ethnicity and country.

H1 (General)

H1ai – The results show that there is no positive relationship between Muslim religiosity for the general model. The results indicate that Muslim religiosity is not significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of $5.189 < 1.96$, which was obtained through bootstrap simulation. Thus, it does support Hypothesis H1ai.

H1bi- The results show that there is a positive relationship between Muslim religiosity and the halal consciousness among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that halal consciousness is significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of $29.562 > 1.96$, which was obtained through bootstrap simulation. Thus, it supports Hypothesis H1bi.

Table 4.76: The summary of Hypotheses and Results

| Hypotheses | | | | Result | |
|------------|---|--------|---------|---------------|---------------|
| H1a | There is a positive relationship between Muslim religiosity and the halal knowledge among Arab Muslim and Non-Arab Muslims in UK and Australia. | H1ai | General | Not-Supported | |
| | | H1aii | Ethnic | Arab | Not-Supported |
| | | | | Non-Arab | Supported |
| | | H1aiii | Country | Aus | Supported |
| | | | | UK | Supported |
| H1b | There is a positive relationship between Muslim religiosity and Halal consciousness among Arab Muslim and Non-Arab Muslims in UK and Australia. | H1bi | General | Supported | |
| | | H1bii | Ethnic | Arab | Supported |
| | | | | Non-Arab | Supported |
| | | H1biii | Country | Aus | Supported |
| | | | | UK | Supported |
| H1c | There is a positive relationship between Muslim religiosity and the importance of Halal Logo among Arab Muslim and Non-Arab Muslims in UK and Australia. | H1ci | General | Supported | |
| | | H1cii | Ethnic | Arab | Supported |
| | | | | Non-Arab | Supported |
| | | H1ciii | Country | Aus | Supported |
| | | | | UK | Supported |
| H1d | There is a positive relationship between Muslim religiosity and products originated from Muslim countries among Arab Muslim and Non-Arab Muslims in UK and Australia. | H1di | General | Supported | |
| | | H1dii | Ethnic | Arab | Supported |
| | | | | Non-Arab | Supported |
| | | H1diii | Country | Aus | Supported |
| | | | | UK | Supported |

Table 4.76: Continued

| Hypotheses | | | | Result | |
|------------|--|--------|---------|---------------|---------------|
| H2a | There is a positive relationship between halal knowledge food and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | H2ai | General | Not-Supported | |
| | | H2aii | Ethnic | Arab | Supported |
| | | | | Non-Arab | Not-Supported |
| | | H2aiii | Country | Aust | Supported |
| | | | | UK | Not-Supported |
| H2b | There is a positive relationship between halal consciousness and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia in UK and Australia. | H2bi | General | Supported | |
| | | H2bii | Ethnic | Arab | Supported |
| | | | | Non-Arab | Supported |
| | | H2biii | Country | Aust | Supported |
| | | | | UK | Supported |
| H2c | There is a positive relationship between the importance of halal logo and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | H2ci | General | Not-Supported | |
| | | H2cii | Ethnic | Arab | Not-Supported |
| | | | | Non-Arab | Supported |
| | | H2ciii | Country | Aus | Supported |
| | | | | UK | Not-Supported |
| H2d | There is a positive relationship between products originated from Muslim countries and the intention to purchase halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | H2di | General | Not-Supported | |
| | | H2dii | Ethnic | Arab | Supported |
| | | | | Non-Arab | Not-Supported |
| | | H2diii | Country | Aus | Supported |
| | | | | UK | Not-Supported |
| H3 | The higher the Muslim religiosity, the higher will be the intention to purchase Halal food product among Arab Muslim and Non-Arab Muslims in UK and Australia. | H3i | General | Supported | |
| | | H3ii | Ethnic | Arab | Supported |
| | | | | Non-Arab | Supported |
| | | H3iii | Country | Aus | Supported |
| | | | | UK | Not-Supported |

H1ci - The results show that there is a positive relationship between Muslim religiosity and the importance of the halal logo among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that the importance of the halal logo is significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of $13.739 > 1.96$, which was obtained through bootstrap simulation. Thus, it supports Hypothesis H1ci.

H1di - The results show that there is a positive relationship between Muslim religiosity and the products originating from Muslim countries among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that products originating from Muslim countries is significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of $9.253 > 1.96$, which was obtained through bootstrap simulation. Thus, it supports Hypothesis H1di.

H1 (Between Ethnicity)

H1aii- The results show that there is no positive relationship between Muslim religiosity and the halal knowledge among Arab Muslims in the UK and Australia. The result indicates that Muslim religiosity is significant with halal knowledge for Arab Muslims with an interaction t-value of $4.491 > 1.96$. However, it is not significant relationship between Muslim religiosity and the halal knowledge among non-Arab Muslims in the UK and Australia, and with an interaction t-value of $1.665 < 1.96$ which were obtained through bootstrap simulation.

H1bii- The results show that there is a positive relationship between Muslim religiosity and the halal consciousness among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that Muslim religiosity is significant with halal consciousness for Arab Muslims and non-Arab Muslims with an interaction t-

value of $16.918 > 1.96$ and t-value of $35.177 > 1.96$, respectively, which were obtained through bootstrap simulation. Thus, it supports Hypothesis H1biii.

H1cii - The results show that there is a positive relationship between Muslim religiosity and the importance of the halal logo among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that Muslim religiosity is significant with the importance of the halal logo for Arab Muslims and non-Arab Muslims with an interaction t-value of $7.574 > 1.96$ and t-value of $9.632 > 1.96$, respectively, which were obtained through bootstrap simulation. Thus, it supports Hypothesis H1ciii.

H1dii - The results show that there is a positive relationship between Muslim religiosity and products originating from Muslim countries among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that Muslim religiosity is significant with the importance of the halal logo for Arab Muslims and non-Arab Muslims with an interaction t-value of $5.721 > 1.96$ and t-value of $6.909 > 1.96$, respectively, which were obtained through bootstrap simulation. Thus, it supports Hypothesis H1dii.

H1 (Between Countries)

H1aiii- The results show that there is a positive relationship between Muslim religiosity and halal knowledge among Arab Muslims and non-Arab Muslims in Australia but not in the United Kingdom. The results indicate that Muslim religiosity is significant with halal knowledge in Australia and not significant in the United Kingdom with interaction t-values of $3.966 < 1.96$ and $3.763 < 1.96$, respectively.

H1biii- The results show that there is a positive relationship between Muslim religiosity and the halal consciousness among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that Muslim religiosity is significant with

halal consciousness in Australia and the United Kingdom with interaction t-values of $33.698 < 1.96$ and $7.809 < 1.96$, respectively. Thus, it supports Hypothesis H1biii.

H1ciii - The results show that there is a positive relationship between Muslim religiosity and the importance of the halal logo among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that Muslim religiosity is significant with the importance of the halal logo in Australia and the United Kingdom with interaction t-values of $24.664 < 1.96$ and $4.972 < 1.96$, respectively. Thus, it supports Hypothesis H1ciii.

H1diii - The results show that there is a positive relationship between Muslim religiosity and the products originating from Muslim countries among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that Muslim religiosity is significant with products originating from Muslim countries in Australia and the United Kingdom with interaction t-values of $10.533 < 1.96$ and $3.895 < 1.96$, respectively. Thus, it supports Hypothesis H1diii.

The above discussion on the H1 results has confirmed the influence of Muslim religiosity towards halal perception. Halal perception consists of halal knowledge, halal consciousness, the importance of the halal logo and products originating from Muslim countries. Muslim religiosity significantly influenced halal consciousness among Arab Muslims and non-Arab Muslim consumers in the UK and Australia. f

H2 (General)

H2ai – The results show that there is no positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that halal knowledge is not significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia with an interaction t-value of

0.182 < 1.96, which was obtained through bootstrap simulation. Thus, it does not support Hypothesis H2ai.

H2bi- The results show that there is a positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that halal consciousness is significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of 6.511 > 1.96, which was obtained through bootstrap simulation. Thus, it supports Hypothesis H2bi.

H2ci - The results show that there is no positive relationship between products originating from Muslim countries and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that products originating from Muslim countries is not significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia with an interaction t-value of 1.555 < 1.96, which was obtained through bootstrap simulation. Thus, it does not support Hypothesis H2ci.

H2di - The results show that there is a positive relationship between Muslim religiosity and the products originating from Muslim countries among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that Muslim religiosity is not significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of 1.222 > 1.96, which was obtained through bootstrap simulation. Thus, it supports Hypothesis H1di.

H2 (Between Ethnicity)

H2aii-The results show that there is a no positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims and Non Arab Muslim in the UK and Australia. With an interaction t-value of $0.826 < 1.96$ and $0.663 < 1.96$.

H2bii- The results show that there is a positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that halal knowledge is significant with the intention to purchase halal food products for Arab Muslims and non-Arab Muslims with an interaction t-value of $4.285 > 1.96$ and t-value of $7.351 > 1.96$, respectively, which were obtained through bootstrap simulation. Thus, it supports Hypothesis H2bii.

H2ciii - The results show that there is no positive relationship between the importance of the halal logo and the intention to purchase halal food products among Arab Muslims in the UK and Australia with an interaction t-value of $0.06 < 1.96$. The results indicate that the importance of the halal logo is significant non-Arab Muslims with an interaction t-value of $2.493 < 1.96$ which were obtained through bootstrap simulation.

H2dii - The results show that there is a no positive relationship between products originating from Muslim countries and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia with an interaction t-value of $1.694 > 1.96$ and $0.039 > 1.96$.

