INTENTION TO PURCHASE HALAL PRODUCTS AMONG CONSUMERS

NADIAH RUS LIYANA RUSLI

MASTER OF SCIENCE MANAGEMENT
UNIVERSITI UTARA MALAYSIA
JANUARY 2015

INTENTION TO PURCHASE HALAL PRODUCTS

AMONG CONSUMERS

By

NADIAH RUS LIYANA RUSLI

Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia, in Partial Fulfillment of the Requirement for the
Master of Science (Management)

PERMISSION TO USE

In presenting this dissertation in partial fulfillment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this dissertation in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor or in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my dissertation. It is understood that any copying or publication or use of this dissertation parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my dissertation.

Request for permission to copy or to make other use of materials in this dissertation/project paper in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

ABSTRACT

Demand for halal products had increased tremendously due to expansion of the Muslim population worldwide. This study intends to investigate factors such as attitude, subjective norms and perceived behavioral control that influence the intention to purchase halal products among consumer in Malaysia. Factors that lead to buying decision among consumer must be understood carefully in order to boost the growth of halal industry. Based on the multiple linear regression analysis, the perceived behavior control is significantly influenced the intention to purchase halal products while attitude and subjective norms are not significantly influenced the intention to purchase. The finding indicates that an individual are able to control their perception and the intention to purchase halal products. Therefore, marketers, retailers, and manufacturers have to build an effective strategy to satisfy this value among potential consumers in Malaysia.

Keywords: Halal Products, Attitude, Subjective Norms, Perceived Behavioral Control, Intention to Purchase, Theory of Planned Behavior

ABSTRAK

Permintaan untuk produk halal telah meningkat dengan ketara disebabkan oleh pengembangan penduduk Islam di seluruh dunia. Kajian ini berhasrat untuk menyiasat faktor-faktor seperti sikap, norma subjektif dan kawalan terhadap kelakuan dilihat yang mempengaruhi niat untuk membeli produk-produk halal di kalangan pengguna di Malaysia. Faktor-faktor yang membawa kepada keputusan membeli di kalangan pengguna mesti difahami dengan teliti dalam usaha untuk meningkatkan pertumbuhan industri halal. Berdasarkan analisis regresi linear berbilang, kawalan tingkah laku dilihat memberi pengaruh yang signifikan terhadap niat untuk membeli produk-produk halal manakala sikap dan norma-norma subjektif dilihat tidak memberi pengaruh yang signifikan terhadap niat untuk membeli produk halal. Dapatan menunjukkan bahawa seorang individu yang boleh mengawal persepsi dan niat mereka untuk membeli produk-produk halal. Oleh itu, pemasar, peruncit dan pengeluar perlu membina strategi yang berkesan untuk memenuhi nilai ini di kalangan pengguna-pengguna yang berpotensi di Malaysia.

Kata kunci: Produk Halal, Sikap, Norma Subjektif, Kawalan Terhadap Kelakuan, Gelagat Pembelian Pengguna, Teori Kelakuan Terancang (Theory of Planned Behavior)

ACKNOWLEDGEMENT

In the name of Allah, the Most Gracious and Most Merciful. Praise to Allah S.W.T. The Creator and Guardian of the universe. Praise and peace be upon Prophet Muhammad S.A.W, the last messenger of Allah, his family and his companions, from whom we gain the enlightenment.

Alhamdulillah. First and foremost, praises and thanks to Allah S.W.T. for His bounties of blessings throughout my research paper in order to complete the research successfully. And also peace been upon to the Prophet Muhammad SAW as the Messenger.

I would like to express my grateful thanks to my parents, Dr. Rusli Busu and Madam Nor Zalina Zalazilah, for sharing the entire time and giving the fullest strength and support to me while assisting me in the pursuit of my goals in this research. It truly was a pleasure to have all of you in my life, whereby I would extend a heartfelt thank you.

