

**DETERMINANTS INFLUENCING HALAL FOOD CONSUMPTION
AMONG GENERATION Y MUSLIMS IN MALAYSIAN PRIVATE
UNIVERSITIES**

AIEDAH BINTI ABDUL KHALEK

**ACADEMY OF ISLAMIC STUDIES
UNIVERSITY OF MALAYA
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**THESIS SUBMITTED IN FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY**

**ACADEMY OF ISLAMIC STUDIES
UNIVERSITY OF MALAYA
KUALA LUMPUR**

2015

UNIVERSITY OF MALAYA

ORIGINAL LITERARY WORK DECLARATION

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Field of Study: Islamic Governance (Social Science)

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ABSTRACT

Previous researches have shown that there are three main determinants of halal consumption, namely attitude, subjective norms and perceived behavioral control. In addition, religiosity has been an important inquiry in human consumption, particularly in halal food consumption. In Malaysia, many initiatives have been conducted by the Malaysian government to encourage halal consumption. However, the influence attitude, subjective norms, perceived behavioral control, religiosity and the government initiatives in influencing halal food consumption among Generation Y as the main food consumers are still vague. Therefore, this study aims to identify and analyze the determinants influencing Generation Y Muslim consumers' intention in consuming halal food. The Theory of Planned Behavior with two added predictors which are religiosity and the government initiatives is proposed as the conceptual framework. This study employed a quantitative method by using questionnaires to achieve its objectives. Data were collected from 452 respondents from five Private Universities located in the Klang Valley. Descriptive analysis, Exploratory Factor Analysis, Multiple Linear Regression and Moderated Multiple Regression tests were used to analyse the findings. In determining the determinants of behavioral intentions to consume halal food, a five predictors Multiple Linear Regression model was used. In addition, this study, explores the possibility of gender and halal knowledge acquired at the university in moderating the relationship between all five predictors and behavioral intentions in consuming halal food. The results indicated that religiosity, subjective norms and attitude of Generation Y significantly influenced them to consume halal

food. The findings of this study have also shown that gender plays a moderating role between attitude and behavioral intentions in consuming halal. In a nutshell, this study presents three main contributions which are contribution to the body of knowledge, contribution to the *fiqh* consumption and to the government in improving policies and strategies of halal food consumption in Malaysia.

ABSTRAK

Kajian lepas menunjukkan terdapat tiga faktor penentu utama bagi amalan kepenggunaan halal iaitu tanggapan, norma sosial dan persepsi terhadap kawalan perilaku. Selain daripada itu, penghayatan agama juga merupakan faktor yang penting dalam amalan kepenggunaan terutama dalam kepenggunaan makanan halal. Dalam konteks Malaysia, pelbagai inisiatif telah dijalankan oleh kerajaan bagi menggalakkan kepenggunaan halal. Walau bagaimanapun, pengaruh prediktor-prediktor utama iaitu tanggapan, norma sosial, persepsi terhadap kawalan perilaku, penghayatan agama dan inisiatif kerajaan dalam mempengaruhi niat Generasi Y yang merupakan pengguna utama untuk mengamalkan pemakanan halal adalah masih kabur. Oleh itu, kajian ini bertujuan untuk mengenal pasti dan menganalisa faktor penentu yang mempengaruhi niat pengguna Generasi Y untuk mengambil makanan halal. Bagi mencapai objektif kajian, Teori Tingkahlaku Terancang (Ajzen) dengan dua prediktor tambahan iaitu penghayatan agama dan inisiatif kerajaan telah digunakan sebagai kerangka teori dalam kajian ini. Kajian ini menggunakan metod kuantitatif dengan menjalankan soal selidik bagi mencapai tujuan kajian. Data telah dikumpul daripada 452 responden daripada lima buah Universiti swasta di Lembah Klang. Analisis Deskriptif, Analisis Faktor, ujian Regresi Linear Berganda dan Regresi Linear Moderasi telah digunakan untuk menganalisa data. Model Regresi Moderasi bagi lima prediktor digunakan untuk menentukan faktor penentu niat bagi Generasi Y untuk mengambil makanan halal. Kajian ini juga mengeksplorasi pengaruh gender dan pengetahuan halal yang dipelajari oleh Generasi Y di universiti swasta dalam menggalakkan hubungan antara lima prediktor dan niat untuk mengambil makanan halal. Dapatan kajian ini menunjukkan bahawa penghayatan agama, norma sosial and

tanggapan mengenai makanan halal mempengaruhi niat Generasi Y untuk mengambil makanan halal. Manakala, gender pula didapati memainkan peranan sebagai penggalak di antara persepsi dan niat untuk mengambil makanan halal. Kesimpulannya, kajian ini menyumbang dalam tiga aspek utama iaitu sumbangan akademik, sumbangan fiqh kepenggunaan dan maklumat bagi meningkatkan keberkesanan polisi dan inisiatif kerajaan dalam untuk menggalakkan amalan kepenggunaan makanan halal di Malaysia.

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TRANSLITERATION

Konsonan

Arab	Roman
ا, ء	a, ʾ
ب	b
ت	t
ث	th
ج	j
ح	h
خ	kh
د	d
ذ	dh
ر	r

Arab	Roman
ز	z
س	s
ش	sy
ص	ṣ
ض	ḍ
ط	ṭ
ظ	ẓ
ع	ʿ
غ	gh
ف	f

Arab	Roman
ق	q
ك	k
ل	l
م	m
ن	n
و	w
ه	h
ي	y
ة	h,t

Vokal

Vokal Pendek	Transliterasi	Contoh	Transliterasi
اَ	a	قَانَاتَ	<i>qanata</i>
اِ	i	سَلِمَ	<i>salima</i>
اُ	u	جُعِلَ	<i>ju'ila</i>

Vokal Panjang	Transliterasi	Contoh	Transliterasi
اِيْ، اِيْ	ā	كَبْرَى، بَابُ	<i>Bāb, kubrā</i>
اِيْ	ī	وَكَيْلٌ	<i>wakīl</i>
اُوْ	ū	سُوْرَةٌ	<i>sūrah</i>

Diftong

Diftong	Transliterasi	Contoh	Transliterasi
اَوْ	aw	قَوْلٌ	<i>qawl</i>
اَيُّ	ay	خَيْرٌ	<i>khayr</i>
اُوْ	uww	قُوَّةٌ	<i>quwwah</i>
اَيُّ	iy, ī	عَرَبِيٌّ	<i>arabiy/ ī</i>

LIST OF ABBREVIATIONS

AMU	Asia Metropolitan University
APU	Asia Pacific University, Bukit Jalil
DV	Dependent Variable
EFA	Exploratory Factor Analysis
HDC	Halal Industry Development Corporation
IV	Independent Variable
JAKIM	Malaysia's Department of Islamic Development
MLR	Multiple Linear Regression
MMR	Moderated Multiple Regression
MQA	Malaysian Qualification Agency
MV	Moderating Variable
SPSS	Statistical Package for Social Sciences
TAYLORS	Taylor's University Malaysia
TPB	Theory of Planned Behavior
UNISEL	University of Selangor
UNITAR	University of Tun Abdul Razak

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CHAPTER 1: INTRODUCTION

1.1 Overview of Halal Industry

Halal industry is one of the fastest growing businesses in Malaysia as well as in the global market. The annual global market value for the entire halal trade is estimated at USD 2.1 trillion with 60 percent of it is generated from halal food. The value of halal trade is expected to rise further with the growing population of close to 3 billion Muslims in 112 countries in the world.¹ This is due to the fact that Muslims are the main consumers of halal food and products.²

The development of halal trade is not only increasing in Malaysia and other Muslim-majorities populated countries, but also in the countries which are populated by Muslim-minority; for example in the United States and other European countries.³ It was reported in the European Molecular Biology Organization (EMBO) report that Muslim consumers in Britain are concerned about halal requirements in their everyday consumption.⁴ This is evident in consumers' increasing demand for halal food products and non-food products, for example personal care, cosmetics, tourism, pharmaceuticals,

¹ Halal Industry Development Corporation (HDC), "Market Information," website *HDC*, retrieved on 31 Dec 2014, http://www.hdcglobal.com/publisher/bhi_market_information#synopsis.

² Zurina Mohd Bistari, "Halal Certification Scheme," *Standard and Quality News*, July-August 2004, 1.

³ Karijn Bonne, Iris Vermeir, Florence Bergeaud-Blackler, Wim Verbeke, "Determinants of Halal Meat Consumption in France," *British Food Journal* 109, no. 5 (2007), 368.

⁴ Johan Fischer, "Religion, Science and Markets," *EMBO Report* 9, no. 9, (2008), 831.

banking, financing and other services such as hospitality and logistics.⁵ Due to this demand, many countries have benefitted economically from this halal industry. Malaysia in particular exported RM32 billion halal food and products including halal chemicals, cosmetics and pharmaceutical to China, Singapore, United States, Indonesia, Netherlands and many other countries.⁶ The variety of halal products and services in the local and global markets has enlarged resulting from the demand of Muslim consumers worldwide.

From the global halal perspective, Malaysia is viewed as a role model in developing halal standard and institutionalization.⁷ The Malaysian government introduced the halal certification as one of the initiatives in developing reputable halal industry and as a response to the demand of Muslim consumers who are obliged to consume halal products, especially halal food. In fact, Malaysia is the only country in the world which the federal government supports processes of halal certification.⁸ In contrast, halal certifications in other countries are established either by state, individual provinces, or by non-governmental organizations⁹. Together with the federal government, state government and non-governmental organization; for instance, the

⁵ Nik Hadiyan Nik Azman and Tajul Ariffin Masron, "Halal Development and Food Export: Evidence from Malaysia and Middle Eastern Asian Conferences" (proceeding, National Economic Conference (PERKEM VII), National University Malaysia, Ipoh Perak, 4-6 June 2012), 320.

⁶ HDC, "Halal Export," website *HDC*, retrieved on 20 March 2014, http://www.hdcglobal.com/publisher/bi_halalexport .

⁷ Johan Fisher, *The Halal Frontier: Muslim Consumers in a Globalized Market*, (New York: Palgrave Macmillan, 2011), 38.

⁸ HDC, "Government Halal Certification," website *HDC*, retrieved on 11 January 2014, http://www.hdcglobal.com/publisher/gwm_halal_certification.

⁹ *Ibid.*

Muslim Consumer Group (MCG) and halal centers in Malaysian Universities are also supporting the effort of developing the halal industry within their own capacity.¹⁰

A few institutions were given responsibilities in developing the halal industry in Malaysia. The launching of the Malaysia International Halal Showcase (MIHAS) on 16th August 2004 as the largest halal trade fair in the world is a good example of the Malaysian government's effort to turn Malaysia into a global halal hub. Indeed, with the continuous effort from the government, especially the Halal Industry Development Cooperation (HDC) in positioning Malaysia as the world's halal-hub, Malaysia has become a well-known player in the halal industry. Furthermore, the Malaysian government has allocated an annual budget, as well as established long term strategies and short term planning to boost the development of the halal industry.¹¹

The institutionalization of halal by establishing the Halal Hub in Malaysia's Department of Islamic Development (JAKIM) and HDC, have added to the importance of the halal industry in Malaysia.¹² HDC in particular, manages the general development of the halal industry, including promoting business participation and consumers' awareness in this industry. It has contributed to a positive demand of halal products from RM50 million in 2005 to RM260 million in 2010.¹³ Nevertheless, the government has its own strategies in promoting halal and encouraging consumers to consume halal food, products and services. However, the commitment of the Malaysian government in

¹⁰ Arshia Mukhtar and Mohsin Muhamad Butt, "Intention to Choose Halal Products: The Role of Religiosity," *Journal of Islamic Marketing* 3, no. 2 (2012), 1.

¹¹ Zalina Zakaria, "Tapping Into the World Halal Market: Some Discussions on Malaysian Laws and Standard", *Shariah Journal* 16, Special Edition (2008), 605.

¹² Johan Fisher, "Religion, Science and Markets," *EMBO Report* 9, no. 9 (2008), 829-830.

¹³ HDC, "About HDC," *website HDC*, retrieved on 11 January 2014, <http://www.hdcglobal.com/publisher/about>.

developing the halal industry and halal consumption could be improved further, due to resources and potential that Malaysia has in developing this halal industry.¹⁴

One of the aspects that could be studied further is the consumers' commitments in consuming halal products and services. In Malaysia, generally getting halal products and services is not a major issue, as they are available and accessible in the market.¹⁵ But there are also non-halal products and services offered in the market. Therefore, it is important to enhance the consumption of halal products as an adherence to Islamic rulings and consumerism in developing Malaysia as the global halal hub.

1.2 Overview of Halal Food in Malaysia

Malaysia has been regarded as the top one country in the world for establishing halal food indicators.¹⁶ It is also reported that the global expenditure of Muslim consumers on food and lifestyle sectors expected to reach USD 3.7 trillion by 2019. This shows the potential market for halal food sectors. The value of Malaysian halal food industry is RM 37.7 billion¹⁷, which can be considered as a rapid growth in the food industry.¹⁸ The food industry now is giving more attention to halal requirement not only to fulfill a

¹⁴ Syed Shah Alam and Nazura Mohamed Sayuti, "Applying the Theory of Planned Behavior (TPB) in Halal Food Purchasing", *International Journal of Commerce and Management* 21, no. 1 (2011), 83.

¹⁵ Zalina Zakaria, "Tapping Into the World Halal Market: Some Discussions on Malaysian Laws and Standard", *Shariah Journal* 16, Special Edition (2008), 605.

¹⁶ Rafi-uddin Shikoh (ed.), *State of the Global Islamic Economy Report*, (2014-2015), Thomson Reuters, 11.

¹⁷ Mahiah Said, Faridah Hassan, Rosidah Musa and Rahman N.A., "Assessing Consumers' Perception, Knowledge and Religiosity on Malaysia's Halal Food Products," *Procedia Social and Behavioral Sciences* 130, (2014), 120.

¹⁸ Saad al-Harran, and Patrick Chen Low, "Marketing of Halal Products: The Way Forward," *The Halal Journal* (2008), 44-46.

religious obligation for Muslims to consume halal food, but also to expand the potential halal market to non-Muslims consumers.

Generally, the demand for halal food in the world market is escalated due to three main factors; the growth of the Muslim population, the increase of purchasing power among Muslim consumers, and the awareness of Islamic rulings on halal and *haram*¹⁹ in the society. Institutionally in Malaysia, the importance of halal food was initiated by JAKIM and further developed and industrialized by HDC.

According to statistics provided by HDC, halal food trade covers 60 percent of total global trade of halal products.²⁰ However, the adherence to halal practice has given abundant attention to halal food compared to the other halal products. Muslims are more sensitive to the food products compared to other products and services.²¹ In fact, halal food, especially halal meat is given attention not only in Malaysia but also worldwide. Likewise for overall halal products, the general acceptance of halal food among global consumers is also the consequence of religious obligation and other characteristics of halal food practices for example hygiene, sanitation and safety aspects.

From the global view, Malaysia has been perceived as a main player in the halal food market. The significant role of Malaysia in this industry was highlighted by Associate Professor Dr. Baker Alserhan, Keynote Speaker and Chairperson of Global

¹⁹ *Haram* is an opposite concept of halal which means prohibited in Islam.

²⁰ HDC, "Halal Food," website *Halal Industry Development Corporation*, retrieved on 11th January 2014, http://www.hdcglobal.com/publisher/bhis_food_and_beef.

²¹ Karijn Bonne, Iris Vermeir, Florence Bergeaud-Blackler, Wim Verbeke, "Determinants Of Halal Meat Consumption in France," *British Food Journal* 109, no. 5 (2007), 368.

Islamic Marketing Conference in Cairo, Egypt.²² He commented that the commitment of the Malaysian government in developing the halal industry was remarkable from the perception of other Muslim countries. In addition, Malaysia could be a good example, which government promotes halal by integrating the religious and scientific factors for example hygiene, safety and health. Johan Fisher (2008) also stressed this point in the European Molecular Biology Organization (EMBO) report by saying; “Malaysia promotes halal as bridging religious and scientific hygiene, safety and health standards, as an example of the compatibility of the state, modern Islam, business and Islamic consumption.”²³

Despite the national and global demand of halal food by Muslim consumers from the commercial point of view, the basic rulings of halal food should be observed in complying with Islamic rulings of halal, *harām* and *syubhah*. Technically, halal food should be prepared, processed and manufactured hygienically so it is safe to consume. This comprises the process of slaughtering, storing, displaying and in preparing the food itself.²⁴

The advantage of eating halal food is also due to the characteristic of “*tayyib*” or good quality standard of food²⁵, which is a divine standard for the quality of

²² Baker Ahmad Alserhan (Associate Professor and Chancellor, Islamic Marketing University, United Arab Emirates) in the Keynote Speech of the 3rd Global Islamic Marketing Conference in Cairo Egypt, International Islamic Marketing Association, 17th December 2012.

²³ Johan Fisher, “Religion, Science and Markets,” *EMBO Report* 9, no. 9 (2008), 829-830.

²⁴ Shahidan Shafie and Md Nor Othman, “Halal Certification: An International Marketing Issues and Challenges,” *Malaysia Standardization for Halal food, Standard and Quality News*, August 2004, 1.

²⁵ Anas bin Mohd Yunus, Wan Mohd Yusof bin Wan Chik, Mahani binti Mohamad, “The Concept of *Halalan Tayyiba* and Its Application in Products Marketing: A Case Study at Sabasun HyperRuncit Kuala Terengganu, Malaysia,” *International Journal of Business and Social Science*, no. 3 (2010), 243.

consumerism²⁶. In fact, the word *halal* has been mentioned together with the word “*tayyib*” several times in the al-Qur’an.

يَا أَيُّهَا الرُّسُلُ كُلُوا مِنَ الطَّيِّبَاتِ وَاعْمَلُوا صَالِحًا إِنِّي بِمَا تَعْمَلُونَ عَلِيمٌ

Al-Mukminun 23:51

Translation: O (you) Messengers! Eat of the *Taiyibat* all kinds of *halal* (legal) foods which Allah made legal (meat of slaughtered eatable animals, milk products, fats, vegetables, fruits, etc.), and do righteous deeds. Verily! I am well-acquainted with what you do.

As a response to the growing understanding of the concept of *halal* and *tayyib* among Muslim consumers in Malaysia, manufacturers and food operators gained *halal* certification for their food and products.²⁷ However, there are still some issues of non-*halal* consumption among Muslims, which need to be given serious attention, for example, consuming alcohol, dining in non-*halal* food outlets²⁸ and lacking in awareness of the *halal* certification logo. These issues should receive serious attention and proper research should be conducted into understanding Muslim consumers’ behavior. Thus, the *halal* consumption culture can be established in this country.

Henceforth, in developing *halal* food consumption and the *halal* industry in Malaysia, all aspects need to be analyzed and further improved. This is important in ensuring that the *halal* industry, especially the *halal* food industry has developed holistically from the business, scientific and religious point of view.

²⁶ *Ibid*, 247.

²⁷ Johan Fisher, “Religion, Science and Markets,” *EMBO Report* 9, no. 9, (2008), 831.

²⁸ Abdul Kadir Mohd. Ayub, “Remaja Melayu Tidak Sensitif Status *Halal*,” *Dewan Masyarakat*, Mac 2011, 21.

1.3 Research Problems

The Malaysian government emphasizes on the halal industry and halal consumption in the society for religious and commercial purposes. Numerous initiatives have been taken by the Malaysian government, companies and non-governmental organizations, to develop the halal industry in Malaysia. Furthermore, the role of JAKIM in regulating halal certification in Malaysia could be considered substantial. This is evident through JAKIM's effort in establishing its own halal laboratory in order to improve its halal certification management. Indeed, manufacturers and food operators use halal certification as a guarantee to consumers that their food or products are halal compliant and can serve as a benchmark for safety and quality assurance to consumers.²⁹

There are many initiatives that have been implemented in promoting the halal industry, for example the effort of HDC in stimulating halal business in Malaysia. HDC has been performing its role, particularly in promoting Malaysian halal products and brands in Malaysia as well as abroad. But, the influence of government initiatives in influencing Muslims consumers to consume halal food is still vague. There is very few empirical research found, investigated and elaborated this matter. Reflecting and evaluating the government's strategy and initiatives reflects the concept of *hisbah*. Al-Mawardi in his book *al-Ahkām al Sulṭaniyyah* described *hisbah* as practices of enjoining what is right when it's found and forbidding the wrongdoing in society.³⁰

²⁹ Ministry of Information and Communication, "Halal dan Haram Mempengaruhi Keperibadian Muslim," website *Ministry of Information and Communication*, retrieved on 14th January 2012, <http://pmr.penerangan.gov.my/index.php/component/content/article/252>.

³⁰ Al-Mawārdī Abu al-Ḥasan 'Alī bin Muhammad bin Ḥabīb, *Al-Ahkām al-Sulṭāniyyah wa al-Wilāyah al-Dīniyyah* (Beirut: Dar al Kutub al Arabi, 1990), 240.

In fact, it is a mechanism of enjoining good and prohibiting evil in the society and it had been practised by the Prophet SAW and Khulafa' al Rasyidin. As Allah SWT mentioned in the al-Qur'an;

وَالْمُؤْمِنُونَ وَالْمُؤْمِنَاتُ بَعْضُهُمْ أَوْلِيَاءُ بَعْضٍ يَأْمُرُونَ بِالْمَعْرُوفِ
وَيَنْهَوْنَ عَنِ الْمُنْكَرِ وَيُقِيمُونَ الصَّلَاةَ وَيُؤْتُونَ الزَّكَاةَ وَيُطِيعُونَ اللَّهَ وَرَسُولَهُ
أُولَئِكَ سَيَرْحَمُهُمُ اللَّهُ إِنَّ اللَّهَ عَزِيزٌ حَكِيمٌ

Al-Taubah 9:71

Translation: The believers, men and women, are protectors one of another, they enjoin what is just and forbid what is evil, they observe regular prayers, practise regular charity, and obey Allah and His Messenger, on them will Allah pour His Mercy, for Allah is exalted in power, wise.

According to Sharifah Hayaati (2011), the practices of government should be evaluated for the improvement or maintaining the system. In the same vein, the modern framework of effective governance also stresses on the peoples' participation and *hisbah* in managing the country.³¹ Indeed, one of the functions of *hisbah* serves as a quality control of government practices in order to maintain the quality as anticipated by the society.³² It could be performed voluntarily by an individual, the society or an organization in promoting good and forbidding evil.³³ Therefore, evaluating the

³¹ Sharifah Hayaati Syed Ismail al Qudsy and Asmak Ab Rahman, "Effective Governance in the Era of Caliphate 'Umar Ibn al-Khattab (634-644)," *European Journal of Social Sciences* 18, no. 4 (2011), 615.

³² Monzer Kahf, "Islamic Government and Market Regulation: a Theoretical Framework" (proceeding, Conference of Government in Islamic Economic, Iranian Association for Energy Economic, Tehran Iran, 20-21 October 2007).

³³ Abdul Ghafur Hamid, *Islam in Human Rights Law: International, Malaysia and Islamic Perspective* (Malaysia: Sweet and Maxwell, 2012), 356.

influence of government initiatives in halal consumption might be a part of the *hisbah* mechanism in strengthening the halal consumption in the Malaysia.

The influence of these initiatives on halal consumption among Muslim consumers, particularly Generation Y has not found to be reflected and evaluated. Moreover, research on halal consumption is important in understanding the actual behavioral intentions of Muslim consumers in consuming halal food, as it also reflects the effectiveness of government initiatives in this aspect. The initiatives of the Malaysian government in strengthening halal consumption also could be improved by analyzing feedback from the consumers and the industry itself. Thus, it would support the future planning in promoting halal consumption in Malaysia.

Despite numerous efforts initiated by the Malaysian government and non-government organisations in promoting halal food, it is still common to see Muslims, particularly young Muslims dining in non-halal food outlets including restaurants that serve alcohol. In fact, some of them assume that if the workers are Muslims, the food served should be halal³⁴. The observations conducted by Abdul Kadir (2011) in a non-halal cafe located in Klang Valley revealed that the majority of its customers were young Muslims in the category of Generation Y. It was revealed from the interview conducted by Abdul Kadir that young consumers whom he interviewed did not feel guilty after eating in non-halal food cafe, even though they knew that the cafe is a non-halal cafe.³⁵

There is also an increasing concern about the non-halal consumption among the young Muslims. The study conducted among young Muslim consumers in private

³⁴ “Jangan Remehkan Isu Halal,” *Utusan Malaysia*, 15th February 2010, 12.

³⁵ Abdul Kadir Mohd. Ayub, “Remaja Melayu Tidak Sensitif Status Halal,” *Dewan Masyarakat*, Mac 2011, 21.

higher learning institutions in the Klang Valley on their attitude towards halal food outlets revealed that the majority of these young consumers agreed that eating halal food is important to them and they will not dine in a non-halal food outlet. However, half of the total respondents assumed that all fast food and chain coffee shop are halal without looking for the halal certification displayed in the outlet.³⁶ This fact is quite alarming, because it shows that halal awareness among young Muslim consumers in private higher learning institutions towards certain types of food outlets is still non-satisfactory.

In addition, previous study revealed that there was a significant relationship between gender and education towards the behavioral intention to consume halal food. Female were found to be more concerned to choose halal food compared to male consumers. Thus, the role of gender in influencing halal food consumption would be explored in this study. Similarly, consumers with higher levels of education were more concerned to consume halal food compared to the ones with lower levels of education.³⁷ As in the private universities, the influence of education particularly halal knowledge acquired in the universities on halal food could explain further the determinants influencing halal food consumption among Generation Y.

Although many initiatives have been taken and publicity made on halal certification in Malaysia, there is still a drawback in consumers' awareness on halal food consumption. Many Muslim consumers still could not recognize the halal logo

³⁶ Aiedah Abdul Khalek, "Young Consumers' Attitude towards Halal Food Outlets and JAKIM's Halal Certification in Malaysia," *Procedia – Social and Behavioral Sciences* 121, (2014), 26-34.

³⁷ Aiedah Abdul Khalek, Sharifah Hayaati and Hairunnisa Mohd Ibrahim, "A Study On The Factors Influencing Young Muslims' Behavioral Intention In Consuming Halal Food In Malaysia," *Shariah Journal* 23, no. 1 (2015), 67-68.

issued by JAKIM. In fact, it was observed that many Muslims continue to buy imported goods from Thailand, which do not have the halal certification.³⁸

Data from a previous study show that majority Muslim youths acknowledged that the halal logo is important, but the majority were unable to recognize JAKIM's halal logo used in Malaysia.³⁹ This suggests that the attitudes of young Muslim consumers including Generation Y towards halal food still remain vague and ambiguous. Coupled with the influence of Western culture in this society where the information is highly accessible and other social issues faced by young generation, the question that resonates is: are Generation Y Muslims still choosing to consume halal food, and how could they be influenced to consume halal food in their daily life?

To date, there are not many researches on Muslim consumers' behavior and halal food consumption, particularly for Generation Y Muslim consumers. Generation Y has conclusively been shown as unique and have different ways of consumption compared to previous generations. They are heavily consumption-oriented, savvy, trendsetters and brand conscious⁴⁰. Thus, the findings of halal consumption conducted on different generations might not be relevant to generation Y due to their unique consumption behavior and preferences. In fact, research on Generation Y is significant because they are the largest and most lucrative consumers⁴¹ for the current and future halal industry.

³⁸ "Miliki Status Halal atau Haram," *Sinar Harian*, 27 October 2014.

³⁹ Nor Hidayatun Abdul Razak, Rahimah Abd Wahab, Norlaili Harun, Nor Chahaya Johar, "Buying Behavior of Muslims Youth: Concern on Halal Logo" (proceeding, International Halal Conference, University Technology MARA, Putra World Trade Centre, 11-12 September 2012), 797.

⁴⁰ Kristen M. Regine, "Generation Y Consumer Choice for Organic Foods", *Journal of Global Business Management* 7, no.1 (2011), 2-3.

⁴¹ *Ibid.*

Although, halal research is a broad field which could be explored, yet it is still considered as an under researched topic and should be explored for the advantage of Muslims in general and for the development of the halal industry. Indeed, Muslim consumers' behavior in general is also an under researched segment.⁴² The importance of halal consumption research does not merely serve as a commercial purpose, but most importantly, it is for Muslim to adhere to the religious obligation to consume halal food. The halal food consumption is clearly mentioned by Allah SWT in surah al Baqarah verse: 168;

يَا أَيُّهَا النَّاسُ كُلُوا مِمَّا فِي الْأَرْضِ حَلَالًا طَيِّبًا وَلَا تَتَّبِعُوا خُطُواتِ الشَّيْطَانِ إِنَّهُ لَكُمْ عَدُوٌّ مُبِينٌ

Al-Baqarah 2:168

Translation: O ye people, eat from what is on earth, lawful and good; and do not follow the footsteps of the Evil One, for he is to you an avowed enemy.

In sum, the determinants and behavioral intention of Generation Y in consuming halal food have not attained an adequate attention in the academic research and society. Many initiatives have been carried out in cultivating halal food consumption behavior, but the impact of these initiatives on generation Y consumption still remains vague and unclear. This issue needs to be addressed, so that the effectiveness of government strategy and the halal food consumption behavior could be improved in our society.

⁴² Baker Ahmad Alserhan and Zeid Ahmad Alserhan, "Researching Muslim Consumer: Do They Represent The Fourth Billion Consumer Segment?," *Journal of Islamic Marketing* 3, no. 2 (2012), 121.

1.4 Research Questions

Generally, this research investigates the determinants influencing Generation Y Muslims in consuming halal food in Malaysian private universities. Specifically, there are seven research questions to be answered in order to achieve the objectives of this study.

It is noticeable that the amount of efforts have been channeled by various parties in promoting halal food consumption in Malaysia. But, how Generation Y could be influenced in consuming halal food in Malaysian private universities still remains vague. Thus, the following research questions are to be answered;

- 1) What are the determinants influencing the behavioral intention of Generation Y Muslims in consuming halal food?
- 2) How significant is the effect of attitude on the behavioral intention of Generation Y Muslims in consuming halal food?
- 3) How significant is the effect of social influence on the behavioral intention of Generation Y Muslims in consuming halal food?
- 4) How significant is the effect of perceived behavioral control on the behavioral intention of Generation Y Muslims in consuming halal food?

As the Malaysian government has been focusing on the initiatives in increasing the demand of the halal market and developing the halal industry at the national and international levels. The question that follows is;

- 5) How significant are the government initiatives in influencing the behavioral intentions' of Generation Y Muslims in consuming halal food?

The next research question is related to the influence of religion on human consumption, which has been discussed by several researchers. Few studies have investigated the influence of religiosity on human consumption. But the actual influence of religiosity on halal food consumption among Generation Y needs to be studied. Thus, this yields the sixth question;

6) How significant is the religiosity factor in influencing behavioral intentions' of Generation Y Muslims in consuming halal food?

The last research question is about the influence of socio-demographics on halal food consumption. As previous studies have shown different influences of socio demographic factors on food consumption, therefore, the question that arises in this study is the role of gender and education in moderating the determinants influencing halal food consumption in Malaysian private universities. This leads to the last research question which is;

7) Do gender and halal knowledge acquired at the Malaysian private universities moderate other determinants of behavioral intentions' in consuming halal food among Generation Y?

1.5 Aims and Objectives

This study aims;

1. To identify and analyze the determinants which influence the Generation Y Muslim consumers' intention in consuming halal food in Malaysian private universities. To be specific, five main determinants of behavioral intentions in consuming halal foods are investigated in the study. These determinants refer to attitude, subjective norms, perceived behavioral control, religiosity factor and

the government initiatives in halal food consumption. Even though there were studies conducted on factors influencing consumers' behavioral intention in general, Generation Y Muslim consumers in Malaysian private universities have their own different characteristics. They are young Muslims between ages 15-30, residing in the urban areas and exposed to an opened access source of information such as the internet. Therefore, it is important for researchers to study the halal food consumption among this target group of Muslim consumers.

2. To explore the moderating effects of gender between determinants and behavioral intention in consuming halal food among Generation Y in Malaysian private universities.
3. To explore the moderating effect of halal knowledge acquired at the university between determinants and behavioral intention in consuming halal food among Generation Y in Malaysian private universities. These two objectives, explore the possible effect of gender and halal knowledge acquired at the Private University and the determinants of halal food consumption. Eventually, this would provide insightful knowledge of the determinants influencing halal food consumption among Generation Y.
4. To propose the model for the behavioral intention of halal food consumption. The present consumption framework is considered generic without looking at context and religious point of view. By understanding the determinants influencing Generation Y Muslims' behavior, this study provides a model of halal food consumption for Generation Y Muslims. Therefore, the model could be used as a theoretical framework by other researchers in the same field to extend the knowledge in this field. However, it does not aim to produce a definitive conclusion about the relationship between the determinants and behavioral intention in consuming halal food among Generation Y, but rather as

an exploratory effort on a predictive model in explaining behavioral intention in consuming halal food, which could serve as a basis for future studies in this aspect.

5. To suggest the practical implication of the study in encouraging halal food consumption among Generation Y consumers. The Government and relevant bodies may use the data of this study to support their planning and initiatives in promoting halal food consumption particularly among Generation Y consumers.

1.6 Operational Definitions

This section explains the terminology used in this study.

1.6.1 Generation Y Consumers

The word “generation” is defined as a cohort group in which people were born in the duration of consecutive years, approximately 22 years per generation.⁴³ There are different views in defining the Generation Y time span. This study, however applies the definition of Generation Y provided by Markerts (2004) which describes Generation Y as a demographic characteristic of a young group of people who were born between the duration of 1986-2005.⁴⁴ Since this study focuses on Malaysian private universities and normally the youngest age of a student joining private universities is the age of 16 years old, thus, the age of Generation Y in this study is between 16-28 years old.

⁴³ Amy Glass, "Understanding Generational Differences for Competitive Success," *Industrial and Commercial Training* (2007), 98 – 103.

⁴⁴ John Markert, "Demographics of Age: Generational and Cohort Confusion," *Journal of Current Issues and Research in Advertising* 26, no.2 (2004), 18.

Whereas, “consumer” is defined as someone who buys products or services at the retail level.⁴⁵ The consumer in the context of this study refers to the personal consumer. Schiffman and Kanuk (2007) define the personal consumer as a person who buys goods and services for his or her own use.⁴⁶ Therefore, Generation Y consumers in the context of this study refer to persons who were born in the time span of 1983-2005 who buy halal food for his or her own consumption.

1.6.2 Halal Food

Halal is an Arabic term which means lawful and permissible. Technically, it means the food which is permitted by Allah SWT and there are no restrictions found from the sources of Syariah⁴⁷. According to Sayyid Sabiq in his book *Fiqh al-Sunnah*, food can be conceptualized as things which are obtained from animals or plants and edible by human beings to provide energy and to sustain their life.⁴⁸

Halal food means food which is not made of, or does not contain any part of the animal which is forbidden in Islam (for example pork) and is free from any non-halal elements. The concept of halal food shields the entire value chain from “farm to fork” process⁴⁹. Halal food should be prepared, processed or manufactured hygienically and safe to consume. This includes the process of slaughtering, storing, displaying and the

⁴⁵ Sharp E. Duane, *Customer Relationship Management Systems Handbook*, (Washington: Auerbach Publications, 2003), 2.

⁴⁶ Schiffman G. Leon and Kanuk Lazar Leslie, *Consumer Behavior*, 9th ed. (New Jersey: Pearson International, 2007), 4.

⁴⁷ Al-Qaradāwi Yusuf, *Al-Halal wal al-Haram fi al-Islam*, 15th ed. (Kaherah: al-Maktab al-Islami, 1994), 17.

⁴⁸ Al-Sayyid Sabiq, *Fiqh al-Sunnah*, 4th ed. (Beirut: Dar al-Kutub al-Arabi, 1985), 268.

⁴⁹ Marco Tieman, "The Application of Halal in Supply Chain Management: In-Depth Interviews", *Journal of Islamic Marketing* 2, no. 2, (2011), 186 – 195.

preparation of the food itself.⁵⁰ Halal food in the context of this study implies the cooked and uncooked food produced by manufacturers or sold in the food outlets.

1.6.3 Attitude

Ajzen (2001) conceptualizes attitude as a “summary evaluation of a psychological object captured in such attribute dimensions as good-bad, harmful beneficial, pleasant-unpleasant, and likable-dislikable”.⁵¹ Attitude towards the behavior is referred to as the respondents’ favorable or unfavorable evaluation to perform certain behaviors. In this study, the attitude towards the behavior is the respondents’ favorable or unfavorable evaluation in consuming halal food.⁵²

1.6.4 Subjective Norms

Subjective norm is a perceived social influence to perform or not to perform the behavior. The influence of subjective norms refers to the influence of people in social surroundings on individual behavioral intentions. In the context of this study, a subjective norm is a perceived social influence for Muslim consumers in consuming halal food.⁵³

⁵⁰ Shahidan Shafie, Md Nor Othman, “Halal Certification: An International Marketing Issues And Challenges: Malaysia Standardization for Halal food,” *Standard and Quality News*, August 2004, 9.

⁵¹ Icek Ajzen (2001), “Nature and Operation of Attitude”, *Annual Review Psychology* 52 (2001), 28.

⁵² Icek Ajzen and Martin Fishbein, "Understanding Attitude and Predicting Social Behavior," (Eaglewood-Cliffs, NJ: Prentice Hall, 1991) 179.

⁵³ *Ibid.*

1.6.5 Perceived Behavioral Control

Ajzen (1991) defines perceived behavioral control as an individual's perceived ease or difficulty in performing the particular behavior. Perceived behavioral control in this study is associated with the belief of Muslim consumers ease and difficulty in consuming halal food in Malaysia.⁵⁴

1.6.6 Behavioral Intention

Behavioral intention is defined as a person's perceived possibility to perform certain behavior. It reflects the determination and motivation of an individual to perform the behavior. The behavioral intention is the most influential predictor of behavior as outlined in the Theory of Planned Behavior (TPB).⁵⁵ In this study, behavioral intention refers to willingness of respondents to consume halal food. Behavioral intention can be measured with Likert scale response choices, for example “I plan to (behavior)”, “I will (behavior)” or “I intend to (behavior)”.⁵⁶

1.6.7 Government Initiatives

Government initiatives refer to the efforts of the Malaysian government, particularly HDC as a main government body which is responsible in promoting halal products and

⁵⁴ *Ibid.*

⁵⁵ *Ibid*, 179-211.

⁵⁶ Ajzen and Fishbein, “Constructing a TPB Questionnaire: Conceptual and Methodological Considerations”, website University of Massachusetts , retrieved on 10th Dec 2012, <http://www.people.umass.edu/aizen/pdf/tpb.measurement.pdf> 5-6.

consumption in Malaysia.⁵⁷ The initiatives could be by way of a government campaign or publicity in promoting any effort intended to influence consumers to consume halal products through face-to-face, mass media and internet.

1.6.8 Religiosity

Religiosity in the context of this study refers to Islamic Religiosity which includes the Islamic worldview of the *tawhidic* paradigm and the Religious Personality paradigm. Islamic worldview reflects Muslims beliefs and *tawhidic* paradigm. Abdul Latiff Abdullah et al (2005) explain a worldview as our personal vision on how we perceive and evaluate the world and its contents.⁵⁸ Hence, the *tawhidic* worldview is not confined to the reality of this world only, but embraces both the world and hereafter.⁵⁹ It encompasses the beliefs of Muslims as primarily described in the six pillars of Iman in accordance with the al-Qur'an and al-Sunnah.

The Religious Personality paradigm is a manifestation of Muslims' belief into their actions, for example, performing solat, zakat and fasting.⁶⁰ It encompasses aqidah, manners, behaviors, *akhlaq*, *adab* and interpersonal life of Muslims. The interpersonal

⁵⁷ HDC, "About HDC," website *HDC*, retrieved on 10th September 2013, <http://www.hdcglobal.com/publisher/about>.

⁵⁸ Steven Eric Krauss (Abdul-Lateef Abdullah), Azimi Hj. Hamzah, Turiman Suandi, Sidek Mohd. Noah, Khairul Anwar Mastor, Rumaya Juhari, Ifas An Kassan, Azma Mahmoud & Jamiah Manap, "The Muslim Religiosity-Personality Measurement Inventory (MRPI)'s Religiosity Measurement Model: Towards Filling the Gaps in Religiosity Research on Muslims," *Pertanika Journal of Society, Science & Humanities* 13, no.2 (2005), 134.

⁵⁹ *Ibid*, 142.

⁶⁰ *Ibid*, 131-144.

trait includes the relationship between man with God, other human being, society and environment.⁶¹

1.6.9 Moderator/ Moderating Variable

A moderator or moderating variable is a variable that may affect the strength of the relationship between an independent variable and a dependent variable. It specifies when or under what conditions an independent variable could affect the dependent variable. A moderator may possibly increase or decrease the strength of a relationship between independent and dependent variable.⁶² In the present study, the moderator/moderating variable is referred to gender and halal knowledge acquired formally in the Malaysian private universities.

1.7 Scope

Halal consumption includes the consumption of halal food, cosmetics, pharmaceuticals', services and other products. This study, however focuses on halal food which essentially could be considered as basic concepts and practice of halal consumption for Muslims. Focusing on food consumption is also due to the importance of halal food consumption, which is stressed directly many times in the al-Qur'an and al-Sunnah.

⁶¹ Azimi Hamzah, Krauss Eric Krauss (Abdul Lateef Abdullah), Sidek Mohd. Noah, Turiman S., Rumaya Juhari, Khairul Anwar Mastor, Jamiah Manap, Azma Mahmoud, & Hasnan Kassn, *Muslim Religiosity Personality Assessment: Prototype for Nation Building*, 2nd ed. (Serdang: Institute for Social Science Studies, 2007), 17.

⁶² Rueben M. Baron and David A. Kenny, "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology* 51, no. 6, (1986), 1173-1182.

In the aspect of Muslim consumers, this study focuses on Generation Y consumers between ages 16-28 years old who are undergraduate students from Malaysian private universities. The significance of generation Y as a main focus in this study is because of three reasons. Firstly, the fact that the number of Generation Y has remarkably increased in Asia from 648 million in 1995 to 729 million in 2006. Secondly, Generation Y is the main consumer of food and they have significant spending power to consume. Studies have shown Generation Y Asians, including Malaysians determine their own consumption. In fact, they dare to try new food and eat out frequently compared to the older generation.⁶³

Thirdly, a majority of Generation Y who go to higher institutions of learning are mostly employed after they have completed their studies. Henceforth, their purchasing power would increase as well as their consumption.⁶⁴ Due to the mentioned characteristics, Generation Y consumers are a substantial group of consumers to be studied in regard with the halal consumption. Knowledge of the Generation Y Muslim consumers in halal food consumption is important due to their distinctive behavior of food consumption and religious obligation to consume halal food.

The scope of Generation Y Muslims consumers in this study is confined to the respondents from Malaysian private universities in the Klang Valley. Malaysian private universities in the Klang Valley are chosen to be the location of study due to three factors. Firstly, student demographic in many Malaysian private universities around the Klang Valley consists of a majority of non-Muslim students who could have some

⁶³ Karen Kueh and Boo Ho Voon, "Culture and Service Quality Expectation Evidence from Generation Y Consumers in Malaysia," *Managing Service Quality* 17, no. 6 (2007), 657.

⁶⁴ Craig A. Martin and L.W. Turley, "Malls and Consumption Motivation: An Exploratory Examination of Older Generation Y Consumers", *International Journal of Retail & Distribution Management* 32, no.10 (2004), 464.

influence on their Muslim peers on food consumption. As previous research has proven, halal consumption was influenced by friends, family and society.⁶⁵

Secondly, the majority of Malaysian private universities is located in the urban area of the Klang Valley. They are characterized by modernization with easy access to information. Students may possibly be influenced by non-Islamic lifestyle and disregard halal consumption or they could control their consumption due to the religiosity aspect.

The third factor is private universities in Klang Valley have easy access to many kinds of non-halal food around their campus. In fact, some private universities in Klang Valley do not provide halal (JAKIM) certified food outlets inside the campus. Therefore, this study seeks to investigate the determinants influencing behavioral intentions in consuming halal food.

Currently, there are 21 main branches of Malaysian private universities in Malaysia and majority of them (17 branches) are located in the Klang Valley.⁶⁶ Therefore, the fieldwork scope is confined to private universities which are located in Klang Valley.

⁶⁵ Syed Shah Alam and Nazura Mohamed Sayuti, "Applying the Theory of Planned Behavior (TPB) in Halal Food Purchasing", *International Journal of Commerce and Management* 21, no.1 (2011), 8-20. Karijn Bonne, Iris Vermeir, Florence Bergeaud-Blackler, Wim Verbeke, "Determinants of Halal Meat Consumption in France", *British Food Journal* 109, no. 5 (2007), 379. Sudin Lada, Geoffrey Harvey Tanakijal, Hainudin Amin, "Predicting Intention to Choose Halal Products Using Theory of Reasoned Action", *International Journal of Islamic and Middle Eastern Finance and Management* 2, no. 1 (2009), 66-76. Arshia Mukhtar and Mohsin Muhamad Butt, "Intention to Choose Halal Products: The Role of Religiosity", *Journal of Islamic Marketing* 3, no. 2 (2012), 1-23.

⁶⁶ Ministry of Education, "Private Higher Education Institution Statistics", website *Ministry of Education Malaysia*, retrieved on 7th of May 2013, http://www.mohe.gov.my/web_statistik/.

1.8 Hypotheses

The Theory of Planned Behavior (TPB) is used as a framework of this research indicates that attitude, subjective norms and perceived behavioral control are the important determinants in influencing behavioral intention, and in this study, towards Generation Y Muslims intentions' in consuming halal food. The relationship of attitude and consumption in general has been addressed previously in other studies. Therefore, it yields the following hypothesis for this study.

H1: There is a significant relationship between the attitudes of Generation Y Muslim consumers and the behavioral intention in consuming halal food.

Generally, human behavior is guided by the expectations of others such as friends, family and societal norms.⁶⁷ Bonne et al (2007) described people in collectivistic society normally could be influenced by peoples around them to perform their behavior, because they tend to perceive themselves as interdependent with their society.⁶⁸ Thus, this study suggests the second hypothesis as below;

H2: There is a significant relationship between subjective norms and the behavioral intentions of Generation Y Muslim consumers in consuming halal food.

The third hypothesis relates to the influence of perceived behavioral control on behavioral intention to consume halal food. Perceived behavioral control is referred as the ability and availability to consume halal food. It was found that the perceived

⁶⁷ Edwin AJ Van Hooft, Marise Ph Born, Taris, Toon W Taris and Henk Van Der Flier "The Cross-Cultural Generalizability Of The Theory Of Planned Behavior: A Study On Job Seeking In The Netherlands", *Journal Of Cross-Cultural Psychology* 37, no. 2 (2006), 135.

⁶⁸ Bonne et.al, "Determinants of Halal Meat Consumption in France", 368-369.

behavioral control can contribute to the prediction of behavior.⁶⁹ Therefore, the next hypothesis is:

H3: There is a significant relationship between perceived behavioral controls and the behavioral of Generation Y Muslim consumers' in consuming halal food.

The fourth hypothesis relates to religiosity as an additional independent variable added in the existing framework. In this study, religiosity refers to Islamic religiosity and its influence on halal food consumption. Therefore, it yields the following hypothesis:

H4: There is a significant relationship between religiosity factor and the behavioral intention of Generation Y Muslim consumers in consuming halal food.

The Malaysian government's initiatives on halal consumption are remarkable. Many initiatives, for example publicity through mass media, internet and face-to-face have been implemented objectively to promote halal consumption especially among Muslim consumers. Thus, this study proposes the fifth hypothesis as below;

H5: There is a significant relationship between government initiatives and the behavioral intention of Generation Y Muslim consumers in consuming halal food.