H2 (Between Countries)

H2aiii – The results show that there is a positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia. The results indicate that halal knowledge is significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia with an interaction t-value of $2.048 > 1.96$. However, there is no positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslim and non-Arab Muslims an interaction t-value of $0.036 < 1.96$.

H2biii - The results show that there is a no positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the Australia with interaction t-values of $1.470 < 1.96$. However, it is positive relationship for Arab Muslims and non-Arab Muslims in the UK with interaction t-values of 9.271

H2ciii - The results show that there is a positive relationship between the importance of the halal logo and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia with an interaction t-value of $3.847 > 1.96$. However, there is no positive relationship between the importance of the halal logo and the intention to purchase halal food products among non-Arab Muslims in the UK with an interaction t-value of $0.652 < 1.96$. Thus, the importance of the halal logo is not significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK.

H2diii - The results show that there is a no positive relationship between the products originating from Muslim countries and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia

with an interaction t-value of $0.6760 < 1.96$. However, it has positive relationship in the UK and t-value of $1.979 > 1.9$.

The above discussion has confirmed the significant relationship between halal perception and the intention to purchase halal food products. Halal perception, which consists of halal knowledge, halal consciousness, the importance of the halal logo and products originating from Muslim countries, has shown a positive relationship. Halal consciousness and Muslim religiosity has shown a significant relationship between halal perception and the intention to purchase halal food products among Arab Muslims and non-Arab Muslim consumers in the UK and Australia. This is consistent with a study undertaken in Singapore by Nasir et al. (2008). According to them halal consciousness had an effect on defensive dining, or, in other words, to only consume halal food.

However, a few relationships have no positive relationship with the intention to purchase halal food products. These are halal knowledge (general, non-Arab Muslim consumers and Muslim consumers in the UK), the importance of the halal logo (general and Muslim consumers in the UK) and products originating from Muslim countries (general and non-Arab Muslim consumers). Surprisingly, the halal logo was not significant with the intention to purchase halal food products. However, this is consistent with a previous study, which confirmed that the halal logo did not have any impact on purchase intention (Omar, 2008).

A previous study confirmed that understanding and knowledge was not a better predictor for behavioural intention (Bley and Khuen, 2004). Meanwhile, Ahmed et al. (2004), in their study, suggested that a country's positive image in some product categories does not necessarily carry over to other product categories. However, this is not consistent with previous literature, which found that products originating from Muslim countries have a positive relationship with the intention to purchase (Sallehudin et al., 2010; Bonne, 2008).

H3 (General)

H3i -The results show that there is a positive relationship between Muslim religiosity and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that Muslim religiosity is significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia with an interaction t-value of $5.174 < 1.96$, which was obtained through bootstrap simulation. Thus, it supports Hypothesis H3.

H3 (Between Ethnicity)

H3ii -The results show that there is a positive relationship between Muslim religiosity and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK and Australia. The results indicate that Muslim religiosity is significant with the intention to purchase halal food products for Arab Muslims and non-Arab Muslims in the UK and Australia with interaction t-values of $4.378 > 1.96$ and $3.127 > 1.96$, respectively. Thus, it supports Hypothesis H3ii.

H3 (Between Countries)

H3iii– The results show that there is a positive relationship between Muslim religiosity and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia. The results indicate that halal Muslim religiosity is significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia with an interaction t-value of $5.427 > 1.96$. However, there is no positive relationship between Muslim religiosity and the intention to purchase halal food products among non-Arab Muslims in the UK with an interaction t-

value of $0.029 < 1.96$. Thus, Muslim religiosity is not significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the UK.

The above results confirmed that Muslim religiosity has a significant impact on the intention to purchase Halal food products among Arab Muslims in the UK and Australia, as well as non-Arab Muslims in Australia. This is consistent with the literature, which supports that religiosity has a significant relationship with the behavioural intention and purchasing behaviour (Fauziah, 2008; Rezai, 2008). However, Muslim religiosity has no significant impact on the intention to purchase Halal food products among non-Arab Muslims in the UK. There is a study that suggested that religiosity does not support purchase intention (Shaharudin, 2010).

4.11 Testing the Mediating Effect

The testing of the mediation effect follows Baron and Kenny (1986). The mediation effect was tested by comparing the alternative model (Models 1 & 2) to the research model (Model 3). Model 1 presents the direct effect, Model 2 presents the indirect effect and Model 3 presents the total effect. In other words, for Model 1, there is no mediation, in which Muslim religiosity is directly linked to the intention to purchase halal food products. In Model 2, full mediation includes the relationship between Muslim religiosity, halal perception and the intention to purchase halal food products. Model 3 is partial mediation, which includes all the relationships among the halal perception constructs, Muslim religiosity and the intention to purchase halal food products.

Table 4.77 presents the bootstrap simulation for standardized parameters, which compares the t-values and path coefficients of the three models. The results explain that Model 1 (direct effect) has a greater predictive power (GoF= 0.5869). However, Model 3 shows significant increases in the explained variance for purchase intention ($R^2 =$

0.7031), which indicates a better measurement model and confirms that model 3 is better than model 1.

Therefore, it can be said that the mediating effect of the halal perception constructs proved to create better variance explained for purchase intention and gives greater global validation of the model. Thus, it can be said that the proposed model, that is, Model 3, provides evidence that halal perception partially mediates the relationship between the antecedent of Muslim religiosity and the outcome of the intention to purchase halal food products. The three models are illustrated in Figure 4.6.

Meanwhile, in examining the mediator constructs individually, Table 4.78 shows the results that depict that all four mediating constructs have a partial mediation effect over the dependent variable (Intention to purchase halal food products- INT). The results show significant increases in the explained variance for the intention to purchase halal food products (R2), which indicates a better measurement model and confirms that model 3 is better than model 1.

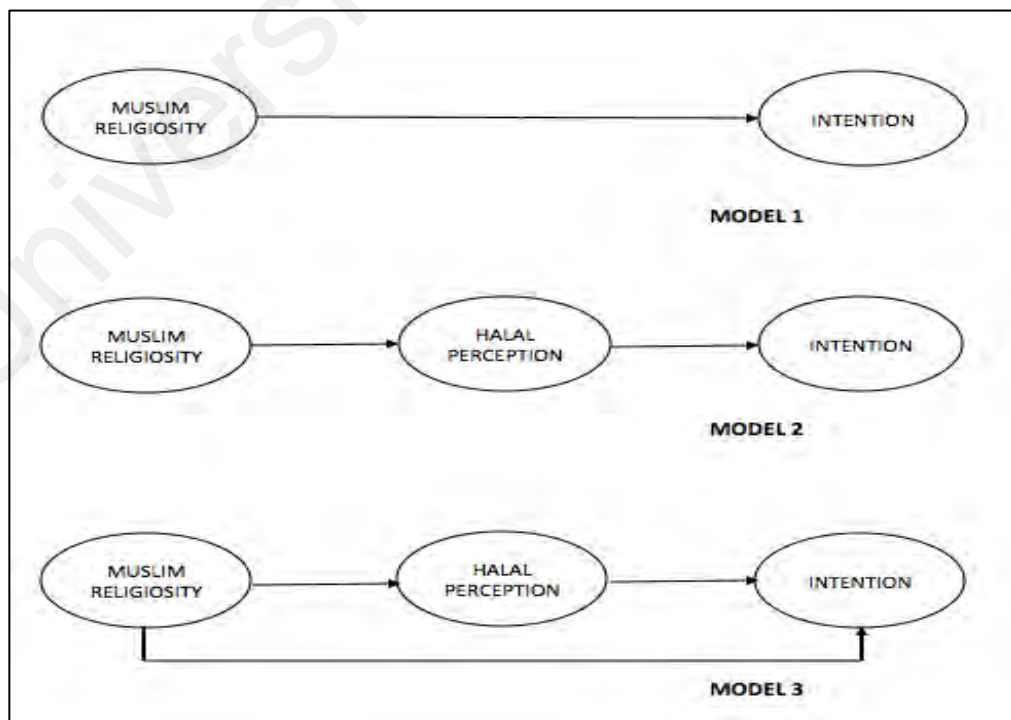


Figure 4.6: Alternative Models for Testing Mediating Effect

Table 4.77: Testing the Mediation Effect Based on R2 and GoF

| | Without Mediation (Model 1) | | With Mediation (Model 1) | | Full Model (Model 1) | |
|---------------|--------------------------------|-----------|-----------------------------|------------|-------------------------|------------|
| | Direct Effect | | Indirect Effect | | Total Effect | |
| | β | t-value | β | t-value | β | t-value |
| RELI -> KNOW | | | 0.0535 | 1.4352 | 0.0532 | 1.4057 |
| RELI -> CONS | | | 0.8402 | 41.6885*** | 0.8404 | 42.2049*** |
| RELI -> LOGO | | | 0.4371 | 13.2342*** | 0.4369 | 13.4099*** |
| RELI -> PODMC | | | 0.2591 | 8.8749*** | 0.259 | 8.9286*** |
| KNOW -> INT | | | 0.0139 | 0.6489 | 0.0305 | 1.4658 |
| CONS -> INT | | | 0.8113 | 36.1827*** | 0.6294 | 10.9486*** |
| LOGO -> INT | | | 0.0192 | 0.5846 | 0.0459 | 1.4208 |
| PODMC -> INT | | | 0.0145 | 0.5453 | 0.0127 | 0.4735 |
| RELI -> INT | 0.751 | 29.226*** | | | 0.194 | 3.4178*** |
| R2 | 0.5641 | | 0.6913 | | 0.7018 | |
| GoF | 0.5869 | | 0.4137 | | 0.4151 | |