I wish to thank and express my gratitude for the enthusiasm and encouragement from my supervisor, Dr. Hazlinda Hassan**,** not only for her tremendous amount of help on this research paper, but also for her great teaching and unconditional support throughout the semester. Without your knowledge, patience, and willingness to help, this research would have been impossible. I would also like to thanks Tuan Hj. Mohamad Zainol Abidin b Adam, as the examiner for his guidance and kindness. I really appreciate their sacrifices and good deeds. Without them, I would not be able to complete this project. **THANK YOU.**

Nadiah Rus Liyana Rusli,
Master of Science Management,
Universiti Utara Malaysia.

TABLE OF CONTENT

CONTENT   **PAGE**

CHAPTER 4: Data Analysis and Findings

CHAPTER 5: Discussion, Recommendation and Conclusion

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.0   Chapter Introduction

This chapter discusses the background, problem statement, research objectives and research questions, significance and organization of the study.

1.1   Background of study

Alam and Sayuti (2011) mentioned that one of the fastest growing religion is Islam especially in birth and adoption. The total number of Muslims worldwide in 2014 was 2.08 billion and the rate of growth is increasing at 1.84% compared to the number of Muslim worldwide in 2013 (World Muslim Population, 2014). In Malaysia, the Muslim population is estimated at 60.4%. In addition, Shafie and Othman (2006) stated that the population of Muslims in Malaysia will increase to 30% in the year 2025.

Due to the extreme rise in Muslim population, the Halal industry is becoming very significant in the global market. Pew Forum (2011) described that the Halal trade foods globally is at the range of USD 800 billion to 1.2 trillion. This is because Halal foods are also being demanded by non-Muslims who are looking for food with additional value added features such as being wholesome, safe, hygienic, and contamination-free principles (Halal Development Corporation, 2011).

The intention to purchase among consumers can be explained through Theory of Planned Behavior (TPB) that has been extensively used by other researcher such

Soesilowati (2010), Hansen, Jensen, and Solgaard (2004), and Chung, Stoel, and Xu (2012). Ajzen (1991) described that TPB has been developed as an addition to the Theory of Reasoned Action (TRA) with the addition of Perceived Behavioral Control (PBC) variable. The theory that has been developed by Ajzen and Fishbein (1980) has received a huge attention in the academic literature as it has an important role in postulated the individual behaviour. There are three dimensions described in the theory which are attitude, subjective norms (SN), and perceived behavioral control (PBC). These three dimensions will be used in this study to explain and understand the importance of predictor factors of the TPB model towards the factor that influence the consumer to purchase Halal products.

1.2   Problem Statement

Halal has been always associated to Muslims. However, today people all around the world are concerned about the Halal status of the products that they consumed. Hornby and Yucel (2009) described that due to the perception that Halal products are safe and wholesome, there are also non-Muslims in European countries prefers to purchase Halal products. As evidence in Yousef's (2010) study, he indicated that the level of consumption of Halal food in year 2009 was $66.6 billion in Europe, $16.16 billion in North America, $20.8 billion in China, $23.6 billion in India and $43.8 billion in Gulf Cooperation Countries.

Entrepreneurs and businesses need to have proper skills to attract more loyal customers. In order to have a constant and numerous loyal customers, the industry has to be aware on the factors that lead them to purchase Halal products. There have been several studies that concern about the level of awareness of the consumer toward

Halal products. For instance, Ahmad, Tunku Abaidah, and Abu Yahya (2013) investigated the level of awareness of consumers in Malaysia towards Halal products.

The demands for Halal foods and products have increased tremendously together with the expansion of the Muslim population. The growth of Halal market has increased tremendously at 25% per year (Dewan Ekonomi, 2011). Halal has become the main concern around the world. However, there is limited research investigate the perception of consumers toward Halal products especially in the context of Malaysia (Seyed Danesh, Charoon & Naharandi, 2010; Lada, Tanakinjal & Amin, 2009).

Though numerous studies has been conducted in examining the TPB on the Intention to Purchase (ITP) Halal products, there is a very limited study that focused on examining the consumer in large scale such whole Malaysia (Gopi & Ramayah, 2007). Based on the scenario and limitation of the research in the academic literature, this study attempts to investigate the influence of TPB on intention to purchase Halal products among Malaysia consumers including Sabah and Sarawak.