Gender has a certain role in food consumption among consumers, and the following hypotheses relate to gender as a moderating variable in explaining halal consumption among Generation Y Muslim consumers. This is based on postulation that gender might enhance or decrease the role of determinants in influencing behavioral intention to consume halal food.

⁶⁹ A.R. Pratkanis, S.J.Breckler and A.G.Greenward, *Attitude Structure Function*, ed. (New-Jersey: Lawrence Erlbaum, 2008), 241.

H6: Gender plays a moderating role in the relationship between attitude and behavioral intention in consuming halal food.

H7: Gender plays a moderating role in the relationship between subjective norms and behavioral intention in consuming halal food.

H8: Gender plays a moderating role in the relationship between perceived behavioral control and behavioral intention in consuming halal food.

H9: Gender plays a moderating role in the relationship between religiosity and behavioral intention in consuming halal food.

H10: Gender plays a moderating role in the relationship between government initiatives and behavioral intention in consuming halal food.

The last five hypotheses are concerned with the role of halal knowledge acquired at the university as a moderating variable in explaining halal food consumption among Generation Y in Malaysian private universities. This is based on postulation that halal knowledge acquired at University might enhance or decrease the role of determinants in influencing behavioral intention to consume halal food.

Thus, the last five hypotheses are;

H11: Halal knowledge acquired at the private universities plays a moderating role in the relationship between attitude and behavioral intention to consume halal food.

H12: Halal knowledge acquired at the private universities plays a moderating role in the relationship between subjective norms and behavioral intention to consume halal food.

H13: Halal knowledge acquired at the private universities plays a moderating role in the relationship between perceived behavioral control and behavioral intention to consume halal food.

H14: Halal knowledge acquired at the private universities plays a moderating role in the relationship between religiosity and behavioral intention to consume halal food.

H15: Halal knowledge acquired at the private universities plays a moderating role in the relationship between government initiatives and behavioral intention to consume halal food.

1.9 The Importance of the Study

This study is expected to contribute to the body of knowledge, provides insights of *fiqh* consumption and the data could be used to improve the government policies and strategies in encouraging halal food consumption.

1.9.1 Contribution to knowledge

From the academic point of view, this study would contribute to the body of knowledge. The additional determinants of government initiatives and religiosity variables could provide more insight to knowledge in halal food consumption. In fact, religiosity has been an important field of inquiry in many social sciences and psychology research.⁷⁰ Studying the influence of religiosity on halal food consumption would explain “functionality or output of religion” on Muslim behavior.⁷¹

Adding gender and halal knowledge acquired at the University as the moderating variables in this study would contribute to the novelty of this study. The moderating variable would moderate the performance of behavioral intention of Generation Y in consuming halal food as the dependent variable. Baron and Kenny (1986) conceptualized moderator as a third variable “*which partitions a focal*

⁷⁰ Krauss et al., “The Muslim Religiosity-Personality Measurement Inventory (MRPI)’s Religiosity Measurement model: Towards Filling the Gaps in Religiosity Research on Muslims”, 132.

⁷¹ *Ibid*, 133.

independent variable into subgroups that establish its domains of maximal effectiveness in regard to a given dependent variable".⁷² Thus, a moderating variable is anticipated to explain more on the relationship between independent and dependent variables.⁷³

Gender and halal knowledge acquired at the University are placed as moderating variables. Both of these variable are a social demographic factors and suitable to be tested as a moderating variables.⁷⁴ This would ascertain whether respondents from different gender and education background with the same predictors of behavioral intention (independent variables) would have a different or same performance of their behavioral intention in consuming halal food (dependent variable). Therefore, the moderating variables could explicate the relationship of attitude, subjective norms, perceived behavioral control, religiosity, government initiatives and behavioral intention of Generation Y Muslims in consuming halal food.

Furthermore, this study proposes a model of determinants influencing behavioral intention in consuming halal food. This model could be considered as an important contribution to the academic research because to date, none of the study found has produced a model of determinants influencing halal food consumption among Generation Y. The proposed model could be used as a theoretical framework by other researchers in extending the knowledge on the related topic.

⁷² Baron M. Rueben and Kenny A. David, "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology* 51, no. 6 (1986), 1173-1182.

⁷³ Keith F. Punch., *Introduction to Social Research: Qualitative and Quantitative Approaches*, 2nd ed. (London, SAGE Publication, 2012), 70.

⁷⁴ Zainuddin Awang, "*Structural Equation Modelling Using AMOS Graphic*", (Malaysia: University of Technology MARA Press, 2012), 6.

1.9.2 Contribution to *Fiqh* Consumption

In recent years, there has been an increasing interest and focus on halal industry. One of the most significant discussions is about halal consumption. Knowing determinants influencing halal consumption is at the heart of understanding the Muslim behavioral intention in consuming halal. There is a number of academic researches explaining the Muslim behavioral intention in consuming halal mainly from the business point of view.

However, to date no research has been found that has investigated the behavioral intention of Generation Y Muslims to consume halal food from the Islamic perspective. Therefore, after reviewing the determinants of halal consumption from the Muslim perspective, this research proposes two additional variables which are religiosity and government initiatives in predicting the behavioral intentions of halal food consumption among Generation Y in Malaysian private universities. This could help Muslim scholars to understand the reality of halal consumption from a *fiqh* consumption point of view. Moreover, the impact of Muslim consumer research is normally not limited in one country.⁷⁵ Thus, the findings of present study could be used in understanding the consumption behavior of Muslims in other countries.

1.9.3 Contribution to Government

Lastly, a study on the determinants influencing behavioral intentions of Generation Y consumers to consume halal food could contribute to the data of Muslims' consumers' behavior. It could be utilized in improving halal food consumption, particularly among Generation Y consumers. In addition, this study provides insight of the influence of

⁷⁵ Alserhan & Alserhan, "Researching Muslim Consumer: Do They Represent the Fourth Billion Consumer Segment?" 130.

government initiatives in halal consumption. This would subsequently enhance knowledge and provide practical implications on how to influence Generation Y Muslims to consume halal foods.

Therefore, the findings could provide a sense of direction in improving policies and strategies of halal food consumption in Malaysia. In a nutshell, this research would contribute to the academia, Muslims society, Malaysian government and halal industry as a whole.

1.10 Chapter Outline

This chapter outlines brief information about the content of this thesis, which has been divided into five chapters.

The first chapter deals with the background information about the study. This chapter starts with an introduction, followed by research problems, research questions, objectives of the study, title definition, the scope of the study, the hypotheses, the importance of the study and the chapter outline.

Chapter two presents the literature review and theoretical framework used for this study. The literature review discusses the literature of determinants influencing halal consumption. The second part of this chapter is the discussion of the theoretical framework used in this study, which is the Theory of Planned Behavior (TPB). The concept of *niyyat* from an Islamic perspective is elaborated in understanding the legitimacy of behavioral intention in the framework discussed.

The third chapter elaborates the methodology part of this thesis. This chapter explains the research philosophy, research design, instrumentation, procedures for population determination and sampling, data collection procedures and finally data analysis techniques and procedures.

Chapter four assesses the findings of surveys collected from Generation Y Muslim consumers in Malaysian private universities. Findings of the survey conducted among Generation Y Muslims consumers are analyzed using Statistical Package of Social Science (SPSS). Findings are presented in the form of tables, chart and model. Discussions are presented to analyze the findings. The last chapter summarizes the findings and articulates the practical implications of the study.

1.11 Summary

Halal has become an important discussion among academicians, Muslim scholars, industry and policy makers. This chapter has elaborated the backbone of this study which covers its research problems, research questions, research objectives, operational definitions, scope and hypotheses. This study enhance knowledge, contribute to fiqh consumption and provide sense of direction for the government policies and halal strategies development in Malaysia.

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Literature Review

This section discusses and reviews the literature of halal food consumption and determinants influencing consumers in consuming halal food. There are two sections; firstly, the halal food consumption in Islam and secondly determinants influencing behavioral intentions of Muslim consumers in consuming halal food.

2.1.1 Halal Food Consumption in Islam

This section presents the halal food consumption from a theoretical point of view and from the empirical research findings conducted by other researchers.

A considerable amount of literature has been discussed on halal food consumption according to Islamic teaching. Theoretically, food consumption was discussed from the religious, societal, cultural and business point of views. It is beyond doubt that from the religious perspective, Islam is the most particular in deliberating on halal food consumption. Halal food consumption is elaborated in the al-Qur'an and al-Sunnah as the main sources of Shariah. Al-Qur'an as a holy book for Muslims specifically mentioned certain prohibited foods in surah al-Māidah: verse 3;

حُرِّمَتْ عَلَيْكُمُ الْمَيْتَةُ وَالِدَمُّ وَلَحْمُ الْخِنزِيرِ وَمَا أُهِلَّ لِغَيْرِ اللَّهِ بِهِ وَالْمُنْخَنِقَةُ
وَالْمَوْفُوذَةُ وَالْمُتَرَدِّيَةُ وَالنَّطِيحَةُ وَمَا أَكَلَ السَّبْعُ إِلَّا مَا ذَكَيْتُمْ وَمَا ذُبِحَ عَلَى
النُّصَبِ وَأَنْ تَسْتَقْسِمُوا بِالْأَزْلامِ ذَلِكُمْ فِسْقٌ الْيَوْمَ يَبْسُ الَّذِينَ كَفَرُوا مِنْ
دِينِكُمْ فَلَا تَخْشَوْهُمْ وَاخْشَوْنِي الْيَوْمَ أَكْمَلْتُ لَكُمْ دِينَكُمْ وَأَتَمَمْتُ عَلَيْكُمْ نِعْمَتِي

وَرَضِيْتُ لَكُمْ الْإِسْلَامَ دِينًا فَمَنْ اضْطُرَّ فِي مَخْمَصَةٍ غَيْرِ مُتَجَانِفٍ لِإِثْمٍ فَإِنَّ

اللَّهُ غَفُورٌ رَحِيمٌ

Al-Māidah 5:3

Translation: Forbidden to you (for food) are: dead meat, blood, the flesh of swine, and that on which hath been invoked the name of other than God; that which hath been killed by strangling, or by a violence blow, or by a headlong fall, or by being gored to death; that which hath been (partly) eaten by a wild animal; unless ye are able to slaughter it (due form); that which is sacrificed on stone (altars); (forbidden) also is the division (of meat) by raffling with arrows: that is impiety. This day have those who reject faith given up all hope of your religion: yet fear them not but fear Me. This day have I perfected your religion for you, completed my favour upon you, and have chosen for you Islam as your religion. But if any is forced by hunger, with no inclination to transgression, God is indeed Oft-forgiving, most Merciful.

Perhaps the most well-known theoretical writings of halal food consumption is the book of Yūsuf al-Qaraḍāwi (1985) “*al-Halāl wa al-Harām fī al-Islām*”. Al-Qaraḍāwi outlined eleven principles of halal and *haram* in Islam which are closely related to halal food consumption. All these eleven principles could serve as a basic guideline in practicing halal consumption.

The first principle explained by Yūsuf al-Qaraḍāwi was that of basic fundamental of things and actions are permissible. Everything which are created by Allah s.w.t are permissible unless it is prohibited by a sound and explicit evidence from

al-Qur'an and al-Sunnah.¹ This natural permissibility covers things, for example food and drinks as well as matters like human speech and action in their daily life. In fact, a number of prohibited things are very minor and they are forbidden for specific reasons.² Whereas the majority of the things created on this earth is for the benefit of human beings as mentioned in the al- Qur'an;

هُوَ الَّذِي خَلَقَ لَكُمْ مَا فِي الْأَرْضِ جَمِيعًا ثُمَّ اسْتَوَىٰ إِلَى السَّمَاءِ فَسَوَّاهُنَّ سَبْعَ
سَمَاوَاتٍ ۗ وَهُوَ بِكُلِّ شَيْءٍ عَلِيمٌ

Al-Baqarah 2:29

Translation: He it is who created for you all that is on earth. Then He Istawā (rose over) towards the heaven and made them seven heavens and He is the All-Knower of everything.

The second principle stressed that legislating something as lawful and unlawful is exclusively the authority of Allah s.w.t. Man regardless of their spiritual and worldly status have no right to prohibit things for human consumption. It is mentioned clearly in the al- Qur'an that human beings cannot take the role of Creator to legislate things as they wish:³

وَلَا تَقُولُوا لِمَا تَصِفُ أَلْسِنَتُكُمُ الْكَذِبَ هَذَا حَلَالٌ وَهَذَا حَرَامٌ لِتَفْتَرُوا عَلَى اللَّهِ
الْكَذِبَ ۗ إِنَّ الَّذِينَ يَفْتَرُونَ عَلَى اللَّهِ الْكَذِبَ لَا يُفْلِحُونَ

¹ Al-Qaraḍāwī Yūsuf, *Al-Halāl wa al-Harām fī al-Islām*, 15th ed. (Kaheerah: al-Maktab al-Islami, 1994), 22.

² *Ibid*, 19-25.

³ *Ibid*, 26.

Translation: And do not say, concerning the falsehood which your tongues utter, “This is halal and this is *haram*,’ in order to fabricate a lie against Allah; assuredly those who fabricate a lie against Allah will not prosper.

In fact, the great jurists for example Imām Shāfi‘e, Imām Ḥanafī, Imām Mālik and others (may Allah be pleased with them), tried to avoid pronouncing judgments of halal and *ḥarām* because they were worried of making a wrong interpretation of rulings. Same goes to Imam Ahmad Ibn Hanbal who would always say “I disapprove of it” or “It does not appeal to me” or “I do not like it” or “I do not prefer it”. This is very important fact that Muslims nowadays are free to legislate the ruling of unlawful without having explicit evidence from the al-Qur’an and al-Sunnah.⁴

Al-Qaraḍāwi explained the third principle that is an action of prohibiting something which is halal and permitting something which is *ḥarām* is equivalent to practising polytheism. He gave an example of some Muslims in Madinah who rejected some permissible things and actions.⁵ Then, Allah revealed the following verses in order to bring them back to the right teaching of Islam:

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تُحَرِّمُوا طَيِّبَاتٍ مَا أَحَلَّ اللَّهُ لَكُمْ وَلَا تَعْتَدُوا ۗ إِنَّ اللَّهَ لَا يُحِبُّ الْمُعْتَدِينَ

⁴ *Ibid*, 27.

⁵ *Ibid*, 28.

وَكُلُوا مِمَّا رَزَقَكُمُ اللَّهُ حَلَالًا طَيِّبًا ۗ وَاتَّقُوا اللَّهَ الَّذِي أَنْتُمْ بِهِ مُؤْمِنُونَ

Al-Maidah:87-88

Translation: You who believe! Do not make *ḥarām* the good things which Allah has made halal for you, and do not transgress; indeed, Allah does not like the transgressors. And eat of what Allah has provided for you, lawful and good, and fear Allah, in whom you are believers.

The fourth principle is the prohibitions by Allah s.w.t due to the impurity and harmfulness of the things to human beings. Allah makes the rulings of halal and *ḥarām* for a reason and for the well-being of his creatures. Due to the limited knowledge and weakness of human beings, not all reasons and wisdom of these Islamic rulings are made known to human beings. Knowing or not knowing the reason of prohibition, Muslims still have to adhere to the ruling of Allah s.w.t. In the case of the prohibitions of wine and gambling ruling⁶, Allah s.w.t explained in the al-Qur'an;

يَسْأَلُونَكَ عَنِ الْخَمْرِ وَالْمَيْسِرِ ۖ قُلْ فِيهِمَا إِثْمٌ كَبِيرٌ وَمَنَافِعُ لِلنَّاسِ وَإِثْمُهُمَا أَكْبَرُ
مِن نَّفْعِهِمَا ۗ وَيَسْأَلُونَكَ مَاذَا يُنْفِقُونَ ۗ قُلِ الْعَفْوَ ۗ كَذَلِكَ يُبَيِّنُ اللَّهُ لَكُمْ آيَاتِهِ لَعَلَّكُمْ
تَتَفَكَّرُونَ

Al-Baqarah 2:219

Translation: They ask you (O Muhammad SAW) concerning alcoholic drink and gambling. Say: "In them is a great sin, and

⁶ *Ibid*, 30.

(some) benefit for men, but the sin of them is greater than their benefit." And they ask you what they ought to spend. Say: "That which is beyond your needs. Thus Allah makes clear to you His Laws in order that you may give thought.

The fifth principle indicated that halal things are sufficient and non-halal things are superfluous for human consumption. Islam forbids superfluous things and provides wider ranges of choices which are beneficial and give more comfort to mankind. For example, Islam prohibited alcohol drinks but permitted many kinds of nutritious drinks. The purpose of His ruling is to ensure ease, goodness, guidance and mercy to human beings⁷ as according to the Al-Qur'anic verse;

يُرِيدُ اللَّهُ لِيُبَيِّنَ لَكُمْ وَيَهْدِيَكُمْ سُنَنَ الَّذِينَ مِنْ قَبْلِكُمْ وَيَتُوبَ عَلَيْكُمْ ۗ وَاللَّهُ عَلِيمٌ
حَكِيمٌ ۗ وَاللَّهُ يُرِيدُ أَنْ يَتُوبَ عَلَيْكُمْ وَيُرِيدُ الَّذِينَ يَتَّبِعُونَ الشَّهَوَاتِ أَنْ تَمِيلُوا
مِيلًا عَظِيمًا يُرِيدُ اللَّهُ أَنْ يُخَفِّفَ عَنْكُمْ ۗ وَخُلِقَ الْإِنْسَانُ ضَعِيفًا

Al- Nisa'4:26-28

Translation: Allah desires to make clear to you and to guide you to the ways of the (righteous) people before you and to turn to you in mercy; and Allah is knowing, Wise. And Allah desires to lighten your burden, for man was created weak.

⁷ *Ibid*, 32.

The sixth principle of halal and *ḥarām* stressed that if something which leads to *ḥarām* it is also prohibited. In regard to this principle, it is clear that Islam prohibits all means which lead to *ḥarām* things. In the case of consuming alcoholic drinks for instance, the action of producing, selling, delivering and serving the alcoholic drink are considered *haram* ⁸ This enacts the aim to diminish the opportunity of committing *ḥarām* action.

The seventh principle is concerned with falsely representing the non-halal as halal by changing its name and form is prohibited.⁹ Naming non-halal things by another name and changing its form, but retaining its essence is considered *ḥarām*. In our society, people name obscene dance as “art”, liquor as “spirit” and usury as “interest/profit”.¹⁰ This deceiving tactic is widely used in the food industry nowadays for example, food which contains alcohol and pig gelatin is shown as halal on the food label. They intentionally try to confuse Muslim consumers and gain profit out of it. In Malaysia, particularly alcohol is used and sold in the open market and can be accessed easily even by Muslim consumers. In fact, many kinds of foods which are declared as halal are mixed or prepared with non-halal ingredients, for example wine vinegar and other kinds of alcohols.

The eight principle discussed by al-Qaraḍāwi is that a good intention does not permit halal things and behavior. In Islam any permissible action by Muslims accompanied by a good intention could be considered as *‘Ibadah*. However, in the case of prohibited things and action, good intentions have no effect to the ruling of *ḥarām*. Therefore the noble intention does not permit Muslims to consume non-halal foods. For

⁸ *Ibid*, 34.

⁹ *Ibid*, 34.

¹⁰ *Ibid*, 35.

example, feeding poor people with non-halal food does not lift the sin of consuming *ḥarām*. Fundamentally, the principle of “ends justifying the means” does not apply in Islam.¹¹

The ninth principle is Muslims should avoid doubtful (*syubḥah*) things in their daily life. Halal and *ḥarām* are clearly defined in Shariah, however, there is a gray area between these two rulings. This is the area of doubtful which should be avoided by Muslims. Therefore, if Muslims are not sure about the ruling of food that they intend to consume, they have to avoid it because it falls under the ruling of *syubḥah*. The derivation of this principle is based on the hadith of the Prophet (peace be on him). An-Nu'man ibn Basheer reported: I heard the Messenger of Allah, peace and blessings be upon him, said:

الْحَلَالُ بَيِّنٌ وَالْحَرَامُ بَيِّنٌ وَبَيْنَ ذَلِكَ أُمُورٌ مُشْتَبِهَاتٌ لَا يَدْرِي كَثِيرٌ مِّنَ
النَّاسِ أَمِنَ الْحَلَالِ هِيَ أَمْ مِنَ الْحَرَامِ فَمَنْ تَرَكَهَا اسْتَبْرَأَ لِدِينِهِ وَعَرْضِهِ فَقَدْ سَلِمَ
وَمَنْ وَقَعَ شَيْئًا مِنْهَا يُوشِكُ أَنْ يُوَاقِعَ الْحَرَامَ كَمَا أَنَّهُ مَنْ يَرْعَى حَوْلَ الْحِمَى
يُوشِكُ أَنْ يُوَاقِعَهُ أَلَا وَإِنَّ لِكُلِّ مَلِكٍ حِمَى أَلَا وَإِنَّ حِمَى اللَّهِ مَحَارِمُهُ

Translation: The halal is clear and the *ḥarām* is clear. Between the two there are doubtful matters concerning which people do not know whether they are halal or *ḥarām*. One who avoids them in order to safeguard his religion and his honor is safe, while if someone engages in a part of them he may be doing something *ḥarām*, like one who grazes his animals near the hima (the grounds reserved for animals belonging to the King which are out

¹¹ *Ibid*, 35.

of bounds for others' animals); it is thus quite likely that some of his animals will stray into it. Truly, every king has a hima, and the hima of Allah is what He has prohibited.¹²

The tenth principle stresses on the universality of *ḥarām* and its applicability to all, regardless of the people's descendent and societal status. For example, stealing is prohibited for Muslims and non-Muslims regardless the social, economic, religious and family status in the society.¹³ The laws of Allah do not discriminate between one person and another¹⁴. In the case of halal food consumption, for example, it should be practised by Muslims regardless of their social background and status. The prohibition of pork for example, is applicable to all Muslims whether in the East or West, rich or poor. The last principle of halal and *ḥarām* is in the time of necessity (*ḍarūrat*) which eradicates restrictions. Islam as a practical religion considers the circumstances of committing *ḥarām* in the condition of *ḍarūrat*. As an example, Islam allows Muslims to eat forbidden food in sufficient quantity to save them from death. Indeed, Allah s.w.t repeats four times relating to this *ḍarūrat* principle after mentioning the prohibited food in al-Qur'an.¹⁵ As an example, Allah mentioned in surah al-Baqarah;

إِنَّمَا حَرَّمَ عَلَيْكُمُ الْمَيْتَةَ وَالدَّمَ وَلَحْمَ الْخِنزِيرِ وَمَا أُهْلَ بِهِ لِغَيْرِ اللَّهِ فَمَنْ
اضْطُرَّ غَيْرَ بَاغٍ وَلَا عَادٍ فَلَا إِثْمَ عَلَيْهِ إِنَّ اللَّهَ غَفُورٌ رَحِيمٌ

Al-Baqarah 2:173

¹² Hadith narrated by Ibn Habbān, *Ṣaḥīḥ Ibn Ḥabbān*, Kitab al-Hadhōr wa al-Ibāhah Zakara 'Amru bi Mujānabati Syubahāt Sitrahu, Hadith no. 5685.

¹³ Al-Qaradāwi Yusuf, *Al-Halāl wa al-Ḥarām fī al-Islām*, 37.

¹⁴ *Ibid*, 37.

¹⁵ *Ibid*, 39.

Translation: He has forbidden you only carrion, blood, the flesh of the swine, and that which has been offered to other than Allah. But should someone be compelled, without being rebellious or aggressive, there shall be no sin upon him. Indeed Allah is all-forgiving, all-merciful.

It has been demonstrated that halal food consumption is closely related to the religious belief and obligation. In Islam, the halal consumption reflects the wholesome and cleanliness of the food, which is the reflection of *ḥalālan ṭoyyibba* concept. In fact, Islam forbids its followers to consume dirty, harmful and intoxicating food.¹⁶ The food and drinks that intoxicate affects the functions of the brain and harm the body of the consumers. Al-Qur'an stresses on halal food in the verse:

قُلْ أَغَيْرَ اللَّهِ أَنْخِذُ وَلِيًّا فَاطِرِ السَّمَاوَاتِ وَالْأَرْضِ وَهُوَ يُطْعِمُ وَلَا
يُطْعَمُ قُلْ إِنِّي أُمِرْتُ أَنْ أَكُونَ أَوَّلَ مَنْ أَسْلَمَ وَلَا تَكُونَنَّ مِنَ
الْمُشْرِكِينَ

Al-An'am 6:14

Translation: Say, 'Shall I take for guardian [anyone] other than Allah, the originator of the heavens and the earth, who feeds and is not fed?' Say, 'I have been commanded to be the first of those who submit [to Allah],' and never *be* one of the polytheists.

Another well-known book of *al-Fiqh al-Islami wa Adillatuhu* written by Wahbah al-Zuhaylī discusses on the halal food and beverage from the perspective Islamic jurisprudence. The argument of halal and *ḥarām* are deliberated from the opinions of the four Imams of different *madhhab*; namely Imām Ḥanbali, Ḥanafi,

¹⁶ Basri bin Ibrahim Al Hasani Al Azhari, *Isu-Isu Fiqh Semasa: Halal & Haram*, Jilid 1. (Selangor: al-Hidayah Publication, 2009), 546.

Māliki and Shāfi'e. This book could be a noteworthy reference about the ruling of halal food from the different *madhhab* point of view.¹⁷ However, this book focuses more on the Islamic ruling on halal and *ḥarām* than the halal consumption behavior itself.

The discussion of halal food consumption is incomplete without looking at the perspective of the Islamic worldview (*taṣawwur*). This is because Muslims' consumption should be governed by the *taṣawwur*. The concept of *taṣawwur* is a main emphasis on Islamic consumer behavior. It could be reflected in the form of “man-Allah relationship” (*ḤablminAllāh*), “man-man relationship” (*ḥablminalnas*) and “man's relationship with other creations of Allah”. In other words, Muslims should consume based on Islamic rulings and guidelines. At the same time, they should maintain a harmonious relationship with human beings and other creatures for example animals, plants and the environment. In addition, material and spiritual needs should be placed in balance in order to achieve a harmonious life on earth and hereafter. Furthermore, the Islamic consumption method focuses on consumption as an '*Ibadah* for Muslims. Any useful social action could be considered as '*Ibadah* with the condition that it is performed for the sake of Allah S.W.T. In addition, Islamic consumption should be God-driven, clean, wholesome, beneficial thing to the consumers.¹⁸

Professor Dr. Karim Douglas Crow in his talk on “Muslims as consumers: a dialogue with modernity” argued that the growing middle class among Muslims changes the attitude of Muslims in consumerism. Muslims have the spending power to purchase and consume compared to before and the concern of halal has come into the

¹⁷ Wahbah al-Zuhayli, *Al-Fiqh al-Islami wa Adillatuhu*, 3rd ed. (Beirut: Darul al-Fikr, 1985).

¹⁸ Ahmad Azrin Adnan, “Islamic Consumer Behavior (ICB): Its Why and What”, *International Journal of Business and Social Science* 2, no. 21 (2011), 157.

picture in Muslim consumerism.¹⁹ In fact, the emergence of middle class Muslims increases the Muslim consumption power behavior and boost certain industry in Malaysia²⁰, for example halal products and services.

Professor Dr. Karim Douglas Crow has also stressed that the Islamic consumption should integrate with the sense of rationality and faith, as the consumption is a part of religion and Muslims will be responsible for their own consumption as mentioned in the verse above.²¹ This is based on sūrah al-Takāthur on the Islamic consumption.

ثُمَّ لَتُسْأَلُنَّ يَوْمَئِذٍ عَنِ النَّعِيمِ

Al-Takāthur: 102:8

Translation: Then, shall you be questioned that day about the joy you indulged in.

The study conducted by Gabriele Marranci (2012) from the National University of Singapore investigated on how Muslims in Singapore practised their halal food consumption within the majority of non-Muslim population. He discovered that Singaporean Muslims were able to integrate with the non-Muslim majority in practising their halal food consumption. It was demonstrated that Muslims were familiar with the halal logo in practising halal food consumption. But, he claimed that some practices of

¹⁹ Karim Douglas Crow (Professor, International of Advanced Islamic Studies Malaysia) in his talk on “Muslims as Consumers: A Dialogue with Modernity” in Academy of Islamic Studies, University of Malaya, 25th September 2013.

²⁰ Wan Kamal Mujani, Wan Mohd Hirwani Wan Hussain, Noor Inayah Ya’akub, Allawati Kasri and Ermy Azziaty Rozali, “The Political and Economic Contributions of the Muslim Middle Class in Malaysia”, *Advances in Natural and Applied Sciences* 6, no. 3 (2012), 285.

²¹ Karim Douglas Crow (Professor, International of Advanced Islamic Studies Malaysia) in his talk on “Muslims as Consumers: A Dialogue with Modernity” in Academy of Islamic Studies, University of Malaya, 25th September 2013.

halal food consumption may create misunderstanding among non-Muslims. Therefore, the awareness and understanding of non-Muslims on halal food consumption practised by Muslims are crucial in sustaining the racial integrity of a multicultural country.²²

There was some issues discussed involving halal food consumption among Muslim consumers in Malaysia. Firstly, the issue concerning halal certification, which is used to inform consumers that the products are complying with Islamic rulings and guidelines. Some manufacturers and food outlets display forged halal certification to attract Muslim consumers. Issues related to halal are improper animal slaughtering, use of contaminated ingredients and false representation to Muslim consumers by displaying al-Qur'anic verses or wearing Islamic headgear (*kopiah*). These issues were highlighted by the media and fortunately it has alerted Muslims to be more cautious of their consumption.²³

Similarly, a conceptual paper by Hayati et al (2008) discussed the importance of quality assurance in halal food manufacturing in Malaysia. This paper discussed the background of halal certification, issues and quality assurance in Malaysia.²⁴ The importance of consumers' perceptions on JAKIM's halal certification was also discussed in and highlighted in other study²⁵. Also, Muslim consumers' perceptions of

²² Gabriele Marranci, "Defensive or Offensive Dining? Halal Dining Practices Among Malay Muslim Singaporeans And Their Effects On Integration", *The Australian Journal of Anthropology* 23 (2012), 84-100.

²³ Zalina Zakaria, "Tapping Into the World Halal Market: Some Discussions on Malaysian Laws and Standard", *Shariah Journal* 16, Special Edition (2008), 608.

²⁴ Hayati @ Habibah Abdul Talib , Khairul Anuar Mohd Ali and Khairur Rijal Jamaludin , "Quality Assurance in Halal Food Manufacturing in Malaysia: A Preliminary Study", (proceeding, International Conference on Mechanical and Manufacturing Engineering (ICME), Universiti Tun Hussein Onn Johor Bahru Malaysia, 21-23 May 2008), 1-2.

²⁵ Nordin Ahmad, "Persepsi Persatuan Pengguna di Malaysia Terhadap Status Pengesahan Halal JAKIM," (PhD thesis, University of Malaya, 2007).

halal and non-halal products and services were studied in Klang Valley.²⁶ The importance of Muslim consumers' perception on halal products, services and certification were highlighted in few studies due to their influence in shaping Muslim behavior in consuming halal food.

Indubitably, consumers' confidence on halal food is closely related to halal certification. Halal certification reflects that the food is permitted to be consumed by Muslims and has undergone a systematic procedure before the certification is issued. It provides a competitive advantage for manufacturers and quality assurance for consumers. It was demonstrated that the introduction and execution of halal certification could increase the understanding and awareness of Muslims in Malaysia to consume halal products and food.²⁷ The consumers' awareness of halal certification could be grounded based on determinants influencing their intentions to consume halal, which is the central discussions of this study.

2.1.2 Determinants Influencing Halal Food Consumption

Numerous studies have attempted to explain the determinants influencing halal food consumption in a society. The influence of attitude, subjective norms, perceived behavioral control, religiosity and gender towards the human consumption have been discussed by scholars in different fields such as marketing, business, psychology, religion and sociology. However, in the context of Malaysia, where the government plays a certain role in developing, sustaining and promoting the halal industry, the

²⁶ Burhan Adnan, "Consumer Behavior and Religiosity of Muslims Community in Klang Valley: Consumers Perceptions on Halal and non-Halal Products and Services," (master dissertation, University of Malaya, 2007).

²⁷ Shahidan Shafie, Md Nor Othman, "Halal Certification: An International Marketing Issues And Challenges: Malaysia Standardization for Halal food", *Standard and Quality News*, August 2004, 11.

influence of government initiatives towards the halal food consumption serves as a pertinent aspect in this study.

2.1.2.1 Attitude, Subjective Norms and Perceived Behavioral Control

Attitude, subjective norms and perceived behavioral control have been identified as contributing factors influencing halal food consumption.²⁸ A study which investigated the attitude of young consumers on halal food outlets and JAKIM certification revealed that attitude and perceived behavioral control significantly influence behavioral intention of young consumers to choose halal food outlets. Their attitudes include their evaluation of the concept of halal food outlet that should abide to Islamic rulings, hygienic practices and food safety practices. However, the influence of family and friends were found not important enough to influence their intention in consuming halal food. This could be due to young consumers having a tendency to make their own decisions in choosing halal food outlets.²⁹

The halal food acceptance in Malaysia was not only due to religious requirements of Islamic consumption, but also the aspects of quality, hygiene and safety of the food. According to Vloreen et al (2014), non-Muslims consumers viewed the halal food from the health perspective. It was found in the study conducted in Malaysia, that non-Muslims consumers showed a positive attitude towards halal food. Their positive attitude about the health aspect of halal food could provide did influence even non-Muslim consumers to consume halal food. The author argued that it is important to

²⁸ Syed Shah Alam and Nazura Mohamed Sayuti, "Applying the Theory of Planned Behavior (TPB) in Halal Food Purchasing", *International Journal of Commerce and Management* 21, no.1 (2011), 8-20.
Bonne et al., "Determinants of Halal Meat Consumption in France", 367-386.

²⁹ Aiedah Abdul Khalek, "Young Consumers' Attitude towards Halal Food Outlets and JAKIM's Halal Certification in Malaysia," *Procedia - Social and Behavioral Sciences* 121 (2014), 26-34.

explore the non-Muslim consumers in Malaysia. This could be done by integrating the positive attitude and perception about the advantage of halal food.³⁰

Another study conducted among 118 University students demonstrated that attitude and subjective norms were significant in predicting consumers' intention in consuming halal food. The perception of young consumers on food and restaurants influenced them to dine in the modern coffee shop. In addition, family and friends played important roles in influencing halal consumption among the respondents. In contrary, perceived behavioral control has been found not significance in influencing the intention of young consumers in consuming halal food.³¹

A study conducted on halal awareness in choosing food outlet in Klang Valley, revealed that the awareness of halal food among Muslim consumers was influenced by their attitude on halal concept. This study used the quantitative method of questionnaire, collected among 113 Muslim respondents. It was suggested that public, food producers and the government should give their commitment in order to increase the halal awareness among consumers in Malaysia.³²

Abdul Raufu' Ambali and Ahmad Naquiuddin Bakar (2012) conducted a study on Muslims' awareness on halal food and products in Shah Alam. This study used Partial

³⁰ Vloreen Nity Mathew, Ardiana Mazwa Raudah binti Amir Abdullah and Siti Nurazizah binti Mohamad Ismail "Acceptance on Halal Food among Non-Muslim Consumers," *Procedia-Social and Behavioral Sciences* 121 (2014), 262-271.

³¹ Mohd Sobhi Ishak, Muhammad Ahmad, Mohd Nizho Abdul Rhman, Mohd Khadafi Rofie, "Predicting Intentions to Visit Kopitiam as Halal Food Outlet: An Extension of the Theory of Planned Behavior," (proceeding, 4th International Conference on Business and Economic Research (4th ICBER 2013), 4-5 March 2013, University of Technology MARA, Bandung Indonesia), 213-216.

³² Nor Ardyanti binti Ahmad, Tunku Nashril bin Tunku Abaidah & Mohd Helmi bin Abu Yahya, "A Study On Halal Food Awareness Among Muslim Customers In Klang Valley," (proceeding, 4th International Conference on Business and Economic Research (4th ICBER 2013), 4-5 March 2013, University of Technology MARA, Bandung Indonesia), 1073-1087.

Least Square-Structural Equation Modelling to analyse the data. The findings of this study revealed that religious belief, exposure, logo certification, and health reasons are determinants in predicting halal awareness among Muslims. Interestingly, health reason is the most significant factor contributing to Muslims awareness on halal food and products.³³ This view was previously supported by Wilson and Liu (2010) as they stated that halal is often allied with the health.

“Muslims view health as having a strong spiritual element, encompassing elements of fatalism. Therefore, once something is been deemed Halal, it is not a question of whether it can be consumed or not; but rather the quantity³⁴.”

At the end of the paper, Abdul Raufu Ambali and Ahmad Naquiuddin Bakar highlighted the policy-makers should focus on health issue in reinforcing regulatory policy of halal compliance and halal certification in food and products. In addition, the authority needs to monitor and control the halal certification in Malaysia. There is a need of policy redirection for the halal authority to include the steps and procedures for quality assessment for halal food and products.³⁵ Conceptually, even though practising halal food consumption is an Islamic obligation for Muslim. It comes with benefits of health, as it is mentioned in the al al-Qur’an as “*ḥalālān ṭayyiba*” which indicates the wholesomeness of the halal food.

³³ Abdul Raufu Ambali and Ahmad Naquiuddin Bakar, “Halal Food and Products in Malaysia: People’s Awareness and Policy Implications,” *Intellectual Discourse* 21, no. 1 (2013), 7-32.

³⁴ *Ibid.*

³⁵ Abdul Raufu Ambali and Ahmad Naquiuddin Bakar, “Halal Food and Products in Malaysia: People’s Awareness and Policy Implications,” 28.

The influence of food labeling, which includes the halal logo as an item was investigated by Zul Ariff et al (2012). In their study, 1219 Muslims respondents were analysed using structured questionnaires in Klang Valley. The TPB was used as a conceptual framework in determining the intention to purchase and purchasing behavior. Data collected from this study revealed food labeling, including halal logo influenced their purchasing behavior. This indicated that Muslim consumers preferred to consume halal food and they relied on halal logo to assure that the foods that they purchase are halal.³⁶

The importance of halal consumption by reviewing the verses from al al-Qur'an and al-Sunnah and current challenges of consumers in consuming halal were discussed in the book titled *Pengurusan Produk Halal di Malaysia*. The alcohol and gambling industry, capitalism and socialism monetary system and globalization were identified as challenges of Muslims in consuming halal. The author highlighted a very important issue for example the availability and accessibility of non-halal food and drinks at some urban areas in Malaysia.³⁷ The availability and accessibility of non-halal food could be one of the causes of non-halal consumption among Muslims. This factor is indeed reflected in the perceived behavioral control variable in the TPB, the conceptual framework used in this study.

In addition, it has been practised in Malaysia that halal certification has influenced buying decision among Muslim consumers in choosing halal food. In promoting halal consumption, it is important to look at the *'urf* or social behavior of the

³⁶ ZulAriff Abdul Latiff, Zainal Abidin Mohamed, Golnaz, Rezai, Nitty Hirawaty Kararuzzaman, "The Effect of Food Labeling Awareness on Muslim Consumers Food Purchasing Behavior in Malaysia," (proceeding, International Halal Conference, University of Technology MARA, Kuala Lumpur, 11-12 September 2012), 806.

³⁷ Suhaimi Ab.Rahman and Jafro Abdullah, ed., *Pengurusan Produk Halal di Malaysia*, (Serdang: Universiti Putra Malaysia, 2011), 136-159.

people in the country. Social behavior and social influence could be important determinants in predicting behavioral intentions in consuming halal food.³⁸

Wilson and Liu (2010) in their paper “Shaping halal into a brand” argued that the role of halal branding is substantial in attracting Muslim consumers such as the use of terms like “Halal Insurance”, “Halal Finance” in banking and finance industry. This can also be applied in the context of Malaysia, where halal branding is very common in influencing Muslim consumers to purchase products and services such as *halālan tayyiba* food and halal tour.³⁹

The significance influence of attitude and subjective norms were revealed in the study of predicting intentions to choose halal products using the Theory of Reasoned Action. This study used a survey to collect data from 485 respondents in Labuan Malaysia. According to the presented findings, family and friends played a major role in determining behavioral intention of Muslims to choose halal products. The author argued that a possible reason of the subjective norms influence among Malaysian consumers was the characteristic of the Malaysian society itself.⁴⁰ In Malaysia, Muslims particularly practice a collectivist culture, where people are interdependent in their behavior with the family and society.

Another study by Golnaz Rezai (2008) investigated the level of confidence among consumers towards halal labeled manufactured food in Malaysia. The findings revealed that the majority of consumers are concerned about halal and have more

³⁸ *Ibid*, 216-235.

³⁹ Wilson and Liu, “Shaping the Halal into a Brand?” 107-123.

⁴⁰ Suddin Lada, Geoffrey Harvey Tanakijal, Hanudin Amin, ‘Predicting Intention to Choose Halal Products Using Theory of Reasoned Action,’ *International Journal of Islamic and Middle Eastern Finance and Management* 2, no. 1 (2009), 66-76.

confidence on JAKIM's halal logo compared to other halal certification. Based on the factor analysis, consumers' confidences on halal-labeled food were based on six factors; confidence with halal logo, halal consciousness, reliability of halal labels, safety and health consciousness, governmental participation and manufacturing practices.⁴¹

A survey of 184 Muslim respondents in Penang examined the determinants influencing the intention to visit halal restaurants among Muslims. This study examined the influence of attitude, subjective norm and perceived behavior control as the independent variables. Ambiance and religiosity were placed as moderating variables between the three independent variables and dependent variable. It was reported that attitude, subjective norms and perceived behavioral control influence the intentions of Muslims to visit halal restaurants. Ambiance moderated the relationship between perceived behavior control and behavioral intention to visit halal restaurants. The second moderating variable is religiosity which moderates the relationship between subjective norm and perceived behavioral control and behavioral intention to visit halal restaurants.⁴²

2.1.2.2 Religiosity

The influence of religion to mankind in daily living has made it an important area of inquiry in this study. The role of religiosity is placed as an independent variable in explaining its influence towards the halal food consumption among generation Y Muslim consumers.

⁴¹ Golnaz Rezai, "Consumers' Confidence in Halal Labeled Manufactured Food in Malaysia," (PhD thesis, Universiti Putra Malaysia, 2008), ii.

⁴² Tawfik Salah Mohammed Ben Bisher AL-Nahdi, "Patronage Halal Restaurants among Muslims: An Issue of Halal Perception," (master dissertation, Universiti Sains Malaysia, 2008).

In Islam, religiosity or in the Arabic term as "*tadayyun*" could be defined as practising Islamic teaching comprehensively in thinking, words and action in every aspect of life. It could be based on the Islamic knowledge and the understanding of Islam as a religion.⁴³ Yusuf al-Qaradāwi (1984) described religiosity as practising Islam in all aspects of life, including *aqidah*, *'ibadah*, *shariah* and *akhlak*.⁴⁴

The first academic attempt to investigate the influence of religion on consumer behavior was undertaken by Allport and Ross in 1967. Since then, many studies have been conducted by researchers worldwide to determine the role of religion and religiosity on human consumption. Numerous studies have shown the significant role of religiosity on the attitude of people towards consumption in general.⁴⁵ Generally, the influence of religion on food consumption normally depends on the teaching of one religion, for example pork is prohibited in Islam as well as Judaism, and beef in Hinduism. The influence of religion on food consumption is closely related to religious teachings and people's interpretation of their religious teaching. However, the exact role of religion in determining food choice could be explored further.⁴⁶

Religiosity has been identified as a significant contributing factor for halal food consumption. The study which took place in Turkey investigated this issue. It was shown that Muslim consumers with higher religiosity were more concerned of halal

⁴³ Zulkiple Abd. Ghani, and Nor Salimah Abu Mansor, "Penghayatan Agama Sebagai Asas Pembangunan Pelajar: Analisis Terhadap Beberapa Pandangan Al-Imam Al-Ghazali," (proceeding, National Student Development Conference (NASDEC), University of Technology Malaysia, Kuala Lumpur, 8-9th August 2006, Malaysia), 1-19.

⁴⁴ Al-Qaradāwi Yusuf, *Ke Arah Perlaksanaan Syariah Islamiyyah*, translated by Abdul Rahman Ahmad Jerlun (Shaha Alam: Dewan Pustaka Fajar, 1984), 12.

⁴⁵ Ahmad Jamal, "Marketing in A Multicultural World: The Interplay of Marketing, Ethnicity and Consumption," *European Journal of Marketing* 37, no.11 (2003), 1599.

⁴⁶ Delener Nejdert, "Religious Contrasts in Consumer Decision Behaviour Patterns: Their Dimensions and Marketing Implications," *European Journal of Marketing* 28, no.5 (1994), 36-53.

certification when they purchased the food products.⁴⁷ Similarly in Malaysia, religion was found as a contributing factor in determining consumers' perception on halal food and halal logo in Malaysia. Muslim consumers who were more religious had more positive perception about halal food and more concern about halal logo when they wanted to consume halal food.⁴⁸

A study conducted in Malaysia by Syed Shah Alam et al. (2011) examined the role of religiosity on Muslims' purchasing behavior. Eight items were used to test the religiosity construct in this study. This study revealed that religiosity played a full mediating role in the relationship between independent variables and purchasing behaviors of Muslim consumers⁴⁹. This view is also discussed by Nazlida and Mizerski (2010) who stated that the influence of religion on consumer behavior are based on five elements which are religious affiliation, commitment, motivation, knowledge and social consequences.⁵⁰ The factor of religiosity was translated to the religious commitment dimension in this study. It was defined as "the degree of religious belief held and practised by an individual"⁵¹.

A study by Atteq-ur-Rahman (2010) carried out among students in the International Islamic University Pakistan revealed that religiosity influenced products

⁴⁷ Ekrem Erdem Inci Varinli and M.Emin Yildiz Erciyes, "Consumers' Awareness and Perceptions in Halal Food Certified Products," (proceeding, 3rd Global Islamic Marketing Conference, International Islamic Marketing Association, Cairo Egypt, 17-18 Dec 2012), 130-132.

⁴⁸ Mohani Abdul, Hashanah Ismail, Haslina Hashim and Juliana Johari, "Consumer Decision Making Process in Shopping for Halal Food In Malaysia," *China-USA Business Review* 8, no.9 (2009), 40.

⁴⁹ Syed Shah Alam, Rohani Mohd and Badrul Hisham, "Is Religiosity an Important Determinant on Muslim Consumer In Malaysia?" *Journal of Islamic Marketing* 2, no. 1 (2011), 83-96.

⁵⁰ Nazlida Muhammad and Dick Mizerski, "The Constructs Mediating Religions; Influence on Buyers And Consumers", *Journal of Islamic Marketing* 1, no. 2 (2010), 124-135.

⁵¹ Safiek Mokhlis, "Relevancy and Measurement of Religiosity in Consumer Behavior Research", *International Business Research* 2, no. 3, (2009), 75-84.

acceptance for consumption by Muslim consumers.⁵² The religiosity index used in this study is commendable were it covers many dimensions, namely the ideological, ritualistic, intellectual, consequential and experiential. Few items which were used in this study were contextual, as they were suitable to be tested among Muslims in Pakistan but not really suited for the Malaysian context.

In Malaysia, there are numerous researches that investigate the role of religiosity in consumer behavior. Safiek Mokhlis and Leigh Spartks (2009) examined the role of religiosity towards shopping orientation among consumers from different religions in Kuala Lumpur. The study revealed that religiosity determined the shopping orientation of consumers. Shafiek suggested that religiosity should be placed as one of determinants of shopping orientation in the consumer behavior framework.⁵³ Similarly, the study of Delener (1994) also concluded that religion influenced the consumers' decision making in buying things for their consumption. It has an important potential to be placed as a variable in determining human consumption.⁵⁴

According to Bonne et al (2007) religion was a determinant in deciding food purchasing and developing food habits of individuals and society. Bonne conducted a study of halal meat consumption among 576 Muslims from North Africa who were living in France. He concluded that positive attitude, social influences, especially peers and perceived behavioral control determine the intentions of Muslims to consume halal meat in France. However, perceived availability was not significant in predicting halal meat consumption in France. Furthermore, the study revealed that Muslims were willing

⁵² Ateeq-ur-Rehman, "The Relationship between Religiosity and New Product Adoption," *Journal of Islamic Marketing* 1, no. 1 (2010), 63-69.