*Significant at 1 **Significant at 5% ***Significant at 1%

Table 4.78: Individual Construct Mediating Effect

| Mediator | Construct | Model 1 | | Model 2 | | Model 3 | | Effect |
|--|---------------|-----------------|----------|-------------------|------------|----------------|------------|-------------------|
| | | (Direct Effect) | | (Indirect Effect) | | (Total Effect) | | |
| | | β | t-value | β | t-value | β | t-value | |
| Halal Knowledge | RELI -> KNOW | | | 0.0883 | 0.8425 | 0.0533 | 1.3233 | Partial Mediation |
| | KNOW -> INT | | | 0.1837 | 4.6968*** | 0.1207 | 4.1058** | |
| | RELI -> INT | 0.751 | 20.6019* | | | 0.7443 | 31.1708*** | |
| | R2 | 0.5641 | | 0.0337 | | 0.5781 | | |
| | GoF | 0.5869 | | 0.1144 | | 0.4316 | | |
| Halal Consciousness | RELI -> CONS | | | 0.8405 | 27.4468*** | 0.8406 | 27.5763*** | Partial Mediation |
| | CONS -> INT | | | | | 0.6879 | 9.5542*** | |
| | RELI -> INT | 0.751 | 20.6019* | 0.8308 | 36.8834*** | 0.1702 | 2.2577*** | |
| | R2 | 0.5641 | | 0.6903 | | 0.699 | | |
| | GoF | 0.5869 | | 0.6491 | | 0.6511 | | |
| The Importance of Halal Logo | RELI -> LOGO | | | 0.4384 | 10.8333*** | 0.4371 | 8.4531*** | Partial Mediation |
| | LOGO -> INT | | | 0.5602 | 15.0409*** | 0.2628 | 4.6626*** | |
| | RELI -> INT | 0.751 | 20.6019* | | | 0.634 | 11.6946*** | |
| | R2 | 0.5641 | | 0.3139 | | 0.6167 | | |
| | GoF | 0.5869 | | 0.3966 | | 0.502 | | |
| Product Originated From Muslim Countries | RELI -> PODMC | | | 0.2589 | 7.8308*** | 0.2594 | 6.5596*** | Partial Mediation |
| | PODMC -> INT | | | 0.3594 | 8.9449*** | 0.1272 | 2.8541*** | |
| | RELI -> INT | 0.751 | 20.6019* | | | 0.7172 | 17.925*** | |
| | R2 | 0.5641 | | 0.1292 | | 0.5779 | | |
| | GoF | 0.5869 | | 0.2393 | | 0.4365 | | |

*Significant at 1 **Significant at 5% ***Significant at 1%

4.12 Conclusion

This chapter presented the results for quantitative data. The first section presented the results of the respondents' profile, followed by the descriptive statistics of the studied constructs, testing the assumptions for the multivariate analysis, the findings for exploratory factor analysis, confirmatory factor analysis, testing the mediating effect and hypotheses testing. Basically, the model for this study is assessed in terms of content validity, indicator reliability, construct validity, convergent validity and discriminant validity. SmartPLS 3.0 was used to test the validity of the model and for the hypotheses testing.

The hypotheses testing was assessed on three different groups (general model, ethnic comparison and country comparison). The ethnic groups were non-Arab Muslims and Arab Muslims while the countries were Australia and the United Kingdom. It was found that there was a slight difference between the two groups, especially in terms of halal knowledge, the importance of the halal logo and products originating from Muslim countries.

CHAPTER 5 : DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter begins with a brief review of the research which includes research overview and research framework. Subsequently, the major findings are discussed, followed by the findings of hypotheses derived from the analysis of data. The practical implications and theoretical contributions are presented next, before the chapter ends with discussion about the limitations encountered during research process. The future direction of research is also discussed.

5.2 Research overview

This research aimed to develop a theoretical framework to comprehend the intention of purchasing halal food products among Muslims. Research design was then conducted by following a few steps in order to answer the main research questions.

First, this study applied the theory of reasoned action (TRA) which integrated the aspects of food products, individuals, and environment in order to predict food consumption behaviour (Bredahl and Grunert, 1997; Conner, Martin, Silverdale, and Grogan, 1996; Dennison and Sheppard, 1995; Sparks, Conner, James Sheppard, and Povey, 2001; and Verbeke and Vackier, 2005). According to the TRA, the stronger a person's intention, the harder they are expected to try, and, as such, the greater the likelihood that the behaviour will actually be performed.

Second, an extensive literature review about halal concept and food consumption field had been carried out. Since the halal food concept is closely related to Islamic dietary rules, it is important to integrate Muslims' religiosity in the model. The availability of a model that is in accordance with religion, particularly related to Islamic dietary laws and practices is also still sparse (Kabir, 2015; Ahmed, 2008). This

research considered the role of religiosity and behavioural intention towards halal food products as determinant factors to reveal insightful consumer behaviour in respect of halal products.

Third, this study conducted focus group discussions (FGDs) and interviews in order to obtain an overview of halal perception and to explore the predictors of the intention to purchase halal food products. The combination of these two methods has its own advantages, first, it helps researchers to explore deeper into the nuance of opinions about halal food consumption. Second, it helps researchers to understand different perspective of the Arab Muslims and non-Arab Muslims. Third, the factors influencing the intention to purchase halal food products can also be discovered.

In this study, four focus group discussions were conducted in June 2010 with Muslim participants. Purposive sampling method was used when contacting the participants. Meanwhile, five interviews were conducted in the Klang Valley area (Selangor, Kuala Lumpur, and Cyberjaya) in July 2010, and among the interviewees was a halal expert from JAKIM. Halal perception constructs were then developed based on content analysis of the FGDs and interviews. The development of halal perception constructs and measures followed an established procedure suggested from the literature.

Fourth, data collection was performed using self-developed questionnaire to examine the proposed model. As discussed in the previous chapter, items in the questionnaire were tested for face and content validity. Once the questionnaire had been pre-tested and piloted, it was distributed in a few cities in the United Kingdom and Australia. A total of 788 usable responses were used for the statistical analysis.

Finally, statistical analysis was performed in a three-stage process. It started with exploratory factor analysis to determine the dimension and set of items of the given constructs. Then, the remaining set of items was assessed for its reliability and validity.

Next, confirmatory factor analysis (CFA) was performed to obtain the construct validity which includes unidimensionality, convergent validity, and discriminant validity. Subsequently, the model was tested as a structural model and mediating effect using partial least squares (PLS). The research theoretical framework is shown in Figure 6.1.

5.3 Major Findings

This section summarizes the findings of this study. It starts with the descriptive analysis of the respondents based on the demographic profile. Next, the results of hypotheses testing are discussed.

5.3.1 Characteristics of the Respondents

Forty six nationalities represented the respondents' country-of-origin. The majority of the Arab Muslim respondents originated from Saudi Arabia while the non-Arab Muslims originated from Malaysia. The respondents were almost distributed evenly in terms of country, ethnicity, and gender. A total of 50.1% of the respondents were located in the United Kingdom and 49.9% were in Australia. Out of this, 48.5% were Arab Muslim and 51.5% were non-Arab Muslim. Distribution by gender in both countries showed that 50.4% were female and 49.6% were male. In the United Kingdom, for Arab Muslim there were more male respondents than female respondents with 53.1% and 46.9% respectively. However, there were more female respondents for non-Arab Muslims than for male, with 51.7% and 48.3% respectively.

By marital status, the Arab Muslims showed that 44.8% of them were single, 51.6% of them were married, and the rest were either divorced, separated, or widowed. The majority of Arab Muslims were single with 62.6%. Next, in terms of distribution by age, the Arab Muslims represented 80.8% for those between 20-39 years old while non-Arab Muslims represented 78.3%. The majority of Arab Muslims and non-Arab

Muslims had tertiary education and above, with 74.4% and 67% respectively. Lastly, most of the respondents for Arab Muslims and non-Arab Muslims were earning less than GBP1999.

Meanwhile, in Australia, for Arab Muslims there were more female respondents than male respondents, with 51.1% and 48.9% respectively. Similarly, for the non-Arab Muslims, there were more female respondents than male, with 51.7% and 48.3% respectively. By marital status, the Arab Muslims showed that 56.3% of them were single, 43.7% were married, and the rest were either divorced, separated, or widowed. The majority of non-Arab Muslims were married with 62.1%. Next, in terms of distribution by age, the Arab Muslims represented 92.1% aged between 20-39 years old and non-Arab Muslims with 71.4%. The majority of Arab Muslims and non-Arab Muslims obtained degree and above with 94.8% and 61.1% respectively. Lastly, most of the respondents for Arab Muslims and non-Arab Muslim were earning less than GBP1999.

5.3.2 Research Procedure

This study explored the perceptions that influence the intention to purchase halal food products. Halal perception is a newly developed construct for the study, hence it is important for researcher to obtain a broader view of halal perception. For this reason, focus group discussions (FGDs) were conducted, followed by interviews to explore the perceptions deeper. The combination of these two methods has its own advantages, first, it helps researchers to explore deeper into the nuance of opinions about halal food consumption. Second, it helps researchers to understand different perspective of the Arab Muslims and non-Arab Muslims. Third, the factors influencing the intention to purchase halal food products can also be discovered.

In this study, four sessions of FGDs and four interviews were conducted using the purposive sampling method. As a result, the FGDs provided an indication of the different perceptions about halal food concept between the Arab Muslims and non-Arab Muslims. The non-Arab Muslim respondents were more careful compared to the Arab Muslims in terms of halal consumption.