1.3   Research Questions

Based on the industry scenarios and gaps in academic literature, the study focuses on answering the following issues:

i)   Does intention to purchase Halal products differs significantly between genders?

ii)   Does intention to purchase Halal products differs significantly among ethnic groups and religion?

iii)   Does attitude, subjective norms and perceived behavioural control have a relationship with intention to purchase Halal products?

iv)   Does attitude, subjective norms and perceived behavioural control have a significant influence on intention to purchase Halal products?

1.4   Research Objectives

The main objective of the research is to examine the influence of attitude, subjective norms, and perceived behavioral control on intention to purchase Halal products. The specific objective of the study includes the following:

i)   To determine the significant difference of intention to purchase between genders.

ii)   To determine the significance difference of intention to purchase among ethnic groups and religion.

iii)   To investigate the relationship between the independent variables (attitude, subjective norms and perceived behavioral control) on intention to purchase Halal products among consumers.

iv)   To examine the significance influence of attitude, subjective norms and perceived behavioral control on intention to purchase Halal products among consumers.

1.5   The variables of the study

The variables of the study are defined as follows:

1.5.1   Intention to purchase

Intention can be defined as the person's motivation to perform the behavior (Samin, Goodarz, Muhammad, Firoozen, Mahsam & Sanza, 2012). Originally, the intention can be assumed as the motivational factors that influence the behavior, the factors that how hard people are willing to try and also the effort that applied in order to perform the behavior (Ajzen, 1991). He also added that people would be more likely to perform the behavior as they have a stronger intention to engage in that behavior (Ajzen, 1991).

1.5.2   Attitude

Ajzen (1991) defined the attitude as the degree to which a person has a favorable or unfavorable evaluation and appraisal of the behavior in question.

1.5.3   Subjective Norms

Subjective norm can be defined as the person's perception of the social pressure for or against in performing the behavior in question (Ajzen, 1987).

1.5.4   Perceived Behavioral Control

Ajzen (1991) believed that the PBC is the extent to which a person feels able to engage in the behavior. Other researcher such Chen (2007) and Kang, Hanh, Fortin, Hyun, and Eom (2006) define PBC as the degree to control that an individual perceives over performing the behavior.

1.6   Theoretical framework

Figure 1.1 shows the theoretical framework of this study with three independent variables (i.e. attitude, subjective norms and perceived behavioral control) and intention to purchase as the dependent variable. Based on this framework, the influence of attitude, SN and PBC will be examined on the consumers' intention to purchase Halal products.