⁵³ Safiek Mokhlis and Leigh Spartks, "Consumer Religiosity and Shopping Behavior in Kuala Lumpur", *Malaysian Management Journal* II 1&2 (2009), 96-97.

⁵⁴ Delener Nejdert, "Religious Contrasts in Consumer Decision Behaviour Patterns: Their Dimensions and Marketing Implications," *European Journal of Marketing* 28, no.5 (1994), 36-53.

to put an effort to get a halal meat for their consumption.⁵⁵ He added that social structure such as people's origin and generation differences were contributing factors in predicting dietary preferences of consumers.⁵⁶

Norazamimah (2007) in her dissertation, indicated that there was a significant relationship between religiosity and the attitude of Muslim consumers in determining their food consumption. This study was conducted in Klang Valley with the sample size of 320 using convenience random sampling.⁵⁷ However the religiosity construct in this study did not include the comprehensive Islamic worldview of *Ibadah* particularly the practices of the basic principles of Islam (*Rukun Islam*) as the items in the questionnaires. The basic principles of Islam should be included in the religiosity construct as it is an important dimension of religiosity in Islam. Therefore, this study would fill the gap by including the basic principles of Islam in constructing the religiosity.

A research conducted in Canada revealed that people who attended mosque regularly were the group of people with the highest halal meat consumption.⁵⁸ However, this research did not measure the religiosity as a construct in its instrument. The nature of the mentioned study was a market research, but few items of consumers' attitude and religiosity were included in the survey. Therefore, the generalizability of the religiosity influence on halal consumption is deemed questionable.

⁵⁵ Bonne et.al, "Determinants of Halal Meat Consumption in France", 379.

⁵⁶ *Ibid*, 368.

⁵⁷ Norazamimah Bogal, "Religiosity and Halal Food: Attitude Muslim Consumers", (master dissertation, University of Malaya, Kuala Lumpur, 2007), iii.

⁵⁸ Hicham Aitelmaalem, Patti Breland, Reynolds-Zayak Leona, "Canadian Halal Meat Market Study, Agriculture Food and Rural Development," (Report, Alberta Agriculture, Food & Rural Development, Canada, 2005), 22.

According to Baker al-Serhan (2010), even though modern Muslim consumers are tend to be influenced with western lifestyles and products, yet many of them are concern about shariah compliance products. They would prefer Islamic version of products, for example halal fast food. This to serve their modern lifestyles and at the same time to adhere with Islamic rulings. Halal consumption is fundamentally different from other consumption as religion normally plays a main role in the decision-making process among the increasingly observant Muslim consumers.⁵⁹

It is also observed that in the current literature, religion has been given only slight attention in understanding consumer behavior.⁶⁰ This could be viewed as a reflection of the prediction that modernity will reduce the importance of religion in classical consumption theory such as Max and Weber.⁶¹ However, it was found that religion shape the consumption of Muslims and it is an important variable to look at in understanding the social behavior of the society.⁶²

Few studies looked at the behavioral intention of halal consumption from a business point of view. However, this research integrates the religiosity dimension from the Islamic perspective in understanding the determinants of halal food consumption among Generation Y consumers. In addition, previous research tended to focus more on halal consumption among consumers in general, without looking at the Generation Y cohort in specific. Therefore, the generalization of these studies to the Generation Y on this matter is questionable. There is a need to study the Generation Y in specific due to

⁵⁹ Baker Ahmad Alserhan, "Islamic Branding: A Conceptualization Of Related Terms," *Brand Management* 18, no.1, (2010), 44–49.

⁶⁰ Safiek Mokhlis, "Relevancy and Measurement of Religiosity in Consumer Behavior Research," *International Business Research* 2, no.3, (2009), 75.

⁶¹ O`zlem Sandıkcı and Aliakbar Jafari, "Islamic Encounters in Consumption and Marketing", *Marketing Theory* 13, no. 4, (2013), 413.

⁶² Mustafa Karatas and O`zlem Sandıkcı, 'Religious Communities and the Marketplace: Learning And Performing Consumption in an Islamic Network,' *Marketing Theory* 13, no. 4, 481.

their differences compared to the other generations. Indeed, only few studies have investigated the influence of religiosity on halal food consumption. In fact, none of these few studies explore government initiatives and its influence in explaining behavioral intention in consuming halal food.

Lastly, exploring government initiative as a possible determinant in influencing halal food consumption contributes to a new body of knowledge as none of the studies found have investigated this aspect empirically. Therefore, it is viable to conduct a research in this area to fill in the research gap. The present study could expand knowledge on halal consumption and provide information for the improvement of halal industry as well.

2.1.2.3 Government Initiatives Influencing Halal Consumption

This section reviews the governments' initiatives in influencing halal consumption in general and in the context of the Malaysian experience. In 1981, Tun Dr. Mahathir raised the wave of regulating and institutionalizing halal in Malaysia.⁶³ The Malaysian government tries to ensure that halal goods are sufficient in supporting halal consumption among consumers. At the same time, Malaysia has enhanced and enlarged the halal industry in its way to become the Global Halal Hub.

In many countries, government and private organizations give attention to food and consumers' management, for example in Indonesia, Turkey, Pakistan and Iran. In Western countries, for example New Zealand, the government takes care of their food safety by forming New Zealand Safety Food Safety authority and formulating Food Safety Risk Management Framework. Another example is the Islamic Food and

⁶³ Johan Fisher, *The Halal Frontier: Muslim Consumers in a Globalized Market*, (New York: Palgrave Macmillan, 2011), 38.

Nutrition Council (IFANCA), which is the leading halal certification in North America. IFANCA plays a significant role in issuing halal certification, as well as in promoting and creating halal awareness. Initially, IFANCA played its role in America, but now it is expanding its wings worldwide to China and India.⁶⁴

Professor Mohamed Sadek (2012) in his paper on halal awareness outlined few initiatives by the Malaysian government in creating halal awareness in Malaysia. Among the initiatives were organizing talks, seminars, conference and exhibitions. Another important initiative taken to increase the awareness of halal food consumption was the establishment of halal-haram committee in 1980 in the Prime Minister Department. Among the central role of the committee was to spread awareness on the halal food concept by explaining the concept of halal to food manufacturers, restaurant owners and food outlets throughout the country.⁶⁵ This effort technically was an eye opener for Malaysian food operators to adopt a halal concept to their business and to get halal certification as a halal assurance to their consumers.

In addition, the government is a responsible body in managing and controlling the issue of halal in the country. There are four fundamental rights of consumers which are also applied to halal consumers. Firstly, consumers have rights to get safe products and services. They should be able to access information on the products and to be informed about the product and services. Consumers have rights to voice out their opinions and concerns about products and services through the appropriate channels provided to them.⁶⁶ Other than government bodies, media appears as a powerful channel

⁶⁴ Mohamed Sadek, "Halal Awareness," (proceeding, International Halal Conference, University of Technology MARA, Kuala Lumpur, 4-5 September 2012), 842-843.

⁶⁵ *Ibid*, 842-843.

⁶⁶ Siti Arni Basir, ed., *Pengurusan Aduan Menurut Perspektif Islam* (Kuala Lumpur: Institut Perkembangan Minda, 2011), 112-118.

for halal consumers to voice out their concerns and doubts on halal products and services.

In Islam, the role of government in consumerism deliberates the value of ethics, moral, *akhlāq*, halal and *ḥarām*. Therefore, from the perspective of managing the Muslim consumer, it is a part of the government's responsibility to educate and spread awareness of halal to the society. In doing that, the government may use *ḥisbah* institution to educate people about halal consumption and reprimand Muslim consumers who consume non-halal food and drinks.⁶⁷ However, educating Muslims about halal consumption is not solely the responsibility of the government as Muslim consumers also have their own personal duty to be aware and adhere to Islamic rulings of halal in their consumption.

Another significant initiative was the formation of the Committee of Focus Group in The Prime Minister's Department on the initiatives and impacts of halal certification in Malaysia. The objective of this study was to analyse the halal procedures and policies implemented by JAKIM. It also proposed the amendment for the improvement of halal certification and to expedite the halal certification process. Data on the compliance and issues of halal certification from the fieldwork and focus group with companies involved were revealed and discussed⁶⁸. The last part of the report touched on the initiatives of JAKIM in promoting and educating people about halal certification. Among the initiatives highlighted briefly were promotions through printed

⁶⁷ Zulfaqar bin Mamat, *Institusi Hisbah dan Peranannya dalam Mengawal Kegiatan Ekonomi Negara Islam*, Jurnal Muamalat Bil 3 2012), 122.

⁶⁸ Unit Permodenan Tadbiran dan Perancangan Pengurusan Malaysia (MAMPU), "Inisiatif dan Impak Pelaksanaan Fokus Group Pengurusan Persijilan Halal" (Report, Jabatan Perdana Menteri Malaysia, 2012), 7-10.

and electronic media, national and international exhibitions, halal directories and 1Malaysia 1halal campaign.⁶⁹

The most remarkable initiative of the Malaysian government in developing the halal industry was the establishment of the Halal Development Industry Corporation (HDC) on 18 September 2006. HDC primarily manages the overall development of halal industry at a local and international level. HDC is in charge of matters such as halal standards, audit, capacity building for halal products and services. It stimulates the involvement of Malaysian companies in the halal industry and promotes halal understanding among consumers. It also acts as a center for consultation, information and business support for halal companies. In specific, HDC coordinates policies and programmes of the national agenda as according to the Halal Master Plan.⁷⁰ The Halal Master Plan is a comprehensive planning of halal certification, development, integrity, implementation and covering the responsibilities of government bodies which is involved in halal development. There are three phases of the Halal Master Plan, firstly, phase 1 (2008-2010) is a stage of developing Malaysia as a global centre for halal integrity and preparing the growth of halal industry. The second phase (2011-2015) is a stage of establishing Malaysia as a centre for halal related business. The final phase (2016-2020) is a stage of expanding geographic footprint of home grown companies in the international market.⁷¹

In 2006, the HDC took charge of halal matters from JAKIM which could be considered as a positive change from the federal management in managing halal

⁶⁹ *Ibid*, 21.

⁷⁰ Halal Industry Development Corporation (HDC), "About HDC", website *HDC*, retrieved on 31 Dec 2012, <http://www.hdcglobal.com/publisher/faq>.

⁷¹ Abdul Manaf Bohari, Cheng Wei Hin, Nurwahida Fuad, "An Analysis on the Competitiveness of Halal Food Industry in Malaysia: An Approach of SWOT And ICT Strategy," *Geografia Malaysia Journal of Society and Space* 9, no.1 (2013), 1-2.

industry and consumption. This change authorized all halal matters to be managed by the HDC as a central agency, objectively to enhance the Malaysian halal industry in the global market. There are many initiatives of the HDC in this aspect, for instance, facilitating halal products companies to be certified with Hazard Analysis and Critical Control Points (HACCP). HACCP is a systematic preventive approach to food safety. In addition, HDC assists companies which produce halal products to obtain Good Manufacturing Practices (GMP) to enhance to the credibility of halal food in the market. In 2008, HDC was given authority to issue halal certification but in year 2009 Malaysian government decided to return the authority of issuing halal certification to JAKIM.⁷²

Among the initiatives of HDC in educating the public about consuming halal consumption are organizing talks, seminars, conferences and exhibition on halal for example the courses cover halal awareness, wholesomeness, safety, hygiene and consumer products⁷³. In 2010, HDC introduced Halal Application as the World's First Government Halal Certified premise locator. This application assists consumers to locate halal food premises using the Global Positioning System (GPS) technology and Google Maps. Consumers could access halal directory and knowledge, locate halal food outlets certified by JAKIM and rate the cleanliness of the food outlets.⁷⁴ In addition, HDC launched the halal kiosk in 2011 mainly to encourage consumers to consume halal products. The Halal kiosk is an interactive computer terminal that provides knowledge

⁷² Halal Industry Development Corporation, "About HDC", website *HDC*, retrieved on 31 Dec 2012, <http://www.hdcglobal.com/publisher/about>.

⁷³ Halal Industry Development Corporation, "HDC Training", website *HDC*, retrieved on 18th February 2014, <http://www.hdcglobal.com/publisher/training>.

⁷⁴ Halal Industry Development Corporation, "Halal Application Now Available for iPhone", website *HDC*, retrieved on 18th February 2014, http://www.hdcglobal.com/publisher/bu_hdc_iphone_app.

about halal eateries which are located at major locations, for example at shopping malls in Klang Valley.

The initiatives of the Malaysian government in the halal industry also can be viewed from the legal perspective. There are several statutes that protect consumers of halal goods and services in Malaysia. There are two regulations allotted under the Trade Description Act 1972, which are the Trade Descriptions (Use of Halal Expression) Order 1975 and the Trade Descriptions (Marking of Food) Order 197. The aims of these acts are to ensure the standard of goods offered to consumers and to protect misleading goods and services in the market. Indeed, Section 3 of the Trade Descriptions (Use of Halal Expression) Order 1975 is regarded as the first legal effort to conceptualize halal from a legal perspective. Below are descriptions related to the mentioned act⁷⁵ ;

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

⁷⁵ Trade Descriptions (Use of Halal Expression), 1975, (Act 281).

Another important initiative was the establishment of the National Consumer Advisory Council and the Tribunal for Consumer Claim under Malaysian Consumer Protection Act 1999. This act protects the rights of consumers in Malaysia including halal consumers. Alias Azhar (2012) stressed the role of the Trade Description Act 1972⁷⁶ in protecting consumers of halal food.

According to Zalina (2008), it is not an obligation of the manufacturer or food operators to declare their products as halal. However, if the products are proclaimed as halal, the halal regulations are applied and should be adhered to by the manufacturers or food operators.⁷⁷ The Food Act 1983 postulates that it is illegal for anyone to prepare, pack, label and sell any food in a false or deceptive manner. Adding to that, Food Regulations 1985 stated that it is mandatory to label food which contains beef, pork or its derivatives for the information of consumers. In addition, the Veterinary Department also plays its role in monitoring the slaughter of animals as according to the Animal Rule 1962.⁷⁸

According The Trade Description Act 2011, any confusing and misleading actions, for example, using Al-Qur'anic verses to deceive consumers that the food offered is halal is illegal. Involved individuals may be charged up to RM1 million for the first offence and/or prison of not more than 3 years and up to RM5 million and/or five years prison for a second offence. If the offence is committed by a company, a fine

⁷⁶ Alias Azhar, Harlida Abdul Wahab, Nurretina Ahmad Shariff, Muhammad Hafis Badarulzaman, "Perlindungan Pengguna terhadap Produk Makanan Halal: Tinjauan Hukum dan Undang-Undang di Malaysia" (proceeding, World Conference on Islamic Thought (WCIT), Sultan Azlan Syah University College, Ipoh Perak, 11-12 September 2012), 1-13.

⁷⁷ Zalina Zakaria, "Tapping Into the World Halal Market: Some Discussions on Malaysian Laws and Standard," *Shariah Journal* 16, Special Edition (2008), Kuala Lumpur, University of Malaya, 610.

⁷⁸ *Ibid*, 612.

up to RM5 million is charged for the first offence and RM10 million for the following offence.⁷⁹

There are two enactments under the Trade Description Act 2011; Trade Descriptions (Definition of Halal) Order 2011 and the Trade Descriptions (Certification and Marking of Halal) Order 2011. These two enactments protect consumers, especially Muslims who practise halal consumption. Trade Descriptions (Definition of Halal) Order 2011 described halal food or goods as below⁸⁰;

- a) Does not contain any amount of forbidden animal such as pork and has being slaughtered as according to *Shariah*
- b) Does not consist of any element which is non-halal as according to *Shariah*
- c) Does not intoxicate as according to *Shariah*
- d) Does not contain any part of a human being or its yield
- e) Is not poisonous or hazardous to health
- f) Has not been prepared, processed or manufactured using any instrument that is contaminated or unclean as according to *Shariah*
- g) Has not been prepared, processed, manufactured and stored in contact with or mixed or located close to any food or goods that fail to comply with conditions (a) and (b)

In addition, the Trade Descriptions (Certification and Marking of Halal) Order 2011 emphasizes on the authorized body to issue the halal certification. The Department of Islamic Development Malaysia (JAKIM) and the Islamic Religious Council (MAIN)

⁷⁹ Alias Azhar et.al, “Perlindungan Pengguna terhadap Produk Makanan Halal: Tinjauan Hukum dan Undang-Undang di Malaysia,” 1-13.

⁸⁰ Ministry of Domestic Trade and Cooperative and Consumerism, “Penguatkuasaan Tanda Halal,” website *Ministry of Domestic Trade and Cooperative and Consumerism*, retrieved on 4th April 2013, <http://www.kpdnkk.gov.my/en/pengguna/penguatkuasaan/tanda-halal>.

are the only competent authorities in Malaysia.⁸¹ Even though, it is arguable that the current law is still insufficient to govern the violation of halal in Malaysia,⁸² yet the exertion of the government in governing halal matters from a legal point of view seems enduring and commendable.

There is an interesting exploratory study of the Halal Sensitivity Index (HSI) conducted by Mohamad Aizat et al (2012) from the Halal Products Research Institute, University Putra Malaysia. This study measured the level of halal sensitivity among small and medium enterprise. The Halal Sensitivity Index (HSI) included seven indicators such as food sources, product processing, packaging, labeling, storing, logistic and marketing of halal products.⁸³ This is an important initiative in measuring the halal sensitivity among small medium enterprise to produce halal food for the benefits of Muslims and halal industry.

Another interesting study was a doctoral thesis by Sazelin (2012) on "*Konsep Halalan Tayyiban Dari perspektif Maqasid al Shariah dan Aplikasinya Dalam Prosedur Penentuan Makanan Halal di Malaysia*". This thesis discussed the concept of *ḥalālān ṭayyibān* from the *Maqasid Syariah* point of view and its application in the context of Malaysian halal certification. This study revealed that the concept of *ḥalālān ṭayyibā* in food has been adopted in halal food standard procedure and application. The author argued that there were some weaknesses that needed to be addressed by the authorities, particularly JAKIM in relation to the halal procedure and framework. Therefore, the concept of *Maqāsīd al- Sharīah* should be integrated in the execution of

⁸¹ *Ibid.*

⁸² Zalina Zakaria, "Tapping Into the World Halal Market," 613.

⁸³ Mohammad Aizat Jamaluddin, Mohd Anuar Ramli, Mariam Abdul Latif, "Indeks Sensitiviti Halal: Kajian Terhadap Pengusaha Perusahaan Kecil Sederhana (PKS) di Malaysia," (proceeding, International Halal Conference, University of Technology MARA, Kuala Lumpur, 4-5 September 2012),770.

halal certification. In particular, the concept of *maslahah* and *mafsadah* should be incorporated in the Malaysian halal food certification and operational system. This will ensure the application of *ḥalālan ṭayyiba* from the perspective of *Maqāsid al-Shariah* on halal food certification in Malaysia.⁸⁴

Another study related to halal certification discussed the evaluation of halal certification issued by JAKIM.⁸⁵ This study provides an analysis on halal certification in Malaysia and improvement that could be made in this aspect. Previously, the issue of misuse and abuse of halal logo and the implementation and enforcement of halal law in Malaysia were also discussed by Zulzaidi (2011).⁸⁶

Without a doubt, it is very crucial to efficiently manage and coordinate halal certification authorities and issues in one country. For example, in Indonesia, *Majlis Ulama'* had been given the authority to manage and issue halal certification. But at the same time, the Health and Religious Affairs Department has also been given certain jurisdiction on this matter. The poor coordination between the *Majlis Ulama'* Indonesia and the Health and Religious Affairs Department in managing halal matters had caused misgivings of the halal endorsement. Consequently, the halal certification was not given a greater attention by consumers in choosing halal food. Hence, it should be observed that a clear jurisdiction and coordination of different bodies in halal certification is important. In line with this thought, Malaysia has taken measures in defining and

⁸⁴ Sazelin binti Arif, "Konsep Halalan Tayyiban dari Perspektif Maqasid al Shariah dan Aplikasinya dalam Prosedur Penentuan Makanan Halal di Malaysia," (PhD thesis, University of Malaya, Kuala Lumpur, 2012).

⁸⁵ Lokman Ab. Rahman, "Penilaian Terhadap Perlaksanaan Persijilan Halal Jabatan Kemajuan Agama Islam Malaysia (JAKIM)", (PhD thesis, University of Malaya, Kuala Lumpur, 2012).

⁸⁶ Zulzaidi Mahmood, "Perlaksanaan dan Pemantauan Undang-Undang Halal di Malaysia: Kajian Terhadap Penyalahgunaan Logo Halal", (PhD Thesis, University of Malaya, Kuala Lumpur, 2011).

coordinating different bodies which involved in halal matters, for example JAKIM, the HDC and the State Religious Department.⁸⁷

In order to become a global halal hub, Malaysia needs to gain cooperation from halal manufacturers, traders and consumers.⁸⁸ To date, the Malaysian halal certification issued by JAKIM is well-accepted and highly recognized in the international market. In fact, the Malaysian Halal Standard MS1500:2004 launched by the Malaysian government was the first Halal Standard developed by any Muslim country. Furthermore this MS1500:2004 is in compliance with Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP). It is observed that the blueprint, incentives, monetary supports such as grants provided by the Malaysian government has strengthened the effort of Malaysia to appear as a global halal hub.⁸⁹

A qualitative study of “Value Chain of Halal Certification System: A Case of the Malaysia Halal Industry” deliberated the process and issues of the Malaysian halal certification system. The researchers conducted interviews with HDC officers to comprehend the halal certification process in Malaysia. In addition, this study reviewed documents related to halal certification in order to understand the process and practices of the Malaysian halal certification.⁹⁰ It stressed on two important issues related to halal certification. The first issue was related to the inefficiency of the halal certification

⁸⁷ Endang S. Soesilowati. “Business Opportunities for Halal Products in The Global Market: Muslim Consumer Behaviour and Halal Food Consumption,” *Journal of Indonesian Social Sciences and Humanities* 3 (2010) 151–160.

⁸⁸ Nik Maheran Nik Muhammad, Filzah Md Isa and Bidin Chee Kifli, “Positioning Malaysia as Halal Hub: Integration Role of Supply Chain Strategy and Halal Assurance System”, *ASEAN Social Science* 5, no. 7 (2009), 44.

⁸⁹ *Ibid*, 48.

⁹⁰ Nurulhuda Noordin, Nor Laila Md Noor, Mardziah Hashim and Zainal Samicho, “Value Chain of Halal Certification System: A Case of the Malaysia Halal Industry”, (proceeding, European and Mediterranean Conference on Information System (EMCIS2009), Dokuz Eylül University, Izmir Turkey, 13-14 July 2009), 1-14.

process. The second issue was related to the authority and governance between the federal government and state government in matters concerning halal.⁹¹

These two issues have been discussed in these few years and some actions have been taken to overcome these challenges for example, via the establishment of a focus group by Prime Minister's Department. This focus group was set up objectively to solve the inefficiency of the halal certification process.⁹² Even though, there is still a room for improvement in managing the halal certification, we cannot deny that the government had initiated a commendable effort in managing the halal issue in Malaysia.

Suhaimi Ab.Rahman and Jafri Abdullah (2011) edited a book about the halal management in Malaysia. This book consists of 10 chapters' which discussed the management of halal, particularly focusing on halal food and tourism in Malaysia. This book elaborated on the halal certification for restaurants in Malaysia. Halal certification for the food industry has been given attention due to the increased demand from consumers especially consumers who are more likely to eat out in urban areas.⁹³

Johan Fisher (2011) in his book "The Halal Frontier: Muslim Consumers in a Globalized Market", highlighted the initiatives of the Malaysian government in escalating the halal industry and consumption in the Malaysian society. He argued that the role of the government is important in protecting consumers in the halal markets. Indubitably, in the recent years the food issue has become political. He stated that the food issues, especially which are linked to religious and health factors have been given

⁹¹ *Ibid*, 1-2.

⁹² Unit Permodenan Tadbiran dan Perancangan Pengurusan Malaysia (MAMPU), "Inisiatif dan Impak Perlaksanaan Fokus Group Pengurusan Persijilan Halal" (Report, Jabatan Perdana Menteri Malaysia, 2012), 7-10.

⁹³ Suhaimi Ab.Rahman and Jafro Abdullah, ed., *Pengurusan Produk Halal di Malaysia*, (Serang: Universiti Putra Malaysia, 2011), 128.

attention by the government. Technically, the more Islamic consumption is practised in a society, the more the authority of halal is given to the government.⁹⁴

This book also discussed factors influencing the halal growth in Malaysia from three aspects. First and second reasons are the economic growth of the country and the emergence of the larger middle class consumers among Malay Muslims who are generally more concerned about halal. The third reason is the government's initiatives in halal production, trade and consumption.⁹⁵ However, how the initiatives of the Malaysian government influence consumers empirically were not addressed in his research. Therefore, there is a need to empirically investigate the influence of government initiatives on Muslim consumers in Malaysia, as proposed in this research.

Reviewing government initiatives in encouraging halal consumption seems incomplete without looking at the *Maqasid Shariah* point of view, as both are inseparable. The effective government indeed should fulfill the objectives of *Shariah* for the betterment of the people.⁹⁶ The concept of *Maqasid Shariah* explained by Mohammad Hashim Kamali (2008) was correlated with the effort of promoting halal consumption in the society. It was observed that purposes of *Maqasid Shariah* were included educating the individual (*tahdib al-fard*) and promising *maslahah* in the society.⁹⁷ In the same vein, an Islamic government should educate Muslims, particularly on halal food consumption in the society. Therefore, it could protect the *maslahah* of people as halal ensures safety, cleanliness and wholesomeness of the food.

⁹⁴ Fisher, *The Halal Frontier: Muslim Consumers in a Globalized Market*, 1.

⁹⁵ *Ibid*, 162.

⁹⁶ Sharifah Hayaati Syed Ismail al-Qudsy and Asmak Ab Rahman, "Effective Governance in the Era of Caliphate 'Umar Ibn al-Khattab (634-644)," 617.

⁹⁷ Mohammad Hashim Kamali (2008), *Maqasid Made Simple*, (London: The International Institute of Islamic Thought, 2008) 1.

In particular, the Islamic scholars have categorized *Maqasid Shariah* into three categories of objectives; which are *daruriyyat* (the essential), secondly *hajiyyat* or complementary and followed by *tahsiniyyat* or beautification.⁹⁸ The *daruriyyat* objectives are to protect faith, life, lineage, intellect and property. Halal food consumption is reflected in *daruriyyat* objectives, as an example the non-halal consumption, namely alcohol would be a threat to faith, life, lineage, intellect and properties.⁹⁹

In the context of Malaysia, JAKIM has played its role in the development of halal industry since 1974 in Malaysia. This includes certifying halal food and products produced by companies. From time to time, JAKIM has made improvements in managing halal matters in order to be more a reliable and competitive agency. Among the efforts of JAKIM was upgrading the halal certification procedure and standard.

Another initiative of the state government together with the Malaysian government was in the establishment of the RM50 million National Food Terminal (TEMAN) in Ipoh Perak. This Terminal aimed to be a major provider to the halal agriculture sector and as a one-stop halal distribution center. It was expected to become the country's biggest halal collection and distribution center for halal agricultural products. This project was another effort to ensure the realization of Malaysia as a halal hub.¹⁰⁰

At the national level, JAKIM collaborated with Department of Standards Malaysia SIRIM in adopting the MS15000:2004 to JAKIM's halal certification. In

⁹⁸ *Ibid*, 2-3.

⁹⁹ *Ibid*.

¹⁰⁰ Perak Halal Corporation Sdn Bhd, "Infrastructure and Facilities in Empowering Perak Halal", website *Perak Halal Corporation Sdn Bhd*, retrieved on 28th November 2013, <http://www.daganghalal.com/HalalProjects/InfrastructurePerakHalal.aspx>.

increasing the knowledge and awareness of people on halal, JAKIM has organized seminars, courses, exhibitions and awareness week in Malaysia. In addition, JAKIM has broadcasted their halal certification through media such as television and radio.¹⁰¹ Another study discussed the Malaysian Halal Standard (MS1500:2004) and the intentions of food manufactured to obtain halal certification. This study was based on the TPB as a theoretical framework and it was demonstrated that this framework is fit to predict the intention of halal manufacturers to obtain halal certification.¹⁰²

Other than halal certification, halal food quality development was also an important focus that should be given attention to by the government. This is because the demand of quality halal food is significant. From the consumers' point of view, the products' expiry date is examined first, then halal certification label, followed by ingredients and additives. 61% consumers agreed that halal food possessed a good quality of food and 84% agreed that the Malaysian halal logo guaranteed the authenticity of halal food. The idea of Malaysia to become a halal food hub was surveyed from the consumers' perspectives whereas 55% of them were confident that Malaysia will achieve its aim.¹⁰³

The Malaysian Standard and Quality News which was published in July 2004 is another important published document to be reviewed in relating government initiatives in halal food consumption. The document discussed many important initiatives of Standard and Industrial Research Institute of Malaysia (SIRIM) and other organizations in improving halal food consumption in Malaysia. It was reported that the Industry

¹⁰¹ Zawanah binti Muhamad, Munir bin Md Salleh, Abdul Muhaimin bin Mahmood, "Halal: antara Tuntutan Agama aan Strategi Ekonomi", (working paper, Seminar Pentadbiran Hal Ehwal Islami Di Malaysia, Institut Kefahaman Islam Malaysia, Kuala Lumpur, 6-7 August 2008), 24.

¹⁰² Mohamad Ijaz bin S. M. Mohiyaddin, "Malaysian Halal Standard (Ms1500:2004): Do Halal Food Manufacturers Have Intention to Be Certified?" (Master dissertation, University Sains Malaysia, 2006).

¹⁰³ Mariam Abd Latif, "Development of Halal Food System in Malaysia," (master dissertation, University Putra Malaysia, 2003).

Standards Committee on Halal Standards (ISCI) was established on 13th February 2003 primarily to standardize the management systems of food and non-food products from the Islamic perspective. The ISCI comprises of members from SIRIM, JAKIM, Department of Standard Malaysia (DSM), Federation of Malaysian Consumers' Association (FOMCA), Institute of Islamic Understanding Malaysia (IKIM), Ministry of Health, Federation of Malaysian Manufacturers (FMM), Ministry of International Trade and Industry (MITI), Ministry of Trade and Consumers Affairs and Malaysian Agriculture Research and Development Institute (MARDI). Among the ISCI project was the revision of MS 1500:2000 General Guidelines on the Production, Preparation, Handling and Storage of Halal Food. This guideline provided standard applied procedures for the preparation and handling of halal food in Malaysia.¹⁰⁴

The role of the Malaysian government was stressed by Hakimah Mohd Yusoff the Director of halal hub, JAKIM. She explained the role of JAKIM and state government in issuing halal certification, benefits of halal certification, compliance of halal elements and the establishment of a halal advisory panel. The halal food certification was regarded in her article as a powerful marketing tool and quality assurance for consumers.¹⁰⁵

The book of "*Pengertian halal dan prosedur permohonan sijil serta logo halal Malaysia*" discussed the concept of halal in relation to Malaysian halal certification. Mohd Khan Ayob elaborated the legal matters and procedure of applying halal certification with detailed information on the process of halal certification. He

¹⁰⁴ Zainon Mohd Janis, "Industry Standards Committee on Halal Standards (ISCI)," *Standard and Quality News*, July-August 2004, 10-11.

¹⁰⁵ Hakimah Mohd Yusoff, "Industry Standards Committee on Halal Standards (ISCI), *Standard and Quality News*, July-August 2004, 4-5.

highlighted issues of halal food preparation and halal certification in Malaysia.¹⁰⁶ This book is a good guide for those who want to understand the halal certification procedure and issues and for those who are involved in the halal food industry. However, since this book was published in 1997 some of the information, particularly information on the halal certification procedures were not pertinent due to some changes that have been made by the Malaysian government.

2.1.2.4. Gender and halal knowledge as moderating variables of halal food consumption

Gender is commonly included as a demographics factor in explaining food consumption in academic research. It is an important variable in explaining food consumption in different contexts of society. Gender was found significant in explaining variation in food preferences and consumption.¹⁰⁷

In the perspective of halal consumption, research demonstrated that the demographic backgrounds, for example residential areas, education level and age were found significant in influencing the degree of confidence on halal labeled food in Malaysia. However, gender was found insignificant in predicting consumers' confidence on halal labeled food.¹⁰⁸ This point was supported by findings of Mashitah et al (2013), which indicated that gender was not correlated with the respondents'

¹⁰⁶ Mohd Khan Ayob, *Pengertian Halal dan Prosedur Permohonan Sijil Serta Logo Halal Malaysia*, (Bangi: Universiti Kebangsaan Malaysia, 1997), 2-4.

¹⁰⁷ Athena H.N. Mak, Margaret Lumbers, Anita Eves and Richard C.Y. Chang, "Factors Influencing Tourist Food Consumption," *International Journal of Hospitality Management* 31, no.3 (2012), 931.

¹⁰⁸ Golnaz Rezai, Zainalabidin Mohamed, Mad Nasir Shamsudin, "Assessment of Consumers' Confidence on Halal Labeled Manufactured Food in Malaysia," *Pertanika Journal of Social Science and Humanities* 20, no. 1 (2012), 39.

awareness towards halal products and certification.¹⁰⁹ However, the sample of this study was at age of 30 years of and above and relatively small in number (52 respondents), to generalize the result to the population. Therefore, this study placed gender as a moderating variable in predicting the halal food consumption among Generation Y in Malaysian private universities in Klang Valley.

Johan Fisher (2005) also revealed the findings of his ethnographic research on halal consumption among urban Muslims. He found that female consumers were more concerned about halal and the younger generation were more exposed to halal discourse in Malaysia. Furthermore, the younger generation consumers had more freedom in choosing their own food and eat outside their house more frequent than an older generation.¹¹⁰ Female consumers are generally perceived as giving more importance to food attributes than male in selecting their food.¹¹¹

In general, education could have some influence on people's awareness of consumption. Gonaz Rezai et al (2009) concluded that Muslims who received religious education were more concerned with halal food compared to those who did not receive religious education.¹¹² In the present study, halal food consumption might be related to knowledge of halal and Islamic teachings on halal which is acquired in the University.

¹⁰⁹ Siti Mashitah A., Norhayati Rafida A.R, Alina A.R., "Perceptions towards Halal Awareness and Its Correlation with Halal Certification among Muslims," *Middle East Journal of Scientific Research* 13 (2013), 3.

¹¹⁰ Johan Fisher, "The Moderate and the Excessive: Malay Consumption in Suburban Malaysia" (PhD thesis, Roskilde University, 2005), 161-172.

¹¹¹ Anne C. Bellow, Gabriela Alcaraz V., William K. Hallman, "Gender and Food, A Study of Attitudes in The USA Towards Organic, Local, U.S. Grown And GM-Free Foods," *Appetite* 55, (2010), 549.

¹¹² Golnaz Rezai, Zainal Abidin Mohamed, Mad Nasir Shamsudin and Eddie Chew F.C., "Concerns for Halalness of Halal-Labelled Food Products among Muslim Consumers in Malaysia: Evaluation of Selected Demographic Factors," *Economic and Technology Management Review* 4 (2009), 65.

Therefore, halal knowledge acquired at the University is placed as a moderating variable, to analyse its influence on the behavioral intentions to consume halal food.

The Islamic Studies subject was taught as a compulsory subject to all Muslim students who enrolled to the University from 1996 until year 2013. This is stated in The Private Higher Educational Institution Act 1996 (Act 555) that private higher education institutions shall teach National Language, Islamic Studies (for Muslim students) and Moral Education (for non-Muslim students). All Muslim students were obliged to take and pass this subject as a pre-requisite to a certificate, diploma or degree graduation.¹¹³

The Islamic Studies subject was designed to produce Muslim students who understand the Islamic *tasawwur* as a unified and balanced way of life and to prepare them to face the different problems and challenges as Muslims. It consists of four major components on Islam and its basic concepts, Islamic civilization, Islamic institutions and the current challenges¹¹⁴. Topic of halal would be discussed on this subject especially in Islam and basic concepts, as well as current challenges faced by Muslims. Thus, halal knowledge could be acquired by Muslim students in the Malaysian private universities through this module. However, how the halal knowledge could enhance other factors in influencing the behavioral intentions of Muslim students to consume halal food is an inquiry of the present study.

Therefore, gender and halal knowledge acquired at the Malaysian private universities are placed as moderating variables, in exploring their role in explaining the behavioral intention of Generation Y in the Malaysian private universities to consume halal food. The moderating variables could explain further on what conditions the

¹¹³ Private Higher Learning Institutions Act, 1996, (Act No. 555, 1996).

¹¹⁴ *Ibid.*

attitude, subjective norms, perceived behavioral control, religiosity and government initiatives relate to the behavioral intentions to consume halal food. This is because moderating variable could specify conditions and implied an interaction effect enhancing, buffering or decreasing the effect of the independent variable.¹¹⁵

In a nutshell, none of the studies found investigated determinants influencing Generation Y Muslims' intentions in consuming halal food in Malaysian private universities. The role of religiosity as an additional independent variable, as well as gender and halal knowledge acquired the Malaysian private universities as moderating variables would contribute to the novelty of the research. Hence, it is feasible to research on the present study, as it could fill the knowledge gap, enrich the literature and enhance halal consumption and its industry in Malaysia.

2.2 Conceptual Framework

A conceptual framework is a graphic or narrative representation of the main variables or concepts and the assumed relationship between the variables. The conceptual framework could bring clarity, focus and communicate the ideas about the study. It may assist researchers in focusing and conceptualizing their thinking in the planning of his/her research.¹¹⁶

A number of frameworks were reviewed by a researcher in order to understand the behavioral intentions of consumers in choosing their food. However, Theory of

¹¹⁵ Joseph F. Hair JR., William C. Black, Barry J. Babin, Rolph E. Anderson, *Multivariate Data Analysis* (New Jersey: Pearson Prentice Hall, 2010), 177.

¹¹⁶ Punch, *Introduction to Social Research: Quantitative and Qualitative Approaches*, 56.

Reasoned Action (TRA) and Theory of Planned Behavior (TPB) were among the two conspicuous frameworks which were used in explaining Muslim consumers' choice of halal food and products.

The first framework TRA proposes two determinants influencing behavioral intention which are the attitude of the individual and subjective norms or social influence. This theoretical framework was proposed by Ajzen (1991). Based on TRA, Ajzen (1991) further developed the framework by including the "perceived behavioral control" variable. This innovative framework was known as the TPB.¹¹⁷

2.2.1 The Theory of Planned Behavior

The TPB is used for this study because of three reasons; firstly it has been proven as an effective theoretical framework in predicting consumers' behavior towards halal food (Syed Shah Alam & Nazura, 2011).¹¹⁸

Secondly, it is because the TPB incorporated "perceived behavioral control" as one of the determinant in determining consumers' intention. Indeed, perceived behavioral control was established as an influential variable in determining food preference. This is supported by Armitage & Corner (2001) who confirmed that perceived behavioral control is found as a significant determinant of consumer behavior.¹¹⁹

¹¹⁷ Ajzen and Fishbein, "Understanding Attitude and Predicting Social Behavior," 179.

¹¹⁸ Syed Shah Alam and Nazura, "Applying The Theory Of Planned Behavior (TPB) In *Halal Food Purchasing*," 8.

¹¹⁹ Christopher J. Armitage, and Mark Conner, "Efficacy of the Theory of Planned Behavior: A Meta-Analytic Review", *British Journal of Social Psychology* 40 (2001), 471.

Thirdly, the independent variables and dependent variable presented in the TPB are not contradicted with the Islamic perspective and is suitable to be tested on Muslim respondents. For example, subjective norms as an independent variable represents the influence of family, friends and society on the behavioral intention of an individual. According to Islam as well, the role of the family and society is important in shaping the behavior of Muslims.

According to TPB, intentions to perform the behaviors were influenced by the behavioral belief of three determinants; attitude, subjective norms and perceived behavioral control.¹²⁰ Behavioral beliefs yield a favorable or unfavorable attitude towards the behavior. Attitude normally acts as the main role in explaining consumer behavior.¹²¹ The construct of attitude in the TPB is based on the Expectancy-Value Model which explains the attitude as the degree of favorable and unfavorable cognitive and evaluative reactions on certain objects or matter. The attitude or people's evaluation is determined by their acceptance about the object or action which should have certain attributes.¹²² The attitude of halal food consumption might be related to the advantages of the halal food. For instance, the wholesomeness, cleanliness and food safety are among the positive attitude of halal food that consumers may perceive.

Secondly, normative beliefs are a perceived social influence or subjective norm. Subjective norm is a perceived social pressure for a person to perform certain behavior. The strength of subjective norm depends on the person's motivation to comply with other individual and groups approvals or disapprovals and preference on certain

¹²⁰ Wolfgang Stroebe, Miles Hewstone, ed., *European Review of Social Psychology*, (New York: Wiley, 2000), 1-28.

¹²¹ Icek Ajzen, "*Handbook of Consumer Psychology* (New Jersey: Lawrence Erlbaum, 2008), 530.

¹²² *Ibid*, 531.

behavior.¹²³ For example, family, friends and society could be the elements of subjective norms or social influence for a person to be motivated or unmotivated to perform the behavior. In the context of this study, family, friends and society might influence Generation Y to consume or not to consume halal.

Thirdly control beliefs are about perceived behavioral control or individual belief of how easy or difficult it is for a person to perform the behavior. A person's opportunities and resources might influence his/her behavioral intention. Technically, if the behavior is easy to perform in any context, without prejudice of any other influence, people tend to perform it. As in this study, perceived behavioral control refers to easiness and difficulty to consume halal food, for example the availability, price and variety of halal food available among Generation Y in Malaysian Private Universities.

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In sum, attitude towards the behavior, subjective norms, and perceived behavioral control, influence the formation of a behavioral intention in performing the behavior. As a general rule, positive attitude, favorable influence of subjective norm, and the higher perceived control should contribute to the individual's intention to perform the behavior. The intention is then expected to be the direct antecedent in performing the behavior.¹²⁵

In this study, attitude is the respondents' favorable or unfavorable evaluation to consume halal food, subjective norms are a perceived social influence of Generation Y

¹²³ Icek Ajzen, "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Processes* 50 (1991), 77

¹²⁴ Icek Ajzen, "Constructing a Theory of Planned Behavior Questionnaire", website *University of Massachusetts*, retrieved online by permission on 16th April 2013, <http://www.people.umass.edu/aizen>.

¹²⁵ *Ibid.*

consumers in consuming halal food. The third independent variable, perceived behavioral control is a belief about individual control of the ease and difficulty in consuming halal food. The original research model used in this study is based on the Figure 2.1.

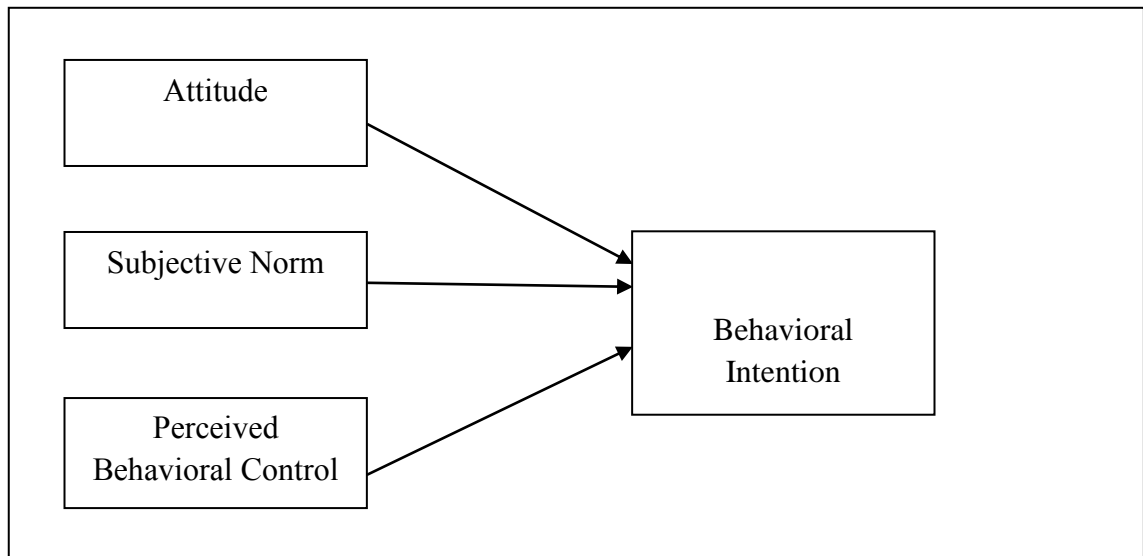


Figure 2.1. A Schematic diagram of TPB

Source: Icek Ajzen and Fishbein Martin, *Understanding Attitude and Predicting Social Behavior* (Eaglewood-Cliffs, New Jersey: Prentice Hall, 1991), 179.

2.2.2 The behavioral intention in consuming halal food and the concept of *Niyyat* from the Islamic perspective.

Many social scientists stressed on the importance of behavioral intention in predicting the behavior of individual and society. Indeed the importance of behavioral intention in predicting human behavior was adopted in many researches across the academic fields. This knowledge was conceptualized scientifically in some theoretical framework, for example, in the Theory of Planned Behavior (TPB) and the Theory of Reasoned Action (TRA). Ajzen (2006) stressed that determinants influencing behavioral intention are the beliefs of human beings about the possible consequences of the behavior, beliefs about

the normative expectations of others, and beliefs about the presence of factors that may ease or obstruct them from performing the behavior.¹²⁶

The TPB was found to be well supported by empirical research findings. The main ideas of TPB and TRA theories are the individual behaviors are guided by his/her behavioral intention. The importance of behavioral intention in engaging behavior was researched and discussed by many scholars. It was found that the stronger intention to perform a behavior, the more likely the behavior will be performed.¹²⁷

The importance of behavioral intention is likewise highlighted in the teaching of Islam. Imam al-Ghazālī discussed the importance of *niyyat* in his seven rules before eating. According to him, one should have a *niyyat* before eating; he or she would have less greed for food when he or she has a good intention of eating for the sake of his/her faith.¹²⁸ In fact, every human action either *'ibādah* or daily activities should begin by a good *niyyat*. The importance of *niyyat* was highlighted in the hadith below;

Umar ibn Al-Khattab reported: The Messenger of Allah, peace and blessings be upon him, said:

إِنَّمَا الْأَعْمَالُ بِالنِّيَّاتِ، وَإِنَّمَا لِكُلِّ امْرِئٍ مَا نَوَى، فَمَنْ كَانَتْ هِجْرَتُهُ إِلَى دُنْيَا
يُصِيبُهَا أَوْ إِلَى امْرَأَةٍ يَنْكِحُهَا فَهِجْرَتُهُ إِلَى مَا هَاجَرَ إِلَيْهِ .

¹²⁶ *Ibid.*

¹²⁷ Icek Ajzen, "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Processes* 50 (1991), 181.

¹²⁸ Al-Ghazālī, Muḥammad b. Muḥammad b. Muḥammad al-Ghazzālī, *Ihya' 'Ulum al-Din*, Book.2, (Beirut Lubnan: Dar al-Ma'rifah, 1982), 3-5.