Consequently, the results of the analysis were categorised into five major aspects, namely halal knowledge, halal consciousness, halal cautiousness, as well as the importance of halal logo and products originated from Muslim countries. These aspects were then developed as “halal perception”. This study followed the steps recommended by Churchill (1979), Malholtra (2008), and Chen and Paulraj (2004). The proposed steps in developing the new constructs were: (i) specifying the domain of constructs; (ii) generating the sample of items; (iii) purifying the measures; and (iv) continuous improvement cycle.

The developed scales in the studied constructs were subjected to exploratory and confirmatory factor analysis (CFA). The constructs were divided into three groups, namely independent variables, intermediary variable, and dependent variable in the exploratory factor analysis. This is consistent with Rummel (1970) who divided the construct into three groups so that factor analysis is useful for placing variables into meaningful categories. The results showed that all KMO indexes were higher than 0.5 and Bartlett’s test of sphericity results were significant. This study employed CFA or measurement model to obtain a better understanding of the measurement quality. The study achieved its unidimensionality and showed acceptable results for the overall model fit indexes including goodness-of-fit (GFI), adjusted goodness-of-fit index (AGFI), normed fit index (NFI), Tucker-Lewis index (TLI), comparative fit index (CFI), and root mean square error of estimation (RMSEA).

On a different note, this study applied the theory of reasoned action (TRA) and the tri-component attitude model as a foundation for the theoretical framework. According to these theories, the stronger a person's intention, the harder he or she is expected to try, and, as such, the greater the likelihood that the behaviour will actually be performed. Basically, the model of this study was assessed in terms of content validity, indicator reliability, construct validity, convergent validity, and discriminant validity. SmartPLS 2.0 was used to test the validity of the model and for the hypotheses testing.

The study's hypotheses testing was assessed on three different groups, namely general model, ethnic comparison, and country comparison. The ethnic groups were non-Arab Muslims and Arab Muslims while the countries were Australia and the United Kingdom. It was found that there was a slight difference between both groups, especially in terms of halal knowledge, the importance of halal logo and products originated from Muslim countries. This confirmed the diversity among Muslim consumers since they have different cultural practices, beliefs, ethnicities, languages, among others (Lawrence, 2000; Rabasa, 2004; Waardenburg, 2004; Ismail et al., 2008). Figure 5.1 shows the final framework of the current study.

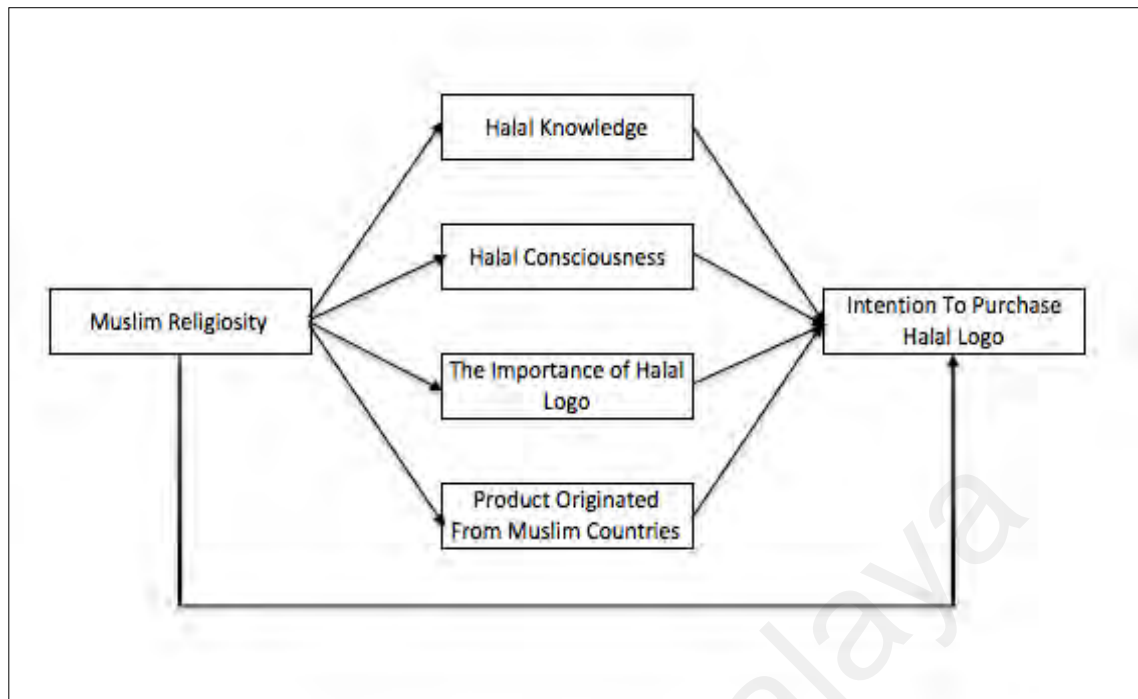


Figure 5.1: Final framework of the present study

5.3.2.1 Hypotheses testing

As stated in the earlier chapter, this part reveals the response of research questions which were formulated for the purpose of this study. There are five research questions guiding the research process as follows.

RQ1: How to measure the perception towards the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia?

RQ2: Does Muslims' religiosity influence the intention to purchase halal food products among Arab Muslims and Non-Arab Muslims in the United Kingdom and Australia?

RQ3: Does Muslims' religiosity have any relationship with halal perception among Arab Muslims and Non-Arab Muslims in the United Kingdom and Australia?

RQ4: Does halal perception influence the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia?

RQ5: Does halal perception act as a mediator between Muslims' religiosity and their intention to purchase halal food products?

Research question 1 was answered by developing the constructs and measurement scale for halal perceptions, consisting of halal knowledge, halal consciousness, as well as the importance of halal logo and products originated from Muslim countries. The process of developing the constructs was detailed in previous chapters. Research questions 2, 3, 4, and 5 were then answered through hypotheses testing using partial least squares (PLS). Lastly, research question 6 was answered using t-test method of analysis.

Muslims' religiosity and halal knowledge

Results of the general model show that there is no positive relationship between Muslims' religiosity and the halal knowledge among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia with an interaction t-value of $1.4057 < 1.96$. This was obtained through bootstrap simulation. Thus, it does not support Hypothesis H1ai. Arab Muslims in the United Kingdom and Australia do not show any positive relationship between Muslims' religiosity and halal knowledge, indicating that Muslims' religiosity is not significant with halal knowledge for Arab Muslims with an interaction t-value of $1.4853 < 1.96$.

However, there is a positive relationship between Muslims' religiosity and halal knowledge among non-Arab Muslims in the United Kingdom and Australia with an interaction t-value of $4.2859 < 1.96$ that was obtained through bootstrap simulation.

Meanwhile, the results for country's comparison show that there is a positive relationship between Muslims' religiosity and halal knowledge among Arab Muslims and non-Arab Muslims in Australia but not in the United Kingdom, indicating that Muslims' religiosity is significant with halal knowledge in Australia but insignificant in the United Kingdom with interaction t-values of $2.4213 < 1.96$ and $1.8708 < 1.96$ respectively. The differences in the results for ethnicity and country support the dissimilarities among Muslim consumers, especially between Arab Muslims and non-Arab Muslims regarding halal food consumption (Rizzo et al., 2007).

Muslims' religiosity and halal consciousness

The results for the general model show that there is a positive relationship between Muslims' religiosity and halal consciousness among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. Results indicate that Muslims' religiosity is significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims with an interaction t-value of $42.2049 > 1.96$. This was obtained through bootstrap simulation. Thus, it supports Hypothesis H1bi. The comparison results for Arab Muslims and non-Arab Muslims in the United Kingdom and Australia show that there is a positive relationship between Muslims' religiosity and halal consciousness, indicating that Muslims' religiosity is significant with halal consciousness for Arab Muslims and non-Arab Muslims with an interaction t-value of $43.8667 > 1.96$ and t-value of $38.0781 > 1.96$ respectively. These were obtained through bootstrap simulation. Thus, it supports Hypothesis H1bii.

On the other hand, results for the country comparison show that there is a positive relationship between Muslims' religiosity and halal consciousness among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims' religiosity is significant with halal consciousness in Australia

and the United Kingdom with interaction t-values of $64.7692 < 1.96$ and $11.7252 < 1.96$ respectively. Thus, it supports Hypothesis H1biii. This is consistent with Nasir et al. (2008) who found that religiosity has an impact on halal consciousness.

Muslims' religiosity and the importance of halal logo

The results for the general model show that there is a positive relationship between Muslims' religiosity and the importance of halal logo among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims' religiosity is significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of $13.4099 > 1.96$, which was obtained through bootstrap simulation. Thus, this supports Hypothesis H1ci. Next, the results for ethnic comparison show that there is a positive relationship between Muslims' religiosity and the importance of halal logo among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims' religiosity is significant and the importance of halal logo for Arab Muslims and non-Arab Muslims with an interaction t-value of $12.037 > 1.96$ and t-value of $12.7551 > 1.96$ respectively. These were obtained through bootstrap simulation.

Thus, it supports Hypothesis H1ciii. The results for the country comparison show that there is a positive relationship between Muslims' religiosity and the importance of halal logo among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims' religiosity is significant with the importance of halal logo in Australia and the United Kingdom with interaction t-values of $33.7705 < 1.96$ and $5.2904 < 1.96$ respectively. Thus, it supports Hypothesis H1ciii. This finding confirmed that Muslims' religiosity influences the importance of halal logo.

Muslims' religiosity and products originating from Muslim countries

For hypothesis H1di, the results show that there is a positive relationship between Muslims' religiosity and products originated from Muslim countries among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims' religiosity is significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of $8.9286 > 1.96$. This was obtained through bootstrap simulation. Thus, it supports Hypothesis H1di.