Independent Variables   **Dependent Variable**

(IV)   **(DV)**

Attitude

Subjective Norms

Intention to Purchase Halal Products

Perceived Behavioral Control
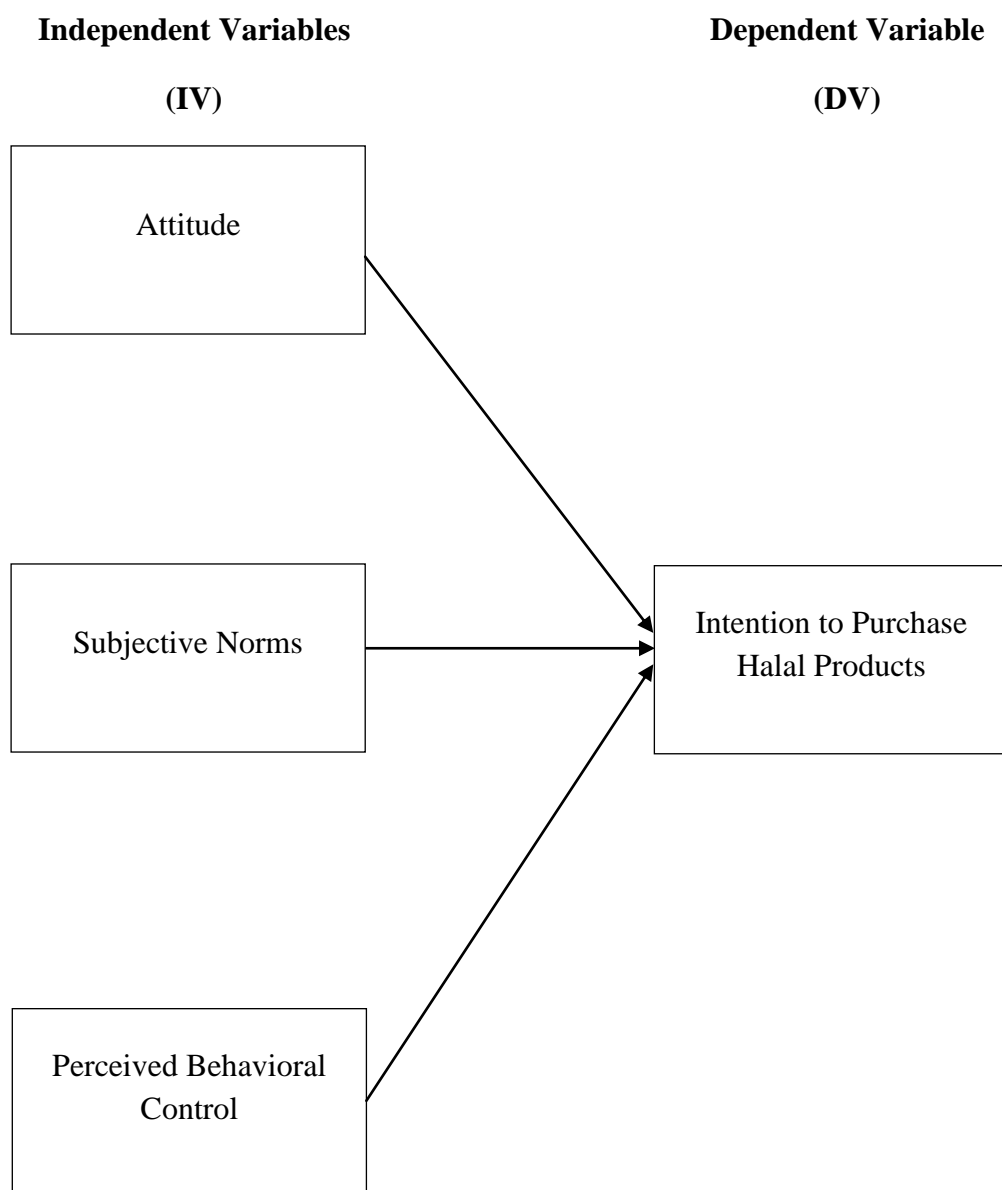
Figure 1.1 Research Framework

1.7   Hypotheses

The hypotheses of the study are as follows:

Hypothesis 1

There is a significant difference of intention to purchase Halal products among genders.

Hypothesis 2

There is a significant difference of intention to purchase among ethnic groups (2a) and religion (2b) of the respondents.

Hypothesis 3

There is a significance relationship between attitude (3a), subjective norms (3b), and perceived behavioral control (3c) and intention to purchase Halal products.

Hypothesis 4

There is a significance influence of attitude (4a), subjective norms (4b), and perceived behavioral control (4c) on intention to purchase Halal products among consumers.

1.8   Significance of study

This study will benefit to the following groups:

1.8.1   Practitioners

Firms that involve in Halal industry can utilize the study findings as a guideline since the Halal industry drastically becomes one of the major industries worldwide.

Moreover, it also helps the firms to get more information on the factors that could be the major influence of consumer purchasing behaviors of Halal products. Furthermore, firms would gain more information on marketing approaches and techniques that can be applied to increase their sales of Halal products. Lada et al. (2009) described that varieties of marketing approaches or techniques need to be used in order to encourage the purchase of Halal products over regular product consumption.

1.8.2   Academicians

This research may become a reference for other study that engage with Halal issues, especially in the topic of Halal purchase intention. In addition, this study intends to promote a better theoretical understanding and acknowledgement of the factors that may encourage consumers to consume Halal products.