Translation: Verily, deeds are only with intentions. Verily, every person will have only what they intended. So whoever emigrated to Allah and His Messenger, then his emigration is for Allah and His Messenger. Whoever emigrated to get something in the world or to marry a woman, then his emigration is for whatever he emigrated for.¹²⁹

‘Umar Sulayman al-Asyqar argued that *mubāḥ* actions that are normally the actions of daily life could be transformed to the good deeds if it was accompanied with a good *niyyat*¹³⁰. Few Islamic scholars for example Ibnu Qayyim and Imam al-Ghazali supported this opinion.¹³¹ Islam as a way of life provides a comprehensive guideline to human beings on daily behavior, for example actions like eating, drinking, exercising and sleeping.¹³² This view is closely related to food consumption, which is a daily life activity that could be turned to good deeds if accompanied by a *niyyat* for the sake of Allah SWT. However, in the context of halal food consumption, choosing halal food is compulsory and eating *ḥarām* food is forbidden for Muslims.

The importance of behavioral intention was stressed many times in the al-Qur’an. It is noted that the behaviors of mankind are based on their intentions. Allah SWT mentioned in the al-Qur’an:

¹²⁹ Hadith narrated by al-Bukhārī, Kitāb al-Imān, Bab Ma Jāa Inna al-A’māl bi Niyyati wa Hisbati wa likulli Imriin ma Nawā, Hadith no.54.

¹³⁰ ‘Umar Sulayman, *Al-‘Aqīdah fi Allah* (Jordan: Dar al-Nafa’is, 1999), 151.

¹³¹ Rushdi Ramli, “Nilai Ibadat Dalam Perbuatan-Perbuatan Harus (Al-Af’al al-Mubahah): Tinjauan terhadap Pemikiran Imam Ahmad Ibn Taymiyyah, *Jurnal Fiqh* 7, (2010), 154.

¹³² *Ibid*, 165.

قُلْ إِنِّي أُمِرْتُ أَنْ أَعْبُدَ اللَّهَ مُخْلِصًا لَهُ الدِّينَ

Al-Zumar 39:11

Translation: Say (O Muhammad): Verily, I am a commanded to worship Allah (alone) by obeying Him and doing religious deeds sincerely for His sake only.

Hence, it is observed that the role of behavioral intention in performing human behavior as discussed by current social scientist, particularly Ajzen the founder of TPB and TRA theories is not something new in Islamic teaching. In fact the concept and application of behavioral intention were reflected in the main sources of Islam; the al-Qur'an and al-Sunnah. The importance of behavioral intention was highlighted in performing '*ibadah* and daily activities.

Conclusively, behavioral intention is important for human beings in performing their behavior. There are some determinants that could influence the behavioral intention of human beings which has been discussed in the theoretical framework presented in this study. As to date, there is no established framework found in conceptualizing these determinants. Therefore, the TPB is adopted as a theoretical framework because of the comprehensiveness and adjustability of this framework. In addition, the TPB is not contradicting with the Islamic teaching and it has supported the concept of *niyyat* as prescribed in Islam.

2.2.3 Modification of the Theory of Planned Behavior

This study proposed the additional independent variable and moderating variable in predicting behavioral intentions of Generation Y in consuming halal food. The additional independent variable proposed is government initiatives in influencing halal

food consumption in Malaysia. In Malaysia, the government plays a certain role in influencing halal consumption. Government initiatives denote the efforts of HDC as the responsible body of Malaysian government, in promoting halal products and consumption in Malaysia.¹³³ The initiatives includes online and offline efforts to promote halal food consumption, for example halal campaign, publicity, seminar, halal kiosks and halal application initiated by the HDC. In fact, the role of the government in influencing halal food consumption was discussed theoretically, but none of the previous researches investigated its influence on halal food consumption. This new dimension of determinant could be explored in order to comprehend the halal consumption pattern among Generation Y Muslims in Malaysia.

The second independent variable proposed in this study is religiosity. This variable is proposed based on the root of halal consumption is based on religion which is the teaching of Islam. Islamic Religiosity comprises the Islamic worldview of the *tawhidic* paradigm and the Religious Personality paradigm. Islamic worldview reflects Muslims beliefs and *tawhidic* paradigm.¹³⁴ The *tawhidic* worldview encompasses the beliefs of Muslims as primarily described in the six pillars of Iman in accordance with the al-Qur'an and al-Sunnah.¹³⁵ The second paradigm which is Religious Personality reflects a manifestation of Muslims' belief into their actions, for example, performing

¹³³ HDC, "About HDC," website *HDC*, retrieved on 10th September 2013, <http://www.hdcglobal.com/publisher/about>.

¹³⁴ Steven Eric Krauss (Abdul-Lateef Abdullah), et al, "The Muslim Religiosity-Personality Measurement Inventory (MRPI)'s Religiosity Measurement Model: Towards Filling the Gaps in Religiosity Research on Muslims," *Pertanika Journal of Society, Science & Humanities* 13, no.2 (2005), 134.

¹³⁵ *Ibid*, 142.

the 5 pillars of Islam.¹³⁶ It is also cover the aspects of manners and *akhlak* of Muslims.¹³⁷

Furthermore, previous studies have established the importance of religiosity in halal consumption as discussed earlier in the literature review. Islamic religiosity encompasses the aspect of Muslim belief and action. From the human psychological point of view, the behavior of Muslims should be guided by their faith, including in the matter of daily consumption. This is because faith is a reflective psychological belief which control human behavior.¹³⁸ Thus, it is feasible that religiosity to be added in this framework to suit the substance of this study.

The moderating variable proposed in this study is gender. According to previous researches, gender has a certain degree of influence for consumers in choosing their food. Gender is placed as a moderating variable because the moderating variable could explain the mechanism that causes the relationship between independent variables and the dependent variable. In addition, gender is positioned as a moderating variable instead of a mediating variable¹³⁹ due to the nature of gender as a demographic variable which is more suited to be treated as a moderating variable.¹⁴⁰ Similarly, religious

¹³⁶ *Ibid*, 131-144.

¹³⁷ Azimi Hamzah, Krauss Eric Krauss (Abdul Lateef Abdullah), Sidek Mohd. Noah, Turiman S., Rumaya Juhari, Khairul Anwar Mastor, Jamiah Manap, Azma Mahmoud, & Hasnan Kassn, *Muslim Religiosity Personality Assessment: Prototype for Nation Building*, 2nd ed. (Serang: Institute for Social Science Studies, 2007), 17.

¹³⁸ Amber Haque and Yasien Mohamed, *Psychology of Personality: Islamic Perspectives*, (Singapore: Cengage Learning, 2009), 222.

¹³⁹ Baron and Kenny (1986) explain that the mediating variable is a third variable that identify the mechanism and process which occur between the relationship of an independent variable and a dependent variable.

¹⁴⁰ Reuben M. Baron and David A. Kenny, "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology* 51, no. 6, (1986), 1180.

education was revealed as having significant influence on halal food consumption.¹⁴¹ Thus, this study adds the halal knowledge acquired in the university as a moderating variable in exploring the influence of education on halal consumption.

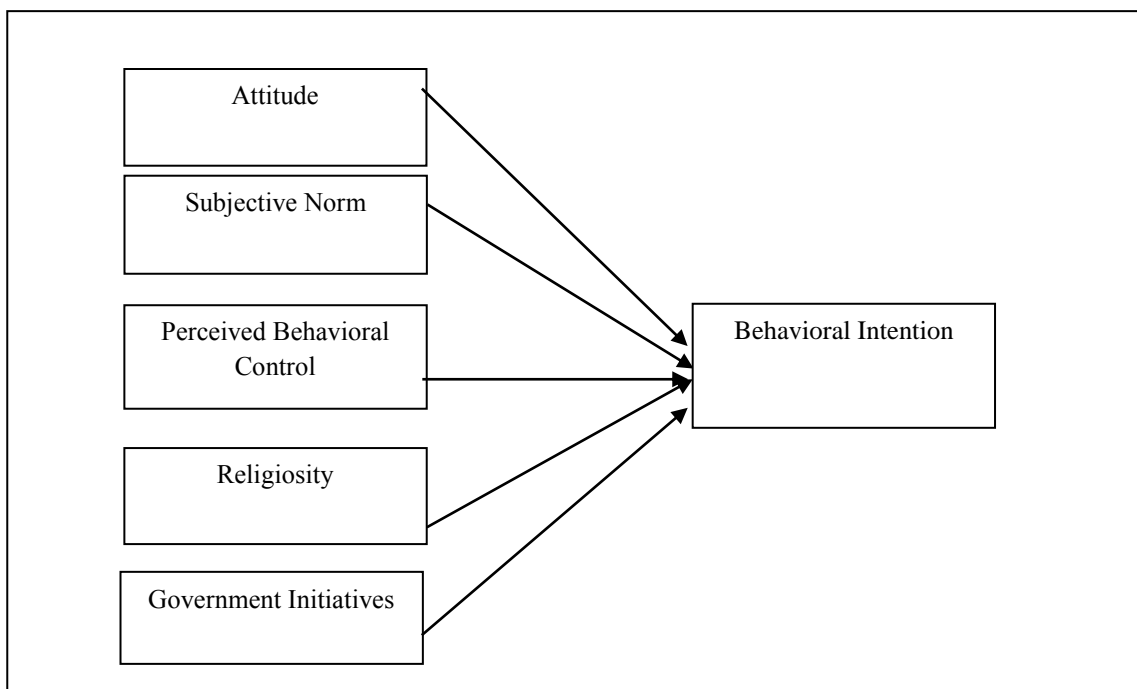


Figure 2.2. Modified Framework of TPB for Halal Food Consumption

Source: The framework is modified from Icek Ajzen and Fishbein Martin, *Understanding Attitude and Predicting Social Behavior* (Eaglewood-Cliffs, New Jersey: Prentice Hall, 1991), 179.

In general, The TPB as a conceptual framework for this study facilitates to identify the determinants influencing behavioral intentions of Generation Y Muslims in private universities in consuming halal food. It determines the relationship between determinants (independent variables and moderating variable) and behavioral intention in consuming halal food (dependent variable).

The results obtained from this study is based on this conceptual framework which enables the development of a new model that would provide answers on how well the TPB can predict behavioral intention of Generation Y Muslims in consuming halal food in private universities. Hence, the modification of the conceptual framework

¹⁴¹ Golnaz Rezai et al, “Concerns for Halalness of Halal-Labelled Food Products among Muslim Consumers in Malaysia: Evaluation of Selected Demographic Factors,” 65.

as shown in Figure 2, is an exploratory framework to establish a new model for the study and perhaps for the future studies.

2.3 Summary

Food consumption has been widely discussed from the business, psychology and sociological perspectives. From the Islamic point of view, food consumption is closely related to the practice of Islam as it involves the ruling of halal. The importance of consuming halal food has been deliberated in the al-Quran and al-Sunnah.

The importance of behavioral intention in food consumption is closely related to the concept of *niyyat* in halal food consumption particularly for Muslims. In general, there are three main determinants that have been discussed in predicting the food consumption among consumers. The three main determinants are positive or negative of people's attitude, social influence for example friends and family and perceived behavioral control which relates to perceived opportunities to consume food. However, looking at the food consumption from the Muslims' perspective and Malaysia as a country with Muslims being the majority, this study identifies two other predictors that may influence the behavioral intention of Muslims in consuming halal food. The two identified predictors adopted in the theoretical framework (TPB) are; religiosity of Muslim consumers and the initiatives of Malaysian government in influencing halal consumption in the country.

Applying the Theory of Planned Behavior (TPB) with added variables; religiosity and government initiatives could explain the behavior of Muslim consumers in consuming halal food. Thus, it could support in understanding the behavioral intention of halal food consumption among Generation Y Muslims and contributing to the body of knowledge in this field.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology used in this study. It outlines research philosophies, methodology and procedures employed to answer the research questions and to achieve the objectives of this study. This chapter divides the discussion into several sections, namely research design, sampling techniques, data collection procedures and data analysis procedures. It concludes with a discussion of ethical consideration taken in conducting this study.

3.2 Research Design

3.2.1 Research Philosophical Paradigms

Research philosophy is a belief about the way of gathering, analyzing, and using the data for the research. Generally, scholars categorize research philosophy into two paradigms which are positivism and interpretivism.

Positivism entrust that reality can be observed without the interference from the perceptions of those who observed it.¹⁴² It was found that all empirical studies are suited to this philosophy of research. Among the variations of positivism are explaining realities, regularities, relationship as well as physical and natural sciences. Positivism paradigm holds more quantitative than qualitative kind of research. Its research strategy could be based on empirical observation, theory verification and determining effects, outcomes or phenomenon. Normally, theories are tested, verified and refined in this

¹⁴² Wallace Walter, *Principles of Scientific Sociology* (New York: Aldine, 1983), 461.

philosophical paradigm. In this paradigm, the researcher develops a study with a theory that suits the inquiry and this is followed by collection of data to support or refute the theory.¹⁴³

The second philosophical paradigm is called interpretivism or some refer it as constructivism. It suggests that the reality of phenomenon could be understood with the intervention and interpretation of the researcher in its natural setting. It has been stressed that none of the first and second philosophical paradigms are better than the other.¹⁴⁴ Constructivism focuses on constructing and interpreting the reality in its own social setting. Different researchers may interpret and give meaning to the reality differently.¹⁴⁵ Most researchers who adopted this paradigm employed research strategies such as interviews, document reviews and observations. This method of research normally uses the inductive approach in interpreting meaning from the data collected in understanding the reality.¹⁴⁶ Indeed, researchers at their level best would interpret the subjective meanings of the experiences based on the participants' views of the phenomena which are being studied. As an outcome, researches would generate theory or framework based on the data collected.¹⁴⁷

Creswell (2009) categorizes the philosophical paradigms to four areas; post positivism, constructivism, participatory and pragmatism. Post Positivism is also known as positivism and constructivism which reflects the interpretivism philosophy have been

¹⁴³ John Wallace Creswell, *Research Design*, 3rd ed. (Los Angeles: SAGE (2009), 6.

¹⁴⁴ *Ibid*, 7.

¹⁴⁵ Herbert J. Rubin, H.J and Irene S. Rubin, *Qualitative Interviewing: The Art of Hearing Data*, (California: Sage Publication, 1995), 35.

¹⁴⁶ Creswell, *Research Design*, 9.

¹⁴⁷ *Ibid*, 8.

explained in the beginning of this chapter. The third philosophical paradigm elaborated by Creswell is the advocacy or participatory approach. The majority of research which adopts this paradigm uses qualitative research strategy. This paradigm believes that research inquiry needs active participation from the concerned individuals or groups, and at the end it relates to the political agenda of the country. This paradigm focuses on changing the practices and providing an action agenda on groups and individuals who may be overlooked in the society.¹⁴⁸ The fourth philosophical paradigm is pragmatism which uses the mixed method; quantitative and qualitative in understanding the problem. This philosophy believes that researchers should have a freedom to employ any method, technique and procedure which meets their needs and purposes of the research.¹⁴⁹

In determining which philosophical paradigm suits the study, it is inevitable for researchers to look at the nature of the inquiry of their research. As the nature of this study investigates the relationship or causal explanation of halal food consumption, the positivism philosophy seems to be the best paradigm for this study. In addition, it has been proven that research studying consumers' behavior is suited to embrace the positivism belief.¹⁵⁰ This research indeed shares the same characteristics with the main principle of positivism, where the researcher investigates the social behavior with an objective and scientific stance without the interference of the researcher.¹⁵¹

¹⁴⁸ *Ibid*, 9.

¹⁴⁹ *Ibid*, 10.

¹⁵⁰ Shelby D. Hunt, "Positivism and Paradigm Dominance in Consumer Research: Towards Critical Pluralism and Rapprochement," *Journal of Consumer Research* 18 (1991), 33.

¹⁵¹ Mark Saunders, Philip Lewis, and Adrian Thornhill, *Research Methods for Business Students*, 4th ed. (London: Prentice Hall, 2007), 108.

3.2.2 Research Approaches

There are two commonly used research approaches which are inductive and deductive approaches. Inductive approach is largely used in the qualitative kind of research, the deductive approach is mostly employed in quantitative type of research. Saunders (2007) described the process of deductive approaches employing the research design and strategies to test the theory, which is normally used in the mature case of inquiry. Whereas the inductive approach generally refer to the process of building the theory based on the data collected by the researcher.¹⁵²

This research used a deductive approach where knowledge is developed based on the TPB which is explained in details in the Theoretical Framework section. The TPB theory is considered a mature theoretical framework and it has been used in many studies related to food consumption.¹⁵³ In addition, to that reason this approach is applied due to the reason that this field is considered a mature case of inquiry.

3.2.3 Strategy of Inquiry

Firstly, library research was used in getting the data and knowledge related to this study, including identifying the right conceptual framework to be used in this study. Books, journals, thesis, newspaper report, websites and government reports and acts were utilized. Secondly, questionnaires are used to collect data from Generation Y Muslim consumers in Malaysian private universities within Klang Valley. This method is preferred because the nature of this study revolves around investigating the behavioral

¹⁵² *Ibid*, 109.

¹⁵³ Peter Marshall, *Research Methods: How to Design and Conduct a Successful Project*, (United States: How To Books, 1997) 17.

intentions of Muslims' consumers need to reach a large number of respondents because it can cover more respondents and a wider area, as well as the responses are free from influence and interruption from the researcher.

This study used the non-experimental design which is a survey. The survey can be defined as different pieces of information which are studied one piece at a time from the sample of targeted population.¹⁵⁴ Technically, there are two types of survey, namely normative or descriptive survey and correlational survey. Normative or descriptive survey is descriptive in nature and may not involve any variables. The second type is correlational survey which stresses on the relationship between variables, for example the study investigates factors and the effects of certain behavior.¹⁵⁵ Correlational survey was decided as a strategy of inquiry because this study is based on the relationship between variables. This relationship is based on the conceptual framework of Theory of Planned Behavior.

In this study, questionnaires are used to collect data from Generation Y Muslim consumers in Malaysian private universities within Klang Valley. This method is preferred because the nature of this study investigates the behavioral intentions of Muslims' consumers and this needs a large number of respondents. Correspondingly, Zainuddin Awang (2012) argued that the questionnaire has some advantages, for example, it can cover more respondents and wider area, as well as the responses are free from influence and interruption from the researcher.¹⁵⁶

¹⁵⁴ Punch, *Introduction to Social Research: Qualitative and Quantitative Approaches*, (London: SAGE Publication, 1998), 76.

¹⁵⁵ *Ibid*, 78.

¹⁵⁶ Zainuddin Awang, *Research Methodology and Data Analysis*, 2nd ed. (Selangor, University of Technology MARA Press, 2012), 96.

Guiding with the conceptual framework, the objective of this study in investigating determinants influencing behavioral intention of Generation Y in consuming halal food could be achieved. Therefore, the quantitative approach seems to be the best method which should be employed to acquire the data for this study.¹⁵⁷ The quantitative approach could also provide numeric explanations on the attitudes of the intended population. As another outcome, the findings of the study can be compared with other findings from previous studies.

3.2.4 Conceptualization

The conceptualization of research definition is important because it determines the construct and bridges the gap between theory and operational definition.¹⁵⁸ In the initial phase of this study, literature review was conducted comprehensively in order to understand the determinants influencing behavioral intentions in consuming halal, as well as the conceptual framework used in previous studies. From the literature review conducted, it was observed that the behavioral intentions of Generation Y Muslim consumers are still vague and could be explored further.

In conceptualizing the research definition, literature review was also conducted on theories that explained behavioral intention of human and halal consumption. A literature review was conducted comprehensively at this stage because there were indeed few studies developed to investigate the behavioral intention in consuming halal in general. However, how well was the literature developed in the area related to halal food consumption among the Generation Y still remains unclear.

¹⁵⁷ Creswell, *Research Design*, 3rd ed. (Los Angeles: SAGE, 2009), 18.

¹⁵⁸ Emmert and Barker, ed., *Measurement of Communication Behavior*, 23.

Hence, this study focuses on exploring the determinants influencing behavioral intention of Generation Y in consuming halal food in Malaysian private universities, using the Theory of Planned Behavior with the intervention of religiosity; in addition to the variable of government initiatives in influencing halal consumption. A comprehensive discussion on the conceptual framework was discussed in chapter 2.

3.2.5 Instrumentation

There were none of established instruments measuring behavioral intentions of halal consumption found. Therefore, the instrument used in this study was constructed by the researcher based on the literature, conceptual framework and discussion on this topic. Two main guidelines and steps were referred to when constructing the questionnaires. Firstly, the guideline written by Punch (1998) on the six steps in constructing an instrument in his book "Introduction to Social Research; Quantitative and Qualitative Approaches"¹⁵⁹ and secondly, the guideline written by Ajzen Icek (n.d) the pioneer of the TPB on constructing the TPB questionnaire.¹⁶⁰ The second guideline was used with the author's permission acquired through email.

To date, the exploratory paper using this instrument was presented in International Halal Conference in Kuala Lumpur on 9th September 2012 and the paper was published in Aiedah Binti Abdul Khalek, "Young Consumers' Attitude towards Halal Food Outlets and JAKIM's Halal Certification in Malaysia," *Procedia – Social and Behavioural Sciences*, no. 121 (2014), 26-34. Another paper entitled "Factors Influencing Young Muslims' Intention to Consume Halal Food in Malaysia" was

¹⁵⁹ Punch, *Introduction to Social Research: Qualitative and Quantitative Approaches*, 95-96.

¹⁶⁰ Ajzen, "Constructing a Theory of Planned Behavior Questionnaire", website *University of Massachusetts*, retrieved online by permission on 16th April 2013, <http://www.people.umass.edu/aizen>.

presented in the International Islamic Marketing Conference in Egypt on 17 December 2012. Part of the findings of this study was accepted by the Shariah Journal published by the University of Malaya. On 22-23 June 2014, a paper title “Why Are We Eating Halal? Using the Theory of Planned Behavior in Predicting Halal Food Consumption among Generation Y in Malaysia” was presented by the author and awarded as the Best Paper in 2nd International Conference on Sociality Culture and Humanities in Moscow Russia. This paper was published in the International Journal of Social Science and Humanity 5, no. 7, 608-612. In a nutshell, the instrument used in this study has been reviewed and accepted by few conferences and journals reviewers.

3.2.5.1 General Guidelines Used in Constructing Questionnaire

This study follows six main steps in constructing a questionnaire which was outlined by Punch (1998), as shown in the flow chart 3.1. The first step is describing, mapping and specifying the indicators of variables.¹⁶¹ In the context of this study, variables of attitude towards halal food consumption, the influence of subjective norms, perceived behavioral control of halal food consumption and government initiatives in influencing halal food consumption, religiosity and behavioral intention in consuming halal food are considered.

Secondly, the researcher needs to decide on the measuring technique used in the questionnaire.¹⁶² The 5-point Likert scale developed by Rensis Likert is used in this study because it allows the respondents to express the degree of agreement and disagreement with statements in the questionnaires, thus it could be used for statistical

¹⁶¹ Punch, *Introduction to Social Research: Qualitative and Quantitative Approaches*, 95.

¹⁶² *Ibid.*

analysis.¹⁶³ The researcher also observed that the 5-point Likert scale is easier to understand for young respondents and they could provide answers faster to the statements compared to 7-point scale and above.

Next, the researcher generates items for each construct based on the theoretical guidelines provided by Ajzen (1991) for Theory of Planned Behavior. In addition to that, a few items were generated in the construct based on the discussion between researcher and Generation Y Muslims on determinants influencing them to consume or not to consume halal food. Nevertheless, some items were included in the questionnaires based on the reading and literature, especially items on attitude and religiosity constructs.

The fourth step is going through the draft of questionnaires in a focus group of 5-6 typical respondents. This is important in ensuring the goodness of the items so they are understandable and easy for the respondents to respond to.¹⁶⁴ The second draft of the questionnaires then went through the pre-test procedure with 25 respondents. The pre-test process used “protocol analysis” whereby the respondents were treated as collaborator and they were informed about the pre-test activity as a refinement process of the questionnaire.¹⁶⁵ The amendments were made based on their feedback and good items were selected for each dimension.¹⁶⁶

In addition to these six steps the questionnaires also went through review by 3 experts from three different Universities in ensuring its content validity and statistical

¹⁶³ Zainuddin Awang, *Research Methodology and Data Analysis*, 100.

¹⁶⁴ Punch, *Introduction to Social Research: Qualitative and Quantitative Approaches*, 96.

¹⁶⁵ Zainuddin Awang, *Research Methodology and Data Analysis*, 153.

¹⁶⁶ *Ibid.*

suitability. Then, the researcher sent the questionnaire for another expert's review to ensure the accuracy and readability of the language used. A pilot language test was conducted to ensure that respondents can understand correctly the language used in the questionnaire.

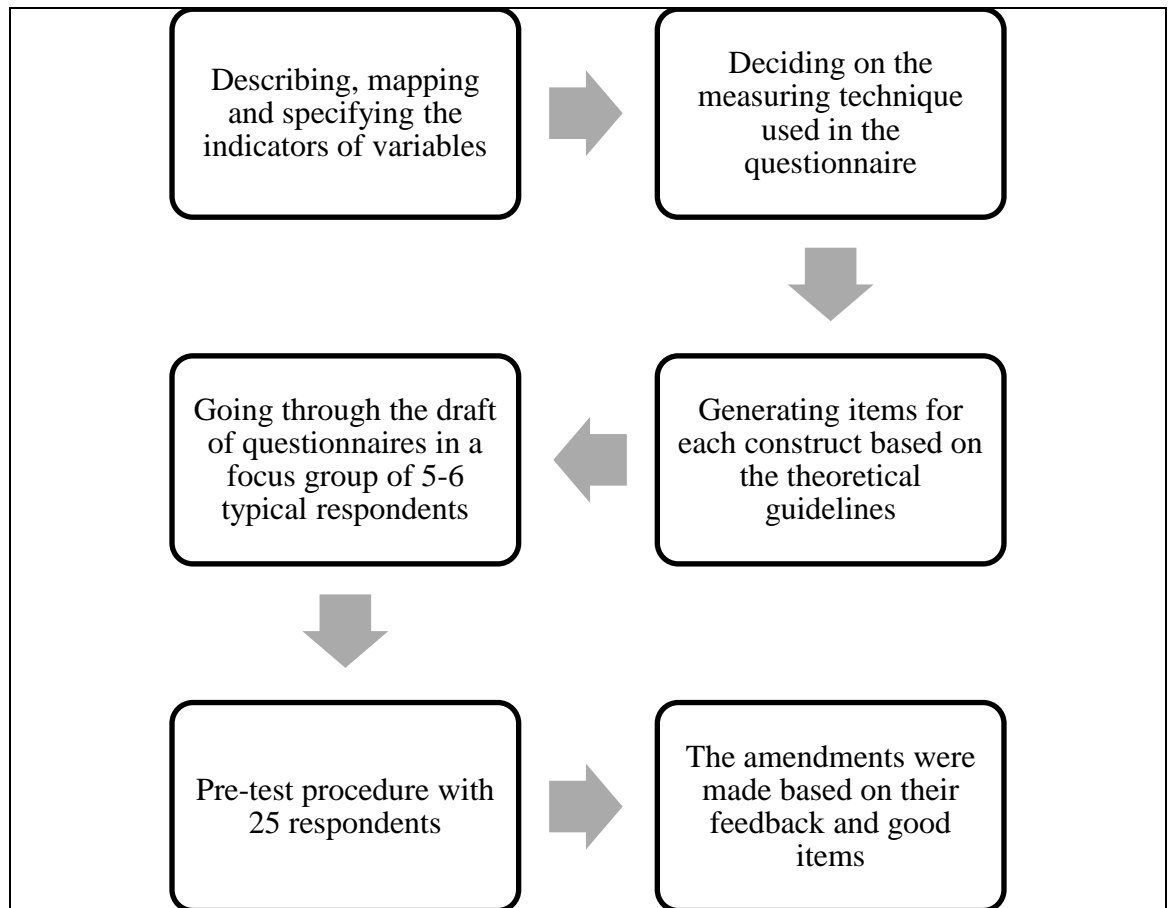


Figure 3.1 Flow Chart: Six Main Steps in Constructing a Questionnaire

Source: Punch, Introduction to Social Research: Qualitative and Quantitative Approaches, 95.

3.2.5.2. Guideline Used in Constructing a TPB Questionnaire

The second guideline which followed the construction of the questionnaire of this study is provided by Ajzen (n.d).¹⁶⁷ This guideline suggested several steps in constructing

¹⁶⁷ Icek Ajzen is a pioneer of the TPB and a Professor Emeritus of Psychology in University of Massachusetts United States of America.

questionnaires using the TPB as a backbone. Firstly, the researcher needs to define the behavior of interest, in terms of the elements of its target, action, context, and time. Secondly, the researcher has to specify the research population that the research will be conducted¹⁶⁸, for example, this study refers to Generation Y and other characteristics of the respondents. Next, the researcher proceeds with formulating items for measuring the construct. A minimum of five items should be formulated to assess each construct. The constructs are attitude, subjective norm, perceived behavioral control, and behavioral intention. Ajzen (n.d) stressed that the formulated items should be to be accurately “compatible with the behavioral criterion and to be self-directed”.¹⁶⁹

After the items are formulated, a small sample of individuals who can represent the population is used to administer the pilot questionnaire. Then, data obtained from the pilot questionnaire is employed in selecting reliable and valid items in the measured construct for the final questionnaire. All items should reach the acceptable degree of alpha coefficient. The item which did not reach the acceptable alpha coefficient should be dropped in order to maintain the reliability of the construct. For this study, two items with low alpha coefficient were dropped in order to maintain the instrument’s reliability.¹⁷⁰

Then, the validity of the questionnaire also needs to be explored and confirmed. Exploratory Factor Analysis (EFA) could be used as the means in achieving this objective and it can be used as a tool to reduce the measurement errors. Last but not least, the pilot questionnaire included the demographic characteristics and social

¹⁶⁸ Icek Ajzen, "Constructing a Theory of Planned Behavior Questionnaire", website *University of Massachusetts*, retrieved online by permission on 16th April 2013, <http://www.people.umass.edu/aizen>.

¹⁶⁹ *Ibid*, 2.

¹⁷⁰ *Ibid*, 5.

structure variables, for example age, gender, ethnicity, education, residence and so on.¹⁷¹

3.2.5.3 Instrument Development

Items on attitude, subjective norm, perceived behavioral control, behavioral intentions, religiosity and government initiatives in promoting halal consumption are constructed by the researcher. The researcher also looked at some previous questionnaires done by the others in the same field in constructing the instrument, for example instrument used by Syed Shah Alam (2011)¹⁷², Suddin Lada et al (2009)¹⁷³ and Steven Krauss (2005)¹⁷⁴. All constructs consist of more than five items, where a minimum of four items is needed in measuring any construct.¹⁷⁵

Three items from the subjective norm construct was taken and amended from Suddin Lada et al (2009). The three items were;

1. My family members prefer halal products.
2. My friends would think that I should choose halal.
3. Most people who are important to me choose the halal products.

¹⁷¹ *Ibid*, 5.

¹⁷² Syed Shah Alam et al., "Is Religiosity An Important Determinant On Muslim Consumer In Malaysia?" 83-96.

¹⁷³ Suddin Lada et.al, "Predicting Intention to Choose Halal Products Using Theory of Reasoned Action," 66- 76.

¹⁷⁴ Krauss et al., The Muslim Religiosity-Personality Measurement Inventory (MRPI)'S Religiosity Measurement Model: Towards Filling the Gaps in Religiosity Research on Muslims, 131-144.

¹⁷⁵ Zainuddin Awang, "*Structural Equation Modelling using AMOS Graphic*", 1.

One item of behavioral intention “I will choose halal products” were also taken and amended from this journal¹⁷⁶.

Six out of twenty two items in religiosity construct were adopted from the study of Syed Shah Alam et al (2011) in his paper “Is Religiosity an important determinant on Muslim Consumer in Malaysia?”¹⁷⁷ The six items are listed as below;

1. I regularly offer prayer five times a day.
2. I fast regularly in the month of Ramadhan.
3. I pay *zakat fitrah* every year if I meet the prescribed criteria.
4. I try to follow Islamic injunctions in all matters of my life.
5. I regularly recite the holy Al-Qur’an.
6. I always try to avoid minor and major sins.

Two items were not used because of the following reasons;

- a. I always keep myself away from earning through *haram* means.

Reason: Respondent for this study are not earning because they are students in Private Universities.

- b. I always pray Friday prayer every week.

¹⁷⁶ Suddin Lada et.al, "Predicting Intention to Choose Halal Products Using Theory of Reasoned Action," 66- 76.

¹⁷⁷ Syed Shah Alam et al., “Is Religiosity An Important Determinant On Muslim Consumer In Malaysia?” 83-96.

Reason: Respondents in this study are male and female; if this item is included, it would lead to confusion for female respondents.

The religiosity construct in this study was based on the Muslims Religiosity Measurement Model (MRPI) as proposed by Krauss et al (2005).¹⁷⁸ The MRPI survey items were developed based on two paradigms of religiosity; which are Islamic worldview of Tawhidic Paradigm and Religious Personality. Islamic worldview of Tawhidic paradigm refers to a level of agreement with statements relating to pillars of Islam for example believing in Allah, Angels, Messengers and Prophets of God, Books of Revelation, The Day of Judgment, and *Qada'* and *Qadar*. The second paradigm is the Islamic religiosity which represents the manifestation of religious worldview in worship (*'ibadah*) and good deeds.¹⁷⁹

The number of items projected below have gone through all steps in constructing questionnaires by Punch (1998) and Ajzen (n.d). Following Creswell's style of variable classification, the items used for this study are classified into groups of independent variable (IV), dependent variable (DV), and moderating variable (MV) as shown in the table 3.1;

¹⁷⁸ Krauss et al., The Muslim Religiosity-Personality Measurement Inventory (MRPI)'S Religiosity Measurement Model: Towards Filling the Gaps in Religiosity Research on Muslims, 140-141.

¹⁷⁹ *Ibid*, 140-141.

3.1. Variable Classification, Items and Research Questions

Variable Name	Research Questions	Items	Source of items
<p>IV 1:Attitude</p> <p>Role: To predict determinants influencing behavioral intention of Generation Y Muslims in consuming halal food.</p>	<p>How significant is the effect of attitude on the behavioral intention of Generation Y Muslims in consuming halal food</p>	<p>Items A1-A8</p>	<p>The researcher</p>
<p>IV 2:Subjective Norms</p> <p>Role: To predict determinants influencing behavioral intention of generation Y Muslims in consuming halal food.</p>	<p>How significant is the effect of social influence on the behavioral intention of Generation Y Muslims in consuming halal food?</p>	<p>Items S1-S5</p>	<p>Suddin Lada (2009)</p> <p>The Researcher</p>
<p>IV 3:Perceived Behavioral Control</p> <p>Role: To predict determinants influencing behavioral intention of Generation Y Muslims in</p>	<p>How significant is the effect of perceived behavioral control on the behavioral intention of Generation Y Muslims in consuming halal</p>	<p>Items BC1-BC5</p>	<p>The researcher</p>

consuming halal food.	food?		
IV 4: Government Initiatives in promoting halal consumption Role: To predict determinants influencing behavioral intention of Generation Y Muslims in consuming halal food.	How significant is the government initiatives in influencing behavioral intentions' of Generation Y Muslims in consuming halal food?	Items G1-G13	The researcher based on government initiatives by HDC. (www.hdcglobal.com)
IV: Religiosity Role: To predict determinants influencing behavioral intention of Generation Y Muslims in consuming halal food.	How significant is the religiosity factor in influencing behavioral intentions' of Generation Y Muslims in consuming halal food?	Items R1-R20	Syed Shah Alam (2009) Steven Krauss et al (2005)
MV: Gender Role: To moderate the influence of 4 determinants (IV) with the intervention of gender (MV) towards the behavioral intention (DV) of Generation Y	Do gender and halal knowledge acquired at the Private Universities moderate the determinants of behavioral intentions' in consuming halal	Gender item in demographic background	The researcher

Muslims in consuming halal food.	food among Generation Y Muslims?		
MV: Halal knowledge acquired at Private Universities. Role: To moderate the influence of 5 determinants (IV) with the intervention of Halal knowledge acquired at Private Universities (MV) towards the behavioral intention (DV) of Generation Y Muslims in consuming halal food.	Do gender and halal knowledge acquired at the Private Universities moderate the determinants of behavioral intentions' in consuming halal food among Generation Y Muslims?	Halal knowledge item in socio demographic background	The researcher
DV: Behavioral Intention	Relates to all the above research questions	Items B1-B7	Suddin Lada (2009) The researcher

Statistical tests were used in the pilot study and actual study in ensuring the validity and reliability of the constructed questionnaire. Below are the list of items measuring the six constructs namely attitude, subjective norms, perceived behavioral control, government initiatives, religiosity and behavioral intentions.

a) Eight (8) Items Measuring Attitude of Halal Food Consumption

Eight items were formulated in measuring attitude of Generation Y towards halal food consumption.

Table 3. 2. List of Items Measuring the Construct of Attitude

A1	Eating halal food is important for me.
A2	I trust to consume halal food compared to non-halal food.
A3	Halal food is clean.
A4	Halal food is cleaner compared to non-halal food.
A5	Halal food is safe to eat.
A6	Halal food is safer to eat compared to non-halal food.
A7	Halal food is healthy.
A8	Halal food is healthier compared to than non-halal food.

b) Five (5) Items Measuring Influence of Subjective Norms towards Halal Food Consumption

At first, seven items were formulated measuring the influence of subjective norms in the questionnaire. But two items were dropped after the data from pilot study shown low alpha coefficient. The two dropped items are; i) People's perceptions affect my decision in choosing halal or non-halal food, ii) I feel shy with people around me if I eat non-halal food.

An item adopted from Suddin Lada (2009) “My friend would think that I should choose halal food” was added in this construct.¹⁸⁰ The item of “Eating halal food is being practised in my family” was dropped after the EFA was conducted.

Table 3.3. List of Items Measuring the Construct of Subjective Norms

S1	Most people who are important to me choose halal food.
S2	People can influence me to eat halal food.
S3	My family members prefer halal food.
S4	My friends think that I should choose halal food.
S5	My family imposes on me the importance of eating halal food.

c) Five (5) Items Measuring Perceived Behavioral Control

Initial number of items formulated was four, but based on comments made by Dr. Arni Basir in the questionnaire validation process; one more item (BC5) on halal food price was added.

Table 3.4. List of Items Measuring the Construct of Perceived Behavioral Control

BC1	It is easy to find halal food in Malaysia.
BC2	It is easy to find halal food in my University.
BC3	I always have a chance to eat halal food.
BC4	There are many choices of halal food in my University.
BC5	The price of halal food is reasonable.

¹⁸⁰ Suddin Lada et al., "Predicting Intention to Choose Halal Products Using Theory of Reasoned Action", *International Journal of Islamic and Middle Eastern Finance and Management* 2, no. 1 (2009), 70.

d) Thirteen (13) Items in Government Initiatives Construct

There were thirteen (13) items formulated for government initiatives in promoting halal consumption in Malaysia. All these items were formulated based on the initiatives of HDC in promoting halal consumption.

Table 3.5. List of Items Measuring the Construct of Government Initiatives

G1	I have read written materials (newspapers/magazine/brochures..etc.) about halal topics in Malaysia.
G2	I have read written materials (newspapers/magazine/brochures..etc.) about halal matters provided by the Malaysian government.
G3	Written materials about halal consumption influences me to consume halal food.
G4	I have accessed a government website for information on halal consumption in Malaysia.
G5	The information on the government website about halal consumption influences me to consume halal food.
G6	I have watched halal programmes providing information on television.
G7	Halal information on television has influenced me to consume halal food.
G8	I am aware of halal trainings/conferences/exhibitions about halal matters.
G9	I have attended halal training/conference/exhibition about halal matters.
G10	I am aware that halal kiosks are available in Malaysia.
G11	I have used halal kiosks to check on halal products in Malaysia.
G12	I am aware that there is a halal application in Malaysia.
G13	I use the halal application on my smart phone/ computer.

e) Nine (9) Items in Behavioral Intentions to Consume Halal Food

Initially, there were seven items formulated in behavioral intention construct. But two items (B18 and B19) were added after the EFA was conducted and these two items were loaded in this construct. The two items were “I consume only halal food” and “I consume only halal food because it is an Islamic ruling”.

Two items were removed and replaced by the other two items based on the remark raised by Associate Professor Dr. Asmat Nizam Abdul Talib regarding the scope of halal food in this study. The two items are 1) I do not drink alcoholic beverages, 2) I check halal certification before I purchase any drink. They were replaced with items BI6 “I will make sure that the food is halal before I purchase it” and BI7 “I will not consume the food if it is prepared using any non-halal ingredients for example alcohol”.

Table 3.6. List of Items Measuring the Construct of Behavioral Intentions

BI1	I will not eat if the food is non-halal.
BI2	I will not eat if the food is doubted as halal.
BI3	I will eat in halal food outlets only.
BI4	I will eat halal food only.
B15	I will make sure that the food is halal before I consume it.
BI6	I will make sure that the food is halal before I purchase it.
BI7	I will not consume the food if it is prepared using any non-halal ingredients for example alcohol.
B18	I consume halal food only.
B19	I consume halal food because it is an Islamic ruling only.

f) Twenty (20) Items in Religiosity Construct

The initial number of items in religiosity construct was six. But one of the panels in Proposal Presentation on 7th February 2013 suggested adding items for this construct. Thus, the researcher referred to numerous literatures on religiosity construct, and then the researcher added another 16 items. But two items from these sixteen items were removed based on the output of EFA, as mentioned earlier. The dimensions of religiosity construct used in this study were based on the MRPI by Steven Krauss @ Abdul Lateef Abdullah (2011).¹⁸¹ In sum, there are twenty items in this construct.

Table 3.7. List of Items Measuring the Construct of Religiosity

R1	I believe that there is no God except Allah SWT.
R2	I believe that Prophet Muhammad SAW is the last messenger of Allah.
R3	I believe in the al-Qur'an.
R4	I believe in the al-Sunnah.
R5	I believe in the Prophets of Allah.
R6	I believe in the Judgement day (<i>Qiamah</i>)
R7	I believe in <i>Qada'</i> and <i>Qadar</i>
R8	I believe that as a human being, I belong to Allah SWT.
R9	I believe that the main purpose of this life is to perform ' <i>ibadah</i> to Allah
R10	I pray regularly five times a day
R11	I fast regularly in the month of Ramadhan
R12	I perform/will perform haj when I can afford to do so

¹⁸¹ Krauss et al., "The Muslim Religiosity-Personality Measurement Inventory (MRPI)'S Religiosity Measurement Model: Towards Filling The Gaps In Religiosity Research On Muslims," *Pertanika Journal of Society, Science & Humanities* 13, no.2 (2005), 131-144.

R13	I pay <i>zakat fitrah</i> every year if I fulfil the prescribed criteria
R14	I regularly recite the holy book of al Al-Qur'an
R15	I always try to avoid minor sins
R16	I always try to avoid major sins
R17	I try to follow Islam in all matters of my life
R18	I try to maintain a good behaviour (<i>akhlak</i>)
R19	I try to maintain good relationship with other Muslims fellow
R20	I try to maintain good relationship with non-Muslims

g) Additional information on the attitude and awareness of halal certification

Dr. Siti Arni Basir as the first expert validator for the questionnaires suggested adding more items to enhance data and discussion of this study. Therefore, researcher has added seven items on the attitude and awareness of halal certification. These seven items were also validated and had gone the pretest and pilot study.

Table 3.8. List of Items Measuring the Construct of Attitude and Awareness of Halal Certification

C1	Halal certification is important for me.	1	2	3	4	5
C2	I trust halal certification which ensures that the food is halal.	1	2	3	4	5
C3	I look at halal certification before I purchase the food.	1	2	3	4	5
C4	I will not buy food which does not have any halal certification.	1	2	3	4	5
C5	I dine in halal certified food outlets only.	1	2	3	4	5

C6	I check for halal certification before I purchase any food.	1	2	3	4	5
C7	I trust the Malaysia Department of Islamic Development (JAKIM)'s halal certification only.	1	2	3	4	5

3.2.5.4 Validity and Reliability

Several measures and statistical tests in the Statistical Package for Social Sciences (SPSS) version 20, were used to check the validity and reliability of the instruments.

Validity can be described as the extent to which the instrument measures what it is supposed to measure.¹⁸² Validity measures were tested in two folds which are content validity and construct validity. The details of validity measures are explained in the following section. Face validity, expert validity and exploratory factor analysis were conducted to ensure the content validity and construct validity are satisfactory for the instruments used.

Reliability is a measurement of the instrument consistency, normally refers to internal consistency and consistency over time. Internal consistency basically measures the item responses across constructs. Secondly, consistency over time measures the score of stability when the instrument is administered for a second time. This can be measured using test retest reliability, which requires two administrations of the instrument.¹⁸³

¹⁸² Punch, *Introduction to Social Research: Qualitative and Quantitative Approaches*, 90.

¹⁸³ Creswell, *Research Design*, 3rd ed. (Los Angeles: SAGE, 2009), 18.

To test the consistency over time, the instrument was tested on two occasions, four weeks apart, and correlations for all items in these two tests were above 0.7 which indicate the stability over time were achieved for all items. Overall, Pearson's correlation coefficient was 0.825 (n=50), indicating reasonable test-retest validity. As according to Nunnally (1978) test retest measures are adequate and acceptable if the correlation coefficient is equal or greater than 0.7. The internal consistency of the instrument was measured using the SPSS Cronbach alpha test. Cronbach's alpha is one of the most extensively used to test reliability in a survey research. According to Punch (1998), the coefficient Cronbach alpha was used because this reliability test is the most appropriate and established in testing the reliability of the instrument in research.¹⁸⁴

For this study, the reliability of the items were at a minimum alpha 0.7, as 0.7 is an acceptable alpha for Social Sciences study.¹⁸⁵ However, some scholars accept the reliability of items of the Cronbach's alpha of minimum 0.6.¹⁸⁶ The basic guideline in interpreting the test is shown in the table 3.9:¹⁸⁷

Table 3.9. A Rule of Thumb to Interpret Cronbach's Alpha

Value of Cronbach's Alpha	Reliability
$\alpha > 0.9$	Excellent
$\alpha > 0.8$	Good
$\alpha > 0.7$	Acceptable

¹⁸⁴ Punch, *Introduction to Social Research: Qualitative and Quantitative Approaches*, 99.

¹⁸⁵ Jum C. Nunally & Berstein Ira. H., (1978), *Psychometric Theory*, 2nd ed. (New York: McGraw-Hill, Inc., 1978), 245.

¹⁸⁶ Zainuddin Awang, *Research Method'ology and Data Analysis*, 200.

¹⁸⁷ Pankit S.Gandhi, "Calculating and Interpreting Reliability Estimates for Achievement Test in Graph Theory (A Modern Branch of Mathematics)," *International Indexed & Referred Research Journal* 5, no. 37 (2012), 37.

$\alpha > 0.6$	Questionable
$\alpha > 0.5$	Poor
$\alpha > 0.4$	Unacceptable

Source: Pankit S.Gandhi, “Calculating and Interpreting Reliability Estimates for Achievement Test in Graph Theory (A Modern Branch of Mathematics),” *International Indexed & Referred Research Journal* 5, no. 37 (2012), 37.

DeVellis (2003) provide more details for the acceptable reliabilities for research, instrument scales as shown in Table 9.¹⁸⁸ The researcher uses the table 3.10 for interpreting the items reliability in this study.

Table 3.10. Internal Reliability Consistency

Value of Cronbach’s Alpha	Reliability
much above .90	consider shortening the scale
between .80 and .90	very good
between .70 and .80	respectable
between .65 and .70	minimally acceptable
between .60 and .65	undesirable
below .60	Unacceptable

Source: DeVallis R. F. (2003). *Scale Development Theory and Application*, 2nd ed. (London: Sage Publication, 2003), 85.