Next, the results for ethnic comparison also show that there is a positive relationship between Muslims' religiosity and products originated from Muslim countries among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims' religiosity is significant and the importance of halal logo for Arab Muslims and non-Arab Muslims with an interaction t-value of $8.0218 > 1.96$ and t-value of $8.8264 > 1.96$ respectively. These were obtained through bootstrap simulation. Thus, it supports Hypothesis H1dii.

In terms of comparison between countries, the results are the same. There is a positive relationship between Muslims' religiosity and products originated from Muslim countries among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. Muslims' religiosity is significant with products originated from Muslim countries in Australia and the United Kingdom with interaction t-values of $13.7595 < 1.96$ and $4.8138 < 1.96$ respectively. Thus, it supports Hypothesis H1diii. This is consistent with previous literature that suggested Muslims prefer to purchase food products from Muslim countries (Bonne and Verbeke, 2007; Ahmed, 2008).

Halal knowledge and the intention to purchase halal food products

Results for the general model show that there is no positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. Halal knowledge is not significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia with an interaction t-value of $1.4658 < 1.96$. This was obtained through bootstrap simulation. Thus, it does not support Hypothesis H2ai.

Meanwhile, the results show that there is a positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims in the United Kingdom and Australia. Halal knowledge is significant with the intention to purchase halal food products for Arab Muslims with an interaction t-value of $2.4841 < 1.96$. However, there is no positive relationship between halal knowledge and the intention to purchase halal food products among non-Arab Muslims in the United Kingdom and Australia with an interaction t-value of $0.877 < 1.96$.

Next, the results for country comparison show that there is a positive relationship between halal knowledge and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia. The results indicate that halal knowledge is significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia with an interaction t-value of $3.8026 > 1.96$. However, there is no positive relationship between halal knowledge and the intention to purchase halal food products among non-Arab Muslims in the United Kingdom with an interaction t-value of $0.2396 < 1.96$. Thus, halal knowledge is not significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom. Again, the differences in the results for

ethnicity and country support the dissimilarities among Muslim consumers, especially between Arab Muslims and non-Arab Muslims regarding halal food consumption.

Halal consciousness and intention to purchase halal food products

The results show that there is a positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that halal consciousness is not significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of $1.4208 > 1.96$, which was obtained through bootstrap simulation. Thus, it supports Hypothesis H2bi. The results show that there is a positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that halal knowledge is significant with the intention to purchase halal food products for Arab Muslims and non-Arab Muslim with an interaction t-value of $10.6861 > 1.96$ and t-value of $16.5988 > 1.96$ respectively. These were obtained through bootstrap simulation. Thus, it supports Hypothesis H2bii.

Again, the results show that there is a positive relationship between halal consciousness and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that halal consciousness is significant with the intention to purchase halal food products in Australia and the United Kingdom with interaction t-values of $10.6599 > 1.96$ and $13.7552 > 1.96$ respectively. Thus, it supports Hypothesis H2biii and confirms that halal consciousness is important to Muslim consumers.

The importance of halal logo and intention to purchase halal food products

The results show that there is no positive relationship between Muslims' religiosity and the importance of halal logo among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that the importance of halal logo is not significant with the intention to purchase halal food products with an interaction t-value of $1.4208 < 1.96$. This was obtained through bootstrap simulation. Thus, it does not support Hypothesis H1ci. The results also show that there is no positive relationship between the importance of halal logo and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that the importance of halal logo is not significant with the intention to purchase halal food products for Arab Muslims and non-Arab Muslims with an interaction t-value of $0.7525 < 1.96$ and t-value of $1.5617 < 1.96$ respectively. These were obtained through bootstrap simulation. Thus, it does not support hypothesis H2cii.

However, the results show that there is a positive relationship between the importance of halal logo and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia but not in the United Kingdom. The results indicate that the importance of halal logo is significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia with an interaction t-value of $3.9725 > 1.96$ but not significant in the United Kingdom with an interaction t-value of $0.1091 < 1.96$. Thus, the importance of halal logo is not significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom. This is a surprising finding since halal logo is perceived as one of the effective marketing strategies to influence purchase decision. Nevertheless, halal logo is not significant with the intention to purchase halal food

products. However, this is consistent with a previous study that confirmed the halal logo does not have any impact on purchase intention (Omar, 2008).

Products originating from Muslim countries and the intention to purchase halal food products

Results for the general model show that there is a positive relationship between Muslims' religiosity and products originated from Muslim countries among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims' religiosity is significant with the intention to purchase halal food products for non-Arab Muslims with an interaction t-value of $8.9286 > 1.96$. This was obtained through bootstrap simulation. Thus, it supports Hypothesis H1di. There is a positive relationship between Muslims' religiosity and products originated from Muslim countries among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims' religiosity is significant and the importance of halal logo for Arab Muslims and non-Arab Muslims with an interaction t-value of $8.0218 > 1.96$ and t-value of $8.8264 > 1.96$ respectively. These were obtained through bootstrap simulation. Thus, it supports Hypothesis H1dii.

On the other hand, results for the country comparison once again show that there is a positive relationship between products originated from Muslim countries and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia and the United Kingdom. Products originated from Muslim countries are found to be significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia with an interaction t-value of $2.6332 > 1.96$ and t-value of $2.6332 > 1.96$ respectively. Thus, it supports hypothesis H2biii. The findings are consistent with previous literature that found Muslim consumers look at the

food products" country-of-origin (Sallehudin et al., 2010 Bonne et al., 2007). This indicates that the origin of a food product does play a vital role in consumer intention to purchase halal food products.

Muslims' religiosity and intention to purchase halal food

Results for the general model show that there is a positive relationship between Muslims" religiosity and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims" religiosity is significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia with an interaction t-value of $3.4178 < 1.96$, which was obtained through bootstrap simulation. Thus, it supports Hypothesis H3. The results show that there is a positive relationship between Muslims" religiosity and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom and Australia. The results indicate that Muslims" religiosity is significant with the intention to purchase halal food products for Arab Muslims and non-Arab Muslims in the United Kingdom and Australia with interaction t-values of $4.4932 > 1.96$ and $2.1333 > 1.96$ respectively. Thus, it supports Hypothesis H3ii.

Next, results also show that there is a positive relationship between Muslims" religiosity and the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia. It is indicated that halal Muslims" religiosity is significant with the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in Australia with an interaction t-value of $6.2197 > 1.96$. However, there is no positive relationship between Muslims" religiosity and the intention to purchase halal food products among non-Arab Muslims in the United Kingdom with an interaction t-value of $0.9185 < 1.96$. Thus, Muslims" religiosity is not significant with

the intention to purchase halal food products among Arab Muslims and non-Arab Muslims in the United Kingdom.

In this case, the results confirmed that Muslims' religiosity has a significant impact on the intention to purchase halal food products among Arab Muslims in the United Kingdom and Australia, as well as non-Arab Muslims in Australia. This is consistent with the literature which support that religiosity has a significant relationship with the behavioural intention and purchasing behaviour (Fauziah, 2008; Rezai, 2008). However, Muslims' religiosity has no significant impact on the intention to purchase halal food products among non-Arab Muslims in the United Kingdom. Shahrudin (2010) suggested that religiosity does not support the purchase intention. Table 5.1 shows the summary of hypotheses and results.

Table 5.1: The summary of hypotheses and results

| Hypotheses | | | | Hypotheses supported? | |
|------------|--|--------|---------|-----------------------|-----|
| H1a | There is a positive relationship between Muslims' religiosity and the halal knowledge among Arab Muslim and Non-Arab Muslims in the United Kingdom and Australia. | H1ai | General | No | |
| | | H1aai | Ethnic | Arab | No |
| | | | | Non-Arab | Yes |
| | | H1aiii | Country | Aus. | Yes |
| UK | Yes | | | | |
| H1b | There is a positive relationship between Muslims' religiosity and Halal consciousness among Arab Muslim and Non-Arab Muslims in the United Kingdom and Australia. | H1bi | General | Yes | |
| | | H1bii | Ethnic | Arab | Yes |
| | | | | Non-Arab | Yes |
| | | H1biii | Country | Aus. | Yes |
| UK | Yes | | | | |
| H1c | There is a positive relationship between Muslims' religiosity and the importance of Halal Logo among Arab Muslim and Non-Arab Muslims in the United Kingdom and Australia. | H1ci | General | Yes | |
| | | H1cii | Ethnic | Arab | Yes |
| | | | | Non-Arab | Yes |
| | | H1ciii | Country | Aus. | Yes |
| UK | Yes | | | | |
| H1d | There is a positive relationship between Muslims' religiosity and products originated from Muslim countries among Arab Muslim and Non-Arab Muslims in the United Kingdom and Australia. | H1di | General | Yes | |
| | | H1dii | Ethnic | Arab | Yes |
| | | | | Non-Arab | Yes |
| | | H1diii | Country | Aus. | Yes |
| UK | Yes | | | | |
| H2a | There is a positive relationship between halal knowledge food and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in the United Kingdom and Australia. | H2ai | General | No | |
| | | H2aai | Ethnic | Arab | Yes |
| | | | | Non-Arab | No |
| | | H2aiii | Country | Aus. | Yes |
| UK | No | | | | |
| H2b | There is a positive relationship between halal consciousness and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in the United Kingdom and Australia in the United Kingdom and Australia. | H2bi | General | Yes | |
| | | H2bii | Ethnic | Arab | Yes |
| | | | | Non-Arab | Yes |
| | | H2biii | Country | Aus. | Yes |
| UK | Yes | | | | |

Table 5.1: Continued

| Hypotheses | | | | Hypotheses supported? | |
|------------|--|--------|---------|-----------------------|-----|
| H2c | There is a positive relationship between the importance of halal logo and the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in the United Kingdom and Australia. | H2ci | General | No | |
| | | H2cii | Ethnic | Arab | No |
| | | | | Non-Arab | No |
| | | H2ciii | Country | Aus. | Yes |
| | | | | UK | No |
| H2d | There is a positive relationship between products originated from Muslim countries and the intention to purchase halal food products among Arab Muslim and Non-Arab Muslims in the United Kingdom and Australia. | H2di | General | No | |
| | | H2dii | Ethnic | Arab | Yes |
| | | | | Non-Arab | No |
| | | H2diii | Country | Aus. | Yes |
| | | | | UK | No |
| H3 | The higher the Muslims' religiosity, the higher will be the intention to purchase Halal food product among Arab Muslim and Non-Arab Muslims in the United Kingdom and Australia. | H3i | General | Yes | |
| | | H3ii | Ethnic | Arab | Yes |
| | | | | Non-Arab | Yes |
| | | H3iii | Country | Aus | Yes |
| | | | | UK | No |

After answering the research questions which should help to solve the research problems in Chapter 1, Table 5.2 presents a summary of the discussion as linked to the research objective, hypothesis, and findings of this research.