1.9   Organization of the remaining chapters

This study is organized into five chapters. Chapter One elaborates the background of the study, the problem statement, the research objectives and research questions about studies and also the significance of the study. Chapter Two explains reviews of previous literature regarding the variables under the study together with the hypothesis and theoretical framework of the study. Chapter Three describes the research design, population and sampling design, data collection method, measurements, and also data analysis techniques. Chapter Four describes the results of the study and discusses the students' findings based on the interpretation of the statistical results. Chapter Five describes the overall conclusion, including the

implication of this study, the limitation of the present and recommendation for future

study.

CHAPTER TWO

LITERATURE REVIEW

2.0   Chapter Introduction

This chapter generally explains the literature on issues that are related to attitude, subjective norms (SN) and perceived behavioral control (PBC), and intention to purchase (ITP). The definition and the link among these variables are explained and followed by the development of research hypotheses at the end of this chapter.

2.1   The concept of *HalalanToyyiban*

Halal is an Arabic word which defined as allowed or permitted according to the Shariah (Islamic) law while Toyyiban defined as good quality, safety, cleanliness, nutritious, and authentic (Shaikh Mohd, 2006). In short, Halal and Toyyib portray the symbol of intolerance in the hygiene, safety and quality. In Islam, the important criteria for food consumption are classified into two, Halal (permissible in Islamic Shariah) and Toyyib (wholesome). Thus, these important criteria have been stressed in Al-Quran in verse 168, which states;

> *"O mankind, eat from whatever is on earth [that is] lawful and good and do not follow the footsteps of Satan. Indeed, he is to you a clear enemy." (Verse 168, Surah Al-Baqarah)*

Referring to the verse, Islam has equally stressed on the importance of both elements, *Halal* (permissible in Islamic *Shariah*) and *Toyyib* (wholesome). In addition, what are permitted by Islam (*Halal*) may also become impure (*GhairToyyib*) if the food becomes unhealthy, unhygienic, or improperly prepared. Thus, Islam stressed the food consumed does not only compliance with *Shariah* (Islamic Law) but must in high and good quality.

"For We had certainly sent unto them a Book, based on knowledge, which We explained in detail - a guide and a mercy to all who believe." (Qur'an, 7:52)

As indicated in surah Al-Araf, verse 52, Al-Quran provides a detailed guideline including the concept of *HalalanToyyiban*. This concept was stated clearly in a few Quranic verses and was explained in depth in Hadith along with the opinions by Islamic scholars. Al Qardawi (2002) mentioned that the concept of Halal as what is permitted and not permitted for Muslims can be explained in the principle of "Permissibility of Things" which described that, things that have been created by Allah is permissible for Muslim unless which has been deemed impermissible in the Al-Quran and Hadith. The aspects of Halal are applied not only in food, but also in every aspect of life. Thus, in food, Allah S.W.T. forbidden certain items such dead animals, blood, pork, and which is dedicated to anyone other than Allah (Al-Quran, 2:172-173; 5:3; 6:145), and also prohibit other behavioral aspect such as gambling (Al-Quran, 2:219; 5:90), lying (Al-Quran, 26:221-222), stealing (Al-Quran, 5:38), and other immoral actions.

The concept of Toyyib (good) is not only limited to food products (Al-Quran, 2:172), but also applied in other aspects such earning and spending activities (Al-Quran, 2: 267) and human practice (Al-Quran, 23:51). This emphasizes that the Halal concept does not applied to consumable items and physical objects, but also stresses on human acts and manner of a true Muslim. The word Toyyib is associated with word Halal (lawful) which portrayed the importance of wholesome in food as specified in this verse: "Halal that is good", from Allah perspectives that all Halal products are necessarily good (Al-Quran, 5: 4-5)

2.2   Halal certification

As the Muslim consumers become more knowledgeable of their religion, it is inevitable that they will be more particular on the type of products and services that they consume or use. In addition, consumers become increasingly more sophisticated in diet and health-related issues, thus, the relevance of informative labeling and the belief in the right to be adequately informed should be strengthen. By receiving the Halal logo from the authority party, it is legally portrayed that the products or goods have undergone strict inspection and safe to be consumed or used.