3.2.5.5 Content Validity

Experts define content validity in many ways. Among the definitions used for content validity are; sampling adequacy of the test, the practical quality of the test item and the applicability of the test content to a content universe. It is important to ensure that the content is valid. Therefore, the samples of questionnaires are representative and

¹⁸⁸ DeVellis R. F. (2003). *Scale Development Theory and Application*, 2nd ed. (London: Sage Publication, 2003), 85.

interpretable.¹⁸⁹ The content validity in this study was measured by three approaches. Firstly, the operational definition corresponds with the conceptual definition which is elaborated by the pioneer of the Theory of Planned Behavior, Professor Emeritus Ajzen Izek as mentioned earlier and was guided by the guidelines to construct TPB's questionnaire.¹⁹⁰

The second approach was a pretest validity check. The face validity is concerned with whether a questionnaire looks like a good questionnaire where it measures what it is supposed to measure. In this study, the researcher gave the survey to three lecturers in a Malaysian Private University who are actively involved in research to review the questionnaire and provide comments for improvement. The three lecturers are: Ms. Inayatul Kamilah Mahyuddin, Mr. Serit Banyan and Ms. Rohaizan Baharuddin. Ten Generation Y students were also chosen to go through the questionnaire to get their feedback on all items used in this study. Their comments were compiled and few minor corrections were made before the survey was sent for expert review.

The third approach was the face validity check performed by experts from three different universities; namely University of Malaya, Universiti Utara Malaysia and Taylor's University. The experts were provided a brief of literature, operational definitions of variables and research design of this study. The experts for this study area;

1. Associate Professor Dr. Asmat Nizam bin Abdul Talib

¹⁸⁹ Anne R. Fitzpatrick, "The Meaning of Content Validity", *Applied Psychological Measurement* 7, no. 1 (1983) 3.

¹⁹⁰ Ajzen, "Constructing a Theory of Planned Behavior Questionnaire", website *University of Massachusetts*, retrieved online by permission on 16th April 2013, <http://www.people.umass.edu/aizen>.

(Senior Lecturer, College of Law, Government and International Studies,
Universiti Utara Malaysia)

2. Dr Siti Arni binti Basir

(Senior Lecturer, Department of Siasah Syari'yyah, Academy of Islamic Studies,
University of Malaya)

3. Ms. Hairunnisa Mohd Ibrahim

(Statistic Module Leader and Lecturer, School of Hospitality, Tourism and
Culinary Arts, Taylor's University)

All three experts were satisfied with the items and constructs in the questionnaire. There was no major correction required based on their comments. But a few items were removed and added based on their comments as mentioned earlier. Dr. Siti Arni Basir verbally commented that the items in the questionnaire were sufficient to answer the research questions and to achieve the objectives of the study, but more items could be added to enhance the discussion of the finding. Based on Dr. Siti Arni's comment, there were eight items added to the questionnaire, basically to improve the data and discussion in the later part of this study.

Associate Professor Dr. Asmat Nizam Abdul Talib, from Universiti Utara Malaysia mentioned that "I read through your two documents and I think they are well researched and I don't have any further input to add".¹⁹¹ However, he highlighted three points for the researcher to pay more attention, firstly; to look at the scope of research either to include or not to halal drinks and beverages in the questionnaires, secondly; the dimensions of construct and thirdly; the relevancy of JAKIM halal logo in this study.

¹⁹¹ Email from Dr. Asmat Nizam (Associate Professor, College of Law, Government and International Studies, University Utara Malaysia) to the researcher, email asmat.nizam@gmail.com, 25th May 2013.

After amendments were made based on the two experts' comments, the questionnaire was then passed to the third expert in statistics. The third expert Ms. Hairunnisa who is the Statistics Module leader and lecturer validated the questionnaire focusing on the statistical point of view. After looking at the items, constructs, objectives and statistical test planning for this study, she stated and commented that the questionnaire should have no problem to run the statistical test and to achieve the objectives of the study. Two minor amendments were made based on her input, which were related to demographic information and arrangement of items in the construct.

3.2.5.6 Construct Validity

The instrument of this study was tested for construct validity, objectively to test how well the items conformed to the theoretical expectation. According to J. Paul Peter (1981), construct validity is the necessary condition in theory testing because it ensures the correspondence of theoretical expectation and the operational measures in the particular research. The construct should have systemic (theoretical) and observational (operational) meanings.¹⁹²

The EFA was used to test the construct validity because it is the most appropriate test to verify clusters of items that share adequate variation and to justify their existence in the constructs. All variables in the analysis had factorability value because the results indicated that Bartlett's test of Sphericity was significant at 0.0001 level ($p < 0.001$) and the Kaiser-Meyer-Olkin value was greater than 0.8, exceeding the recommended value of 0.6. Using the principle component analysis with varimax

¹⁹² Paul J. Peter, "Construct Validity: A Review of Basic Issues and Marketing Practices," *Journal of Marketing Research* 18, no. 2 (1981), 133.

rotation, results indicated that the top six factors accounted for 69.542% of the total variance. The number of factors was determined by the Eigenvalue greater than one. An Eigenvalue of more than one was used to determine the criteria for each factor in the factor analysis.¹⁹³

3.2.5.6.1 Construct Validity for Items Measuring Attitude

The Correlation Matrix showed that there is no item highly correlating with each other. Therefore, all the items are maintained in this construct. The results showed a very ‘clean’ result where all variables exceeded the factor loading criteria of more than .40 in one extraction.¹⁹⁴

Table 3.11. Varimax Rotation for Attitude Items

Items	Component					
	1	2	3	4	5	6
Eating halal food is important for me.	.639					
I trust to consume halal food compare to non-halal food.	.490					
Halal food is clean.	.406					
Halal food is cleaner compared to non-halal food.	.517					
Halal food is safe to eat.	.529					
Halal food is safer to eat compared to non-halal food.	.539					
Halal food is healthy.	.480					
Halal food is healthier compared to non-halal food.	.498					

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2014.

¹⁹³ Perry R. Hinton et al., *SPSS explained*, London: Routledge Taylor & Francis Group (2004), 350.

¹⁹⁴ Pallant, *SPSS Survival Manual: A Step By Step Guide To Data Analysis Using SPSS*, (Australia: Allen & Unwin, 2007), 196.

The attitude was defined as favorable and unfavorable evaluation on the object or action. The interpretation of this component was consistent with the conceptual framework of this study. Therefore, these items were suitable and valid to measure the attitude construct in this study.

3.2.5.6.2 Construct Validity for Items Measuring Subjective Norms

The Correlation Matrix showed that there is no item highly correlating with each other. Therefore, all the items are maintained in this construct. The results showed a very ‘clean’ result where all variables exceeded the factor loading criteria of more than .40 in one extraction¹⁹⁵, except for one item “eating halal food is being practised in my family. Hence, this item was deleted resulting in the reduction of a six-item scales measuring subjective norms construct to a five -item scales.

Subjective norm is defined as the influence of people in social surroundings on individual behavioral intentions. The interpretation of this component was consistent with the conceptual framework of this study. Therefore, these items were suitable and valid in measuring the subjective norms in this study.

Table 3.12. Varimax Rotation for Subjective Norms Items

Items	Component					
	1	2	3	4	5	6
Most people who are important to me eating halal food.		.418				
People can influence me to eat halal food.		.421				

¹⁹⁵ *Ibid.*

My family member eating halal food.	.402				
My friend would think that I should choose halal food.	.416				
My family imposes on me the importance of eating halal food.	.557				

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

3.2.5.6.3 Construct Validity for Items Measuring Perceived Behavioral Control

The Correlation Matrix showed that there is no item in perceived Behavioral Control construct is highly correlated with each other. The results showed a very ‘clean’ result where all variables exceeded the factor loading criteria of more than .40 in one extraction.¹⁹⁶ The factor loading values and variance percentages resulting from the principle component analysis with varimax rotation were listed in Table 3.13.

Table 3.13. Varimax Rotation for Perceived Behavioral Control Items

Items	Component					
	1	2	3	4	5	6
It is easy to find halal food in Malaysia.			.567			
It is easy to find halal food in my university.			.689			
I always have a chance to eat halal food.			.590			
There are many choices of halal food in my university.			.690			
Price of halal food is reasonable.			.408			

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

¹⁹⁶ *Ibid.*

Perceived behavioral control is defined as an individual's perceived ease or difficulty in performing the particular behavior, and in this study it is associated with the belief on the ease and difficulty in consuming halal food. The interpretation of this component was consistent with the conceptual framework of this study. Therefore, these items were suitable and valid in measuring the perceived behavioral control construct in this study.

3.2.5.6.4 Construct Validity for Items Measuring Religiosity Construct

The Correlation Matrix showed that there is no item in Religiosity construct which highly correlates with each other. The results showed a very ‘clean’ result where all variables exceeded the factor loading criteria of more than .40 in one extraction¹⁹⁷. Two items “I consume only halal food” (.610) and “I consume only halal food because it is an Islamic ruling” (.475) were loaded strongly under the Behavioral Intention component; therefore both of these items were placed in the Behavioral Intention component. The factor loading values and variance percentages resulting from the principle component analysis with varimax rotation are listed in Table 3.14.

Table 3.14: Varimax Rotation for Religiosity Items

Items	Component					
	1	2	3	4	5	6
I believe that there is no God except Allah SWT.				.872		
I believe that Prophet Muhammad SAW is the last messenger of Allah SWT.				.915		

¹⁹⁷ *Ibid.*

I believe in Al-Qur'an.				.895	
I believe in Al-Sunnah.				.925	
I believe in Prophet of Allah.				.909	
I believe in Judgment day (<i>Qiamah</i>).				.909	
I believe in <i>Qada'</i> and <i>Qadar</i> .				.921	
I believe that as a human being, I belong to Allah SWT.				.922	
I believe that the main purpose of this life is to perform <i>ibadah</i> to Allah.				.799	
I regularly pray five times a day.				.541	
I fast regularly in the month of <i>Ramadhan</i> .				.471	
I perform/will perform <i>haj</i> when I can afford to do so.				.422	
I pay zakat fitrah every year if I fulfill the prescribed criteria.				.422	
I regularly recite the holy book of al Al-Qur'an.				.595	
I always try to avoid minor sins.				.723	
I always try to avoid major sins.				.752	
I try to follow Islam in all matters of my life.				.505	
I try to maintain a good behavior (akhlak).				.667	
I try to maintain good relationship with others Muslim fellow.				.735	
I try to maintain good relationship with non-Muslim.				.686	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Religiosity was referred to as a Muslim's belief and a manifestation of a Muslims' belief in his/her actions, for example performing prayer, zakat and fasting. The interpretation of this component was consistent with the conceptual framework of

this study. Therefore, these items were suitable and valid in measuring the perceived behavioral control construct in this study.

3.2.5.6.5 Construct Validity for Items Measuring Government Initiatives

The Correlation Matrix showed that there is no item in perceived behavioral control construct which highly correlates with each other. The results showed a very ‘clean’ result where all variables exceeded the factor loading criteria of more than .40 in one extraction¹⁹⁸. The factor loading values and variance percentages resulting from the principle component analysis with varimax rotation are listed in Table 3.15.

Table 3.15. Varimax Rotation for Government Initiatives Items

Items	Component			
	1	2	3	4
I have read to written materials about the halal topic in Malaysia				.689
I have read to written materials about halal matters provided by Malaysian government				.736
Written materials about halal consumption influence me to consume halal food				.669
I have accessed government website for information on halal consumption in Malaysia				.806
The information on government website about halal consumption influence me to consume halal food				.792
I have watched halal programmes providing information on television				.663

¹⁹⁸ *Ibid.*

Halal information on television has influenced me to consume halal food				.744
I am aware of halal training/conferences/exhibitions about halal food				.777
I attended halal training/conferences/exhibitions about halal food				.803
I am aware that halal kiosks are available in Malaysia				.692
I have used a halal kiosk to check on halal product in Malaysia				.759
I aware there is halal application in Malaysia				.715
I use to halal application on my smart phone/computers				.768

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Government initiatives in this study were the efforts of the Malaysian government, particularly HDC as a main government body which is responsible in promoting halal products and services in Malaysia for example campaign or publicity in promoting and influencing consumers to consume halal through face-to-face, mass media and internet. The interpretation of this component was consistent with the conceptual framework of this study. Therefore, all the items in this construct were suitable and valid in measuring the government's initiatives construct in this study.

3.2.5.6.6 Construct Validity for Items Measuring Behavioral Intentions in Consuming Halal

The Correlation Matrix showed that there is no item in Behavioral Intentions construct which highly correlates with each other. The results showed a very 'clean' result where all variables exceeded the factor loading criteria of more than .40 in one extraction¹⁹⁹.

¹⁹⁹ *Ibid.*

Two items “I consume only halal food” (.610) and “I consume only halal food because it is an Islamic ruling” (.475) which were previously placed in the religiosity construct from religiosity construct loaded strongly on the Behavioral Intention component; therefore both of these items were placed in the Behavioral Intention component. The factor loading values and variance percentages resulting from the principle component analysis with varimax rotation are listed in Table 3.16.

Conceptually behavioral intentions were defined as a person's perceived possibility to perform certain behavior and in this study, behavioral intention refers to willingness of respondents to consume halal food. The interpretation of this component was consistent with the conceptual framework of this study. Therefore, the items in the construct above were suitable and valid in measuring the government initiatives construct in this study.

Table 3.16. Varimax Rotation for Behavioral Intention Items

Items	Component					
	1	2	3	4	5	6
I consume only halal food						.610
I consume only halal food because it is an Islamic ruling						.475
I will not eat if the food is not halal						.775
I will not eat if the food doubted as halal						.615
I will eat only in halal certified food outlets						.697
I will eat only halal certified food						.731
I will make sure that the food is halal before I consume it						.739
I will make sure the food is halal before I purchase any food						.741

I will not consume the food if it is prepared using my non-halal ingredients for example alcohol											.606
--	--	--	--	--	--	--	--	--	--	--	------

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

3.2.5.7 Language Check

The questionnaire was checked by Ms. Audrey Lee, an English language lecturer from School of Hospitality, Tourism and Culinary Arts, Taylor’s University. Few amendments were made related to grammatical error and sentences readability. Then, language check procedure was conducted through the “Language Pilot Test”. Questionnaires were distributed to 25 students who were gathered in the classroom. This language check session was conducted objectively to ensure the right interpretation of each constructed item. It was found that there was no issue with the language used in the questionnaire. This “Language Pilot Test” confirms that all items in the instrument were tested for readability, accuracy and answerability from the respondents’ point of view.

In the “Language Pilot Test” session, the researcher briefed the respondents regarding the procedure and students were given half an hour to read through the instrument. Students were allowed to ask for extra time if they could not finish their reading in the duration of time given. The researcher reads through each item in order to check its clarity and suitability of the word and sentence used. The researcher gathered the respondents’ feedback by including four columns indicating “understand”, “do not understand”, “comment and suggestion”. The students were asked to circle the words or sentence which they did not understand. They were allowed to give their comments and suggestions.

3.2.6 Pilot Study

A pilot study can be defined as small scale or a trial run as a feasibility procedure for the main study. It is important to foresee whether the methods or instruments are inappropriate for the actual study²⁰⁰. The pilot study aims to detect any weakness so that the correction for improvement could be made in the actual questionnaires.²⁰¹

The researcher conducted the pilot study for this study objectively to develop and test the adequacy and feasibility of this study. A pilot study was conducted among 50 respondents in a Private University in Klang Valley. The targeted population for the pilot study were Muslim students in Taylors University included youth with age ranges between 18 and 23 years old. This group of respondents was selected because they met the characteristics of the population for this study.

The sample size of 50 respondents was sufficient to determine validity and reliability of the questionnaire. According to Stopher (2012), the respondents for the pilot study should not be less than 30. Another opinion mentioned that the sample size for the pilot study can be from 3%-7% of the total sample size in the actual study.²⁰² Gillian et al (2004) also used the general rule of thumb minimum sample size of the pilot study is 30.²⁰³ In fact, data normality and reliability of the study tends to increase with the increase of sample size in the actual study.

²⁰⁰ David De Vaus, *Surveys in Social Research*, 2nd ed. (London: University College London Press, 1993), 79.

²⁰¹ Zainuddin Awang, *Research Methodology and Data Analysis*, 38.

²⁰² Peter Stopher, *Collecting Managing and Accessing Data Using Sample Survey*, (New York: Cambridge University Press, 2012), 259.

²⁰³ Gillian A. Lancaster, Susanna Dodd, Paula R. Williamson, "Design and Analysis of Pilot Studies: Recommendations for Good Practice," *Journal of Evaluation in Clinical Practice* 10 (2004), 308.

The researcher played a role as a facilitator in administering the questionnaires. Respondents were given a brief explanation about questionnaires and were ensured the anonymity of their profiles. The respondents were given approximately 30 minutes to 45 minutes to complete the surveys and were advised to complete the questionnaire independently. They were allowed to ask questions if they have any doubt on the questionnaire. However, none of the respondents asked questions. This could be due to the “Language Pilot Test” which was conducted earlier to ensure the respondents could comprehend the questionnaire. Data from the pilot study were used to test the validity and reliability in order to improve the questionnaire used.

3.2.6.1 Reliability and Validity of the Instrument Used in the Pilot Study

The objective of the pilot study conducted prior to the actual study was to ensure the reliable and valid instrument to be used for the actual study. For those reasons, several statistical testing using the Statistical Package for Social Sciences (SPSS) version 20 was run to analyze the data.

Internal reliability test using the Cronbach’s alpha analysis was conducted on each of the construct; attitude, subjective norms, perceived behavioral control, religiosity, government initiatives and behavioral intention in consuming halal food. It is observed that the coefficients of all the scales in the pilot study were in the range of .680 to .929. In the pilot study, two items in the construct of subjective norms were identified as having low alpha, which are “People’s perception affect my decision in choosing halal or non-halal food” and “I feel shy with people around me if I eat non-halal food”. These two items are dropped in the actual instruments to increase the reliability of the instrument. The reliability of the instrument used in this pilot study is

acceptable and could be increase with the deletion of 2 items with low alpha coefficient and increase in the sample size of the actual study.

Cronbach's alpha for actual study were in the range of .775 to .955. The calculated coefficient of .775 to .955 (the maximum value for $\alpha = 1$) indicated the reliability of the six constructs were acceptable and the internal reliability of the instrument was adequate. Hence, the instrument is reliable to be used in this study. The table 3.17 shows the summary of the results of reliability analysis for the six constructs used in the present study.

Table 3.17. Cronbach's Alpha Results for Pilot Test and Actual Study

Constructs	No of Items	Pilot Study (Cronbach Alpha)	Actual Study (Cronbach Alpha)
Attitude	8	.929	.883
Subjective Norms	5	.680	.775
Perceived Behavioral Control	5	.867	.781
Government Initiatives	13	.893	.943
Religiosity	20	.836	.955
Behavioral Intention	7	.837	.929

Source: The Alpha Cronbach Analysis, Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 2013.

As shown in the table above, the alpha coefficients for all the scales were greater than .70. The minimum Alpha was .775 for the subjective norms construct and the highest reliability scale was religiosity construct at .955. High alpha coefficient for all constructs in this instrument indicated the high internal consistency for each of the constructs.

3.2.6.2 Summary of Instrumentations

The instrumentation strategy of this study is guided by Punch (1998)²⁰⁴ and Ajzen (n.d).²⁰⁵ The instrumentation procedure began with the conceptual definition development and practical conceptualization. The content was then validated by a group of experts and corrections were made based on the feedback from the experts. The language check was conducted to ensure the accuracy and suitability of the language used in the instrument. A pilot study was conducted on 50 respondents.

Then, the construct validity test was conducted to confirm the theoretical expectation of the items in the constructs. A reliability test was conducted using Cronbach's alpha to ensure the internal constituency of the instrument. After all the steps were finalized, the final instrument was then used and distributed to the respondents.

3.3 Sampling Technique

The sampling technique in this study follows the (7) steps of sampling design by C. R. Kothari (2004)²⁰⁶;

Step 1: Defining the population to be studied. For this study, the population is defined as Generation Y Muslims consumers.

²⁰⁴ Punch, *Introduction to Social Research: Qualitative and Quantitative Approaches* (London: Sage Publication, 1998), 95-96.

²⁰⁵ Icek Ajzen, "Constructing a Theory of Planned Behavior Questionnaire", website *University of Massachusetts*, retrieved online by permission on 16th April 2013, <http://www.people.umass.edu/aizen>.

²⁰⁶ C. R. Kothari, *Research Methodology: Method and Techniques*, 2nd ed. (New Delhi: New Age International (P) Limited Publishers, 2004), 56-60.

Step 2: Deciding on the sampling unit. The sampling unit could be based on geographical areas such as Kuala Lumpur, or construction unit such as apartment or social unit for example family or individuals. In this study, the sampling unit is based on the geographical area which is Klang Valley.

Step 3: Preparing the sampling frame. In this study it refers to the private universities listed in Klang Valley. The sampling frame should be comprehensive and reliable. As for this study it was acquired from the Ministry of Education Malaysia.

Step 4: Choosing the sample size, which should be based on the population size. This step is very crucial because it involves some calculation technique and the sample size should be able to satisfy the representativeness and reliability of the sample.

Step 5: Determining the parameters of interest for the study conducted. For example the study is concerned with some characteristics or sub-group in the population. Parameters of interest for this study refer to Generation Y Muslims in the Malaysian private universities.

Step 6: Considering the budget such as affordability and constraints to conduct the questionnaire on the intended sample.

Step 7: Deciding on the sampling procedure and technique in choosing the sample. The details of sampling procedure for this study were discussed at the end of this sub-topic.

3.3.1 Population

A population in the research refers to the number of individuals in a targeted group with minimum of one similar characteristic. The researcher needs to identify the characteristics of the population and pay attention to these characteristic for

generalizing the sampling groups of the population²⁰⁷. In this study the targeted population is Generation Y Muslims in private universities in the area of Klang Valley. There are 17 private universities scattered the area of Klang Valley. As this targeted population could consider as a medium large population, the sample of the population is employed to represent the population.

3.3.2 Sampling

The targeted population for this study is undergraduate students between the ages 16-28 years old from private universities in Klang Valley. Since there are many courses offered in private universities. The researcher categorise the courses in the groups of; Biosciences, Social Science, Technical and Skills Studies and Information Technologies. According to the data provided by the Ministry of Education, there are 21 main branches of private universities in Malaysia and 17 of them are located in the Klang Valley.²⁰⁸

The numbers of Muslim students acquired from the Ministry of Education in Malaysian private universities at Klang Valley is 19,727.²⁰⁹ Krejcie and Morgan's table (1970) was used to determine sample size for this study. According to this table, the population of 20,000 required a sample size of minimum 377.²¹⁰

²⁰⁷ *Ibid*, 55.

²⁰⁸ Ministry of Higher Education, "Private Higher Education Institution Statistics," website Ministry of Education, retrieved on 7th of May 2013, http://www.mohe.gov.my/web_statistik/.

²⁰⁹ Puan Ummi Kalsom (Deputy Director, Ministry of Education Malaysia) in her email to the researcher, 28th May 2013.

²¹⁰ Robert. V. Krejcie and Daryle.W.Morgan, "Determining Sample Size for Research Activities," *Educational and Psychological Measurement* 30, (1970), 608.

Table 3.18. Table for Determining Sample Size from a Given Population

Source: R.V. Krejcie and D.W.Morgan, “Determining Sample Size for Research

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Activities,” *Educational and Psychological Measurement* 30 (1970), 608.

Note: “N” is population size

“S” is sample size.

Relating to determining of sample size, Leedy (1997) indicated that for a population smaller than 100, a researcher needs to study the entire population. If the population size is around 500, 50% of the respondents is needed to be sampled. In the case of population around 1500, 20% of respondents is needed as a sample. A population which is more than 5000, a sample size of 400 is considered sufficient to

represent the population. He stressed that the basic rule for determining sampling is that the larger the sample, the better it is for the research findings to be generalized.²¹¹

Henceforth, the researcher distributed more than a minimum requirement of questionnaires. 600 questionnaires were distributed to obtain higher accuracy of the findings and to increase its representativeness.²¹²

3.3.3 Sampling Procedure

Researchers generally divided sampling designs into two types; which are probability sampling and non-probability sampling. Probability sampling, which is known as random sampling postulates that every unit in a population has an equal chance to be a sample for the study.²¹³ Whereas non-probability sampling is the sampling procedure where researchers select a sample, but not all units in the population have an equal chance to become a sample.²¹⁴ For this study, probability sampling was chosen, as this type of sampling could ensure probability of the sample.²¹⁵

In achieving its objectives, this study adopted the stratified random sampling because this design categorizes a population into several sub-populations (strata) and the sample is selected from the stratum. The population is categorized into several sub-populations (strata) based on the location of this Private Universities in Klang Valley. This is important in ensuring the representativeness, reliability and accuracy of the data

²¹¹ Paul D. Leedy, *Practical Research Planning and Design*, 6th ed. (), (Colorado: Pearson, 1997). 211.

²¹² *Ibid*, 210.

²¹³ Kothari, *Research Methodology: Method and Techniques*, 2nd ed. (New Delhi: New Age International (P) Limited Publishers, 2004), 60.

²¹⁴ *Ibid*, 59.

²¹⁵ *Ibid*, 60.

collected. In this study, there were 17 private universities in Klang Valley with many fields of study offered. From the 17 private universities, 5 Universities were randomly chosen from different areas in Klang Valley to maintain homogeneity among private universities. The five universities are;

- a) Taylor's University Malaysia, Subang Jaya (Taylor's)
- b) Asia Pacific University, Bukit Jalil (APU)
- c) University of Tun Abdul Razak, Kelana Jaya (UNITAR)
- d) University of Selangor, Shah Alam (UNISEL)
- e) Asia Metropolitan University, Cheras (AMU)

A list of faculties in all these five universities was prepared and categorized under the five different fields of studies. Respondents were randomly chosen to cover all fields of studies as stated in the questionnaire. A total of 120 questionnaires were distributed in each selected University and total numbers of questionnaires returned (70.8%) are as below;

- a) Taylor's University Malaysia, Subang Jaya (Taylor's)-91 questionnaires
- b) Asia Pacific University, Bukit Jalil (APU) - 70 questionnaires
- c) Universiti Tun Abdul Razak, Kelana Jaya (UNITAR) -96 questionnaires
- d) Universiti Industri Selangor, Shah Alam (UNISEL) - 100 questionnaires
- e) Asia Metropolitan University, Cheras (AMU) – 68 questionnaires

According to statistics provided by the Ministry of Education, approximately 52% of students were male and 48% of students were female.²¹⁶ Therefore, the researcher tried to ensure that there was no big difference for the number of respondents according to gender.

3.4 Data Collection Procedure

This study is based on a cross-sectional survey design with the data collected at one point in time. Self-administered questionnaires were used to collect data on the behavioral intentions on Generation Y Muslims in consuming halal food at private universities in Klang Valley. Data collection was carried out from September 2013-December 2013, which is in the duration of four months. Before the data collection, a researcher approached the universities through the lecturers and questionnaires were given to acquire their consent.

Next, the researcher administered the data collection in each university. During the data collection process, Generation Y students were gathered in the class. The respondents were being informed of the objectives of the study and they were ensured that their profiles would remain anonymous. The researcher also reminded the respondents to answer the questionnaire truthfully on the matters asked. They were allowed to ask questions if they have any doubt in understanding the question. Respondents were given 30 minutes to complete the questionnaire. Once completed, the questionnaires were collected and coded before proceeding with entering data in the SPSS.

²¹⁶ Ministry of Higher Education, "Private Higher Education Institution Statistics," website Ministry of Education, retrieved on 7th of May 2013, http://www.mohe.gov.my/web_statistik/.

3.4.1 Ethical Consideration

The data collecting process is conducted by the researcher herself. This measure is taken to ensure that the questionnaire is given to the targeted sample, and also to avoid any unethical issue in the process of filling up the questionnaires.

In addition, questionnaires were attached with the informed consent document for the respondents to be aware of information about the study, researcher and the respondents' role in giving their information.²¹⁷ The document also has the guarantee of confidentiality and anonymity of the respondents. Another ethical consideration is to ensure that the respondents fill up the questionnaire at their own will, without any influence or coercion from any party.²¹⁸ Participants' acceptance to filling up the survey is based on the willingness of respondents to do so.

Indeed, anonymity of the respondents is normally highlighted as one of the main ethical issues to be considered by the researcher.²¹⁹ Thus, in maintaining the anonymity of the respondents, they are not required to reveal their name and institution which they are attached to. Lastly, respondents in this study are protected from any harm or risk for participating in this study.²²⁰

²¹⁷ Sue Greener, *Business Research Method*, (London: Ventus Publishing Aps, 2008), 44.

²¹⁸ Zainuddin Awang, "Structural Equation Modelling using AMOS Graphic," 11.

²¹⁹ Sue Greener, *Business Research Method*, 41.

²²⁰ Zainuddin Awang, "Structural Equation Modelling using AMOS Graphic", 10.

3.5 Data Analysis Procedure

This sub section explains the data management procedures and data analysis techniques conducted in order to analyse the findings.

3.5.1. Data Management Process

There are three main steps followed by researcher in analyzing data²²¹. They are;

a. First Step: Data Editing

After data collection, researcher screened for any errors during the data collection process, for example, double checking that the respondents are from the targeted group and are eligible to participate in the questionnaire. In this study, the researcher dealt with missing data via two options. Firstly, to disregard missing responses if the proportion of missing data is large and it is involved in the main variables. The second option, is to assign missing values if the proportion of missing data for each respondent is small and not the main variables in the study.²²²

b. Second Step: Data Coding.

Data coding is a process of identifying and classifying items with numbers or symbol. In this process, the researcher identifies the column position, the number of variable, name of variable and coding instructions.²²³

²²¹ *Ibid*, 177-186.

²²² *Ibid*, 178.

²²³ *Ibid*, 181.

c. Third Step: Data Entry

After the coding process, the researcher keys in the data into the SPSS software. The researcher then screens the entered data to detect if there is any error in the data entry process. As suggested by Zainuddin Awang (2011), a frequency table is one of the ways to scan the error in the data and to detect if there is any missing value. After clearing the errors, the researcher proceeds to analyse the data.²²⁴

3.5.2 Data Analysis Technique and Procedure

3.5.2.1: Data Analysis for SPSS

Data Analysis techniques for this study is based on the guidelines as below;

Table 3.19. Guidelines for Data Analysis Techniques

	Types of Research Question	Number of Variable	Statistical Test
1	Univariate Descriptive Question	One Variable	t-test for mean F-test for variance
2	Multivariate Descriptive Question	Two or more variables (e.g:gender, programme)	Chi Square test

²²⁴ *Ibid*, 182.

3	Univariate Difference Question	One independent and one dependent variable	One-way ANOVA
4	Multivariate Difference Question	Three or more variables. Normally more than two independent variables and more than one dependent variable.	Multivariate Analysis of Variance (MANOVA), Structural Equation Modelling (SEM)
5	Univariate Associational Question	One independent variable and one dependent variable	t-test for Pearson's correlation, F-test for regression, SEM
6	Multivariate Associational Question	More than two independent and dependent variables.	F-test for multiple regression, t-test for regression coefficient, SEM

Source: Zainuddin Awang, "*Structural Equation Modelling using AMOS Graphic*", (University Technology MARA Press, 2012), 10.

The collected data is analyzed using descriptive analysis, EFA and Multiple Linear Regression (MLR) in the SPSS. These were used in interpreting and analyzing the relationship between dependents, independent variables and moderating variable in this study.

The Inductive method is used specifically in analyzing efforts done by the government in influencing behavioral intention of Muslim consumers in consuming halal food in Malaysia. It is based on the established theory which is the TPB, in explaining the factors of behavioral intentions in consuming halal food. The relationship between five independent variables, a dependent variable and moderating variables were analyzed in the data analysis section.

Next, the data collected were screened for missing values and normality. Exploratory data analysis was then employed objectively to confirm there were no missing values in the data. Descriptive statistics such as frequency distribution, mean and standard deviation were then used to describe the demographic background of the respondents. MLR was used to analyze the influence of independent, dependent and moderating variables. This is due to the function of MLR could estimate much of the variance in a dependent variable using the dependent variables. In addition, MLR also could determine the effect of different independent variables on the dependent variable.²²⁵

Hypotheses were tested as below;

a. Multiple Linear Regression relationship with the items A1-A8 and BI-BI9 to test the hypothesis 1:

H1: There is a significant relationship between attitudes of Generation Y Muslim consumers towards behavioral intention in consuming halal food.

b. Multiple Linear Regression relationship with the items S1-S5 and B1-BI9 to test the hypothesis 2:

H2: There is a significant relationship between subjective norms towards behavioral intentions of Generation Y Muslim consumers in consuming halal food.

c. Multiple Linear Regression relationship with the items BC1-BC5 and B1-BI9 to test the hypothesis 3:

²²⁵ Punch, *Introduction to Social Research: Quantitative and Qualitative Approaches*, 82.

H3: There is a significant relationship between perceived behavioral controls towards behavioral intention of Generation Y Muslim consumers in consuming halal food.

d. Multiple Linear Regression relationship with the items R1-R20 and B1-BI9 to test the hypothesis 4:

H4: There is a significant relationship between religiosity towards behavioral intention of Generation Y Muslim consumers in consuming halal food.

e. Multiple Linear Regression relationship with the items GI1-G13 and B1-BI9 to test the hypothesis 5:

H5: There is a significant relationship between government initiatives towards behavioral intention of Generation Y Muslim consumers in consuming halal food.

f. Moderated Multiple Linear Regression was used to test the Hypotheses H6, H7, H8, H9 and H10:

H6: Gender plays a moderating role in the relationship between attitude and behavioral intention in consuming halal food.

H7: Gender plays a moderating role in the relationship between subjective norms and behavioral intention in consuming halal food.

H8: Gender plays a moderating role in the relationship between perceived behavioral control and behavioral intention in consuming halal food.

H9: Gender plays a moderating role in the relationship between religiosity and behavioral intention in consuming halal food.

H10: Gender plays a moderating role in the relationship between government initiatives and behavioral intention in consuming halal food.

g. Moderated Multiple Linear Regression was used to test the Hypotheses H11, H12, H13, H14 and H15:

H11: Halal knowledge acquired at the private universities plays a moderating role in the relationship between attitude and behavioral intention to consume halal food.

H12: Halal knowledge acquired at the private universities plays a moderating role in the relationship between subjective norms and behavioral intention to consume halal food.

H13: Halal knowledge acquired at the private universities plays a moderating role in the relationship between perceived behavioral control and behavioral intention to consume halal food.

H14: Halal knowledge acquired at the private universities plays a moderating role in the relationship between religiosity and behavioral intention to consume halal food.

H15: Halal knowledge acquired at the private universities plays a moderating role in the relationship between government initiatives and behavioral intention to consume halal

3.6 Summary

This research held on the main principle of positivism paradigm. Therefore, a quantitative technique using questionnaires was employed to achieve the objectives of this study. The instrument was constructed by the researcher based on the literature, conceptual framework and discussion on this topic. The development of instrument was also based on two main guidelines by Punch (1998) and Ajzen Izek (n.d). Face validity, expert validity, pre-test and construct validity were employed to maintain the validity of this study. Reliability tests were also conducted to ensure an internal consistency and consistency over time of the instrument used. Pilot test and language pilot test were run in this study. Sampling and population were calculated based on Krejcie and Morgan table. Data was self-administered among 425 respondents with an ethical consideration of doing research. Data analysis procedure and techniques using SPSS 20.00 were elaborated at the end of chapter.

CHAPTER 4: FINDINGS AND DISCUSSION

4.1 Introduction

This chapter deliberates the findings of this study based on the interpretation and analysis of the data collected from a total sample size of 425 undergraduate students in five private universities around Klang Valley. It is divided into five main sections.

The first section discusses the socio demographic profile of the respondents. This includes composition of the respondents' gender, age, ethnicity, programs of study, place of residency, source of formal and informal knowledge acquired on halal. Data is presented using the summary statistics of frequencies and percentages. The second part of the first section discusses the halal certification awareness of the respondents. The last part of this section discusses about the perception of Generation Y consumers on halal certification. Even though, halal certification is not a variable in this study, exploring the perceptions of consumers on halal certification would enhance the understanding about of halal food consumption. Thus, this section would give more insights of halal certification from the perspective of Generation Y in Malaysian private universities in Klang Valley. Data is presented using the summary statistics of frequencies and percentages.

The second section of this chapter presents the findings in order to answer the first and second objectives of this study. The first objective is to analyze the determinants influencing the Generation Y Muslim consumers' intention in consuming halal food in Malaysian private universities. There are five determinants which are attitude, subjective norms, perceived behavioral control, government initiatives in promoting halal food and religiosity towards behavioral control in consuming halal

food. MLR was used to analyze the influence of these five predictors on the behavioral intention in consuming halal food among Generation Y Muslims in private universities situated in Klang Valley. The null hypotheses of H1, H2, H3, H4 and H5 would be analysed based on the findings.

Using the MLR statistics, this section determines which are among the five predictors explains the behavioral intention of halal food consumption. In addition, this section analyzes the level of influences of all the five predictors of the behavioral intentions of Generation Y in consuming halal food. In order to achieve the second objective to produce the model of halal food consumption for Generation Y, the model of halal food consumption among Generation Y would be proposed, analyzed and discussed,

The third section answered the third objective where it discussed whether the gender variable moderate the relationship between attitude, subjective norms, perceived behavioral control, government initiatives, religiosity and the behavioral intentions of Generation Y in consuming halal food. Moderated Multiple Regression (MMR) was used to determine the moderating effect of the gender and halal knowledge acquired at the university between attitude, subjective norms, perceived behavioral control, government initiatives, religiosity and behavioral intention in consuming halal food. The null hypotheses H6, H7, H8, H9, and H10 would be tested based on the findings.

The fourth section answered the fourth objective where it discussed whether the halal knowledge acquired at private universities moderate the relationship between attitude, subjective norms, perceived behavioral control, government initiatives, religiosity and the behavioral intentions of Generation Y in consuming halal food. The Moderated Multiple Regression (MMR) was used to determine the moderating effect of the religiosity between the five determinants and behavioral intention in consuming

halal food. The null hypotheses H11, H12, H13, H14 and H15 would be tested based on the findings.

4.2 Demographic Profile

4.2.1 Gender Profile

Out of 425 respondents, the majority (57.6%) were females as compared to (42.4%) males. This represents very well the distribution of gender in the actual population, which is estimated at (48.7%) of male students and (51.3%) for female students.¹

Table 4.1. Descriptive Statistics of Respondents According to Gender

Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	180	42.4	42.4	42.4
	Female	245	57.6	57.6	100.0
	Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

4.2.2 Age Profile

All the respondents chosen in this study were students in the age range of 16-28 years old, who meet the definition of Generation Y as stated in chapter 1. As shown in the descriptive statistic in Table 4.2, the respondents' age ranged from a minimum of 16 years to the maximum of 28 years old. However, the majority of respondents (63.5%)

¹ Ministry of Higher Education, "Private Higher Education Institution Statistics," website Ministry of Education, retrieved on 7th of May 2013, http://www.mohe.gov.my/web_statistik/.

of respondents were aged between 18 and 20. The second largest age group was respondents (23.8%) aged 21 and 23 years old. Then, followed by (7.3%) respondents, whose age fell between 24 and 26 years old, and (3.1%) were respondents were between 15-18 years old. The smallest percentage (2.4%) was the respondents of age 27-28 years old. This group of students possibly started their tertiary education at a later age as compared to the majority of the respondents.

Table 4.2. Descriptive Statistics of Respondents According to Age Groups

Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-17 years old	13	3.1	3.1	3.1
	18-20 years old	270	63.5	63.5	66.6
	21-23 years old	101	23.8	23.8	90.4
	24-26 years old	31	7.3	7.3	97.6
	27-28 years old	10	2.4	2.4	100.0
	Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

4.2.3 Ethnic Profile

The majority of respondents' proportion (92.7%) was Malay. This is followed by (3.5%) others, (2.6%) was Indian and (1.2%) was Chinese. This proportion is due to the fact that the present study targets only Malaysian Muslim respondents and the majority of Muslims in Malaysia are Malays. However, there was a small proportion of Chinese Muslims, Indian Muslims and Muslims from other ethnic group for example Eurasian Muslims. Therefore, this sample is a good representation of Muslims population in Malaysia.

Table 4.3. Descriptive Statistics of Respondents According to Ethnic Groups

Ethnics	Frequency	Percent	Valid Percent	Cumulative Percent
Malay	394	92.7	92.7	92.7
Chinese	5	1.2	1.2	93.9
Indian	11	2.6	2.6	96.5
Others	15	3.5	3.5	100.0
Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

4.2.4 Religion Profile

Since this study only focuses on the Generation Y Muslim, therefore all the respondents (100%) Muslims. As presented in the previous section, there were Malay Muslims, Chinese Muslims, Indian Muslims and Muslims from other ethnics for example Eurasian community. Table 4.4 showed that 100% respondents were Muslims.

Table 4.4. Descriptive Statistics of Respondents According to Religion

Religion	Frequency	Percent	Valid Percent	Cumulative Percent
Muslim	425	100	100	100
Non-Muslim	0	0	0	100
Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

4.2.5 Institutions of Private Universities

All the respondents came from 5 different private universities situated in different areas in Klang Valley. 120 questionnaires were distributed at each university. As stated in

table 4.5, 91 (21.4%) completed questionnaires were returned from the Taylor's University. 70 questionnaires (16.5%) completed by the respondents from the Asia Pacific University (APU). 96 questionnaires (22.6%) completed by the University of Tun Abdul Razak (UNITAR) respondents, 100 questionnaires (23.5%) completed by the University Selangor (UNISEL) and 68 questionnaires (16%) returned by the Asia Medical University (AMU) respondents.

Table 4.5. Descriptive Statistics of Respondents According to Religion

Institutions	Frequency	Percent	Valid Percent	Cumulative Percent
Taylor's	91	21.4	21.4	21.4
APU	70	16.5	16.5	37.9
UNITAR	96	22.6	22.6	60.5
UNISEL	100	23.5	23.5	84
AMU	68	16	16	100
Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

4.2.6 Programs of Study

The respondents in this study were from seven different fields of studies which were mainly offered by private universities in Klang Valley. The percentage of respondents according to the fields of study were (24%) respondents from Business Studies, (13.4%) from Bioscience, (19.1%) from Computer/Information Technology Studies, (5.9%) from Social Science/Language, (30.8%) of Technical/Skills Studies and (6.8%) from other fields of study. The highest numbers of respondents were from technical/skills background for example, Hospitality, Culinary and Design courses. While, the lowest number of respondents was from the Social Science and language fields of study.

Table 4.6. Descriptive Statistics of Respondents According to Fields of Study

Fields of Study	Frequency	Percent	Valid Percent	Cumulative Percent
Business Studies	102	24.0	24.0	24.0
Bioscience	57	13.4	13.4	37.4
Computer/Information Technology Studies	81	19.1	19.1	56.5
Social Science/Language	25	5.9	5.9	62.4
Technical/Skills Studies	131	30.8	30.8	93.2
Others	29	6.8	6.8	100.0
Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

This sample covered all the main fields of study offered at the private universities in Klang Valley; therefore it is a good representation of the student population for this study.

4.2.7 Place of residence

As a subjective norm is one of the independent variable, therefore it is vital to know whether the respondents live in the hostel, rented residence or with family. The majority of respondents' proportion (42.6%) was staying in rented residence. This is followed by (31.3%) of them stayed in the university hostel and (26.1%) were staying with parents and other family members. The proportion of respondents according to the place of residence was fairly distributed.

Table 4.7. Descriptive Statistics of Respondents According to Residence

Residence	Frequency	Percent	Valid Percent	Cumulative Percent
University Hostel	133	31.3	31.3	31.3
Rented Residence	181	42.6	42.6	73.9
Staying With Parent/Family Member	111	26.1	26.1	100.0
Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

4.2.8 Formal Source of Knowledge on Halal

The majority of respondents (61.4%) acquired formal knowledge of halal from the secondary school (72.2%), primary school (71.3%) and the Fardu Ain class (KAFA); a three hour week day daily class offered by the State government. Only (40.2%) of the respondents stated that they acquired formal knowledge on halal from the university, possibly from the Islamic Studies subject offered at their universities, (6.4%) respondents acquired halal knowledge from other formal sources for example by attending short courses offered by various organisations.

Table 4.8. Descriptive Statistics of Formal Source of Halal Knowledge

Fardhu Ain Class	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	261	61.4	61.4	61.4
No	164	38.6	38.6	100.0
Total	425	100.0	100.0	
Primary School	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	303	71.3	71.3	71.3
No	122	28.7	28.7	100.0
Total	425	100.0	100.0	
Secondary School	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	307	72.2	72.2	72.2

No	118	27.8	27.8	100.0
Total	425	100.0	100.0	
University	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	171	40.2	40.2	40.2
No	254	59.8	59.8	100.0
Total	425	100.0	100.0	
Other Formal Institutions	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	27	6.4	6.4	6.4
No	398	93.6	93.6	100.0
Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Therefore, it can be concluded that formal knowledge about halal is mostly gained from a secondary school followed by primary schools, Fardhu ‘Ain class, university and other institutions. This suggests that the acquisition of halal knowledge in the University is relatively low compared to other institutions, probably due to there being no subject offered covering the halal knowledge in universities. The Islamic Studies subject that has been made compulsory for local Muslims in the private universities does not directly include halal knowledge as one of the topics.

4.2.9 Informal Source of Halal Knowledge

The five highest informal sources of halal knowledge chosen by the respondents were family (74.6), internet (73.4%) television (66.4%), friends (64.5%), and talks/seminar/*tazkirah/usrah* (64%). This is followed by newspaper (59.3%), books (58.8%), mosque/surau (58.1%) and magazines (54.1%). Radio (43.1%) and other sources (5.6%) were found as the lowest percentage of informal sources of halal knowledge.

Table 4.9: Descriptive Statistics of Informal Source of Halal Knowledge

Book	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	250	58.8	58.8	58.8
No	175	41.2	41.2	100.0
Total	425	100.0	100.0	
Magazine	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	230	54.1	54.1	54.1
No	195	45.9	45.9	100.0
Total	425	100.0	100.0	
Newspaper	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	252	59.3	59.3	59.3
No	173	40.7	40.7	100.0
Total	425	100.0	100.0	
Radio	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	183	43.1	43.1	43.1
No	242	56.9	56.9	100.0
Total	425	100.0	100.0	
Television	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	282	66.4	66.4	66.4
No	143	33.6	33.6	100.0
Total	425	100.0	100.0	
Internet	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	312	73.4	73.4	73.4
No	113	26.6	26.6	100.0

Total	425	100.0	100.0	
Family	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	317	74.6	74.6	74.6
No	108	25.4	25.4	100.0
Total	425	100.0	100.0	
Friends	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	274	64.5	64.5	64.5
No	151	35.5	35.5	100.0
Total	425	100.0	100.0	
Mosque/Musolla	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	247	58.1	58.1	58.1
No	178	41.9	41.9	100.0
Total	425	100.0	100.0	
Talk/Seminar/ <i>Usrah</i> / <i>Tazkirah</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	272	64.0	64.0	64.0
No	153	36.0	36.0	100.0
Total	425	100.0	100.0	
Others	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	24	5.6	5.6	5.6
No	400	94.1	94.1	99.8
Missing	1	.2	.2	100.0
Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

In general, the family and the internet were the main informal sources of halal knowledge among the respondents. As Malaysia is a collectivist country, the influence of family on halal knowledge acquisition could be seen as inevitable. In addition, as respondents were from the Klang Valley areas, the internet is easily accessible to them. This allows them to easily access to halal knowledge through internet if they want to. However, radio, mosques/*musalla* and printed sources newspaper, books, magazines were not considered as the main contributors of the halal knowledge for Generation Y Muslims.

4.2.10 Awareness on Halal Food Certification among Generation Y in Malaysian Private Universities

This section explores the respondents' awareness of the halal certification. Table 4.10 indicated that the mean for all items were at more than 4.44, which suggests the respondents have relatively positive awareness on halal certification. The maximum score for all items was 5 (strongly agreed) and the minimum score was 1 (strongly disagreed).