Table 5.2: Research questions, objectives, and hypotheses

| No. | Research Question | Research objective | Hypothesis | Finding |
|-----|---|---|---|---|
| 1 | How to measure the perception towards intention to purchase halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia? | To explore the halal perception that important for the intention to purchase halal food products | | The halal perception consists of Halal knowledge, halal consciousness, the importance of halal logo and product originated from Muslim countries. |
| 2 | Does Muslim religiosity influence the intention to purchase Halal food product among Arab Muslim and Non-Arab Muslims in UK and Australia? | To examine the relationship between Muslim religiosity and the intention to purchase halal food product among Arab Muslim and Non-Arab Muslims in UK and Australia. | There is a positive relationship between Muslim religiosity and the intention to purchase halal food product among Arab Muslim and Non-Arab Muslims in UK and Australia.among Arab Muslim and Non-Arab Muslims in UK and Australia. | The relationship between Muslim religiosity and the intention to purchase halal food product varies for Arab Muslim and non Arab Muslim in UK and Australia as the result show a significant difference between them. |
| 3 | Does Muslim religiosity have a relationship halal perception among Arab Muslim and Non-Arab Muslims in UK and Australia? | To investigate the relationship between Muslim religiosity and halal perception among Arab Muslim and Non-Arab Muslims in UK and Australia. | There is a positive relationship between Muslim religiosity and the halal perception among Arab Muslim and Non-Arab Muslims in UK and Australia. | There is a positive relationship between Muslim religiosity and Halal perception. However, a significant differences of result between Arab Muslim and non Arab Muslim for construct Halal Knowledge |
| 4 | Does halal perception influence the intention to purchase Halal food product among Arab Muslim and Non-Arab Muslims in UK and Australia? | To examine the relationship between halal perception and the intention to purchase Halal food product among Arab Muslim and Non-Arab Muslims in UK and Australia. | There is a positive relationship between halal perceptionand the intention to purchase Halal food products among Arab Muslim and Non-Arab Muslims in UK and Australia. | There is a significant differences of result between Arab Muslim and Non Arab Muslim for construct Halal Knowledge and Product originated from Muslim countries. Also a significant different for construct Halal Knowledge, Halal logo and Product originated from Muslim countries for Arab Muslim and Non Arab Muslim in UK and Australia. |
| 5 | Does halal perception act as a mediator between Muslim religiosity and the intention to purchase halal food products? | To investigate the mediating effects of the halal perception on the relationship between Muslim religiosity and the intention to purchase halal food products. | | Halal perception acts as a mediating effect of halal perception between Muslim religiosity and intention to purchase halal food product among Arab Muslim and Non Arab Muslim consumers. |

5.4. Contribution of the study

This study empirically investigated the factors that determine the intention to purchase halal food products focusing on religiosity and halal perception. This study therefore makes several contribution that can be classified into two categories, namely knowledge and marketing implications.

5.4.1. Knowledge

The present study has identified several important contributions to the body of knowledge in several areas. First, there is a lack of empirical research on halal perception although the interest and demand of halal food are growing globally. This study helps different stakeholders, especially businesses and consumers, to better understand the halal perception via the development of a theoretical framework that links different aspects of Muslim consumer behaviour, namely religiosity, halal perception, and the intention to purchase halal food products.

Second, the study has developed constructs and measurement scales for four different constructs of halal perception, namely (i) halal knowledge, (ii) halal consciousness, (iii) the importance of halal logo, and (iv) products originated from Muslim countries. These newly developed constructs, which are very important within the halal food context, may be the set of predictors of intention to purchase halal food products. The developed measured could help further research related to the intention of purchasing halal food products.

Third, to date, this is the first study that integrates the relevant constructs within the halal food consumption context labelled as halal perception. The integration of the relevant constructs in halal perception is an important factor within the halal food consumption context. The identified constructs of halal perception and the measures

have the potential to be utilised by other researchers since the halal market constitutes a new area in global marketing.

Fourth, this study also investigated the relationship between religiosity, halal perception, and the intention to purchase halal food products across different cultures and countries which have not been studied before in halal marketing studies and will provide a better understanding of halal marketing among Muslims.

Fifth, this study has also developed a new relationship that observes the importance of Muslims' religiosity and halal perception towards the intention to purchase halal food products. A few new relationships were developed to examine (i) the influence of Muslims' religiosity on halal perception, (ii) the influence of halal perception on the intention to purchase halal food products, (iii) the influence of Muslims' religiosity on the intention to purchase halal food products; and (iv) the influence of halal perception as a mediator to Muslims' religiosity and the intention to purchase halal food products. These relationships have narrowed down the gap in theoretical and practical aspects of halal food consumption. The scale of halal perception is advantageous for future research. It provides the opportunity for researchers to test the relationship of halal perception within a wider variety of measures.

Sixth, this study has developed a comprehensive model to measure the influence of Muslims' religiosity in the consumer behaviour context. This study can be a platform for other studies in the same area, especially those that are focusing on halal issues. Thus, this study provides a new perspective in terms of theoretical implications, choice of methodology, scale, and findings on halal consumption.

Seventh, halal perception is able to act as a mediating effect between Muslims' religiosity and intention to purchase halal food products among Arab Muslim and non-Arab Muslim consumers.

5.4.2 Marketing implications of the study

This study also has several important marketing implications. First, halal perception gives better understanding on the halal food consumption pattern among Muslims consumers since the differences have not been studied before in halal marketing studies. Significant differences on the importance of halal logo and products originating from Muslim countries among Muslim consumers show diversification among Muslims themselves. This helps in understanding the intention to purchase halal food products. Second, manufacturers, marketers, retailers, and legislators should focus (i) to increase the awareness and credibility of halal logo. Halal logo is a mark of trust and could be part of marketing strategy for companies producing halal products, and (ii) to increase the awareness and product credibility from certain countries. The two factors help consumers to make wiser decisions when purchasing halal products.

Third, based on the results, Muslim consumers have not much differences across ethnicities. However, the countries where they live play an important role, thus global food marketers and managers could implement more effective strategies by understanding the influence of religiosity, halal perception, and dissimilarities among Muslim consumers in different countries. Therefore, marketers and managers can develop marketing strategies based on the dissimilarities to attract Muslim consumers and encourage repeat purchases.

Fourth, this study identified halal perception as an important determinant for Muslim consumers in purchasing halal food products. It is recommended for food marketers to focus more on these factors to satisfy Muslim consumers. Fifth, marketers should recognise the positive role of religiosity towards halal food consumption, hence it is recommended for food marketers to focus more on religiosity to attract the intention to purchase halal food products.

Sixth, Muslim diversification which varies across beliefs, cultures, and perceptions help marketing practitioners to plan and execute their marketing strategies, particularly in segmenting, positioning, merchandising, and communicating more effectively. This study will lead to a better understanding of the important predictors of within the Muslim market segment and provide marketers with an understanding of the precise pattern among Muslims consumers.

Seventh, Muslims' religiosity plays an important role in halal perception and the intention to purchase halal food products. The findings of this study could provide a better understanding to marketers concerning the concept of religious consumption decisions. The analysis of the outcomes and findings of the present study will help marketers deal with halal products and services to gain a better understanding of the personal consumption. Eight, the marketers are encouraged to develop marketing strategies to attract Muslim consumers by focusing on halal perception of Muslim consumers.

Ninth, marketers can develop marketing strategies based on different ethnicities and countries. The findings of this study provide a better understanding to marketers concerning the concept of religious consumption decisions that act as a marketing indicator to verify the different perceptions and opinions in respect of halal issues and provide a platform to create awareness and educate the consumers and marketers regarding halal food consumption.

Tenth, this study benefits the international marketers by providing a deeper understanding of the Muslim consumers' religious background and commitment influencing the intention to purchase halal food products. This is essential for them to penetrate different markets across the globe. In short, besides filling the void in the literature, the results of the current study have significant managerial implications for marketing strategists.

5.5 Limitations

Despite the findings and implications that have emerged from this study, it is important to identify the limitations of the study. The first limitation concerns with the items within the knowledge and concept of halal. The model is reflective factors, however halal knowledge construct has items in it which are not substitutable and more like a formative construct and an index.

The second limitation concerns with either the convergent, discriminant, known-group, or nomological validity beyond that which structural equation modelling provides. Furthermore, the collection of both dependent and independent variables use one method without testing the common method bias to test the validity of new scale.