In order to confirm that the Halal products meet the Islamic Law requirements, an Islamic organization has been pointed to issue the certification. Mian (2010) mentioned that the product can only be legally considered Halal when it is free from pork, alcohol, and not containing any prohibited ingredients of animal origins, and also has been prepared and manufactured through a safety equipment. This proved that the Halal

certification not only certified product that good in hygiene but also compliance with Islamic law.

There are few countries that have their own Halal certification agency such as Singapore, and Thailand. For instance, Mohamad Sadek (2006) stated that Singapore started their Halal certification services in 1972 and the agency is managed by Majlis Ulama Islam Singapura (MUIS). MUIS is responsible in regulatory function in Halal certification. Mohamad Sadek (2006) also identified three government agencies that collaborate with MUIS in Halal certification and enforcement, namely the Food Control Department, Ministry of Environment; Agro-Veterinary Authority, Ministry of National Department and Commercial Crime Department, and Ministry of Home Affairs. On the other hand, a source from the Halal Standard Institute of Thailand, the Central Islamic Committee of Thailand is responsible for Halal certification of slaughtering houses, process food, and services. The production of Halal food standard and issuance of the Halal symbols are also handled by this committee in cooperation with the Thailand government.

In Malaysia, the Halal certification and logo is issued by a body that is authorized by the Malaysian's government. The government controls the system with the support from various agencies like Halal Industry Development Corporation (HDC) and Jabatan Kemajuan Islam Malaysia (JAKIM). HDC is a body that is responsible to handle local and international Halal Certification Process (Halal Development Corporation Vibe, 2008). The HDC was established in 2006 to facilitate the Malaysian's Halal hub project

through a better coordination in order to avoid international confusion and to increase the efficiency of the Halal certification processes. There are several steps outlined by JAKIM in issuing Halal certification on the certification process which include (Mohani, Hashanah, Haslina & Juliana, 2009):

(1) Document Evaluation - application forms and supporting documents with detailed analysis of the company's profile with declared ingredients, suppliers' details, manufacturing process and procedures and more.

(2) Inspection - physical inspection includes an assessment of declared ingredients, storage methods of raw materials, and finished products, cold rooms, processing plant manufacturing flows and handling aspects of production, packaging materials, general hygiene, quality control and assurance practices.

(3) Report preparation - technical inspectors will write a full report on the status of the application based on its site inspection.

(4) Evaluation Committee and Recommendation - report will be tabled and evaluated.

(5) Issuing of Halal Certificate - once approved, JAKIM will issue the Halal certificate and permission to use the Halal logo will be granted. The certificate is valid for two years with renewal of the application to be submitted three months before the expiry date. JAKIM will carry out constant monitoring to ensure conformity to the Halal standards.

Halal certification provides greater consumer confidence as it allows consumers to make an informed choice on their purchase (Wan Hassan & Hall, 2003). This is important tdue to malpractice in the supply of meat to consumers and restaurants (Pointing, Teinaz & Shafi, 2008). For example, the Muslim Council of Britain (MCB) suggested that up to 90%sale of the Halal meat and poultry in the United Kingdom are sold illegally and not slaughtered in accordance to the Shariah Law (Ahmed, 2008). In addition, Halal certification is also a potentially useful branding and marketing mechanism for restaurants (Al-Nahdi, 2009; MohdYusoff, 2004).

2.3 Halal logo

Halal logo in Malaysia issued by Jabatan Kemajuan Islam Malaysia (JAKIM) that certified the products or goods sold have undergone strict inspection and safe to be consumed, nutritious, and with high quality. Figure 2.1 below shows the Halal logo of Malaysia.

Figure 2.1: Malaysian Halal Logo

Source: Halal Industry Development Cooperation (2011)

Based on the Figure 2.1, the specific symbol of the logo describes as follows (JAKIM, 2014):

1) An eight cusp star at the centre of a circle;

2) The Arabic word – "حلال" at the center of the star;

3) Followed by "HALAL" in Roman alphabets below it;

4) The word "Malaysia" written in Roman alphabets and مال يزي ا in Arabic within the circle of the logo;

5) Two small five cusp stars positioned to separate the Roman alphabets from the Arabic word mentioned

2.4   Intention to Purchase (ITP)

Intention can be defined as the person's motivation to perform the behavior (Rezvani, Dehkordi, Rahman, Fouladivanda, Habibi & Eghtebasi, 2012). Moreover, Rezvani et al. (2012) believed that the intention is "what we think, we will buy". Originally, Ajzen (1991) described that the intention enforce people to try and give an effort applied to perform the behavior. Ajzen (1991) added that when people have strong intention to engage in that behavior, they tend to perform it.