Table 4.10. Means for all Items in Halal Certification Awareness

Statements	Mean	Standard Deviation	Strongly Disagree	Disagree	Some-what Agree	Agree	Strongly Agree
Halal certification is important for me	4.67	.674	2 (0.5%)	5 (1.2%)	27 (6.4%)	69 (16.2%)	322 (75.8%)
I trust halal certification which ensures that the food is halal	4.67	.637	1 (0.5%)	2 (0.5%)	28 (6.6%)	76 (17.9%)	318 (74.8%)
I look at halal certification before I purchase the food	4.58	.711	0 (0%)	8 (1.9%)	34 (8%)	91 (21.4%)	292 (68.7%)
I will not buy food	4.49	.803	1	9	58	75	282

which does not have any halal certification			(0.2%)	(2.1%)	(13.6%)	(17.6%)	(66.4%)
I dine only in halal certified food outlets	4.51	.806	3 (0.7)	14 (3.3%)	36 (8.5%)	89 (20.9%)	282 (99.8%)
I check for halal certification before I purchase any food	4.45	.897	4 (0.9%)	17 (4.0%)	50 (11.8%)	71 (16.7%)	283 (66.6%)
I trust only the Malaysian department of Islamic development JAKIM's halal certification	4.44	.984	10 (2.4%)	19 (4.5%)	41 (9.6%)	63 (14.8%)	292 (68.7%)

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

From the percentage statistics generated in the table 4.11, (75.8%) of the respondents strongly agreed, (16.2%) agreed and (6.4%) somewhat agreed that halal certification were important for them. Percentages of respondents who agreed and strongly agreed were considered high. This could be interpreted that Generation Y Muslims in Klang Valley believed the importance of halal certification in ensuring the status of halal food. This statistic suggests that the government initiatives in developing and publicizing the halal certification in Malaysia, probably has influence on Generation Y's awareness about halal food certification.

The second item in this section tests the confidence of respondents on the halal certification in ensuring the food is halal. It is demonstrated in the table 4.10 that (74.8%) of the respondents strongly agreed, (17.9%) agreed and (6.6%) somewhat agreed to the statement that "I trust halal certification could ensure that the food is halal". The trust of Generation Y on halal certification was slightly higher compared to the importance of halal certification to them. Only (0.2%) of the respondents strongly

disagreed and (0.5%) disagreed to the statement which indicated that they did not trust that halal certification could ensure that the food is halal.

Next, table 4.11 described the respondents' behavior in checking halal certification before purchasing the food. (68.7%) of the respondents were strongly agreed, (21.4%) agreed and (8.0%) somewhat agreed that they looked at halal certification before they purchased the food. This data implies that the majority of Generation Y Muslims' awareness on halal certification is considerably high. Only (1.9 %) of them did not look at halal certification before buying the food. This was actually explained by the previous questions about Generation Y Muslims in private universities and their concern with halal certification of food that they purchase and consume.

In explaining the halal certification awareness, Table 4.11 also demonstrated that the respondents strongly agreed (66.4%), agreed (17.6%) and somewhat agreed (8.5%), that they will not buy food which do not have any halal certification. Only (2.1%) of the respondents were strongly disagreed and (0.2%) of them were disagreed with the statement. This implies that the percentage (2.3%) of respondents would buy foods which do not have halal certification is very low compared to the majority who strongly agreed, agreed and somewhat agreed to this statement.

Generation Y in private universities spend most of their time outside the house particularly in a university. Thus, dining out seems to be common or a trends for Generation Y. Furthermore, it was found that the Generation Y spend most of their money on food². Therefore, it is important to study their behavior in choosing food and food outlets while dining out.

Table 4.11 describes the behavior of dining out for Generation Y Muslims, whether they dine in only in halal food or non-halal food outlets. Among the

² Kristen M. Regine, "Generation Y Consumer Choice for Organic Foods", 3.

respondents, (68.7%) strongly agreed, (21.4%) agreed and (8.0%) somewhat agreed that they checked the halal certification before they purchase the food. This halal certification awareness was considerably high. In addition, none of the respondents strongly disagreed with this statement and only (1.9 %) of them disagreed that they looked at halal certification before they purchased the food. This corresponds with the previous findings, which shows that the respondents are concerned about halal certification when they purchase and consume food.

Exploring the trust of Generation Y on the JAKIM's halal certification, this study reveals that (68.7%), (14.8%) and (9.6%) of respondents strongly agreed, agreed and somewhat agreed that they trust only JAKIM's halal certification. Whereas, (6.9%) strongly disagreed and disagreed with this statement, implying that they trusted halal certification issued by other bodies. Even though, (93.1%) of respondents trusted only JAKIM's halal certification, but only (78.4%) could identify the actual halal logo issued by JAKIM. This could also due to the fact of JAKIM has changed their halal logo few times and there were many kinds of halal logo used by food operators in Malaysia.

In short, the finding of this study has shown that halal certification was important for Muslim consumers in ensuring halal food consumption. In the same vein, previous studies have also demonstrated the role of the halal logo in purchasing decision among Muslim consumers in Malaysia, as well as among Arab Muslims.³ The study of Nuradli Ridwan Syah et al (2007) as well showed that majority Muslim consumers

³ Golnaz Rezai et al, "Concerns For Halalness Of Halal-Labelled Food Products among Muslim Consumers in Malaysia: Evaluation of Selected Demographic Factors," 65-73.

checked the halal logo on the products' package to ensure the products that they consume were halal⁴.

In addition, this study revealed that the JAKIM's halal certification was the most trusted halal certification by Generation Y Muslim in Malaysian private universities. Similarly, research conducted by Johan Fisher (2012) revealed similar findings, where the JAKIM halal certification was preferred compared to other halal certification in Malaysia⁵. In addition, the study conducted in Kedah, Malaysia has shown that consumers who had halal knowledge and perceived value on halal were more influenced to consume products with the halal logo.⁶

Table 4.11. Descriptive Statistics of Halal Certification Awareness

Halal certification is important for me	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	2	.5	.5	.5
Disagree	5	1.2	1.2	1.6
Somewhat agree	27	6.4	6.4	8.0
Agree	69	16.2	16.2	24.2
Strongly agree	322	75.8	75.8	100.0
Total	425	100.0	100.0	
I trust halal certification which ensures that the food is halal	Frequency	Percent	Valid percent	Cumulative percent

⁴ Nuradli Ridzwan Shah Mohd Dali , Suhaila Sulaiman, Akmaliah A.Samad, Nurbaiti Ismail, Siti Hajar Alwi, "Halal Products From The Consumers Perception. An Online Survey," (proceeding, Islamic Entrepreneurship Conference (ICEP), Kolej Universiti Islam Malaysia, 19th January - 21st January 2007), 10.

⁵ Fisher, *The Halal Frontier: Muslim Consumers in a Globalized Market*, 91.

⁶ Habibah binti Che Harun, "The Confidence Level of Purchasing Product with Halal Logo among Consumers," (master dissertation, Universiti Utara Malaysia, 2011), 103.

I look at halal certification before I purchase the food	Frequency	Percent	Valid percent	Cumulative percent
Disagree	8	1.9	1.9	1.9
Somewhat agree	34	8.0	8.0	9.9
Agree	91	21.4	21.4	31.3
Strongly agree	292	68.7	68.7	100.0
Total	425	100.0	100.0	
I Will Not Buy Food Which Does Not Have Any Halal Certification	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	1	.2	.2	.2
Disagree	9	2.1	2.1	2.4
Somewhat Agree	58	13.6	13.6	16.0
Agree	75	17.6	17.6	33.6
Strongly Agree	282	66.4	66.4	100.0
Total	425	100.0	100.0	
I dine only in halal certified food outlets	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	3	.7	.7	.7
Disagree	14	3.3	3.3	4.0
Somewhat agree	36	8.5	8.5	12.5
Agree	89	20.9	21.0	33.5
Strongly agree	282	66.4	66.5	100.0
Total	424	99.8	100.0	
Missing	System	1	.2	
Total	425	100.0		
I Trust Only Malaysian Department Of Islamic Development (JAKIM)'s Halal Certification	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	10	2.4	2.4	2.4
Disagree	19	4.5	4.5	6.8
Somewhat Agree	41	9.6	9.6	16.5

Agree	63	14.8	14.8	31.3
Strongly Agree	292	68.7	68.7	100.0
Total	425	100.0	100.0	
Able to Recognise Halal Logo Issued by JAKIM	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	333	78.4	78.4	78.4
No	92	21.6	21.6	100.0
Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

4.2.11 Mean Score of All Variables

Table 4.12 shows mean scores of respondents for all the variables. The arrangement for mean values of all variables from highest to lowest is recorded as religiosity (M= 4.795, SD=.445), attitude (M= 4.790, SD=.424), subjective norms (M= 4.723, SD=.504) behavioral intention in consuming halal (M= 4.705, SD=.637) perceived behavioral control (M= 4.572, SD=.538) and government initiatives on halal consumption (M= 3.888, SD=.927).

Table 4.12: Mean Score of All Variables

	Attitude	Subjective Norms	Religiosity	Behavioral Intentions	Government Initiatives	Perceived Behavioral Control
Valid	425	425	425	425	424	425
Missing	0	0	0	0	1	0
Mean	4.7906	4.7235	4.7953	4.7059	3.8880	4.5729
Std. Deviation	.42438	.50414	.44560	.63735	.92755	.53803

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Religiosity was recorded as the highest mean value (4.80) indicating that the majority of the respondents strongly agreed and agreed to the manifestation Islam in

their thinking and action. As halal is closely related to Islam, therefore Muslim religiosity factor is vital in explaining the halal food consumption. This point is supported by a number of researches which have found the significant influence of religion on human consumption.⁷

The second highest mean value is attitude construct which is recorded at (4.79). This suggests that Generation Y Muslims in private universities have a positive evaluation on halal food consumption. This includes their positive evaluation on the image of halal food as good for them, healthy, clean and safe to consume. This is probably due to halal food being portrayed as a positive image in this country. Indubitably, food that is certified halal by JAKIM in this country has gone through systematic procedure and inspection to ensure that the food is halal, clean and safe for consumption. In addition, HDC has ensured that certified halal food in Malaysia is also recognized with HACCP and GMP.⁸ This probably could contribute to a positive attitude towards halal food among consumers.

The third highest mean variable is subjective norms or social influence to consume halal food among Generation Y Muslims in Malaysian private universities. This point suggests that family, friends and society do play their role in influencing halal food consumption. As Malaysian society practises the collectivist culture which is also recommended in Islam in the concept of "*Jama'ah*", the society should have some influence in promoting good and preventing evil among its members. But the exact influence of subjective norms is precisely elaborated in the section 4.4.

⁷ Refer to Delener Nejd et, "Religious Contrasts In Consumer Decision Behaviour Patterns: Their Dimensions and Marketing Implications", 36, Aitelmaalem et al., "Canadian Halal Meat Market Study, Agriculture Food and Rural Development," 22, and Jamal, "Marketing In A Multicultural World: The Interplay of Marketing, Ethnicity and Consumption", 1599.

⁸ Halal Industry Development Corporation, "Halal Certification," website *HDC*, retrieved on 31st Dec 2012, http://www.hdcglobal.com/publisher/qalias/gwm_halal_certification.

The dependent variable for this study, which is behavioral intention in consuming halal food, is captured at mean (4.70). This indicates that the behavioral intention of Generation Y Muslims in consuming halal food is quite high. This could be due to many factors that could influence their intentions to consume halal. The factors might originate from individuals, society and government some examples are influence by family, friends, the accessibility of halal food and the halal promotion by the authority.

The perceived behavioral control was captured at mean (4.57), which is lower compared to other variables (except government initiatives variable). The perceived behavioral control or perceived ease and difficulty to consume halal among Generation Y Muslims, includes the availability, variety and price of halal food offered in Malaysia. Since the target population for this study were Muslim students from the private universities, the price of halal food was a concern highlighted. It was observed the highest strongly disagree and disagree percentage in perceived behavioral control variable construct was the item of “the price of halal food is reasonable”, as (3.3%) respondents strongly disagreed and agreed and only (55.3%) were strongly agreed with this statement.

Table 4.13. Descriptive Statistics for the Statement “Price Of Halal Food Is Reasonable”

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	1.4	1.4	1.4
	Disagree	8	1.9	1.9	3.3
	Somewhat Agree	52	12.2	12.2	15.5
	Agree	124	29.2	29.2	44.7
	Strongly Agree	235	55.3	55.3	100.0
	Total	425	100.0	100.0	

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The lowest mean value was government initiatives variable ($M= 3.888$, $SD=.927$). This suggested that Generation Y Muslims in private universities were not strongly influenced by the government initiatives in promoting halal consumption. Even though there were many initiatives taken by the Malaysian government in stimulating halal consumption, particularly among Muslims, Generation Y were not influenced by all these efforts such as written materials on halal topics, television, trainings/seminar/talks/exhibition, halal kiosks and application. Possibly, government initiatives on halal consumption were not appealing to Generation Y of people or the message did not reach them through the medium used by the government.

In understanding the lowest mean value variable, which refer to government initiatives, descriptive percentage of respondents' responses were analysed in the table 4.14. It is indicated that the majority of respondents (97.6%) strongly agreed, agreed and somewhat agreed that they had read written materials about the halal topic in Malaysia. A minority of respondents (2.1%) of the respondents strongly disagreed (0.5%) and disagreed (1.6%) that they had read written materials on the halal topic in Malaysia. In explaining the influence of written materials on halal for consumption, (96.1%) of the respondents strongly agreed, agreed and somewhat agreed that written materials about halal influence them to consume halal food, whereas (4%) of them strongly disagreed and disagreed to the statement. This result suggested that written materials on halal had some influence on Generation Y Muslims in private universities on halal knowledge.

Table 4.14: Descriptive Statistic of Halal Written Materials

I have read written materials about the halal topic in Malaysia	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	2	.5	.5	.5

Disagree	7	1.6	1.7	2.1
Somewhat agree	67	15.8	15.8	17.9
Agree	140	32.9	33.0	50.9
Strongly agree	208	48.9	49.1	100.0
Total	424	99.8	100.0	
Missing	1	.2		
Total	425	100.0		
I have read written materials about halal matters provided by Malaysian government	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	5	1.2	1.2	1.2
Disagree	10	2.4	2.4	3.5
Somewhat agree	87	20.5	20.5	24.1
Agree	135	31.8	31.8	55.9
Strongly agree	187	44.0	44.1	100.0
Total	424	99.8	100.0	
Missing	1	.2		
Total	425	100.0		
Written materials about halal consumption influence me to consume halal food	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	6	1.4	1.4	1.4
Disagree	11	2.6	2.6	4.0
Somewhat agree	55	12.9	13.0	17.0
Agree	133	31.3	31.4	48.3
Strongly agree	219	51.5	51.7	100.0
Total	424	99.8	100.0	
Missing	1	.2		
Total	425	100.0		

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The descriptive statistics of government websites on halal in Table 4.15 indicate that the majority of respondents (86.8%) strongly agreed, agreed and somewhat agreed

that they have accessed the government websites for information on halal consumption in Malaysia. 13.2% of the respondents strongly disagreed (4.5) and disagreed (8.7%) with the statement. In general, the government websites on halal knowledge mostly can be found on the JAKIM and HDC websites. In addition, the responses of respondents on the influence of government website for them to consume halal food were (41.6%), (28.2%), (21.2%), (5.4%) and (2.8%) for strongly agreed, agreed, somewhat agreed, disagreed and strongly disagreed.

This result suggests that Generation Y accessed more written materials on halal rather than via the government website. Even though, JAKIM and HDC have extensive information about halal in their websites, but the percentage of Generation Y Muslims accessing on their website were not as high as them accessing the written materials on halal. This is quite unexpected because the respondents of this study were urban Generation Y in private universities around Klang Valley who normally have easy access to the internet.

Table 4.15. Descriptive Statistic of Government Website

I have accessed the government website for information on halal consumption in Malaysia	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	19	4.5	4.5	4.5
Disagree	37	8.7	8.7	13.2
Somewhat agree	101	23.8	23.8	37.0
Agree	95	22.4	22.4	59.4
Strongly agree	172	40.5	40.6	100.0
Total	424	99.8	100.0	
Missing	1	.2		
Total	425	100.0		
The information on government websites about halal	Frequency	Percent	Valid Percent	Cumulative Percent

consumption influence me to consume halal food				
Strongly disagree	12	2.8	2.8	2.8
Disagree	23	5.4	5.5	8.3
Somewhat agree	90	21.2	21.3	29.6
Agree	120	28.2	28.4	58.1
Strongly agree	177	41.6	41.9	100.0
Total	422	99.3	100.0	
Missing	3	.7		
Total	425	100.0		

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Examining the percentage score in the Table 4.16, indicated that the majority of respondents (95.5%) strongly agreed, agreed and somewhat agreed that they have watched halal programmes on television. A minority of respondents (4.5%) strongly disagreed (0.9%) and disagreed (3.5%) to the statement. In explaining the influence of television on them to consume halal food, (93.6%) of the respondents strongly agreed, agreed, somewhat agreed that television programmes about halal have influenced them to consume halal, whereas (6.1%) of them strongly disagreed and disagreed with the statement.

This result suggests that the majority of Generation Y watched halal programmes on television, and halal programmes have some influence on them to consume halal food. Since, Generation Y watched halal programmes on television; more interesting programmes should be aired in order to educate Generation Y Muslims on halal and to encourage them to consume halal food.

Table 4.16: Descriptive Statistic of Respondents on Government Halal Programmes in
Television

I have watched halal programmes providing information on television	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	4	.9	.9	.9
Disagree	15	3.5	3.5	4.5
Somewhat agree	71	16.7	16.7	21.2
Agree	131	30.8	30.9	52.1
Strongly agree	203	47.8	47.9	100.0
Total	424	99.8	100.0	
Missing	1	.2		
Total	425	100.0		
Halal information on television has influenced me to consume halal food	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	9	2.1	2.1	2.1
Disagree	17	4.0	4.0	6.1
Somewhat agree	58	13.6	13.7	19.8
Agree	122	28.7	28.8	48.6
Strongly agree	218	51.3	51.4	100.0
Total	424	99.8	100.0	
Missing	1	.2		
Total	425	100.0		

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The percentage of respondents who aware of halal trainings conferences and exhibitions are as shown in table 4.17. The majority of respondents (88.7%) strongly agreed, agreed and somewhat agreed that they were aware about training, talks, seminar, and exhibition on halal organized by the Malaysian government. A minority of them (11.3 %) strongly disagreed (4.0%) and disagreed (7.3%) with the statement. However,

less respondents (79.9%) strongly agreed, agreed and somewhat agreed that they have attended these trainings, conferences and exhibitions.

This result indicates that the majority of respondents were aware of the talks/seminar/exhibition on halal organized by the Malaysian government. However (20.1%) of respondents never attend any of halal trainings, conferences or exhibitions. Even though the Malaysian government has organized many halal programmes, for example, talks, seminars, exhibitions and conferences to educate public on halal knowledge and to create halal awareness⁹, it is important to ensure that all these programmes could reach Generation Y, because they are among the prominent food consumers with high spending powers¹⁰.

Table 4.17. Descriptive Statistic of halal training/conferences/exhibitions

I am aware of halal training/conferences/exhibitions about halal food	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	17	4.0	4.0	4.0
Disagree	31	7.3	7.3	11.3
Somewhat agree	66	15.5	15.6	27.0
Agree	117	27.5	27.7	54.6
Strongly agree	192	45.2	45.4	100.0
Total	423	99.5	100.0	
Missing		2.5		
Total		425	100.0	

⁹ Mohamed Sadek (2012), Halal Awareness, 842-843.

¹⁰ Karen Kueh and Boo Ho Voon, "Culture and Service Quality Expectation Evidence from Generation Y Consumers in Malaysia," 657.

I have attended halal training/conferences/exhibitions about halal food	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	31	7.3	7.3	7.3
Disagree	54	12.7	12.8	20.1
Somewhat agree	85	20.0	20.1	40.2
Agree	100	23.5	23.6	63.8
Strongly agree	153	36.0	36.2	100.0
Total	423	99.5	100.0	
Missing	2	.5		
Total	425	100.0		

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Table 4.18 indicated the percentage of respondents' awareness and their usage of halal kiosks. It is indicated that the majority of respondents (91.7%) of them, strongly agreed, agreed and somewhat agreed that they aware that halal kiosk were available in Malaysia. Only a minority of respondents were strongly disagreed (3.5%) and disagreed (4.7%) to the statement. In explaining the influence of using halal kiosks on halal food consumption, 84.6% of the respondents strongly agreed, agreed and somewhat agreed that they have used the halal kiosks, whereas 15.4% of them strongly disagreed and disagreed with the statement, indicating that they never use halal kiosks in Malaysia.

This result demonstrates that the majority of Generation Y were aware that halal kiosks were available in Klang Valley but many of them have never used them. The Malaysian government has allocated a budget of RM130, 000.00 in developing halal kiosks in Klang Valley.¹¹ Therefore, it could be benefited by halal consumers in getting information about halal knowledge and products.

¹¹ "Optimis 300,000 Guna Alat Pengesan Halal HDC," *Harian Metro*, 6th December 2011.

Table 4.18 Descriptive Statistic of Halal Kiosks

I am aware that halal kiosks are available in Malaysia	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	15	3.5	3.5	3.5
Disagree	20	4.7	4.7	8.3
Somewhat agree	53	12.5	12.5	20.8
Agree	112	26.4	26.4	47.2
Strongly agree	224	52.7	52.8	100.0
Total	424	99.8	100.0	
Missing	1	.2		
Total	425	100.0		
I have used halal kiosk in Malaysia	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	27	6.4	6.4	6.4
Disagree	38	8.9	9.0	15.4
Somewhat agree	81	19.1	19.1	34.5
Agree	101	23.8	23.9	58.4
Strongly agree	176	41.4	41.6	100.0
Total	423	99.5	100.0	
Missing	2	.5		
Total	425	100.0		

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Table 4.19 indicates the percentage of awareness on and usage of the halal application among the respondents. It is indicated that the majority of respondents (91.2%) of the respondent strongly agreed, agreed and somewhat agreed that they aware about the availability of halal application in Malaysia. Whereas, (2.4%) of respondents strongly disagreed and (6.4%) disagreed to the statement, which shows that they were not aware of the halal application was available for halal consumers in Malaysia.

Table 4.19. Descriptive Statistic of Halal Application

I am aware there is halal application in Malaysia	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	10	2.4	2.4	2.4
Disagree	27	6.4	6.4	8.7
Somewhat agree	70	16.5	16.5	25.2
Agree	121	28.5	28.5	53.8
Strongly agree	196	46.1	46.2	100.0
Total	424	99.8	100.0	
Missing	System	1	.2	
Total	425	100.0		
I have used the halal application before	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	40	9.4	9.4	9.4
Disagree	58	13.6	13.7	23.1
Somewhat agree	115	27.1	27.1	50.2
Agree	76	17.9	17.9	68.2
Strongly agree	135	31.8	31.8	100.0
Total	424	99.8	100.0	
Missing	1	.2		
Total	425	100.0		

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

In addition, 76.8% of the respondents strongly agreed, agreed and somewhat agreed that they have used the halal application. In fact, the statement of “I use a halal application on my smart phone/computers” was captured as the highest percentage (23.1%) for strongly disagreed and disagreed percentage in this section. This suggests that a percentage of the respondents who are aware about the halal application was relatively high, but many of them never used this application.

4.3 Determinants Influencing Behavioral Intentions of Generation Y in Consuming Halal Food in Malaysian Private Universities.

4.3.1 Assumptions of Multi Linear Regression Analysis

Firstly, before the data can be used in the multiple regression tests, the researcher has checked five main assumptions of MLR. The first assumption is the level of independent and dependent variable are measured at the interval level.¹² The researcher has confirmed that the independent and dependent variables were measured at the interval level. Secondly, the variables have to be normally distributed in order to avoid unstable regression estimates. However, according to DeVaus (2002), a failure of normality is not a big issue if the sample size is more than 100 cases, due to the Central of Limit Theory.¹³ Pallant (2007) also mentioned that with the large group of sample size (more than thirty), the violation of this normality assumption should not cause major problem.¹⁴ As for this study, data were not normally distributed, but the sample of 425 was more than 100 cases. Therefore, the MLR analysis could still be performed.

Next, in order to meet the assumption, the ratio cases should be twenty times more cases than predictors.¹⁵ In the case of this study, there are five predictors. Therefore, the sample should be more than 100 cases (20 x 5 predictors). As researchers managed to collect 425 samples therefore the ratio of cases to predictors were more than sufficient to meet this assumption. The fourth assumption to be met is there are no outliers that could mislead the result. In confirming this, the Mahalanobis distances

¹² David De Vaus, *Analyzing Social Science Data: 50 Keys Problems in Data Analysis*, 343.

¹³ *Ibid*, 344.

¹⁴ Pallant, *SPSS Survival Manual: A Step By Step Guide to Data Analysis Using SPSS*, 204.

¹⁵ De Vaus, *Analyzing Social science Data: 50 Keys Problems in Data Analysis*, 344.

were calculated using the Regression menu, the output was generated as the residual statistics in Table 4.20.

Table 4.20. Residual Statistics I

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	4.0164	4.9528	4.7986	.21660
Std. Predicted Value	3.607	.713	.002	.999
Standard Error Of Predicted Value	.026	.101	.039	.018
Adjusted Predicted Value	3.9770	4.9642	4.7986	.21613
Residual	2.95278	.97085	.00012	.41924
Std. Residual	7.007	2.304	.000	.995
Stud. Residual	7.021	2.365	.000	1.003
Deleted Residual	2.96425	1.02301	.00015	.42628
Stud. Deleted Residual	7.502	2.379	-.003	1.022
Mahal. Distance	.521	21.592	2.986	4.069
Cook's Distance	.000	.333	.004	.019
Centered Leverage Value	.001	.055	.008	.010

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Table 4.20 indicated the maximum value for Mahalanobis Distance is 21.592 which is larger comparing to the critical value for five independent variables (20.52) based on the chi square values in Table 4.21¹⁶ as shown below. Therefore, there were multivariate outliers in data file. In order to determine how many cases were involved as outliers, a further analysis was conducted using the descriptive statistics. The output generated in the extreme values box in Table 4.20 indicated both the highest and lowest values for the Mahalanobis distance variable and the case numbers that recorded those scores. As there were two cases involved in the extreme values with the highest values

¹⁶ Barbara G. Tabachnick, & Linda S. Fidell, *Using Multivariate Statistics*, 4th ed. (Boston: Allyn and Bacon, 2001), 93.

much larger than the critical values, these two cases were finally removed from the data file.

Table 4.21. Critical Values in Chi Square Table

Number of Dependent Variables	Critical Value
2	13.82
3	16.27
4	18.47
5	20.52
6	22.46
7	24.32
8	26.13
9	27.88
10	29.59

Source: Barbara G. Tabachnick, & Linda S. Fidell, *Using Multivariate Statistics*, 4th ed. (Boston: Allyn and Bacon, 2001), 93.

The Mahalanobis Distance was calculated again and the maximum value of Mahalanobis Distance was generated at (17.613) as shown in the table 4.22. This value was less than the critical value (20.52) as stated in Table 4.21. Therefore, it can be concluded that there were no substantial multivariate outliers and the fourth assumption was met.

Table 4.22. Residual Statistics II

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	3.9970	4.9541	4.8014	.21480
Std. Predicted Value	3.741	.712	.002	.999
Standard Error of Predicted Value	.026	.091	.038	.018
Adjusted Predicted Value	4.0175	4.9656	4.8014	.21417
Residual	2.95406	.77935	.00012	.41625
Std. Residual	7.061	1.863	.000	.995
Stud. Residual	7.075	1.908	.000	1.003
Deleted Residual	2.96564	.81756	.00014	.42314

Stud. Deleted Residual	7.571	1.914	.003	1.023
Mahal. Distance	.527	17.613	2.986	4.032
Cook's Distance	.000	.339	.004	.019
Centered Leverage Value	.001	.045	.008	.010

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The fifth assumption is to meet the multicollinearity assumption, Pearson Correlation Matrix was used to check this assumption. As shown in the 4.23, the strength of the correlations among the variables were identified. The correlation values of all the variables were less than 0.8, as it is a rule of thumb independent variables can be correlated with each other not more than 0.8 in ensuring there is no multicollinearity.¹⁷ In sum, in the correlation table 4.23, there were no pairs of variables that strongly correlated. Therefore, the violation of multicollinearity assumption was not present.

Table 4.23. Correlations between All Variables

		Attitude	Subjective Norms	Religiosity	Behavioral Intentions	Government Initiatives	Perceived Behavioral Control
Attitude	Pearson Correlation	1	.530**	.361**	.487**	.273**	.331**
	Sig.(2-tailed)		.000	.000	.000	.000	.000
	N	425	425	425	425	425	425
Subjective Norms	Pearson Correlation	.530**	1	.375**	.501**	.252**	.321**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	425	425	425	425	425	425
Religiosity	Pearson Correlation	.361**	.375**	1	.516**	.234**	.311**

¹⁷ Perry R. Hinton, Isabella Mc Murray, Charlotte Brownlow, *SPSS Explained* (London: Routledge Taylor & Francis Group, 2004), 323.

	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	425	425	425	425	425	425
Behavioral Intentions	Pearson Correlation	.487**	.501**	.516**	1	.246**	.264**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	425	425	425	425	425	425
Government Initiatives	Pearson Correlation	.273**	.252**	.234**	.246**	1	.275**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	425	425	425	425	425	425
Perceived Behavioral Control	Pearson Correlation	.331**	.321**	.311**	.264**	.275**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	425	425	425	425	425	425

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

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

4.3.2 Analysis of the Strengths of Each Determinants Influencing Halal Food Consumption

The first objective of this study was to analyse the determinants of halal food consumption among Generation Y Muslims in Malaysian private universities. In order to achieve this objective, Multiple Linear Regression was used. Five predictors were identified in order to analyze determinants influencing halal food consumption among Generation Y Muslims. The five predictors were attitude (X1), subjective norms (X2), perceived behavioral control (X3), religiosity (X4) and government initiatives (X5).

Thus, the equation of the proposed Multiple Linear Regression model is as follows:

$$Y = b_0 + b_1 (X_1) + b_2 (X_2) + b_3 (X_3) + b_4 (X_4) + b_5(X_5) + e \dots\dots\dots\text{Equation (1)}$$

Where:

Y = Behavioral Intentions in Consuming Halal Food

b0 = Constant (Intercept)

b1-4 = Estimates (Regression coefficients)

X1 = Attitude

X2 = Subjective Norms

X3 = Perceived Behavioral Control

X4 = Religiosity

X5 = Government Initiatives

e = Error

In analyzing the determinants influencing halal food consumption among Generation Y Muslims, the standard multiple regression stepwise method was used. The stepwise method has some advantages compared to other regression method of procedures. This method only includes significant predictors in the model, whereas insignificant predictor/s would be excluded from the model. In addition, this method would be able to avoid the multicollinearity problem, as the variable with the multicollinearity would also be excluded from the model.¹⁸

Based on the results obtained in table 4.24, only three predictor variables were found to be significant in explaining the behavioral intentions of Generation Y in consuming halal food. The three-predictor variables were attitude ($t = 5.119$, $p = 0.0001$), subjective norms ($t = 5.531$, $p = 0.0001$), and religiosity ($t = 8.182$, $p = 0.0001$). Hence, the null hypotheses for H1, H2, and H4 below are rejected.

¹⁸ Chua Yan Piau, *Asas Statistik Penyelidikan*, 2nd ed., (Kuala Lumpur: Mc Graw Hill, 2012), 246.

H1: There is a significant relationship between attitudes of Generation Y Muslim consumers towards behavioral intention in consuming halal food.

Ho: There is no significant relationship between attitudes of Generation Y Muslim consumers towards behavioral intention in consuming halal food.

H2: There is a significant relationship between subjective norms towards behavioral intentions of Generation Y Muslim consumers in consuming halal food.

Ho: There is no significant relationship between subjective norms towards behavioral intentions of Generation Y Muslim consumers in consuming halal food.

H4: There is a significant relationship between religiosity towards behavioral intention of generation Y Muslim consumers in consuming halal food.

Ho: There is no significant relationship between religiosity towards behavioral intention of generation Y Muslim consumers in consuming halal food.

Table 4.24. Estimates of Coefficients for the Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.203	.351		3.425	.001		
Religiosity (x4)	.560	.068	.338	8.182	.000	.823	1.215
Subjective Norms (x2)	.329	.059	.251	5.531	.000	.681	1.469
Attitude (x1)	.347	.068	.231	5.119	.000	.689	1.452

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Based on the collinearity statistics table 4.24, none of the tolerance value was smaller than 0.10 and all Variance Inflation Factor (VIF) statistics were less than 10.0. This indicates that there was no multicollinearity problem among the predictor variables

of the model and there is no potential problem of instability in this model. Therefore the model is stable and reliable.¹⁹

As shown in the table 4.25, 2 predictors were excluded from the model, which were the third predictors perceived behavioral control ($t = 0.053$, $p = 0.958$) in consuming and government initiatives in influencing halal consumption ($t = 1.118$, $p = 0.264$). Both of these predictors did not contribute in a significant way to the variation of the behavioral intention in consuming halal food. The two predictors were not supported by the questionnaires or sample data. Therefore, null hypotheses for H3 and H5 below are not rejected in this study.

H3: There is a significant relationship between perceived behavioral controls towards behavioral of generation Y Muslim consumers' in consuming halal food.

Ho: There is no significant relationship between perceived behavioral controls towards the behavior of generation Y Muslim consumers' in consuming halal food.

H5: There is a significant relationship between government initiatives towards behavioral intention of generation Y Muslim consumers in consuming halal food.

Ho: There is no significant relationship between government initiatives towards behavioral intention of generation Y Muslim consumers in consuming halal food.

Hence, the final estimated model has only three predictor variables, namely attitude, subjective norms and religiosity which significantly influence the behavioral intentions of Generation Y Muslims in consuming halal food. The two variables which are perceived behavioral control and government initiatives were excluded from the model, as shown in table 4.25.

¹⁹ Tabachnick and Fidell, Using *Multivariate Statistics*, 146.

Table 4.25. Excluded Variables of Determinants Influencing Halal Food Consumption

Model	Beta In	T	Sig.	Partial Correlation	Collinearity Statistics		
					Tolerance	VIF	Minimum Tolerance
3 Perceived Behavioral Control (x3)	.002 ^d	.053	.958	.003	.833	1.201	.668
Government Initiatives (x5)	.044 ^d	1.118	.264	.055	.895	1.117	.674

A. Dependent Variable: Behavioral Intentions

B. Predictors In The Model: (Constant), Religiosity

C. Predictors In The Model: (Constant), Religiosity, Subjective Norm

D. Predictors In The Model: (Constant), Religiosity, Subjective Norm, Attitude

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Based on the result in Table 4.24, the estimates of the model coefficients were, for b0 was 1.203, b1 was 0.347, b2 was 0.329, b3 was 0.044 and b4 was 0.560 and b5 was 0.002. Therefore, the estimated model for the sample of the study is as below:

$$Y (BI) = 1.203 + 0.347 (X1) + 0.329 (X2) + 0.044 (X3) + 0.560 (X4) + 0.002 (X5) + e$$

----- Equation (2)

Where:

Y = Behavioral Intentions in Consuming Halal Food

b0 = Constant (Intercept)

b1-4 = Estimates (Regression coefficients)

X1 = Attitude

X2 = Subjective Norms

X3 = Perceived Behavioral Control

X4 = Religiosity

X5= Government Initiatives

e = Error

Referring to the model summary in table 4.26, the R-square of 0.413 suggesting that the three determinant variables explained about (41.3%) of the variance in the behavioral intentions in consuming halal food among Generation Y in Malaysian private universities in Klang Valley. The Durbin Watson value is (2.006) which is between 1.5- 2.5 suggests that this model is independent and there is no systematic trend in the errors of the model.²⁰

Table 4.26. Model Summary for the Determinants of Halal Food Consumption

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
	.643 ^c	.413	.409	.47729	.037	26.199	1	417	.000	2.006

A. Predictors: (Constant), religiosity

B. Predictors: (Constant), religiosity, subjective norms,

C. Predictors: (Constant), religiosity, subjective norms, attitude

D. Dependent Variable: Behavioral Intention

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

²⁰ Ananda Kumar Palaniappan, *Penyelidikan dan SPSS*, (Kuala Lumpur, Malaysia: Pearson Prentice-Hal, 2009), 146.

4.3.3 Analysis of Model of Halal Food Consumption for Generation Y

The ANOVA table for this model revealed that the F statistics (97.849) were very large and the corresponding p-value is lower than the alpha value of (0.05), which was regarded as highly significant (0.0001) This indicates that the slope of the estimated linear regression model line was not equal to zero; confirming that there was a linear relationship between behavioral intentions in consuming halal food and the three-determinant variables.

Table 4.27. ANOVA Table on the Model

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	66.870	3	22.290	97.849	.000 ^d
	Residual	94.993	417	.228		
	Total	161.863	420			

A. Dependent Variable: Behavioral Intention

B. Predictors: (Constant), Attitude, Subjective Norm, Religiosity

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

As shown in Model Figure 4.1, religiosity holds the largest beta coefficient at (0.560). This indicates that religiosity factors in the control of other independent variables, made the strongest contribution in explaining behavioral intentions in consuming halal food (the dependent variable). It suggests that one standard deviation increase in religiosity was followed by (0.560) standard deviation increases in behavioral intention in consuming halal food.

Secondly, the Beta value of attitude was the second highest (0.347), followed by subjective norms (0.329) as the third significant determinant. This data corresponds with the results obtained from a descriptive analysis conducted earlier, which shows that the mean of these three determinants out of five was the highest. Therefore, this could contribute to the behavioral intentions in consuming halal food among Generation Y in Malaysian private universities. The illustration of the model for determinants influencing halal food consumption among Generation Y Muslims in Malaysian private universities based on the data collected could be reflected in figure 4.1 below;

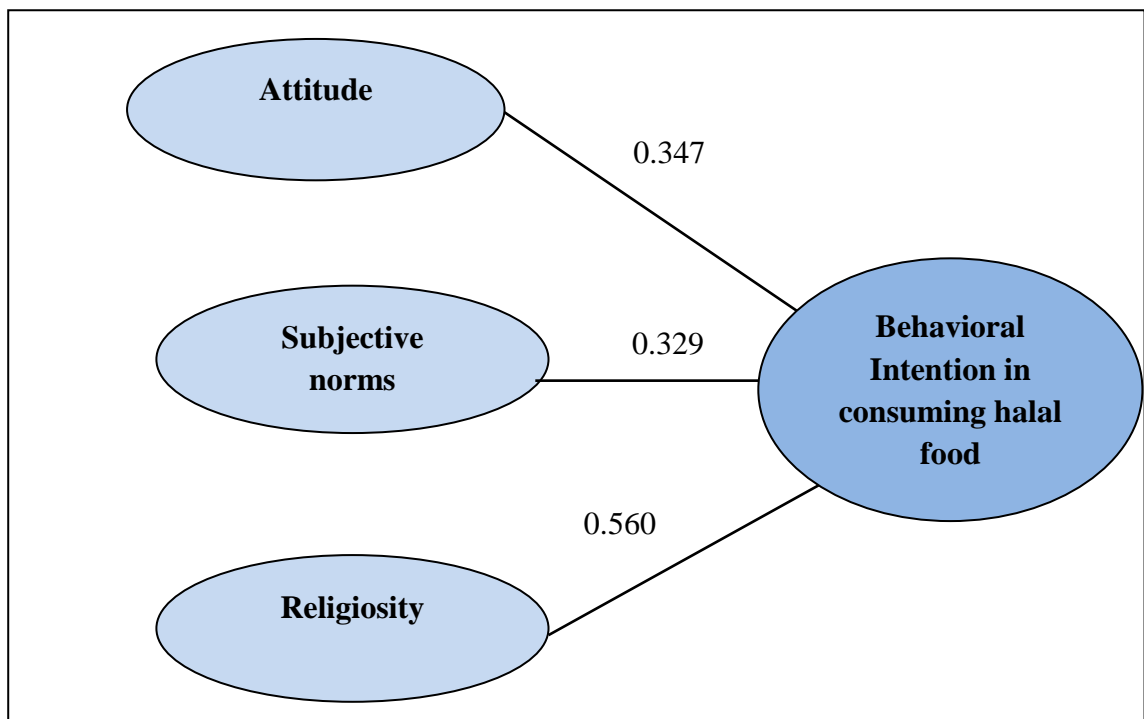


Figure 4.1. Model of Determinants Influencing Generation Y's Behavioral Intentions in Halal Food Consumption.

The data of this study imply that the positive attitude of halal food among Generation Y Muslims would contribute significantly to the increased level of their intentions in consuming halal food. The attitude of Generation Y on the advantage and benefits of halal for example health contributed positively to their intention to consume

halal food. Conceptually, the attitude of consumers on the advantage and benefits of food is a part of value negotiations of food choice.²¹

Similarly, the social influence, for example friends and family contributed significantly to the increase of behavioral intention in consuming halal food among generation Y. This is due to the fact that eating is an important element in our social life because it is a part of social and cultural practices. Normally eating take place in the presence of family members, friends and society. Therefore the eating behavior of one could be influenced by others.²²

Indubitably, the most important determinant of behavioral intention in consuming halal food is the religiosity of Generation Y Muslim consumers. Generation Y Muslim with higher religiosity tend to consume halal food more than those who are with low religiosity level. Henceforth, the results of this study indicate that developing Muslims religiosity, enhancing positive attitude about halal food and creating social influence on halal consumption are important in influencing halal food consumption among Generation Y Muslims in Malaysia. In sum, religiosity, attitude and subjective norms were influential determinants of Generation Y Muslims' behavioral intentions in consuming halal food in Malaysia.

The finding of this study confirms the study of Syed Shah Alam & Nazura (2011) which showed that attitude was a significant predictor in predicting intention to consume halal food.²³ In addition, a study conducted in Canada showed similar findings that consumers' attitude was significant in determining the halal food consumption

²¹ Tanis Furst, Margaret Connors, Carole A. Bisogni, Jeffery Sobal and Laura Winter Falk, "Food Choice: A Conceptual Model of the Process", *Appetite* 26 (1996), 247.

²² Tegan Cruwys, Kirsten E. bevelander and Roel C.J. Hermans, "Social Modelling of Eating: A review of When and Why Social Influence Affects Food Intake and Choice", *Appetite* 86, (2015), 3.

²³ Syed Shah Alam and Nazura Mohamed Sayuti, "Applying the Theory of Planned Behavior (TPB) in Halal Food Purchasing", 8-20.

among Muslims.²⁴ In fact, according the pioneer of TPB, attitude is normally found as the strongest factor in determining the behavioral intention of consumers.²⁵

Subjective norms were found significant in influencing behavioral intentions of halal food consumption among Generation Y consumers in this study. Family and friends play an important role in influencing Generation Y to consume halal food. This finding strengthens the findings of Suddin Lada et al (2006), as they revealed that subjective norm was significant where family, friends and colleagues could influence one to consume halal.²⁶ In the same vein, Islam stressed the significant influence of subjective norms in the society, particularly the role of parent in shaping the belief and behavior of their children. Prophet SAW deliberated the importance of parents in educating children as mentioned in the hadith below.

Abu Huraira reported: The Messenger of Allah, peace and blessings be upon him, said:

مَا مِنْ مَوْلُودٍ إِلَّا يُولَدُ عَلَى الْفِطْرَةِ، فَأَبَوَاهُ يُهَوِّدَانِهِ أَوْ يُنَصِّرَانِهِ أَوْ يُمَجِّسَانِهِ، كَمَا
تُنْتَجُ الْبَهِيمَةُ بِهَيْمَةِ جَمْعَاءَ، هَلْ نُحْسِنُ فِيهَا مِنْ جَدْعَاءَ " ثُمَّ يَقُولُ {فِطْرَةَ اللَّهِ
الَّتِي فَطَرَ النَّاسَ عَلَيْهَا لَا تَبْدِيلَ لِخَلْقِ اللَّهِ ذَلِكَ الدِّينُ الْقَيِّمُ}

Translation: Every child is born with a true faith of Islam (i.e. to worship none but Allah Alone) but his parent's convert him to Judaism, Christianity or Magainism, as an animal delivers a perfect baby animal. Do you find it mutilated?" Then Abu Huraira recited the holy verses: "The pure Allah's Islamic nature (true faith of Islam) (i.e.

²⁴ Aitelmaalem et al., "Canadian Halal Meat Market Study", 22.

²⁵ Ajzen, *Handbook of Consumer Psychology*, 530.

²⁶ Suddin Lada et.al, 'Predicting Intention to Choose Halal Products Using Theory of Reasoned Action,' 66-76.

worshipping none but Allah) with which He has created human beings. No change let there be in the religion of Allah (i.e. joining none in worship with Allah). That is the straight religion (Islam) but most of men know, not. (30.30).²⁷

In addition, Syed Shah Alam & Nazura (2011) stressed the fact that Malaysia with a predominantly Muslim population practice collectivistic culture which subjective norms normally play an important role for Muslims in halal food purchasing.²⁸ However, this study is opposing to the findings of Liou and Contento (2001)²⁹ which showed that the subjective norms did not have a positive influence towards food behavioral intention, probably because the study of Liou and Contento was conducted among the non-collectivist society of Chinese American. This data also confirm the Social Modelling Theory which suggested that people are influenced by the eating behaviors of others especially by those who are in the circle of their social lives.³⁰

The study conducted by Bonne and Verbeke (2007)³¹ and Bonne et al (2006)³² showed that perceived behavioral control was an important determinant in halal consumption. However, this study reveal that perceived behavioral control was not significant in determining halal food consumption among Generation Y Muslims in

²⁷ Hadith was narrated by al-Bukhāri, Kitāb al-Janāiz, Bab Izā Aslama Sobhī Famāta Hal Yusollī ‘Alaihi wahal yuqridhu ‘alā Sobhi al-Islām, Hadith no.1292, and Muslim, Kitāb al-Qadrā, Bab Maqnā kulli Maulūd Yūlad ‘ala Fiṭrati wa Hukmi Mauti Athfāl li al-Kuffāri wa Athfāl li Muslimīn, Hadith no. 2658.

²⁸ Syed Shah Alam and Nazura Mohamed Sayuti, “Applying the Theory Of Planned Behavior (TPB) In Halal Food Purchasing”, 8-20.

²⁹ Doreen Liou and Isobel R. Contento, “Usefulness of Psychosocial Theory of Variables in Explaining Fat-Related Dietary Behaviour in Chinese American: Association with Degree of Acculturation”, *Journal of Nutrition Education* 33, no. 6, (2001), 322-331.

³⁰ Tegan Cruwys et al., “Social Modelling of Eating: A review of When and Why Social Influence Affects Food Intake and Choice”, *Appetite* 86, (2015), 3.

³¹ Karijn Bonne and Wim Verbeke, “Muslims Consumers Attitude towards Meat Consumption in Belgium: Insights from a Means-End Chain Approach,” *Anthropology of Food* 5, (2006), 367-389.

³² Bonne et al., "Determinants of Halal Meat Consumption in France", 367-386

private universities around Klang Valley. This suggests that the ease and difficulty in consuming halal food did not significantly influence Generation Y to consume halal food. Thus, even though if halal food is expensive or not easily accessible, or not many choices offered in Malaysian private universities, Generation Y would still consume halal due to their religiosity, positive attitude about halal food and influences from people surround them. This finding aligns with a previous study which showed that even though consumers perceived the price of halal certified food more expensive than food without halal certification, they would still consume the halal certified food³³. The insignificant role of perceived behavioral control was also supported by Syed Shah Alam & Nazura (2011) in their study to predict Muslims behavioral intention in consuming halal food.³⁴

Religiosity was found as the strongest determinant in predicting behavioral intention of Generation Y in consuming halal food. Similarly, it was also found significant in influencing consumers to consume halal products.³⁵ This reflected the fact that religiosity could shape the preferences and tastes of consumers.³⁶ In fact, this essentially supported the suggestion made by Shafiek and Leigh Spartks (2009) that religiosity should be placed as one of determinants of shopping orientation in the consumer behavior framework.³⁷

³³ Nuradli Ridzwan et al., "Halal Products from the Consumers Perception: An Online Survey," 10.