The third limitation is the fact that the qualitative data for scale development was collected from samples and respondents who were not part of the quantitative study due to time and cost constraints. The fourth limitation is the qualitative data being highly focused around the key constructs of the model. Thus, other important factors that should be incorporated in the model may have been ignored.

5.6 Suggestions for future research

The present study provides new findings in the areas of religiosity, halal perception, and intention to purchase halal food products. However, more research need to be carried out. The first suggestion is to further improve the items for halal knowledge construct, and second is to have a measure on either the convergent, discriminant, known-group, or nomological validity beyond and to test the common method bias to produce an improved, newly validated scale.

Next, the third suggestion concerns on better scale development that collects the same samples and respondents for qualitative data and quantitative data. The fourth suggestion is to cover other important factors that should be incorporated in the model

and fifth, future research may enhance the function of religiosity and halal attitude measure to define the cluster and then predict each cluster's likelihood of using products originated from Muslim countries or the importance of halal logo or intention to purchase as the variable outcomes.

5.7 Conclusion

The study explored the issue of halal food marketing that is currently expanding rapidly in the global market. This research has successfully developed a halal perception scale that includes halal knowledge, halal consciousness, the importance of halal logo, and products originated from Muslim countries as the mediating variables. The integration of the Muslims' religiosity construct as the antecedent has given insights into the proposed theoretical model which analyse the intention to purchase halal food products. Besides that, in terms of the role of religiosity, this research compared the findings between two populations, Arab Muslims and non-Arab Muslims, in order to come out with better findings and workable directions for halal food products.

Generally, this study supported the literature on religiosity which is a good predictor of halal perception together with the intention to purchase halal food. In addition, based on the hypotheses testing, religiosity was found to have a significant difference in respect of the intention to purchase halal food products among the populations of Arab Muslims and non-Arab Muslims.

Meanwhile, halal perception has shown its ability to mediate the relationship between religiosity and the intention to purchase halal food products. This study has also significantly contributed towards providing a deeper understanding among the marketers concerning the concept of religious consumption decision by providing a specific set of consumer perceptions that are associated with food decision confined within the halal food products. Furthermore, the findings will greatly help marketers to

develop effective marketing strategies either at the local or international arena. In this case, however, a more comprehensive model on halal food marketing is needed for this area to keep growing from time to time.

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APPENDICES

Appendix A-

Questionnaire



HALAL FOOD CONSUMPTION

A Doctoral Survey on Halal Food Consumption

University of Malaysia

SECTION A

In this sub section, we would like you to responses to a multiple choice questions. Please circle your answer based on your knowledge concerning the concept of Halal Food. (Please circle only one answer for each question).

- 1 The meaning of Halal is a
- | | |
|----------------------|---------------------|
| [a] Permissible item | [d] Prohibited item |
| [b] Dislikeable item | [e] Doubtful item |
| [c] Don't know | |
- 2 The meaning of Haram is a
- | | |
|----------------------|---------------------|
| [a] Permissible item | [d] Prohibited item |
| [b] Dislikeable item | [e] Doubtful item |
| [c] Don't know | |
- 3 Alcohol is an example of a
- | | |
|----------------------|---------------------|
| [a] Permissible item | [d] Prohibited item |
| [b] Dislikeable item | [e] Doubtful item |
| [c] Don't know | |
- 4 Pork is an example of a
- | | |
|----------------------|---------------------|
| [a] Permissible item | [d] Prohibited item |
| [b] Dislikeable item | [e] Doubtful item |
| [c] Don't know | |
- 5 The term Makrooh refers to a
- | | |
|----------------------|---------------------|
| [a] Permissible item | [d] Prohibited item |
| [b] Dislikeable item | [e] Doubtful item |
| [c] Don't know | |
- 6 The term Mashbooh or '*Syuhba*' refers to a
- | | |
|----------------------|---------------------|
| [a] Permissible item | [d] Prohibited item |
| [b] Dislikeable item | [e] Doubtful item |
| [c] Don't know | |

-
- 7 A meat animal which dies without being slaughtered is considered to be a
- | | |
|----------------------|---------------------|
| [a] Permissible item | [d] Prohibited item |
| [b] Dislikeable item | [e] Doubtful item |
| [c] Don't know | |
- 8 Meat slaughtered by the People of the Book (Ahl-Kitab) is considered to be a
- | | |
|----------------------|---------------------|
| [a] Permissible item | [d] Prohibited item |
| [b] Dislikeable item | [e] Doubtful item |
| [c] Don't know | |
- 9 Adding wine in the cooking of food is considered to be a
- | | |
|----------------------|---------------------|
| [a] Permissible item | [d] Prohibited item |
| [b] Dislikeable item | [e] Doubtful item |
| [c] Don't know | |
- 10 Muslims must eat Halal food
- | | |
|----------------|------------------|
| [a] Very true | [d] Mostly true |
| [b] Not sure | [e] Mostly false |
| [c] Very false | |
- 11 Halal Food should conform to Islamic laws
- | | |
|----------------|------------------|
| [a] Very true | [d] Mostly true |
| [b] Not sure | [e] Mostly false |
| [c] Very false | |
- 12 The prohibition of pork is restricted to meat
- | | |
|----------------|------------------|
| [a] Very true | [d] Mostly true |
| [b] Not sure | [e] Mostly false |
| [c] Very false | |

18 Which of the following are considered as Halal food

- I. Food that does not contain any parts or products of animals that are non-Halal by Shari'ah law
- II. Food that does not contain any parts or products of animals, which are not slaughtered according to Shari'ah law
- III. Safe for consumption, non-poisonous, non-intoxicating or non-hazardous to health

- [a] I only
- [b] I & II only
- [c] I, II & III
- [d] II only
- [e] II & III only

19 As all land animals are Halal as food, which of the following are not considered Halal

- I. Animals that are not slaughtered according to Shari'ah
- II. Pigs and dogs and their descendants
- III. Wild animals that do not hunt their prey, such as deer

- [a] I only
- [b] I & II only
- [c] I, II & III
- [d] II only
- [e] II & III only

20 The term حلال means

- [a] Halal
- [b] Makrooh
- [c] Don't know
- [d] Haram
- [e] Mashbooh

SECTION B

In this subsection, we would like you to label the importance of halal when buying the following food products. Below you will find a list of 29 food products. For each item, please indicate your **response** (by ticking at the most appropriate column) when purchasing those items by using the scale below.

"When purchasing the following items, the Halalness of the following product is important to me."

| | (1) Strongly Disagree | (2) Disagree | (3) Slightly Disagree | (4) Moderate | (5) Slightly Agree | (6) Quite Agree | (7) Strongly Agree |
|----|--|--------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1 | Sausages | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Nuggets | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | Meat ball | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Pizza | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Pasta | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | Noodles | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | Meat based processed food | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 | Vegetable based canned food | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9 | Fish based canned food | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10 | Cookies/ Biscuits | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11 | Fruit based canned food | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12 | Chocolate | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13 | Candy/ Sweet | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14 | Snack Food | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15 | Seasoning | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16 | Soy sauce | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17 | Tomato Sauce | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18 | Chilli Sauce | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19 | Spices | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20 | Butter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21 | Margarine | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22 | Cheese | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23 | Cake | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24 | Muffin | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25 | Vinegar | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26 | Cereals | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 27 | Non alcoholic drink | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 28 | Fruit Juices (e.g. Mango and orange juice) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 29 | Mineral water | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SECTION C

In this subsection, we would like you to indicate your response to the following statements by using the scale below.