There are several research that explains the intention-purchase relationship which highlighting the consistencies between the purchase intention of Halal products (Mukhtar & Butt, 2012; Seyed Danesh et al., 2010; Hanzee & Ramezani, 2011). These studies found that there is a positive intention toward purchasing Halal products.

Mukthar and Butt (2012) examined the intention to choose Halal products which the role of religiosity as the predictor factor. The study was conducted in Pakistan with the aim to investigate the consumers' purchase intention towards Halal products. The study found that the religiosity plays an important role in order to encourage the Muslim consumers to purchase Halal products.

Moreover, Seyed Danesh et al. (2010) investigated the consumers' intention toward services and Halal product. The study found that Muslim and non-Muslim consumers around Kuala Lumpur have an intention to purchase Halal products. Thus, the Muslim and Non-Muslims consumers prefer to purchase Halal product at any cost. This study obtained a positive relationship of Muslim and non-Muslims consumers' intention toward Halal product.

Hanzee and Ramezani (2011) investigated the Halal product in the world market. The study found that there is high demand of Halal products among consumers in global market, which indicate that there is a positive reaction of the consumer intention toward Halal products. Another study by Lada et al. (2009) also examined the consumers' purchase intention toward Halal products. The study found that the consumers in Labuan have the intention to purchase Halal products and validated the TRA model for prediction of the intention to choose Halal products.

2.5   Attitude

Attitude is defined as the positive or negative assessment or the psychological emotion that occur when the individual involves in certain behavior (Eagly & Chaiken, 1993). Other researcher, Ajzen and Fishbein (1980) described the attitude as the favorable or unfavorable view or feeling that occupies in the behavior. Ajzen (1988) believed that attitude is considered to be an important part of expecting and explaining the human behavior and he believed that the actions of people are determined through their traits and attitude, where traits are defined as "a characteristic of an individual that employs a general influence on a broad range of trait-relevant responses". According to Ajzen (1988), attitudes act as a function of beliefs and those people that believe and performed the given behavior often will lead to positive outcomes and it will hold a favorable attitude in performing the behavior, while for those who believed the other way will hold a negative attitude. The beliefs that lie behind a person's attitude towards the behavior are called as behavioral beliefs (the act of consuming or buying Halal or non-Halal products).

2.6   Subjective Norms

Subjective Norm (SN) is defined as the behavior that going to be performed or not to be performed based on the people perception being in the social pressure (Ajzen & Fishbein, 1980). According to Festinger (1954), the SN influence renders as the change in thinking and feeling of a person on the certain behavior due to the relationship with other people. In depth, the consumers may believe that their family, colleagues, friends or anyone like a certain behavior and this cause them to be influenced by their believe (Pavlou & Chai, 2002).

2.7   Perceived Behavioral Control

Perceived behavioral control (PBC) is the extension of the TRA. PBC can be defined as the degree to which an individual able to control the perception over performing the behavior (Chen, 2007; Kang et al., 2006). Moreover, Ajzen (1991) described that PBC can occur when the person is able to be engaged in behavioral that falls in two aspects; (1) the level of control over behavior and (2) the level of confidence of a person being able to perform or not perform the behaviour.

2.8   Theoretical background: Theory of Planned Behavior

The theory of planned behavior (TPB) is the addition of the theory of reasoned action (TRA) that builds in order to act with the behaviors over people that has incomplete volitional control (Ajzen, 1991). The TRA has been used widely in various aspects such as to explain the consumers' purchase intention (Fishbein & Ajzen 1980; Bonsjak, Obermier & Tuten, 2006; Kang et al., 2006). In short, the attitude and subjective norms existed by the TRA while the perceived behavioral control exists by TPB which is the addition of the TRA.