³⁴ Syed Shah Alam and Nazura, "Applying the Theory Of Planned Behavior (TPB) In *Halal* Food Purchasing", 8-20.

³⁵ Habibah binti Che Harun, "The Confidence Level of Purchasing Product with Halal Logo among Consumers," 103.

³⁶ Djamchid Assadi, "Do Religion Influence Customer Behavior? Confronting Religious Rules and Marketing Concepts," *CEREN*, no. 5 (2003), 2-13.

³⁷ Safiek Mokhlis and Leigh Spartks, "Consumer Religiosity and Shopping Behavior in Kuala Lumpur", 96-97.

The last predictor, government initiatives in encouraging halal food consumption was found not significantly influencing Generation Y to consume halal food. The Malaysian government has used the media in educating the public on this matter, for example through publicity on halal certification and halal food aired on television, radio and printed media.³⁸ This is because the knowledge and awareness of food consumption could be disseminated through media. This study found that the government's initiatives in promoting halal consumption did not significantly influence behavioral intention of Generation Y in consuming halal food. There was no quantitative research found investigating this aspect, therefore it is quite difficult to statistically compare it with previous research. However, conceptually the importance of the Malaysian's government efforts in developing the halal industry and influencing halal consumption in Malaysia was previously emphasized by Johan Fisher³⁹ and Prof Mohamad Sadek.

It can be concluded that the Theory of Planned Behavior could be used as a theoretical framework for this study, with an added variable of religiosity to suit the context of Muslim consumers and halal consumption. However, perceived behavioral control was found not as significant. This could be due to the religiosity factor which dominates the perceived behavioral control factor. In addition, technically there is no major constraint in getting halal food in Malaysia. This comes with the assumption that when Muslims consume halal food based on the religious obligation, the variety, price, any other difficulty or ease in consuming halal food (perceived behavioral factor) can no longer be a determinant of their consumption.

Adding religiosity as an additional variable in this study empirically proves the need of looking at the context of study in using any theoretical framework. The need of

³⁸ Mohamed Sadek (2012), Halal Awareness, 842-843.

³⁹ Refer to Johan Fisher, "The Halal Frontiers: Muslim Consumers in a Globalized Market," and Johan Fischer, "Religion, Science and Markets," 829-830.

using a conceptual theory by considering the suitability of the context of study has been stressed by Prof Gomez in his talk “Constructing Knowledge: Interdisciplinary Research”. He has deliberated the need for multi-disciplinary research to explain the research problem and phenomenon in the society.⁴⁰ As this study is a multi-disciplinary kind of research which combines religious study with consumer behavior field of inquiry; therefore, it needs an interdisciplinary theorizing, as it could explain better on the inquiry of the present study. Hence, it could contribute to the body of knowledge and explain the halal food consumption in a comprehensive manner.

4.4 Moderating Effects of Gender between the Determinants and the Behavioral Intentions in Consuming Halal Food among Generation Y Muslims in Malaysian Private Universities

The earlier MLR analysis was conducted in Section 4.3.2, indicated that the attitude (X1), subjective norms (X2), and religiosity (X4) contributed to the variance behavioral intention in consuming halal food. In order to further analyse determinants of halal food consumption among Generation Y. This section intends to determine whether the relationship between the attitude, subjective norms, perceived behavioral control, religiosity, government initiatives and behavioral intentions in consuming halal food changes depending on gender.

Therefore, Moderated Multiple Regression (MMR) analysis was used to determine if gender moderates the relationship between all these determinants and behavioral intentions in consuming halal food. Figure 4.2 illustrates the proposed model for predicting the moderating effects of gender and halal knowledge acquired at

⁴⁰ Edmund Terrence Gomez (Professor, University of Malaya) in his talk on Constructing Knowledge: Interdisciplinary Research in Taylor’s University Malaysia, 16th July 2014.

university between predictors influencing halal consumption and the behavioral intentions in consuming halal food.

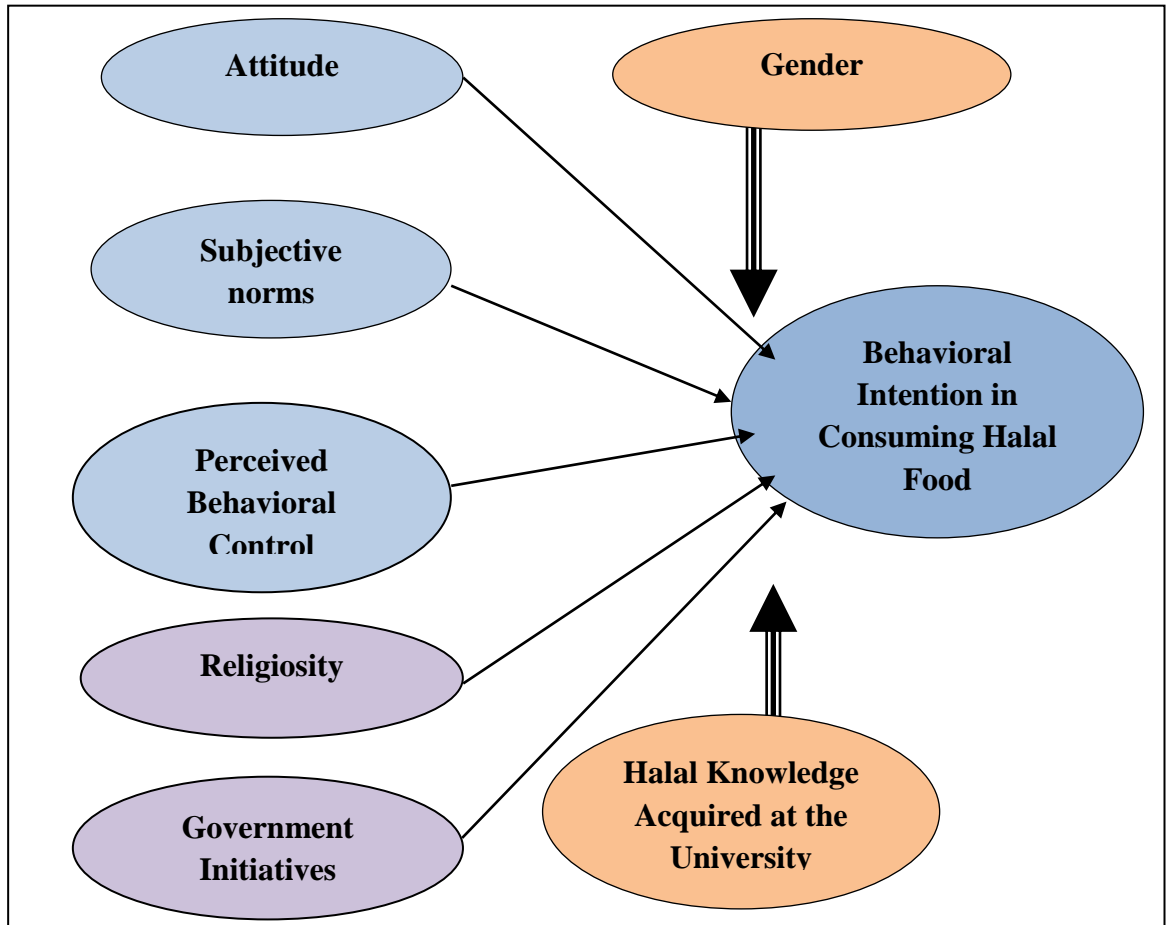


Figure 4.2. Proposed Model for Predicting the Moderating Effects of Gender and Halal Knowledge Acquired at University between Predictors Influencing Halal Consumption and the Behavioral Intentions in Consuming Halal Food.

4.4.1 Moderating Effects of Gender between Attitude and Behavioral Intentions in Consuming Halal Food.

Two equations were formed in determining if gender moderates the relationship between attitude and behavioral intentions in consuming halal food, the first equation proposed is as follows:

$$Y = a + b_1X_1 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b1 = Least squares estimate of the population regression coefficient for X

b2 = Least squares estimate of the population regression coefficient for Z

X1 = Attitude

Z = Gender (moderator)

e = Residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors (X1·Z), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b1X1 + b2Z + b3X1 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b1 = Least squares estimate of the population regression coefficient for X

b2 = Least squares estimate of the population regression coefficient for Z

X1 = Attitude

Z = Gender (moderator)

X·Z = Product Term between attitude and gender

e = residual (error)

Table 4.28. Model Summary for the Moderating Effects of Gender between Attitude and Behavioral Intentions to Consume Halal Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.229 ^a	.053	.048	.45712	.053	10.832	2	425	.000	
2	.270 ^b	.073	.066	.45277	.020	8.528	1	424	.004	1.792

A. Predictors: (Constant), Mean Composite Score Attitude, Dummy Variable Gender

B. Predictors: (Constant), Mean Composite Score Attitude, Dummy Variable Gender , Dummy Variable Gender and X1

C. Dependent Variable: Behavioral Intention

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Results in Table 4.28 show that for model 1, $R = 0.229$, $R^2 = 0.053$. and $F(2, 425) = 10.832$, $p = 0.001$. The R^2 means that 5.3% of the variance in behavioral intention in consuming halal was explained by the attitude and gender. The Durbin Watson value is 1.792 which is between 1.5-2.5 suggesting that the values are independent and there is no systematic trend in the errors of the model.⁴¹

Specifically, the coefficients in Table 4.29 showed that the resulting regression equation for model 1 is the following:

$$Y = 2.966 + 0.368X1 + 0.028Z \text{ ----- Equation (3)}$$

Where:

Y = Behavioral intention

⁴¹ Palaniappan, *Penyelidikan dan SPSS*, 146.

X1 = Attitude

Z = Gender

Table 4.29. Coefficients Values for each Model for the Moderating Effects of Gender between Attitude and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.966	.395		7.509	.000
	Dummy Variable Gender	.028	.047	.030	.599	.549
	Mean Composite Score Attitude	.368	.080	.226	4.582	.000
2	(Constant)	.476	1.242		.383	.702
	Dummy Variable Gender	2.290	.776	2.412	2.951	.003
	Mean Composite Score Attitude	1.076	.255	.661	4.216	.000
	Dummy Variable Gender and X1	.465	.159	2.446	2.920	.004

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Table 4.29 shows the coefficients for model of both attitude and gender. Model 1 was statistically significant at the $p < .001$. The equation in Model 1 also show that for one point increase in attitude, behavioral intentions was predicted to increase by 0.368, given that gender was held constant. The regression coefficient associated with gender meant that the difference in behavioral intentions that increased between male and female was 0.028, given that the attitude score was held constant. Model 1 did not include the product term and thus ignored a possible moderating effect of gender. In other words, this model showed that, holding gender constant; the behavioral intention increases by an average of 0.368 when the attitude increases 1 point.

Model 2 in the table 4.29 show results after the product term is entered into the equation. As shown in Table 4.28, the addition of the product term resulted in an R^2 change of 0.073, $F(1, 424) = 8.528$, $p = 0.004$. With the p value = 0.004, this result

supports the presence of a moderating effect. In other words, the moderating effect of gender explains the variance in behavioral intentions in consuming halal food was above and beyond the variance explained by the attitude and gender. The causal effect of attitude and behavioral intention is still significant; therefore, it can be concluded that gender moderates the relationship of attitude and behavioral intention in consuming halal food. Output in Table 4.29 included information regarding the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 0.476 + 1.076X_1 + 2.290Z + 0.465Z \text{ ----- Equation (4)}$$

Where:

Y = Behavioral Intention

X₁ = Attitude

Z = Gender

X₁·Z = Product Term between attitude and gender

In sum, the influence of attitude on behavioral intention to consume halal food was also influenced by gender, whereas female respondents had more positive attitudes on halal food compared to male respondent which led to the positive behavioral intention to consume halal food among them. Based on the findings presented above, the null hypothesis of H₆ is rejected, as gender demonstrated a moderating effect between the attitude and the behavioral intention to consume halal food.

H₆: Gender plays a moderating role in the relationship between attitude and behavioral intention in consuming halal food.

Ho: Gender does not play a moderating role in the relationship between attitude and behavioral intention in consuming halal food.

4.4.2 Moderating Effects of Gender between Subjective Norms and Behavioral Intentions in Consuming Halal Food.

Two equations were formed in order to determine if gender moderated the relationship between subjective norms and behavioral intentions in consuming halal food. The first equation proposed is as follows:

$$Y = a + b_1X_2 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₂ = subjective norms

Z = Gender (moderator)

e = Residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors (X₂·Z), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b_1X_2 + b_2Z + b_3X_2 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b1 = Least squares estimate of the population regression coefficient for X

b2 = Least squares estimate of the population regression coefficient for Z

X2 = Subjective Norms

Z = Gender (moderator)

X·Z = Product Term between subjective norms and gender

e = residual (error)

Table 4.30. Model Summary for the Moderating Effects of Gender between Subjective Norms and Behavioral Intentions in Consuming Halal Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.307 ^a	.094	.089	.44702	.094	20.231	2	425	.000	
2	.319 ^b	.102	.095	.44563	.008	3.445	1	424	.064	1.793

A. Predictors: (Constant), Dummy Variable Gender , Subjective Norm

B. Predictors: (Constant), Dummy Variable Gender , Subjective Norm, Dummy Variable And X2

C. Dependent Variable: Behavioral Intention

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Results in Table 4.30 show that of Model 1, $R = 0.307$, $R^2 = 0.094$ and $F(2, 425) = 20.231$, $p = 0.0001$. The R^2 means that 9.4% of the variance in behavioral intention in consuming halal was explained by subjective norms and gender. The Durbin Watson value is 1.793 which is between 1.5-2.5 suggests that the values are

independent and there is no systematic trend in the errors of the model.⁴² Explicitly, the coefficients in Table 4.31 show that the resulting regression equation for model 1 as follows:

$$Y = 2.858 + 0.401X_2 + 0.010X_2Z \text{ ----- Equation (5)}$$

Where:

Y = Behavioral intention

X₂ = Subjective Norms

Z = Gender

Table 4.31. Coefficients Values for each Model for the Moderating Effects of Gender between Subjective Norms and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.858	.308		9.279	.000
	Mean Composite Score Subjective Norm	.401	.064	.305	6.306	.000
	Dummy Variable Gender	.010	.046	.010	.213	.832
2	(Constant)	1.178	.956		1.232	.219
	Mean Composite Score Subjective Norm	.752	.199	.573	3.771	.000
	Dummy Variable Gender	1.140	.611	1.200	1.867	.063
	Dummy Variable gender and X ₂	.235	.127	1.248	1.856	.064

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

⁴² *Ibid.*

The coefficients for both subjective norms and gender in the Model 1 were statistically significant at the $p < .0001$ level. The equation in Model 1 also showed that for one point increase in subjective norms, behavioral intentions was predicted to increase by 0.401, given that gender was held constant. The regression coefficient associated with gender meant that the difference in behavioral intentions increased between male and female was 0.010, given that attitude score was held constant. Model 1 did not include the product term and thus ignored a possible moderating effect of gender. In other words, this model showed that, holding gender constant; the behavioral intention increases by an average of 0.401 when the subjective norm increases 1 point.

Model 2 shows results after the product term is entered into the equation. As shown in Table 4.31, the addition of the product term resulted in an R^2 change of 0.102, $F(1, 424) = 3.445, p = 0.064$. With the p value = 0.064, this result did not support the presence of a moderating effect. Output in Table 4.31 included information regarding the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 1.178 + 0.752X_2 + 1.140Z + 0.235X_2 \cdot Z \text{ ----- Equation (6)}$$

Where:

Y = Behavioral Intention

X₂ = Subjective Norms

Z = Gender

X₂·Z = Product Term between subjective norms and gender

In other words, the moderating effect of gender did not explain the variance in behavioral intentions in consuming halal food above and beyond the variance explained

by subjective norms and gender. This indicates that gender does not moderate the relationship between subjective norms and behavioral intention in consuming halal food. In sum, gender has no significant influence in enhancing or decreasing effect of subjective norms on the behavioral intentions between male and female respondents. The influence peers, family and friends on behavioral intention to consume halal food were significant without an influence of the gender of respondents. Meaning to say, regardless what gender the respondents are, peers, family and friend did influence their intentions to consume halal food.

Based on the findings presented above, the null hypothesis of H7 is not rejected, as gender does not demonstrate a moderating effect between the subjective norms and the behavioral intention to consume halal food.

H7: Gender plays a moderating role in the relationship between subjective norms and behavioral intention in consuming halal food.

Ho: Gender does not play a moderating role in the relationship between subjective norms and behavioral intention in consuming halal food.

4.4.3 Moderating Effects of Gender between Perceived Behavioral Control and Behavioral Intentions in Consuming Halal Food.

In determining the role of gender in moderating the relationship between perceived behavioral control and behavioral intentions in consuming halal food, two equations were formed. The first equation proposed is as follows:

$$Y = a + b_1X_3 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b1 = Least squares estimate of the population regression coefficient for X

b2 = Least squares estimate of the population regression coefficient for Z

X3 = Perceived Behavioral Control

Z = Gender (moderator)

e = residual (error)

Table 4.32 Model Summary for the Moderating Effects of Gender between Perceived Behavioral Control and Behavioral Intentions in Consuming Halal Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.171	.029	.024	.46274	.029	5.859	2	425	.003	
2	.171 ^b	.029	.022	.46332	.000	.017	1	424	.897	1.707

A. Predictors: (Constant), Mean Composite Score Perceived Behavioral Control, Dummy Variable Gender

B. Predictors: (Constant), Mean Composite Score Perceived Behavioral Control, Dummy Variable Gender , Dummy Variable Gender And Perceived Behavioral Control

C. Dependent Variable: Behavioral Intention

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The second equation called the MMR model was developed by creating a new variable, the product between the predictors ($X1 \cdot Z$), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b_1X_3 + b_2Z + b_3X_3 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₃ = Perceived Behavioral Control

Z = Gender (moderator)

X·Z = Product Term between Perceived Behavioral control and gender

e = Residual (error)

Results in Table 4.32 show that of Model 1, $R = 0.171$, $R^2 = 0.029$. and $F(2, 425) = 8.859$, $p = 0.003$. The R^2 means that 2.9% of the variance in behavioral intention in consuming halal was explained by perceived behavioral control and gender. The Durbin Watson value is 1.707 which is between 1.5-2.5 suggesting that the values are independent and there is no systematic trend in the errors of the model.⁴³ Specifically, the coefficients in Table 4.33 showed that the resulting regression equation of Model 1 is as follows:

$$Y = 3.997 + 0.033X_3 + 0.163Z \text{ ----- Equation (7)}$$

Where:

Y = Behavioral intention

X₃ = Perceived Behavioral Control

Z = Gender

⁴³ Palaniappan, *Penyelidikan dan SPSS*, 146.

Table 4.33. Coefficients Values for each Model for the Moderating Effects of Gender between Perceived Behavioral Control and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.997	.237		16.868	.000
	Dummy Variable Gender	.033	.047	.035	.692	.490
	Mean Composite Score Perceived Behavioral Control	.163	.049	.166	3.327	.001
2	(Constant)	3.905	.750		5.204	.000
	Dummy Variable Gender	.092	.458	.097	.200	.841
	Mean Composite Score Perceived Behavioral Control	.183	.162	.186	1.129	.260
	Dummy Variable Gender and X3	.013	.099	.067	.130	.897

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The coefficients for perceived behavioral control in the Model 1 was statistically significant at the $p < .005$ level, but gender was not significant. The equation in Model 1 also show that for one point increase in perceived behavioral control, behavioral intentions was predicted to increase by 0.163, given that gender was held constant. The regression coefficient associated with gender meant that the difference in behavioral intentions increased between male and female was 0.033, given that attitude score was held constant. Model 1 did not include the product term and thus ignored a possible moderating effect of gender. In other words, this model showed that, holding gender

constant; the behavioral intention increases by an average of 0.163 when perceived behavioral control increases 1 point.

Model 2 shows results after the product term is entered into the equation. As shown in Table 4.32, the addition of the product term resulted in an R^2 change of 0.001, $F(1, 424) = 0.017, p = 0.897$. With the p value = 0.897, this result did not support the presence of a moderating effect. Output in Table 4.33 included information regarding the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 3.905 + 0.183X_3 - 0.092Z + 0.013X_3 \cdot Z \text{ ----- Equation (8)}$$

Where:

Y = Behavioral Intention

X₃ = Perceived Behavioral Control

Z = Gender

X₃·Z = Product Term between Perceived Behavioral Control and gender

This indicates that the moderating effect of gender does not explain the variance in behavioral intentions in consuming halal above and beyond the variance explained by perceived behavioral control and gender. This suggests that gender did not moderate the relationship between perceived behavioral control and behavioral intention in consuming halal food. In sum, gender has no significant influence in enhancing or decreasing the effect of perceived behavioral control on the behavioral intentions between male and female respondents. The ease and difficulty in consuming halal food do not influence by the factor of gender in influencing behavioral intention to consume halal food. Gender does not significantly enhance or decrease the effect of perceived

behavioral control factor on behavioral intention to consume halal food. Either the respondents were male or female, the ease and difficulty of consuming halal food, for example the accessibility of halal food, price and variety of accessible halal food do not significantly influence them to consume or not to consume halal food.

Based on the findings presented above, the null hypothesis of H8 is not rejected, as gender does not demonstrate a moderating effect between the perceived behavioral control and the behavioral intention to consume halal food.

H8: Gender plays a moderating role in the relationship between perceived behavioral control and behavioral intention in consuming halal food.

Ho: Gender does not play a moderating role in the relationship between perceived behavioral control and behavioral intention in consuming halal food.

4.4.4 Moderating Effects of Gender between Religiosity and Behavioral Intentions in Consuming Halal Food.

In analysing the role of gender in moderating the relationship between religiosity of respondents and their behavioral intentions in consuming halal food, two equations were formed. The first equation is as below:

$$Y = a + b_1X_4 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₄ = Religiosity

Z = Gender (moderator)

e = Residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors (X4·Z), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b_1X_4 + b_2Z + b_3X_4 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₄ = Religiosity

Z = Gender (moderator)

X₄·Z = Product Term between Religiosity and gender

e = Residual (error)

Table 4.34. Model Summary for the Moderating Effects of Gender between Religiosity and Behavioral Intentions in Consuming Halal Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.389 ^a	.152	.147	.43259	.152	34.833	2	425	.000	
2	.390 ^b	.152	.146	.43294	.001	.375	1	424	.541	1.932

A. Predictors: (Constant), Religiosity, Dummy Variable Gender

B. Predictors: (Constant), Religiosity, Dummy Variable Gender , Dummy Variable Gender And X₄

C. Dependent Variable: Behavioral Intention

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Results in Table 4.34 show that of Model 1, $R = 0.389$, $R^2 = 0.152$. and $F(2, 425) = 34.833$, $p = 0.001$. The R^2 means that 15.2% of the variance in behavioral intention in consuming halal was explained by religiosity and gender. The Durbin Watson value is 2.006 which are between 1.5-2.5, suggesting that the values are independent and there is no systematic trend in the errors of the model.⁴⁴

The coefficients in Table 4.35 showed that the resulting regression equation for model 1 is the following:

$$Y = 1.190 + 0.016X_4 + 0.736Z \text{ ----- Equation (9)}$$

Where:

Y = Behavioral intention

X₄ = Religiosity

Z = Gender

⁴⁴ *Ibid*, 146.

Table 4.35. Coefficients Values for each Model for the Moderating Effects of Gender between Religiosity and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.190	.434		2.743	.006
	Dummy Variable Gender	.016	.044	.017	.367	.714
	Religiosity	.736	.089	.388	8.302	.000
2	(Constant)	2.036	1.449		1.405	.161
	Dummy Variable Gender	.519	.876	.547	.593	.554
	Religiosity	.562	.298	.296	1.887	.060
	Dummy Variable Gender And X4	.110	.180	.578	.612	.541

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The coefficients for religiosity in the Model 1 was statistically significant at the $p < .001$ level, while gender was not significant. Equation in Model 1 also showed that for one point increase in religiosity, behavioral intentions was predicted to increase by 0.736, given that gender was held constant. The regression coefficient associated with gender meant that the difference in behavioral intentions increased between male and female was 0.016, given that religiosity score was held constant. Model 1 did not include the product term and ignored a possible moderating effect of gender. In other words, this model showed that, holding gender constant; the behavioral intention increased by an average of 0.736 when religiosity increases 1 point.

Model 2 shows the results after the product term is entered into the equation. As shown in Table 4.35, the addition of the product term resulted in an R^2 change of 0.001,

$F(1, 424) = 0.375, p = 0.54$. With the p value = 0.541, this result did not support the presence of a moderating effect.

The output in Table 4.35 includes information regarding the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 2.036 + 0.562X_4 - 0.519Z + 0.110X_4.Z \text{ ----- Equation (10)}$$

Where:

Y = Behavioral Intention

X₄ = Religiosity

Z = Gender

X₄·Z = Product Term between Religiosity and gender

In sum, the moderating effect of gender did not explain the variance in behavioral intentions in consuming halal above and beyond the variance explained by religiosity and gender. This indicates that gender does not moderate the relationship between religiosity and behavioral intention in consuming halal food. In other words, the gender of respondents does not contribute significantly in enhancing or decreasing the effect of religiosity on halal food consumption. Therefore, we can predict that if the respondents are religious they would consume halal food regardless of male or female respondents.

Based on the result presented above, the null hypothesis of H₉ is not rejected, as gender does not demonstrate a moderating effect between the religiosity and the behavioral intention to consume halal food.

H₉: Gender plays a moderating role in the relationship between religiosity and behavioral intention in consuming halal food.

Ho: Gender does not play a moderating role in the relationship between religiosity and behavioral intention in consuming halal food.

4.4.5 Moderating Effects of Gender between Government Initiatives and Behavioral Intentions in Consuming Halal Food.

Two equations were formed in order to analyse the moderating effect of gender and the relationship between government initiatives of respondents and their behavioral intentions in consuming halal food. The first equation proposed is as follows:

$$Y = a + b_1X_5 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₅ = Government Initiatives

Z = Gender (moderator)

e = Residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors (X₁·Z), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b_1X_1 + b_2Z + b_3X_5 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b1 = Least squares estimate of the population regression coefficient for X

b2 = Least squares estimate of the population regression coefficient for Z

X5 = Government Initiatives

Z = Gender (moderator)

X5·Z = Product Term between Government Initiatives and Gender

e = residual (error)

Table 4.36. Model Summary of the Moderating Effects of Gender between Government Initiatives and Behavioral Intentions in Consuming Halal Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.163 ^a	.027	.022	.46384	.027	5.318	2	389	.005	1.652
2	.166 ^b	.028	.020	.46418	.001	.421	1	388	.517	

A. Predictors: (Constant), GI, Dummy Variable Gender

B. Predictors: (Constant), Government Initiatives, Dummy Variable Gender , Dummy Variable Gender And X5

C. Dependent Variable: Behavioral Intentions

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Results in Table 4.36 shows that of Model 1, $R = 0.163$, $R^2 = 0.27$. and $F(2, 425) = 5.318$, $p = 0.005$. The R^2 means that 2.7% of the variance in behavioral intention in consuming halal explains by government initiatives and gender. The Durbin Watson value is 1.652 which is between 1.5-2.5 suggesting that the values are independent and

there is no systematic trend in the errors of the model.⁴⁵ The coefficients in Table 4.37 showed that the resulting regression equation for model 1 is the following:

$$Y = 4.429 + 0.082X5 + 0.031Z \text{ ----- Equation (11)}$$

Where:

Y = Behavioral intention

X5 = Government Initiatives

Z = Gender

Table 4.37. Coefficients Values for each Model for the Moderating Effects of Gender between Government Initiatives and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.429	.126		35.042	.000
	Dummy Variable Gender	.031	.048	.032	.645	.520
	Government Initiatives	.082	.026	.158	3.165	.002
2	(Constant)	4.221	.344		12.275	.000
	Dummy Variable gender	.164	.211	.173	.778	.437
	Government Initiatives	.135	.085	.261	1.576	.116
	Dummy Variable Gender and X5	.034	.052	.180	.649	.517

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

⁴⁵ *Ibid.*

Table 4.37 shows the coefficients for government initiatives in the Model 1 was statistically significant at the $p < .005$ level. The equation in Model 1 also shows that for one point increase in government initiatives, behavioral intentions is predicted to increase by 0.082, given that gender is held constant. The regression coefficient associated with gender means that the difference in behavioral intentions, which increases between male and female was 0.031, given that religiosity score is held constant. Model 1 does not include the product term and thus ignores a possible moderating effect of gender. It is demonstrated that holding gender constant; the behavioral intention increases by an average of 0.082 when religiosity increases 1 point.

Model 2 shows results after the product term is entered into the equation. As shown in Table 4.37, the addition of the product term resulted in an R^2 change of 0.001, $F(1, 424) = 0.421, p = 0.517$. With the p value = 0.517, this result does not support the presence of a moderating effect. Output in Table 4.37 includes information regarding the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 2.036 + 0.562X_5 - 0.519Z + 0.110 X_5 \cdot Z \text{ ----- Equation (12)}$$

Where:

Y = Behavioral Intention

X₅ = Government Initiatives

Z = Gender

X₅·Z = Product Term between government initiatives and dummy variable gender

In sum, the moderating effect of gender does not explain the variance in behavioral intentions in consuming halal above and beyond the variance explained by

government initiatives and gender. This indicates that gender does not moderate the relationship between government initiatives and behavioral intention in consuming halal food. Based on the result presented above, the null hypothesis of H10 is not rejected, as gender does not perform a moderating effect between the government initiatives and the behavioral intention to consume halal food.

H10: Gender plays a moderating role in the relationship between government initiatives and behavioral intention in consuming halal food.

Ho: Gender does not play a moderating role in the relationship between government initiatives and behavioral intention in consuming halal food.

4.4.6 Moderating Effects of Halal Knowledge Acquired at the University between the attitude and Behavioral Intentions in Consuming Halal Food.

Two equations were formed in analyzing the moderating effect of halal knowledge acquired at the University between the attitude of the respondents and their behavioral intentions in consuming halal food. The first equation proposed is as follows:

$$Y = a + b_1X_1 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₁ = Attitude

Z = Halal knowledge acquired at a University (moderator)

e = Residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors ($X1 \cdot Z$), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b1X1 + b2Z + b3X1 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b1 = Least squares estimate of the population regression coefficient for X

b2 = Least squares estimate of the population regression coefficient for Z

X1 = attitude

Z = University (moderator)

$X1 \cdot Z$ = Product Term between attitude and halal knowledge acquired at a University

e = residual (error)

Table 4.38. Model Summary of the Moderating Effects of Halal knowledge acquired at the university between the Attitude and Behavioral Intentions in Consuming Halal Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.248 ^a	.062	.057	.45492	.062	12.822	2	425	.000	
2	.251 ^b	.063	.056	.45516	.001	.597	1	424	.440	1.761

A. Predictors: (Constant), Attitude, Dummy Variable University

B. Predictors: (Constant), Attitude, Dummy Variable University, Dummy Variable

University and X1

C. Dependent Variable: Behavioral Intentions

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Results in Table 4.38 are that of Model 1, $R = 0.248$, $R^2 = 0.062$. and $F(2, 425) = 12.822$, $p = 0.001$. The R^2 means that 6.2% of the variance in behavioral intention in consuming halal is explained by the attitude and the halal knowledge acquired at the university. The Durbin Watson value is 1.761 which is between 1.5-2.5 suggests that the value is independent and there is no systematic trend in the errors of the model.⁴⁶ Specifically, the coefficients in Table 4.38 show that the resulting regression equation for model 1 is as follows:

$$Y = 3.000 + 0.370X1 + 0.005Z \text{ ----- Equation (13)}$$

Where:

Y = Behavioral intention

X1 = attitude

Z = Halal Knowledge acquired at a university

Table 4.39. Coefficients Values for each Model for the Moderating Effects of Halal Knowledge Acquired at the university between the Attitude and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.162	.397		7.958	.000

⁴⁶ *Ibid.*

	Dummy Variable University	.095	.047	.100	-2.033	.043
	Attitude	.368	.080	.226	4.606	.000
2	(Constant)	4.138	1.325		3.124	.002
	Dummy Variable University	.707	.793	.744	-.891	.374
	Attitude	.167	.271	.103	.616	.538
	Dummy Variable Attitude And X1	.126	.163	.656	.773	.440

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The coefficients for both attitude and halal knowledge acquired at the University in the Model 1 are statistically significant at the $p < .001$ level. The equation in Model 1 also show that for one point increase in attitude, behavioral intentions is predicted to increase by 0.368, given that the university value is held constant. The regression coefficient associated with university means that the difference in behavioral intentions increases respondents who acquired halal knowledge from the university and the respondents who do not acquire halal knowledge from the university was 0.095, given that attitude score is held constant. Model 1 did not include the product term and thus ignored a possible moderating effect of the university. In other words, this model showed that, holding the university value constant; the behavioral intention increases by an average of 0.095 when the attitude increases 1 point.

Model 2 shows the results after the product term is entered into the equation. As shown in Table 4.39, the addition of the product term resulted in an R^2 change of 0.063, $F(1, 424) = 0.597$, $p = 0.440$. With the p value = 0.440, this result does not support the presence of a moderating effect. Output in Table 4.39 includes information regarding

the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 24.138 + 0.167X_1 - 0.707Z + 0.126 X_1 \cdot Z \text{ ----- Equation (14)}$$

Where:

Y = Behavioral Intention

X₁ = attitude

Z = University

X₁·Z = Product Term between attitude and university

In sum, the moderating effect of halal knowledge acquired at the university does not explain the variance in behavioral intentions in consuming halal above and beyond the variance explained by the attitude and university. This indicates that halal knowledge acquired at the university does not moderate the relationship between attitude and behavioral intention in consuming halal food.

Therefore, the null hypothesis of H₁₁ is not rejected, as the halal knowledge acquired at the university did not demonstrate a moderating effect between the attitude and the behavioral intention to consume halal food.

H₁₁: Halal Knowledge acquired at the university plays a moderating role in the relationship between attitude and behavioral intention in consuming halal food.

H₀: Halal knowledge acquired at the university does not play a moderating role in the relationship between attitude and behavioral intention in consuming halal food.

4.4.7 Moderating Effects of Halal Knowledge Acquired at the University between Subjective Norms and Behavioral Intentions in Consuming Halal Food.

Two equations needed to be formed to analyze the role halal knowledge acquired at the university in moderating the relationship between subjective norms and their behavioral intentions in consuming halal food. The first equation proposed is as follows:

$$Y = a + b_1X_2 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₂ = Subjective Norms

Z = Halal knowledge acquired at a university (moderator)

e = Residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors (X₁·Z), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b_1X_2 + b_2Z + b_3X_2 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₂ = subjective norms

Z = halal knowledge acquired in a university (moderator)

X·Z = Product Term between subjective norms and halal knowledge acquired at a university

e = residual (error)

Table 4.40 Model Summary for the Moderating Effects of Halal knowledge acquired at the University between Subjective Norms and Behavioral Intentions in Consuming Halal Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.316 ^a	.100	.095	.44554	.100	21.662	2	390	.000	
2	.316 ^b	.100	.093	.44611	.000	.003	1	389	.953	1.761

A. Predictors: (Constant), Subjective Norms, halal knowledge acquired at a university

B. Predictors: (Constant), Subjective Norms, University, Dummy Variable halal knowledge acquired at a university And X2

C. Dependent Variable: Behavioral Intentions

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Results in Table 4.40 show that of Model 1, $R = 0.316$, $R^2 = 0.100$ and $F(2, 425) = 21.662$, $p = 0.001$. The R^2 means that 10% of the variance in behavioral intention in consuming halal is explained by subjective norms and the halal knowledge acquired at the university. The Durbin Watson value is 1.761 which is between 1.5-2.5 suggests that the values are independent and there is no systematic trend in the errors of the model.⁴⁷ Specifically, the coefficients in Table 4.40 show that the resulting regression equation for model 1 is as follows:

⁴⁷ *Ibid*, 146.

$$Y = 3.026 + 0.394X_2 + 0.074Z \text{ ----- Equation (15)}$$

Where:

Y = Behavioral intention

X₂ = subjective norms

Z = halal knowledge acquired at a university

The coefficients for both subjective norms and halal knowledge acquired at a university in the Model 1 are statistically significant at the $p < .001$ level. The equation in Model 1 also showed that for one point increase in subjective norms, behavioral intentions is predicted to increase by 0.394, given that the university is held constant. The regression coefficient associated with university means that the difference in behavioral intentions increases respondents who acquire halal knowledge from the university and the respondents who do not acquire halal knowledge from the university was 0.074, given that attitude score is held constant. Model 1 did not include the product term and thus ignored a possible moderating effect of the university. In other words, this model shows that, holding the university constant; the behavioral intention increase by an average of 0.074 when subjective norms control increases 1 point.

Table 4.41. Coefficients Values for each Model for the Moderating Effects of Halal Knowledge Acquired at the University between Subjective Norms and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.026	.319		9.476	.000

	Dummy variable halal knowledge acquired at a university	.074	.046	.078	1.625	.105
	Subjective Norms	.394	.063	.300	6.221	.000
2	(Constant)	2.961	1.148		2.580	.010
	Dummy variable halal knowledge acquired at a university	.036	.657	.038	.054	.957
	Subjective Norms	.407	.237	.310	1.720	.086
	Dummy variable halal knowledge acquired at a university and X2	.008	.136	.041	.059	.953

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Model 2 shows the results after the product term is entered into the equation. As shown in Table 4.41, the addition of the product term results in an R^2 change of 0.100, $F(1, 424) = 0.003$, $p = 0.53$. With the p value = 0.953, this result does not support the presence of a moderating effect. The output in Table 4.41 includes information regarding the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 24.138 + 0.167X2 - 0.707Z + 0.126X2.Z \text{ ----- Equation (16)}$$

Where:

Y = Behavioral Intention

X2 = subjective norms

Z = halal knowledge acquired at a university

X2·Z = Product Term between subjective norms and halal knowledge acquired at a university

In short, the moderating effect of halal knowledge acquired at the university does not explain the variance in behavioral intentions in consuming halal above and beyond the variance explained by subjective norms and halal knowledge acquired at a university. This indicates that halal knowledge acquired at the university does not moderate the relationship between subjective norms and behavioral intention in consuming halal food.

Hence, the null hypothesis of H12 is not rejected, as the halal knowledge acquired at the university did not demonstrate a moderating effect between the subjective norms and the behavioral intention to consume halal food.

H12: Halal Knowledge acquired at the university plays a moderating role in the relationship between subjective norms and behavioral intention in consuming halal food.

Ho: Halal knowledge acquired at the university does not play a moderating role in the relationship between subjective norms and behavioral intention in consuming halal food.

4.4.8 Moderating Effects of Halal Knowledge at the University between Perceived Behavioral Control and Behavioral Intentions in Consuming Halal Food.

In analyzing the role of halal knowledge acquired at the university in moderating the relationship between perceived behavioral control and their behavioral intentions in consuming halal food, two equations were formed. The first equation proposed is as follows:

$$Y = a + b_1X_3 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b1 = Least squares estimate of the population regression coefficient for X

b2 = Least squares estimate of the population regression coefficient for Z

X3 = perceived behavioral control

Z = Halal knowledge acquired at a university (moderator)

e = Residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors ($X1 \cdot Z$), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b1X3 + b2Z + b3X3 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b1 = Least squares estimate of the population regression coefficient for X

b2 = Least squares estimate of the population regression coefficient for Z

X3 = perceived behavioral control

Z = halal knowledge acquired at a university (moderator)

X·Z = Product Term between perceived behavioral control and halal knowledge acquired in a university

e = residual (error)

Table 4.42. Model Summary for the Moderating Effects of Halal knowledge Acquired at the University between Perceived Behavioral Control and Behavioral Intentions in Consuming Halal Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.185 ^a	.034	.029	.46153	.034	6.914	2	425	.001	
2	.185 ^b	.034	.027	.46212	.000	.011	1	424	.915	1.701

A. Predictors: (Constant), Perceived Behavioral Control, halal knowledge acquired at a university

B. Predictors: (Constant), Perceived Behavioral Control, University, Dummy Variable halal knowledge acquired at a university and X3

C. Dependent Variable: Behavioral Intention

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Table 4.42 shows the result for Model 1, $R = 0.185$, $R^2 = 0.034$ and $F(2, 425) = 6.914$, $p = 0.001$. The R^2 means that 3.4 % of the variance in behavioral intention in consuming halal was explained by perceived behavioral control and the halal knowledge acquired at the university. The Durbin Watson value is 1.701 which is between 1.5-2.5 suggests that the values are independent and there is no systematic trend in the errors of the model⁴⁸. In addition, the coefficients in Table 4.42 showed that the resulting regression equation for model 1 as follows:

$$Y = 4.218 + 0.152X_3 + 0.076Z \text{ ----- Equation (17)}$$

⁴⁸ *Ibid*, 146.

Where:

Y = Behavioral intention

X3 = perceived behavioral control

Z = University

Table 4.43: Coefficients Values for each Model for the Moderating Effects of Halal Knowledge Acquired at the University between Perceived Behavioral Control and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.218	.252		16.752	.000
	Dummy Variable University	.076	.048	.080	1.590	.113
	Perceived Behavioral Control	.152	.049	.155	3.086	.002
2	(Constant)	4.311	.900		4.791	.000
	Dummy Variable University	.130	.507	.137	.257	.798
	Perceived Behavioral Control	.132	.191	.135	.694	.488
	Dummy Variable University and X3	.012	.108	.058	.107	.915

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The coefficients for both perceived behavioral control and halal knowledge acquired at university in the Model 1 are statistically significant at the $p < .001$ level. Equation in Model 1 also shows that for one point increase in perceived behavioral

control, behavioral intentions is predicted to increase by 0.034, given that the university is held constant. The regression coefficient associated with university means that the difference in behavioral intentions increased respondents who acquire halal knowledge from the university and the respondents who do not acquire halal knowledge from the university is 0.034, given that perceived behavioral control score is held constant. Model 1 does not include the product term and thus ignore a possible moderating effect of the university. In other words, this model shows that, holding halal knowledge acquired at university constant; the behavioral intention increases by an average of 0.034 when perceived behavioral control increases 1 point.

Model 2 showed results after the product term is entered into the equation. As shown in Table 4.43, the addition of the product term resulted in an R^2 change of 0.034, $F(1, 424) = 0.011$, $p = 0.915$. With the p value = 0.915, this result does not support the presence of a moderating effect. Output in Table 4.43 includes information regarding the regression coefficients after the product term was entered in the equation. The equation is as follows:

$$Y = 4.311 + 0.132X_3 - 0.130Z + 0.012X_3 \cdot Z \text{ ----- Equation (18)}$$

Where:

Y = Behavioral Intention

X₃ = Perceived Behavioral Control

Z = University

X₃·Z = Product Term between Perceived Behavioral Control and University

In other words, the moderating effect of halal knowledge acquired at the university does not explain the variance in behavioral intentions in consuming halal above and beyond the variance explained by perceived behavioral control and

university. This indicates that halal knowledge acquired at the university does not moderate the relationship between perceived behavioral control and behavioral intention in consuming halal food. Thus, the null hypothesis of H13 is not rejected, as the halal knowledge acquired at the university does not demonstrate a moderating effect between the perceived behavioral control and the behavioral intention to consume halal food.

H13: Halal Knowledge acquired at the university plays a moderating role in the relationship between perceived behavioral control and behavioral intention in consuming halal food.

Ho: Halal knowledge acquired at the university does not play a moderating role in the relationship between perceived behavioral control and behavioral intention in consuming halal food.

4.4.9 Moderating Effects of Halal Knowledge from the University between Religiosity and Behavioral Intentions in Consuming Halal Food.

Two equations needed to be formed in analyzing the role halal knowledge acquired at the university in moderating the relationship between religiosity and their behavioral intentions in consuming halal food. The first equation proposed is as follows:

$$Y = a + b_1X_4 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b1 = Least squares estimate of the population regression coefficient for X

b_2 = Least squares estimate of the population regression coefficient for Z

X_4 = Religiosity

Z = University (moderator)

e = Residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors ($X_1 \cdot Z$), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b_1X_4 + b_2Z + b_3X_4 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b_1 = Least squares estimate of the population regression coefficient for X

b_2 = Least squares estimate of the population regression coefficient for Z

X_4 = religiosity

Z = University (moderator)

$X \cdot Z$ = Product Term between religiosity and university

e = residual (error)

Table 4.44. Model Summary for the Moderating Effects of Halal knowledge Acquired at the University between the Religiosity and Behavioral Intentions in Consuming Halal

Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.397 ^a	.157	.153	.43112	.157	36.400	2	424	.000	

2	.402 ^b	.161	.155	.43061	.004	1.921	1	425	.166	1.923
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A. Predictors: (Constant), Religiosity, Dummy Variable University

B. Predictors: (Constant), Religiosity, Dummy Variable University, Dummy Variable University And X4

C. Dependent Variable: Behavioral Intention

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Results in Table 4.44 shows that of the Model 1, $R = 0.397$, $R^2 = 0.157$ and $F(2, 425) = 36.400$, $p = 0.001$. The R^2 means that 15.7 % of the variance in behavioral intention in consuming halal is explained by religiosity and the halal knowledge acquired at the university. The Durbin Watson value is 1.923 which is between 1.5-2.5 suggests that the values are independent and there is no systematic trend in the errors of the model.⁴⁹ Specifically, the coefficient in Table 4.45 shows that the resulting regression equation for model 1 as follows:

$$Y = 1.371 + 0.728X4 + 0.074Z \text{ ----- Equation (19)}$$

Where:

Y = Behavioral intention

X4 = Religiosity

Z = University

⁴⁹ *Ibid.*

Table 4.45: Coefficients Values for each Model for the Moderating Effects of Halal Knowledge Acquired at the University between Religiosity and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.371	.441		3.107	.002
	Dummy Variable University	.074	.044	.078	1.672	.095
	Religiosity	.728	.088	.384	8.238	.000
2	(Constant)	3.474	1.580		2.199	.028
	Dummy Variable University	1.337	.913	1.408	1.466	.144
	Religiosity	.298	.323	.157	.922	.357
	Dummy Variable University And X4	.259	.187	1.336	1.386	.166

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The coefficients for both religiosity and halal knowledge acquired at the university in the Model 1 are statistically significant at the $p < .001$ level. The equation in Model 1 also shows that for one point increase in religiosity, behavioral intentions is predicted to increase by 0.728, given that the university is held constant. The regression coefficient associated with university means that the difference in behavioral intentions increase respondents who acquire halal knowledge from the university and the respondents who do not acquire halal knowledge from the university was 0.074, given that perceived behavioral control score is held constant. Model 1 does not include the product term and thus ignore a possible moderating effect of the university. In other words, this model shows that, holding university constant; the behavioral intention increases by an average of 0.074 when religiosity increases 1 point.