| | (1) Strongly Disagree | (2) Quite Disagree | (3) Slightly Disagree | (4) Moderate | (5) Slightly Agree | (6) Quite Agree | (7) Strongly Agree | | | | |
|----|--|--------------------------|-----------------------------|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | | | | |
| 1 | I read the Quran for inspiration and motivation. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | I am always cautious when purchasing food products to avoid eating Haram or questionable food. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | I am usually extra cautious to ensure that products are Halal when buying new food products. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | I trust the Halalness of food products originating from Muslim countries. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Investigating the ingredient of food products is generally a waste of time. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | Muhammad (peace be upon him) inspires me with good conduct. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | When purchasing processed food products, the first thing I will ensure is that it has the Halal logo. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 | Islam helps me to lead a better life. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9 | I do not mind paying extra to buy any food product with Halal Logo. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10 | I will always eat food products with Halal logo. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11 | The Quran is relevant and applicable to modern day. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12 | I do not mind to buy food products without the Halal logo. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13 | I dress according to Islamic requirements. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14 | I would prefer to purchase products manufactured in Muslim countries. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15 | I perform the obligation of <i>zakat maal</i> (zakat for asset/income) annually. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16 | My intention to purchase Halal food products is very low. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17 | My confidence level in purchasing food products will depend on whether the food products are manufactured in Muslim countries. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18 | I never buy food that I do not know to avoid the risk of buying non-Halal food. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19 | I do the optional fasting on Monday and Thursday regularly. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20 | It is important for me to make sure the food products that I purchase come from Muslim countries. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21 | I will actively seek out Halal food products (in a store in order to purchase it). | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | (1) Strongly Disagree | (2) Disagree | (3) Slightly Disagree | (4) Moderate | (5) Slightly Agree | (6) Disagree | (7) Strongly Agree | | | | |
|----|--|-----------------|-----------------------------|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | | | | |
| 22 | Eating Halal food is not important to me. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23 | I expect to purchase Halal food products in the near future. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24 | Eating Halal food is very important to me. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25 | I believe that Allah helps people. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26 | I buy food products with the Halal logo to avoid feeling doubtful about the Halalness. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 27 | I will always buy food products that come from Halal sources. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 28 | I will search for the Halal Logo on the food product before purchasing it. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 29 | Saying my prayers helps me a lot. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 30 | I will find alternative food products if I have doubts about the Halalness of the food products. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 31 | I fast the whole month of <i>Ramadhan</i> sincerely. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 32 | My likelihood of purchasing Halal products is very low | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 33 | I am confident to buy food products that originate from Muslim countries. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 34 | I will avoid buying any food products if I am not sure of the ingredients. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 35 | It is important for me to check the country of origin before purchasing food products. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 36 | I perform the obligation of <i>zakat fitrah</i> annually. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 37 | The Halal logo is important when deciding to buy any food products. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 38 | I will not purchase food if it is placed next to non-Halal food on the supermarket shelf. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 39 | The supplication (<i>dua</i>) helps me. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 40 | The Halal logo is sufficient for me to feel confident when purchasing food products. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 41 | I intend to purchase Halal food products in the near future. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 42 | I am concerned about my food consumption. It has to be Halal food. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 43 | If I were to purchase Halal food products, I would consider purchase at the price shown. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 44 | If the food products originate from a Muslim country, I will definitely purchase it without looking at other cues. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | (1) Strongly Disagree | (2) Quite Disagree | (3) Slightly Disagree | (4) Moderate | (5) Slightly Agree | (6) Quite Agree | (7) Strongly Agree | | | | |
|----|--|--------------------------|-----------------------------|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | | | | |
| 45 | I take the time to shop carefully for Halal food. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 46 | I always perform other optional prayers (i.e. <i>sunnat</i> prayer such as <i>Dhaha</i> and others). | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 47 | It is not important for me to purchase food products that originate from Muslim countries. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 48 | I believe that Allah helps me. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 49 | I am always making careful purchases on food products to ensure the Halalness. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 50 | I will continuously seek to learn about Allah. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 51 | I trust food products with the Halal Logo and purchase it without doubt. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 52 | If there is no Halal logo, I will always check the ingredients on the packaging of the processed food products. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 53 | At the price shown, I would consider to purchase the Halal food products. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 54 | I believe that Allah listens to prayers. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 55 | I pray five times a day. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 56 | I prefer to buy products with Halal logo. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 57 | I read the Quran every day. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 58 | I do not hesitate to purchase food products that originate from Muslim countries. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 59 | I am always choosing food product that is made in Muslim countries. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 60 | I will perform hajj after I fulfill all the necessary conditions. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 61 | As a Muslim, I have to consume only Halal food. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 62 | Food products originating from Muslim countries are more reliable in terms of the Halalness. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 63 | I consume only Halal food products. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 64 | The five prayers help me a lot. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 65 | The probability that I would purchase Halal food is very high. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 66 | I will definitely look at other cues (for example ingredients) before buying any food products without Halal logo. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 67 | I will always buy meat from Muslim operated premises. | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SECTION D

In this subsection, we would like you to answer based on your Halal food purchasing behaviour. (Please tick only one answer to each question).

1 Your most preferred store to purchase your food products?(Please tick only one answer only)

- | | |
|---|---|
| <input type="checkbox"/> [a] Cash and carry | <input type="checkbox"/> [d] Supermarket |
| <input type="checkbox"/> [b] Hypermarket | <input type="checkbox"/> [e] Muslim owned store |
| <input type="checkbox"/> [c] Any store | |

2 What is the most important factor you would consider when buying food products. (Please tick only one answer only)

- | | |
|--------------------------------------|--|
| <input type="checkbox"/> [a] Price | <input type="checkbox"/> [d] Hygiene |
| <input type="checkbox"/> [b] Quality | <input type="checkbox"/> [e] Availability of product |
| <input type="checkbox"/> [c] Halal | <input type="checkbox"/> [f] Convenient location |

3 When you shop for meat and poultry, which is your most preferred store to purchase? (Please tick only one answer only)

- | | |
|---|--|
| <input type="checkbox"/> [a] Supermarket | <input type="checkbox"/> [d] Grocery store |
| <input type="checkbox"/> [b] Hypermarket | <input type="checkbox"/> [e] Muslim store |
| <input type="checkbox"/> [c] Kosher butcher | <input type="checkbox"/> [f] Halal butcher |

4 What is the most important factor you consider when buying meat and poultry? (Please tick only one answer only)

- | | |
|--|--|
| <input type="checkbox"/> [a] Price | <input type="checkbox"/> [d] Hygiene |
| <input type="checkbox"/> [b] Quality | <input type="checkbox"/> [e] Availability of product |
| <input type="checkbox"/> [c] Confidence about the Halal status | <input type="checkbox"/> [f] Convenient location |

5. When I have dinner outside my home, I would prefer to eat in (please tick only one answer)

- | | |
|----------------------------------|--|
| i. Restaurant serving Halal food | <input type="checkbox"/> Please specify: _____ |
| ii. Any restaurant | <input type="checkbox"/> Please specify: _____ |
| iii. Others | <input type="checkbox"/> Please specify: _____ |

6. What are strategies you use to ensure food that you buy is Halal (Please rank your answer from 1 to 6. 1- the most important strategy and 6- the least important strategy).

- i. Halal Logo _____
- ii. Kosher logo _____
- iii. Ingredients _____
- iv. Country of origin _____
- v. The premises _____
- vi. The owner of the premises _____

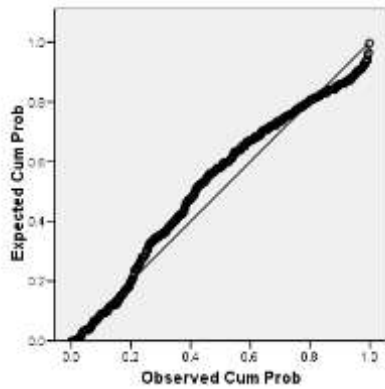
SECTION E

In this subsection, we would like you to tell us about yourself (Please tick only one answer).

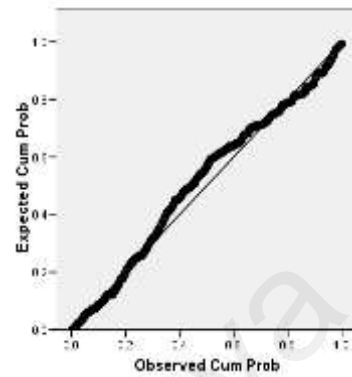
- Gender Male Female
- Marital status Single Married Divorced/ Separated Widowed
- Age Below 20 20 - 29 30 - 39
 40 - 49 50 and above
- Highest Education Secondary school Higher education below degree Postgraduate
 Primary school Degree or equivalent
- Occupation Self employed Homemaker
 Employed part time Retired
 Employed full time Others (Please specify: _____)
 Student

Appendix B: Normal Probability- Plot (P-P) for testing Normality

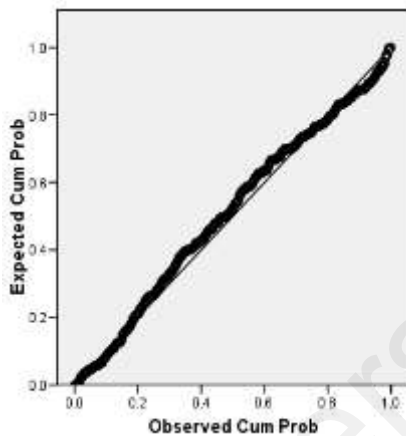
Religiosity and Purchase Intention
Dependent variable: Purchase Intention



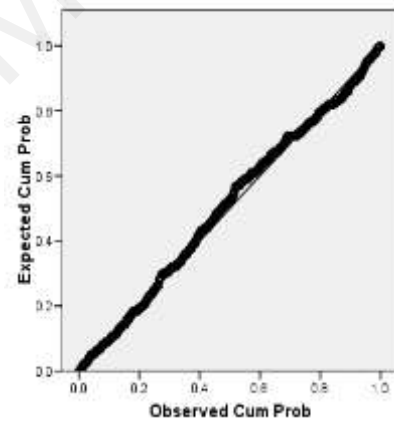
Halal Consciousness and Purchase Intention
Dependent variable: Purchase Intention



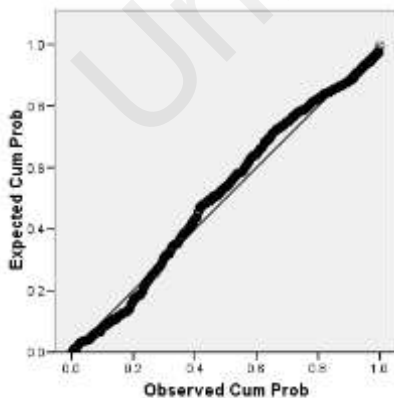
Halal Cautiousness and Purchase Intention
Dependent variable: Purchase Intention



Halal Logo and Purchase Intention
Dependent variable: Purchase Intention



Product Originated and Purchase Intention
Dependent variable: Purchase Intention



Appendix C: Examples Of Halal Logo Or Certification Marks



Appendix D: Examples of halal scandals due to lack of understanding and knowledge

- **CASE STUDY 1 : UAE - Lack of understanding of Halal**

Haram products found in the supermarket shelves in the United Arab Emirates. Where the label says “pork” and “slaughtered according to Islamic rites”.

Facts: The contradiction of terms indicates a lack of understanding of Halal on the part of producer.

* Source : Al-Hilal, WHF 2006



- **CASE STUDY 2: Singapore - Abuse of Halal Logo**

Facts: The “Pasar Fresh Pork (Air Flown)”, packed for NTUC Fairprice was discovered using MUIS Halal logo and allegedly sold at the supermarket’s chain. Upon investigation, it was proven that it did not bear the Halal logo.

Issue: How do we avoid the abuse of Halal logos?

Source: *The Halal Journal*, 2008