Model 2 shows the results after the product term is entered into the equation. As shown in Table 4.45, the addition of the product term resulted in an R^2 change of 0.161,

$F(1, 424) = 1.921, p = 0.166$. With the p value = 0.166, this result does not support the presence of a moderating effect. The equation is as follows:

$$Y = 3.474 + 0.298X_4 - 1.337Z + 0.259 X_4 \cdot Z \text{ ----- Equation (20)}$$

Where:

Y = Behavioral Intention

X₄ = religiosity

Z = University

X₄·Z = Product Term between religiosity and University

In sum, the moderating effect of halal knowledge acquired at the university does not explain the variance in behavioral intentions in consuming halal above and beyond the variance explained by religiosity and halal knowledge acquired at university. This indicates that halal knowledge acquired at the university does not moderate the relationship between religiosity and behavioral intention in consuming halal food. Output in Table 4.45 included information regarding the regression coefficients after the product term is entered in the equation. Thus, the null hypothesis of H14 is not rejected, as the halal knowledge acquired at the university do not demonstrate a moderating effect between religiosity and the behavioral intention to consume halal food.

H14: Halal Knowledge acquired at the university plays a moderating role in the relationship between religiosity and behavioral intention in consuming halal food.

Ho: Halal knowledge acquired at the university does not play a moderating role in the relationship between religiosity and behavioral intention in consuming halal food.

4.4.10 Moderating Effects of Halal Knowledge Acquired at University between Government Initiatives and Behavioral Intentions in Consuming Halal Food.

Two equations were formed in order to analyse the role halal knowledge acquired at the university in moderating the relationship between government initiatives and their behavioral intentions in consuming halal food. The first equation proposed is as follows:

$$Y = a + b_1X_5 + b_2Z + e$$

Where:

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X₅ = Government Initiatives

Z = Halal knowledge acquired at University (moderator)

e = Residual (error)

The second equation called the MMR model was developed by creating a new variable, the product between the predictors (X₅·Z), and including it as a third term in the regression. The second equation proposed is as follows:

$$Y = a + b_1X_5 + b_2Z + b_3X_5 \cdot Z + e$$

Y = Behavioral Intentions

a = Least squares estimate of the intercept,

b₁ = Least squares estimate of the population regression coefficient for X

b₂ = Least squares estimate of the population regression coefficient for Z

X5 = government initiatives

Z = halal knowledge from University (moderator)

X5·Z = Product Term between government initiatives and halal knowledge from University

e = residual (error)

Table 4.46. Model Summary for the Moderating Effects of Halal knowledge Acquired at the University between Government Initiatives and Behavioral Intentions in Consuming Halal Food

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.182 ^a	.033	.028	.46226	.033	6.682	2	425	.001	
2	.182 ^b	.033	.026	.46285	.000	.019	1	424	.892	1.645

A. Predictors: (Constant), Government Initiatives, Dummy Variable halal knowledge from University

B. Predictors: (Constant), Government Initiatives, Dummy Variable halal knowledge from University, Dummy Variable halal knowledge from University and X5

C. Dependent Variable: Behavioral Intention

Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

Results in Table 4.46 show that for model 1, $R = 0.182$, $R^2 = 0.033$ and $F(2, 425) = 6.682$, $p = 0.001$. The R^2 means that 3.3% of the variance in behavioral intention in consuming halal is explained by government initiatives and the halal knowledge acquired from education at the university. The Durbin Watson value is 1.645 which is between 1.5-2.5 suggests that the values are independent and there is no systematic

trend in the errors of the model.⁵⁰ Specifically, the coefficients in Table 4.47 show that the resulting regression equation for model 1 as follows:

$$Y = 4.624 + 0.078X5 + 0.084Z \text{ ----- Equation (21)}$$

Where:

Y = Behavioral intention

X5 = Government initiatives

Z = Halal knowledge acquired at the University

Table 4.47. Coefficients Values for each Model for the Moderating Effects of Halal knowledge acquired at the University between Government Initiatives and Behavioral Intention in Consuming Halal Food

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.624	.135		34.317	.000
	Dummy variable halal knowledge from University	.084	.048	.088	1.753	.080
	Government Initiatives	.078	.026	.152	3.027	.003
2	(Constant)	4.670	.365		12.799	.000
	Dummy variable halal knowledge from University	.112	.216	.118	.520	.604
	Government Initiatives	.067	.088	.129	.755	.451

⁵⁰ *Ibid.*

Dummy variable halal knowledge from University and Government Initiatives	.007	.053	.036	.136	.892
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Source: Questionnaires of Determinants Influencing Halal Food Consumption among Generation Y, Klang Valley, 30th September- 30th December 2013.

The coefficients for both government initiatives and halal knowledge from university in Model 1 are statistically significant at the $p < .001$ level. The equation in Model 1 also show that for one point increase in government initiatives, behavioral intentions was predicted to increase by 0.078, given that university was held constant. The regression coefficient associated with university means that the difference in behavioral intentions increases respondents who acquired halal knowledge acquire from a university and the respondents who do not acquire halal knowledge from a university is 0.084, given that government initiatives score is held constant. Model 1 does not include the product term and thus ignore a possible moderating effect of the university. In other words, this model show that, holding the university constant; the behavioral intention increases by an average of 0.084 when government initiatives increases 1 point.

Model 2 shows results after the product term is entered into the equation. As shown in Table 4.47, the addition of the product term results in an R^2 change of 0.033, $F(1, 424) = 0.19$, $p = 0.892$. With the p value = 0.892, this result does not support the presence of a moderating effect. The equation is as follows:

$$Y = 4.670 + 0.067X5 - 0.112Z + 0.007X5.Z \text{ ----- Equation (22)}$$

Where:

Y = Behavioral Intention

X5 = Government initiatives

Z = Halal knowledge from University

X5·Z = Product Term between government initiatives and University

The finding suggests that the moderating effect of halal knowledge acquired at the university does not explain the variance in behavioral intentions in consuming halal above and beyond the variance explained by government initiatives and university. This indicates that halal knowledge acquired at the university does not moderate the relationship between government initiatives and behavioral intention in consuming halal food. Output in Table 4.47 includes information regarding the regression coefficients after the product term is entered in the equation.

Therefore, the null hypothesis of H15 is not rejected, as the halal knowledge acquired at the university did not demonstrate a moderating effect between the government initiatives and the behavioral intention to consume halal food.

H14: Halal knowledge acquired at the university plays a moderating role in the relationship between the government initiatives and behavioral intention in consuming halal food.

Ho: Halal knowledge acquired at the university does not play a moderating role in the relationship between the government initiatives and behavioral intention in consuming halal food.

4.4.11 Discussion on Moderating Effect of Gender and Halal Knowledge Acquired at Malaysian Private Universities

G. E. Fraser 2000, Kristen et al⁵¹ and Mak Athena et al⁵² discussed the significant influence of gender in shaping people's consumption. However, the moderating effect of gender variable was not widely discussed in the food consumption. The findings of this study have shown that gender plays a moderating role between attitude and behavioral intentions in consuming halal. In specific there is a significant difference in male and female attitude and their behavioral intention in consuming halal.

Female respondents were found to have a more positive attitude about halal food compared to male. Another study has also revealed that female consumers are more concerned about their food consumption. This could be the result of female consumers paying more attention to the types of food that they consume.⁵³ Female also found to be more affected by food marketing and publicity.⁵⁴ This implies that any effort in improving the halal consumption should be able to influence both males and female attitude, since both of these groups are different in this aspect.

However, gender does not contribute moderating effect on subjective norms, perceived behavioral control, religiosity and government initiatives in promoting halal food and the behavioral intentions of Generation Y in halal food consumption. This

⁵¹ Kristen M. Regine, "Generation Y Consumer Choice for Organic Foods," *Journal of Global Business Management* 7, no.1, (2011), 1.

⁵² Mak Athena et al., "Factors Influencing Tourist Food Consumption," 932.

⁵³ Bellows Anne C., Gabriela Alcaraz V., William K. Hallman, "Gender and Food, a Study of Attitudes in the USA Towards Organic, Local, U.S. Grown, and GM-Free Foods," *Appetite* 55, (2010), 548.

⁵⁴ Ariel Chernin, "The Effects of Food Marketing on Children's Preferences: Testing the Moderating Roles of Age and Gender," *ANNALS* 615, (2008), 107.

finding supports Siti Mashitoh et al's (2013) study, which demonstrated the insignificant role of gender on halal food awareness among consumers in Malaysia.⁵⁵ This suggests that the significant influence of subjective norms and religiosity in influencing Generation Y to consume halal food were not being influenced by the gender of the respondents. Similarly, the insignificant role of perceived behavioral control and government initiatives are also not influenced by the factor of gender. Therefore, by improving efforts on social pressure and religious understanding on halal food in general could easily influence the halal food consumption of Generation Y because their intentions in consuming halal are not influenced by their gender.

Golnaz et al (2012) argued that consumers with higher education level were likely less confident with the halal labeled products.⁵⁶ This suggests that higher education does not ensure the halal food consumption among Muslim respondents. Sharing the same pattern of findings, this study reveals that halal knowledge gained from the Malaysian private universities does not play a moderating effect on attitude, subjective norms, perceived behavioral control, religiosity and government initiatives. In sum, the three determinants which are attitude, subjective norms and religiosity play a significant influence without prejudice on the influence of halal knowledge acquired among Generation Y in Malaysian private universities.

⁵⁵ Siti Mashitah et al., "Perceptions towards Halal Awareness and its Correlation with Halal Certification among Muslims," 3.

⁵⁶ Golnaz et al., "Assessment of Consumers' Confidence on Halal Labeled Manufactured Food in Malaysia," 33.

4.5 Summary

This chapter presents the findings based on the statistical analysis conducted to answer all the research objectives outlined in chapter 1. All the respondents in this study were Generation Y Muslims from a sample of five Malaysian private universities situated in Klang Valley. They were all undergraduates studying in five different major programs, namely, Bioscience, Social Science, Technical Studies, Business Studies and Information Technology. The respondents were requested to answer a self-administered questionnaire which consisted of eight sections including demographic section. Each construct were measured using a 5-point Likert scale except for the demographic section. The measured constructs were attitude, subjective norms, perceived behavioral control, religiosity and government initiatives in halal consumption.

In the first section of this chapter, the descriptive analysis was conducted in order to understand the background of respondents and the sources of halal knowledge that they acquired. The findings show that the respondents were a good sample and represented the population in terms of gender, age, races, fields of study and places of residences. Next, the descriptive analysis presented formal and informal sources of halal knowledge acquisition among Generation Y Muslims in Malaysian private universities. Secondary and primary school education were founded as the highest sources of formal knowledge, and then followed by family, internet, television, friends and talks/seminar/*tazkirah/usrah* were the important informal source of halal knowledge for them. The last part of this section deliberated the halal awareness of Generation Y on halal certification and their ability to recognize the JAKIM's halal logo.

Secondly, the Multiple Linear Regression analysis was conducted in order to analyze the determinants influencing the Generation Y Muslim consumers' intention in consuming halal food in Malaysian private universities. From the analysis, it was found that the attitude, subjective norms and religiosity were determinants of halal food consumption among Generation Y Muslims in Malaysian private universities. However, perceived behavioral control and government initiatives in halal consumption were found not significant in influencing halal food consumption. At the end of this section, the model of halal food consumption for Generation Y was proposed, analysed and discussed. The significant influence of attitude, subjective norms and religiosity were discussed and analysed based on previous studies and current situation of halal food consumption in Malaysia.

In this chapter, religiosity was founded as the strongest determinant among all, followed by attitude and subjective norms. This indicates that regardless how easy or difficult to consume halal food, if the religiosity of Generation Y Muslims is high they would still consume halal food as it is a part of their religious obligation. In the same vein, even if the government initiatives may not appear to be effective enough to influence Generation Y to consume halal, with strong religiosity, positive attitude about halal food and push factor from family, friends and society, Generation Y would still consume halal food in Malaysia.

The fourth analysis conducted in this study was to explore the moderating effects of gender and the halal knowledge acquired at university between each of the predictors and behavioral intentions to consume halal food. The output generated by the Moderated Multiple Regression (MMR) analysis indicated that gender was not a moderator between all the predictors and behavioral intentions in consuming halal food except for the attitude. In short, gender only moderated the relationship between

attitude and behavioral intentions to consume halal food. Next, for the moderating effect of halal knowledge acquired at the university, the output produced by the MMR analysis indicated that halal knowledge acquired at the university was not a moderator between all the five predictors and behavioral intentions in consuming halal food.

In sum, this chapter analyses data from the SPSS to answer the five research objectives as stated earlier. It can be concluded that the significant determinants of halal food consumption for Generation Y are attitude, subjective norms, and religiosity. The two variables which are attitude and subjective norms in the TPB are significant in predicting halal food consumption among Generation Y. The third variable which was added based on the context of the present study that looked at halal food consumption, which is related to the teaching of Islam as a religion appeared as the strongest determinant in influencing halal food consumption. Therefore, it is concluded that the TPB could be used as a conceptual framework with an added variable of religiosity. In addition, gender moderates the relationship between attitude and behavioral intentions to consume halal. Eventually, the results obtained from the analysis, provide new insights of halal food consumption and halal industry in general

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Chapter 5 concludes the present study by providing an overview of the study, objectives, underpinning the conceptual framework and methodology used in the study. At the end, this chapter summarizes and concludes the findings, as well as provides practical implications, recommendations and suggestions for future research.

5.2 Summary

The main objective of this study was to analyse the determinants influencing Generation Y Muslims in consuming halal food at Malaysian private universities in Klang Valley. Five specific objectives were set in order to achieve the main objectives.

The first objective was to identify and analyze the role of attitude, subjective norms, perceived behavioral control, religiosity and government initiatives in influencing the Generation Y to consume halal food. The second objective was to explore the moderating effects of gender between determinants and behavioral intention in consuming halal food. Similar to the second objective, the third objective further explores the moderating effect of halal knowledge acquired at the university between the five determinants and behavioral intention in consuming halal food. The fourth objective was to propose the model for determinants influencing the behavioral intention of halal food consumption. The last objective was to suggest the practical implication for practice and policy development on halal food consumption among Generation Y consumers.

The first objective was achieved by investigating the five main determinants of behavioral intentions in consuming halal foods which are attitude, subjective norms,

perceived behavioral control, religiosity factor and the government initiatives in encouraging halal food consumption. In order to achieve the second and third objectives, the researcher explored the moderating effects of gender and the halal knowledge acquired by the respondents at the university, between all these five determinants and behavioral intention in consuming halal food among Generation Y in Malaysian private universities. This is important in order to understand further the influence of gender and halal knowledge acquired by Generation Y in the private universities on attitude, subjective norms, perceived behavioral control, religiosity and government initiatives and intention to consume halal food. This is because factors such as gender and knowledge could possibly enhance or decrease the effect of predictors on the dependent variable in some cases.

Then, a test was conducted in order to achieve the fourth objective, which is to propose a model for behavioral intention of halal food consumption. The last objective was achieved by providing practical implications to encourage halal food consumption among Generation Y consumers based on the literature and findings of this study.

In order to achieve the outlined objectives, library research, including books, website, journal, government reports and field research which involved collecting data using questionnaires were utilized. Firstly, the researcher underwent a process of conceptual development which involved reviewing the literature on halal consumption in Malaysia, as well as other countries. Based on the previous studies, the TPB was proven as an established theoretical framework in predicting human intention including the behavioral intention in food consumption. According to the TPB, the three independent variables, namely attitude, subjective norms and perceived behavioral control are the influential predictors of human intention to perform a behavior. Therefore, using the TPB as a conceptual framework could explain halal food consumption behavior among Generation Y in the Malaysian private universities.

However, by reviewing previous studies, there were two other important predictors that could explain the halal food consumption, which were religiosity and government roles in encouraging halal consumption. Religiosity factor was identified one of the predictors due to the fact that halal food consumption is prescribed in Islam as an obligation for Muslims. Furthermore, a number of researches have shown an important role of religiosity in human consumption. The religiosity in this study refers to Islamic religiosity which comprises of two dimensions which are Islamic worldview *tawhidic* paradigm or Islamic belief and Islamic worldview and Religious Personality or the practices of a Muslim in his/her daily live. The role of Muslim religiosity in the halal food consumption was explored in order to achieve the objective of this study.

Secondly, the government initiatives factor was added after analyzing the government's role in developing the halal industry and halal consumption in Malaysia. Therefore, this study has incorporated religiosity and the Malaysian government initiatives into the TPB objectively to acquire better understanding of factors influencing Generation Y Muslims to consume halal food. Hence, this study incorporates additional dimensions and contributes to the development of theory in halal consumption.

As there is no established complete questionnaires found to be used in this study, the researcher constructed her own questionnaire based on the six steps of Punch in developing questionnaires and guidelines in constructing the questionnaire provided by Ajzen.¹ Several items in the questionnaire were adopted from previous studies. The questionnaire was divided into seven different sections, which measured demographic background, attitude, subjective norms, perceived behavioral control, religiosity,

¹ Ajzen and Fishbein, "Constructing a TPB Questionnaire: Conceptual and Methodological Considerations", website University of Massachusetts, retrieved on 10th Dec 2012, <http://www.people.umass.edu/aizen/pdf/tpb.measurement.pdf> 5-6.

government initiatives and behavioral intentions in consuming halal food. Data was ethically self-administered, collected from the samples which were identified by stratified random sampling from a homogenous population in the Klang Valley. 120 questionnaires were distributed in 5 different private universities and 425 completed questionnaires were collected and analyzed.

The instrument was then tested and underwent the reliability and validity test. The items were found to have a high alpha coefficient ranged between 0.775 and 0.955, demonstrating a good internal consistency of the instrument. The construct validity was also confirmed as all variables in the analysis had factorability value. The results of EFA indicated that Bartlett's test of Sphericity was significant at 0.001 level ($p < .001$) and the Kaiser-Meyer-Olkin value was greater than 0.8, and an Eigenvalue of more than one. Descriptive, MLR, MMLR analyses were employed to answer the research questions, to accept and to reject the null hypotheses, finally to achieve the objectives of this study.

5.3 Summary of Key Findings

5.3.1 The determinants influencing Generation Y Muslim consumers' intention in consuming halal food in Malaysian Private Universities.

Five predictors were identified in order to analyze determinants influencing halal food consumption among generation Y Muslims. The five predictors were attitude, subjective norms, perceived behavioral control, and religiosity and government initiatives. Based on the results obtained, three predictor variables which are attitude ($\beta = 5.119, p < 0.001$), subjective norms ($\beta = 5.531, p < 0.001$), and religiosity ($\beta = 8.182, p < 0.001$) were found significant in explaining the behavioral intentions of Generation Y in consuming halal food. This suggests that the attitude of Generation Y on halal food, social influence, for example family and friends and their religiosity are the three main determinants of halal food consumption.

Another two predictor variables were found not significant in influencing Generation Y to consume halal food. There two predictors were perceived behavioral control ($\beta = 0.002, p > 0.05$) and government initiatives ($\beta = 0.044, p > 0.05$). This implies that the ease and difficulty to consume halal food and the government initiatives on halal were not significant in influencing Generation Y to consume halal food. Based on the findings, the null hypotheses for H1, H2, and H4 are rejected, but the null hypotheses for H3 and H5 are not rejected.

5.3.2 The Model of Determinants Influencing Behavioral Intention of Halal Food Consumption.

The results of MLR Analysis revealed attitude, subjective norms and religiosity were the significant determinants influencing halal food consumption among Generation Y Muslims in Malaysian private universities.

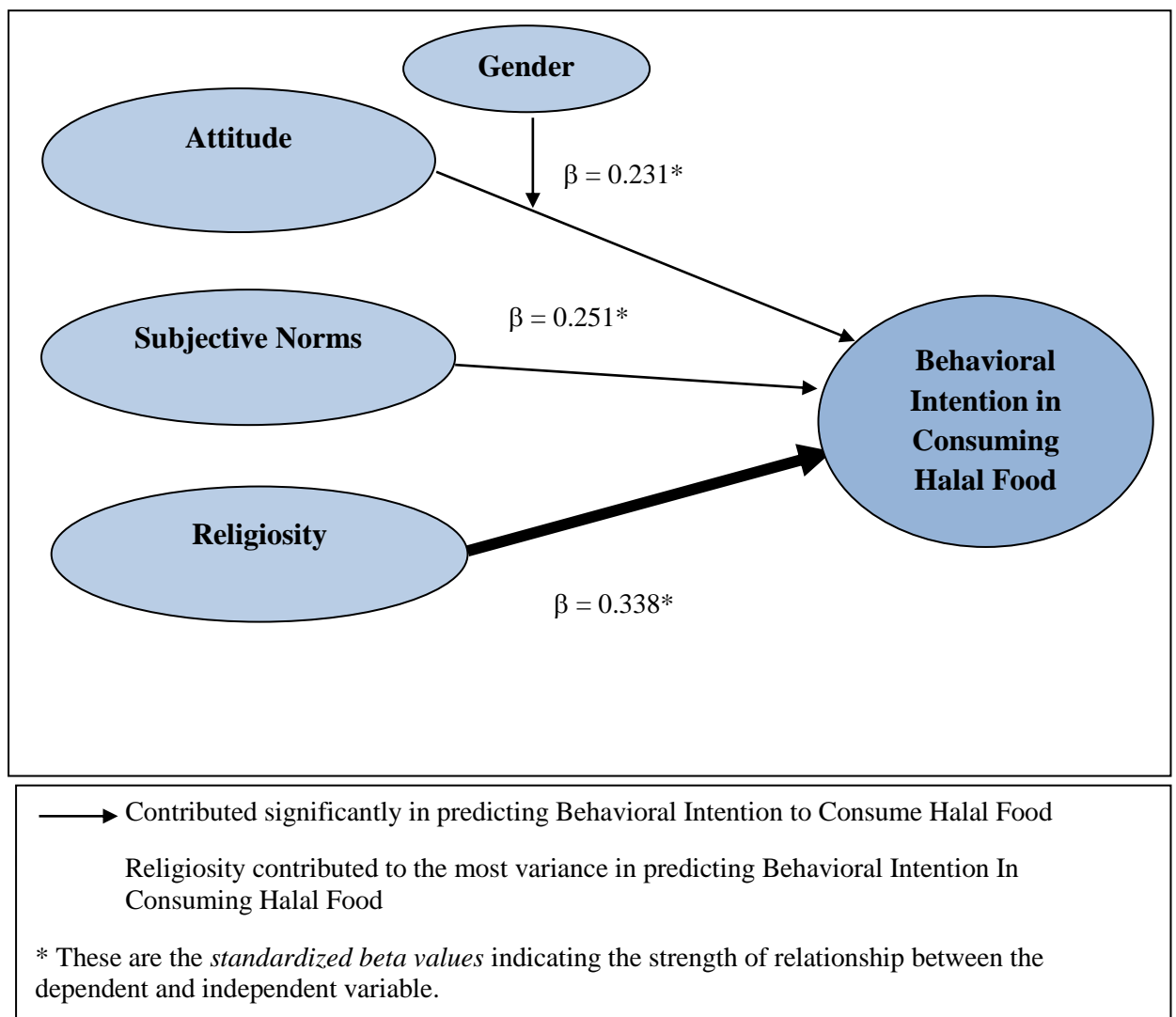


Figure 5.1. Model of Determinants Influencing Generation Y’s Behavioral Intentions in Halal Food Consumption

Figure 5.1 is the model to illustrate the relationship between the attitude, subjective norms and religiosity as the predictors of behavioral intentions in consuming

halal food. It is shown that religiosity is the strongest predictor influencing Generation Y to consume halal food. It is followed by social influence and then Generation Y's attitude on halal food consumption. Hence, these three determinants are important in predicting and influencing Generation Y to consume halal food.

Even though, this study is conducted in Klang Valley Malaysia, but this model could also be used for a research conducted among Muslims in other part of the world. This is because Muslims are a homogenous billion consumer group who share same belief and Islamic rulings on halal food consumption. Therefore, there is possibility to generalize the result of this study, particularly the inclusion of religiosity as the determinant of halal food consumption among Generation y Muslims consumers.

5.3.3 Gender and halal knowledge acquired at the university as the moderators between determinants and behavioral intention in consuming halal food among Generation Y in Malaysian private universities.

The result of this study indicated that gender was a significant moderator for attitude ($\beta = 0.465$, $p < 0.05$) but not a significant moderator between the other predictors namely subjective norms ($\beta = 0.235$, $p > 0.05$), perceived behavioral control ($\beta = 0.013$, $p > 0.05$), religiosity ($\beta = 0.110$, $p > 0.05$), government initiatives ($\beta = 0.034$, $p > 0.05$), and behavioral intentions in consuming halal food. It was revealed that the relationship between attitude and behavioral intention was higher for the female respondents compared to male respondents. This implied that female respondents are more positive about halal food compared to male respondents. Therefore, the null hypothesis 6 is rejected in this study, but the hypotheses 7, 8, 9 and 10 were not rejected because

gender only moderated the attitude and behavioral intention in consuming halal food and not for the other predictors.

Next, it was revealed that that halal knowledge acquired at the university was not a significant moderator between all the five predictors namely attitude ($\beta = 0.126$, $p > 0.05$), subjective norms ($\beta = 0.008$, $p > 0.05$), perceived behavioral control ($\beta = 0.012$, $p > 0.05$), religiosity ($\beta = 0.259$, $p > 0.05$), government initiatives ($\beta = 0.007$, $p > 0.05$) and the behavioral intentions in consuming halal food. Hence, the null hypotheses 11,12,13,14,15 are not rejected in this study, as the halal knowledge did not enhance or reduce the influence of the five predictors on the behavioral intention to consume halal food.

5.4 Implications and Recommendations

5.4.1 Implications and Recommendations for Practice

The findings of the present study have shown that religiosity, subjective norms and attitude were the three determinants influencing the behavioral intention of Generation Y in the Malaysian private universities to consume halal food. This implies that Generation Y could be influenced if they understand and practise Islam as their way of life, have a positive attitude about the halal food consumption, and are surrounded by people who encourage them to consume halal. The religiosity factor was the strongest determinant. As halal consumption is a part of religious obligation in Islam, if someone has moderate or high religiosity, they would consume halal food in their daily lives. Indeed, religiosity and halal awareness begin with knowledge, thus it is important to educate Muslim consumers on the concept of halal and Islamic rulings on food and consumption.

Islam stresses the importance of seeking knowledge for Muslims, including the knowledge of *fardu 'Ain* and *fardu Kifayah*. In fact, learning about halal consumption is a *fardu 'Ain* knowledge which is compulsory for all Muslims. This is aligned with the first Surah revealed to the Prophet SAW in the Surah *al-'Alaq* which stresses the importance of knowledge guided by the Allah SWT through the revelation.

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ اقْرَأْ وَرَبُّكَ الْأَكْرَمُ الَّذِي عَلَّمَ

بِالْقَلَمِ

Al-'Alaq 96: 1-4

Translation: Read! In the Name of your Lord, Who has created (all that exists), has created man from a clot (a piece of thick coagulated blood), Read! And your Lord is the Most Generous, Who has taught (the writing) by the pen [the first person to write was Prophet Idrees (Enoch), has taught man that which he knew not.

Secondly, the influence of attitude was also important in determining halal food consumption. The attitude of consumers on halal food could cover the advantages in halal food itself, for example the aspects of cleanliness, wholesomeness and food safety. If someone has low religiosity and does not practice Islam as their way of life, they could still consume halal food if they have a positive attitude about halal food, especially if they know the advantages that the halal food could provide. It is important to highlight to Generation Y that halal food has many advantages, especially halal food that is certified with the halal certification. This is because the halal certification ensures that products have met the standard of halal, hygiene and safety. In fact, JAKIM's halal certification complies with the HACCP and the GMP endorsement. It is also important to inform consumers about the benefits that is ensured by the JAKIM certification, as

this would change the way they view this certification and could eventually develop their positive attitude on halal. Furthermore, as proven in the previous research, the positive attitude about halal food could influence non-Muslim consumers to consume halal food. Subsequently, this would increase the halal trade and consumption in the country.

The third significant determinant is subjective norms. According to the result of this study, family and friends could influence Generation Y to consume halal food. As Generation Y Muslim students meet with people from different religious background every day in their universities, they could be influenced the way their friends consume food. If they mix with friends who consume halal food, there is high possibility that they also would consume halal food, and vice versa. Therefore, if the universities provide the environment that encourages halal food consumption, it could encourage the Generation Y to consume halal food. It is recommended that the universities ensure that all the food outlets in the private universities have the halal certification in ensuring its Shariah compliance, safety and hygiene of the food. Adding to that, it is recommended that families be the platform to educate their family members on halal consumption. The importance of halal consumption should be highlighted in the pre-marriage courses for Muslim couples, so they can educate their families about halal consumption in the future.

In addition, the elements three significant determinants of halal food consumption, which are religiosity, attitude and subjective norms, could be used in the halal publicity and campaign. For example, advertisers could incorporate the elements of religion, the advantage of halal food and the importance of family and friends in their advertisements or campaigns. In fact, Generation Y consumers need to be approached

through the digital media as the way they consume was found to be influenced by this technology.²

It is important to understand the approach that can attract Generation Y to consume halal food, for example, it was found that Generation Y opted for the advertising that is funny and simple.³ Food operators, producers and advertisers could attract Generation Y consumers to consume halal food if they understand the characteristics of Generation Y. Thus, this will increase the demand of halal food and boost the halal industry for Malaysia to appear as the Global Halal Hub.

At the university, it is recommended that lecturers to elaborate on the topic of halal in the Islamic Studies subject and relate it to daily consumption of Muslims. This is in line with the principle of Islamic Education which is proposed by Khursyid Ahmad (1974) that Islamic Education does not only train the mental part of human beings but should also encompass the behavior and moral aspects.⁴ Even though, the Islamic Studies subject is no longer a compulsory subject for students who enroll after September 2013, it can be placed as an elective module for students. In fact, as the halal industry is leading the global trade industry, it can be proposed as one of the modules for Business related courses.

In addition, the faculty could incorporate halal topics or invite speakers on halal in any related module. For example, the Section for Co-Curricular Courses, External Faculty Electives and Islamic and Asian Civilization (Section for Co-Curricular Courses) University of Malaya invited a speaker to talk about the concept of halal in

² Craig J. Weiland, Advertising to Boomers, Gene Xers and Gen Y,” (thesis, University of Missouri, Columbia, 2007), 3.

³ *Ibid*, 34.

⁴ Khursyid Ahmad, *Principles of Islamic Education* (Lahore: Islamic Publications, 1974), 2.

entrepreneurship for entrepreneurship module which is offered as a compulsory module at the University of Malaya. This is a practice that can be taken as exemplary by the private universities. Likewise, halal academic programmes can be offered in the private universities, as how it is being done in few public universities. For example University of Technology MARA has offered Doctoral Study in halal.

The results of the moderating effects of gender between the five predictors and behavioral intentions to consume halal food among Generation Y suggested that there was interaction between gender and attitude on the behavioral intention to consume halal food. This implied gender affects the attitude of Generation Y and contribute to the behavioral intention in consuming halal food. In specific, Generation Y females in specific had more positive attitudes on halal food consumption and this influenced them to consume halal food more that Generation Y males. Therefore, it is vital to expose the importance of halal consumption on both genders of Generation Y. In addition, the result shows that halal knowledge acquired at the university was not significant in affecting the five predictors and behavioral intentions to consume halal food among Generation Y. Generally, this possibility because of there is only one subject explained in its sub-topic about the concept of halal. Therefore, there is a need to add halal as one as a subject or topic in the syllabus of Private Universities.

However, this is insufficient to encourage Generation Y to consume halal food. Therefore, it is recommended that the university provide a platform for Generation Y to understand about halal and the importance of halal consumption. This can be accomplished through various ways such as offering an elective module on halal, seminars, talks, exhibition and students' activities on halal from religious and commercial point of views.

5.4.2 Implications and Recommendations for Policy Development

The results of the present study have shown that perceived behavioral control and government initiatives were not strong enough to influence the behavioral intention of Generation Y Muslims to consume halal food. Therefore, this study implies two possible scenarios, firstly; ease and difficulty to consume halal food do not influence the behavioral intention of Generation Y to consume halal. This is probably because even though if halal food is not accessible or expensive, Muslims would still consume halal if they practise the teaching of Islam. Next, government initiatives do not significantly influence the behavioral intention of Generation Y because of two possibilities. First possibility is the initiatives conducted by the government did not reach Generation Y and the second reason is probably the initiatives conducted by the government were not appealing to Generation Y.

Therefore, it is recommended that the government initiates programmes which could reach Generation Y and attract them to consume halal food. This could be done by engaging Generation Y in designing the government initiatives that suit their characteristics and attract them to consume halal food. Promotion and publicity should also suit the preference of Generation Y consumers. It is also important to use the medium of communication, for example social media to reach the Generation Y and attract them to consume halal food. Moreover, the government could involve the private universities in their halal programmes, for example, organizing events on halal in the private universities.

It is also recommended that the Malaysian Qualification Agency (MQA) to revert to having the Islamic Studies module as a compulsory module or to offer any similar module for Muslim students which giving more attention to halal as one of sub topic. Also, it is suggested to add halal as one of discussion topic in the present MQA

subjects namely Ethnic Relations or Islamic and Asian Civilization. This is important because the majority of the private universities do not offer the Islamic Studies module if it is not made compulsory by the MQA. This reflects to what has been said by Professor Kareem Douglas about the rationalization of education in the modern society, where people tend to focus less on subjects that could develop a holistic human being, for example the Islamic Studies and the Philosophy subject. The current education system, especially in the private universities focuses more on marketable courses and programmes which prepare students for the workforce, for example courses such as business, information technology, engineering and so on.⁵

In addition, not many of the earlier researches deliberated on the government's initiatives on halal which provide reliable information and knowledge. Thus, it is recommended that policy makers in the government, research centers and universities allocate more funding for researchers in this field. This is to enable more in-depth studies to be conducted on the influence of government initiatives on halal consumption in Malaysia. Hence, this could enhance the strategies and policies of the government on halal, for Malaysia to achieve its aim of becoming the Global Halal Hub.

5.5 Recommendations for Future Research

There are three aspects of recommendation for future research to be conducted. Firstly, research on in depth understanding of determinants of halal food consumption. Secondly, research on the role of the University in developing halal knowledge and halal food consumption. Lastly, the researcher recommends future study that further refines the conceptual model of present study.

⁵ Karim Douglas Crow (Professor, International of Advanced Islamic Studies Malaysia) in his talk on "Muslims as Consumers: A Dialogue with Modernity" in Academy of Islamic Studies, University of Malaya, 25th September 2013.

5.5.1 In-Depth Understanding on the Determinants influencing Halal Food Consumption

This study provides result on determinants influencing halal food consumption among Generation Y based on the statistical point of view. This research has provided a platform in understanding the behavior of Generation Y in halal food consumption. However, in order to understand in-depth why some determinants were significant, and some were not in influencing halal food consumption. A in-depth study could be conducted to investigate on. In-depth understanding of the model and variables proposed in this study could provide a comprehensive knowledge about halal food consumption.

In addition, an in-depth study could propose a meaningful suggestion in improving practices and policies of halal consumption in Malaysia. The present study has shown that religiosity, subjective norms and attitude did influence the intention of Generation Y to consume halal food. The roles of these three determinants shall be elaborated further in future in-depth study. Similarly, as the government's initiatives and perceived behavioral control were not found significant in the present study, detailed explanation of this can be explored further in future in-depth studies using a qualitative approach, for example interviews and via focus groups.

5.5.2 The Role Of The University In Developing Halal Knowledge And Halal Food Consumption Among Generation Y

The role of the university in educating Muslim students on halal consumption was explored in this study. Future research can focus on experimental studies which look at the influence of the Islamic Studies subject or other similar subject towards the

behavioral intention of Generation Y to consume halal food. This will help to determine if a particular subject actually influences Generation Y Muslims to consume halal food. Similarly, the experimental study could also be conducted among students who attend any programs on halal for example seminars or exhibition. Thus, the actual influence of Islamic Studies or any related subject will be explained in the experimental research.

The findings of this future research could be used by the university in their planning for subjects and programmes for Muslim students. For instance, the results from this research could then be utilised to improve or to revise the content and the learning and teaching techniques in delivering the subject. Similarly, it could be used to improve any program related to halal consumption, awareness and halal industry.

5.5.3 Further Refine the Conceptual Model of the Present Study

This study focuses on Generation Y at private universities in Klang Valley. The findings are meant for generalization for the mentioned scope. Therefore, it is recommended that future research applies this model to a larger group of Generation Y from different geographical background, objectively to further refine the conceptual model developed in this study. Furthermore, future research can explore the potential and strength of this model in the Malaysian context across the different geographical backgrounds of respondents. It can further test the Theory of Planned Behavior as a conceptual framework with an additional variable of religiosity, as proposed in this study.

It is also recommended future study be conducted to validate this model in non-urban areas and at a larger geographical scope. This could contribute in validating the model as a conceptual framework and enhancing understanding of the determinants influencing halal food consumption.

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List of Publications and Papers Presented

Publications

1. Aiedah Abdul Khalek, Sharifah Hayaati Syed Ismail and Hairunnisa Mohamad Ibrahim, A Study on the Factors Influencing Young Muslims' Behavioral Intention in Consuming Halal Food In Malaysia, *Jurnal Syariah* 23, no. 1 (2015), 53-74.
2. Aiedah Abdul Khalek and Sharifah Hayaati Syed Ismail, Why are We Eating Halal: Using the Theory of Planned Behavior in Predicting Halal Food Consumption among Generation Y in Malaysia, *International Journal of Social Science and Humanity* 5, no. 7 (2015), 608-614.
3. Aiedah Abdul Khalek (2014), Young Consumers' Attitude towards Halal Food Outlets and JAKIM's Halal Certification in Malaysia. *Procedia Social and Behavioral Science, Science Direct* 121, (2014), 26–34.
4. Aiedah Abdul Khalek and Sharifah Hayaati Syed Ismail, A Conceptual Framework on the Factors Influencing Halal Consumption among Muslim Consumers in Malaysia, (Submitted to *Online Journal of Research in Islamic Studies*, UM).
5. Aiedah Abdul Khalek and Sharifah Hayaati Syed Ismail, The Role Of Religiosity In Influencing Halal Food Consumption Among Generation Y Muslim Consumers In The Klang Valley, Malaysia, (Submitted to *Islamic Marketing Journal* in September 2015- SCOPUS journal)
6. Aiedah Abdul Khalek and Sharifah Hayaati Syed Ismail, How do they understand the concept of halal? A Descriptive Analysis of Knowledge Acquisition of halal among Generation Y Muslims in Malaysian Private Universities, (Submitted to *Online Journal of Islamic Education*, UM).

Papers Presented

The Role of Religiosity In Influencing Halal Food Consumption Among Generation Y Muslim Consumers In Malaysia, 6th Global Islamic Marketing Conference, 6-8th May 2015, University of Istanbul, Turkey.

Why are We Eating Halal-Using the Theory of Planned Behavior in Predicting Halal Food Consumption among Generation Y in Malaysia, 2nd International Conference on Sociality Culture and Humanities, June 22-23 2014, Moscow Russia. (**Awarded as the Best Paper**)

Factors Influencing Young Muslims' Intention to Consume Halal Food, Global Islamic Marketing Conference, 17-18 Dec 2012, Cairo Egypt.

Young Consumers' Attitude towards Halal Food Outlets and JAKIM's Halal Certification in Malaysia, International Halal Conference (2012), 13th Sept 2012, Kuala Lumpur.

Candidature Defense Presentation, 12th September 2014, Department of Siasah Syari'yyah, Academy of Islamic Studies, University of Malaya.

Proposal Presentation Seminar, 7th February 2014, Department of Siasah Syari'yyah, Academy of Islamic Studies, University of Malaya.

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APPENDIX A



DETERMINANTS INFLUENCING BEHAVIOURAL INTENTIONS OF GENERATION Y IN CONSUMING HALAL FOOD IN MALAYSIAN PRIVATE UNIVERSITIES.

Dear Ms. /Mr,

First and foremost, we would like to thank you for participating in this survey. This survey is a part of a research entitled: “Determinants Influencing Behavioural Intentions of Generation Y in Consuming Halal Food in Malaysian Private Universities”. This is a part of a thesis for the Doctor of Philosophy (PhD) degree under the University of Malaya.

The purpose of this study is to analyze the determinants which influence the Generation Y Muslim consumers’ intention to consume halal food in Malaysian private universities.

All the questions are based on individual opinions and there are no right and wrong answers. We also would like to ensure that the data collected is for academic research and your information will be strictly anonymous and confidential.

Thank you

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QUESTIONNAIRE

Section A: Demographic Profile

Please provide some general information about yourself. Please tick the box best describing you.

GENDER	TICK
<i>Male</i>	
<i>Female</i>	
AGE	TICK
15 - 17 years old	
18 - 20 years old	
21- 23 years old1	
24 - 26 years old	
27- 30 years old	
ETHNICITY	TICK
Malay	
Chinese	
Indian	
Others, specify:- _____	
EDUCATION	TICK
Certificate/ Foundation	
Diploma	
Degree	
Post Graduate	
Others, specify _____	
RESIDENCE	TICK
University Hostel	
Rented Residence/Room (Outside Campus)	
Staying with Parents/ siblings/relatives	
PROGRAMME	TICK

Business Studies	
Biosciences	
Computer / Information Technology Studies	
Social Sciences/ Languages	
Technical/Skills Studies	
Others, specify:- _____	
SOURCE OF FORMAL KNOWLEDGE ON HALAL <i>Please identify the sources of formal knowledge on halal food. You may choose MORE than 1 option</i>	TICK
Fardhu Ain Class (KAFA)	
Primary School	
Secondary School	
College/ University	
Others, specify _____	

INFORMAL KNOWLEDGE OF HALAL <i>Please identify the sources of informal knowledge on halal food You may choose MORE than 1 option</i>	TICK
Books	
Magazines	
Newspaper	
Radio	
Television	
Internet	
Family	
Friends	
Mosque/Musalla	
Talks/ Seminar/ Tazkirah/Usrah	
Other _____	

Section B: Halal Food Consumption

This section focuses on determinants and behavioural intention of Muslims in consuming halal food.

Instruction: Using a rating scale of 1 to 5, please circle the level of agreement/disagreement with the following statements:

1	2	3	4	5
Strongly Disagree	Disagree	Somewhat agree	Agree	Strongly Agree

Attitude on halal food

A1	Eating halal food is important for me.	1	2	3	4	5
A2	I trust to consume halal food compared to non-halal food.	1	2	3	4	5
A3	Halal food is clean.	1	2	3	4	5
A4	Halal food is cleaner compared to non halal food.	1	2	3	4	5
A5	Halal food is safe to eat.	1	2	3	4	5
A6	Halal food is safer to eat compared to non halal food.	1	2	3	4	5
A7	Halal food is healthy.	1	2	3	4	5
A8	Halal food is healthier compared to than non-halal food.	1	2	3	4	5

Social influences on halal food consumption

S1	Most people who are important to me choose halal food.	1	2	3	4	5
S2	People can influence me to eat halal food.	1	2	3	4	5
S3	My family prefers halal food.	1	2	3	4	5
S4	My friends think that I should choose halal food.	1	2	3	4	5
S5	My family imposes on me the importance of eating halal food.	1	2	3	4	5

1	2	3	4	5
Strongly Disagree	Disagree	Somewhat agree	Agree	Strongly Agree

Opportunities to consume halal food

BC1	It is easy to find halal food in Malaysia.	1	2	3	4	5
BC2	It is easy to find halal food in my University.	1	2	3	4	5
BC3	I always have a chance to eat halal food.	1	2	3	4	5
BC4	There are many choices of halal food in my University.	1	2	3	4	5
BC5	The price of halal food is reasonable.	1	2	3	4	5

Religiosity

R1	I believe that there is no God except Allah SWT.	1	2	3	4	5
R2	I believe that Prophet Muhammad SAW is the last messenger of Allah.	1	2	3	4	5
R3	I believe in the Quran.	1	2	3	4	5
R4	I believe in the Sunnah.	1	2	3	4	5
R5	I believe in the Prophets of Allah.	1	2	3	4	5
R6	I believe in the Judgement day (<i>Kiamah</i>).	1	2	3	4	5
R7	I believe in <i>Qada'</i> and <i>Qadar</i> .	1	2	3	4	5
R8	I believe that as a human being, I belong to Allah SWT.	1	2	3	4	5
R9	I believe that the main purpose of this life is to perform <i>ibadah</i> to Allah.	1	2	3	4	5
R10	I pray regularly five times a day.	1	2	3	4	5
R11	I fast regularly in the month of <i>Ramadhan</i> .	1	2	3	4	5

1	2	3	4	5
Strongly Disagree	Disagree	Somewhat agree	Agree	Strongly Agree

R12	I perform/will perform haj when I can afford to do so.	1	2	3	4	5
R13	I pay <i>zakat fitrah</i> every year if I fulfil the prescribed criteria.	1	2	3	4	5
R14	I recite the holy book of al-Quran regularly.	1	2	3	4	5
R15	I always try to avoid minor sins.	1	2	3	4	5
R16	I always try to avoid major sins.	1	2	3	4	5
R17	I try to follow Islam in all matters of my life.	1	2	3	4	5
R18	I try to maintain a good behaviour (<i>akhlak</i>).	1	2	3	4	5
R19	I try to maintain good relationship with other Muslims fellow.	1	2	3	4	5
R20	I try to maintain good relationship with non-Muslims.	1	2	3	4	5

Intention to consume halal food

BI1	I will not eat if the food is non-halal.	1	2	3	4	5
BI2	I will not eat if the food is doubted as halal.	1	2	3	4	5
BI3	I will eat in halal food outlets only.	1	2	3	4	5
BI4	I will eat halal food only.	1	2	3	4	5
BI5	I will make sure that the food is halal before I consume it.	1	2	3	4	5
BI6	I will make sure the food is halal before I purchase it.	1	2	3	4	5
BI7	I will not consume the food if it is prepared using any non-halal ingredients for example alcohol.	1	2	3	4	5
BI8	I consume halal food only.	1	2	3	4	5
BI9	I consume halal food because it is an Islamic ruling only.	1	2	3	4	5

1	2	3	4	5
Strongly Disagree	Disagree	Somewhat agree	Agree	Strongly Agree

Government initiatives in promoting halal food





G1	I have read written materials (newspapers/magazine/brochures..etc.) about halal topics in Malaysia.	1	2	3	4	5
G2	I have read written materials (newspapers/magazine/brochures..etc.) about halal matters provided by the Malaysian government.	1	2	3	4	5
G3	Written materials about halal consumption influences me to consume halal food.	1	2	3	4	5
G4	I have accessed government website/s for information on halal consumption in Malaysia.	1	2	3	4	5
G5	The information on government website about halal consumption influences me to consume halal food.	1	2	3	4	5
G6	I have watched halal programmes providing information on television.	1	2	3	4	5
G7	Halal information on television has influenced me to consume halal food.	1	2	3	4	5
G8	I am aware of halal trainings/conferences/exhibitions about halal matters.	1	2	3	4	5
G9	I have attended halal training/conference/exhibition about halal matters.	1	2	3	4	5
G10	I am aware that halal kiosks are available in Malaysia.	1	2	3	4	5
G11	I have used halal kiosks to check on halal products in Malaysia.	1	2	3	4	5
G12	I am aware that there is a halal application in Malaysia.	1	2	3	4	5
G13	I use the halal application in my smart phone/ computer.	1	2	3	4	5

1	2	3	4	5
Strongly Disagree	Disagree	Somewhat agree	Agree	Strongly Agree

Attitude and awareness on halal certification

C1	Halal certification is important for me.	1	2	3	4	5
C2	I trust halal certification which ensures that the food is halal.	1	2	3	4	5
C3	I look at halal certification before I purchase the food.	1	2	3	4	5
C4	I will not buy food which does not have any halal certification.	1	2	3	4	5
C5	I dine in halal certified food outlets only.	1	2	3	4	5
C6	I check for halal certification before I purchase any food.	1	2	3	4	5
C7	I trust the Malaysia Department of Islamic Development (JAKIM)'s halal certification only.	1	2	3	4	5

In your opinion, which of the following is the Halal logo issued by the Malaysia Department of Islamic Development (JAKIM)

HALAL LOGO	TICK	HALAL LOGO	TICK
1. 	1.	3. 	3.
2. 	2.	4. 	4.

Thank you for your cooperation

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