TPB has been used widely in consumer food area studies (Sparks & Sheppherd, 1992; Karijin, Iris, Florence &Wim, 2007; Verbeke, Vermeir & Vackier, 2004; Honkanen, Olsen & Verplanken, 2005). Sparks, Shepherd, and Frewer (1995) and Cook, Fairweather, and Campbell (2000) described that the TPB was found to be a significant model in food areas. In addition, TPB studies also include in other studies such as in the purchase of organic food (Maria, Anne & Hustri 2001; Anssi & Sanna, 2005) and online

purchasing behavior (Joey, 2002, 2004; Suh & Han, 2003). Armitage and Conner (2001) also used TPB as the foundation for their conceptual model where the habit as the addition of the independent predictor.

Figure 2.2 shows the TPB that developed by Ajzen (1991) as an addition to Ajzen and Fishbein's (1980) of Theory of Reasoned Action (TRA). There are three dimensions in TPB that influence human attitude to act. The dimensions are attitude, subjective norms (SN), and perceived behavioral control (PBC).
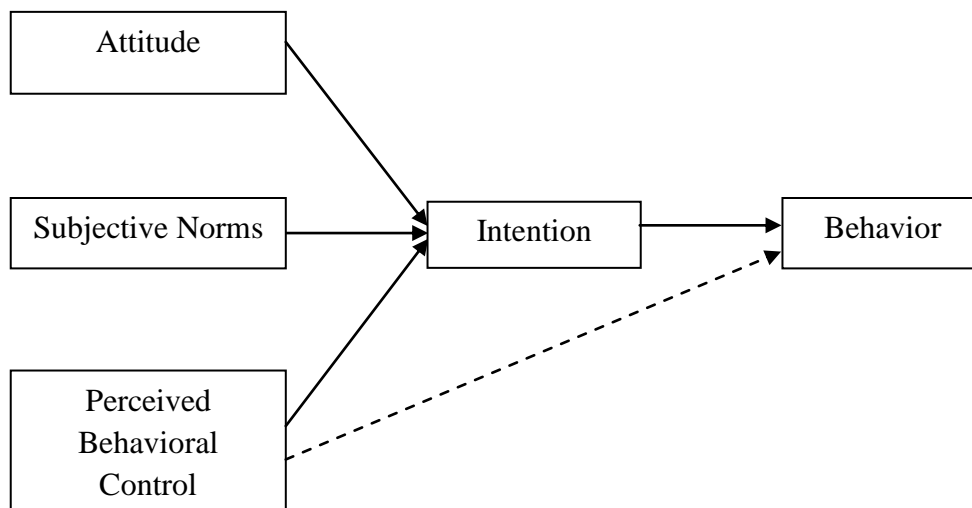
Figure 2.2: Theory of Planned Behavior Model

Source: Ajzen (1991)

Ajzen (1988) found that the TPB was better in predicting behavior than the TRA. The TPB was used to describe the best non-volitional behavior which cannot be described by TRA. This is the strength of TPB compare to TRA. As PBC was added in

TPB as the extension of TRA, the TPB is able to explain the relationship between behavioral intention and actual behavior.

Ajzen (1988) mentioned that the TPB would be the best in predicting the health-related behavioral intention than TRA. There are many fields that TPB is better in explaining the behavioral intention such leisure, exercise, diet and more. On top of that, both TPB and TRA can describe the individual's social behavior in considering the SN as the predictor variable. However, there are a few limitations of TPB. The TPB theory does not account for other variables such mood or past experience as the factor of behavioral intention. Moreover, it also assumed that the person has acquired the opportunities and resources to be successful in performing the desired behavior despite intentions. In addition, the TPB does not account the environmental and economic factor that may have a positive relationship toward the person's intention to perform the behavior in considering the normative influences. Other than that, even though the PBC is added into the theory, it still doesn't explain about the actual control over behavior.

As the study focuses on the consumers' intention to purchase Halal products, TPB is used in explaining the framework of the study (refer Figure 1.1). The intention to purchase Halal products is the process before the actual purchase as the intention reflects a future behavior. The three dimensions of TPB (i.e., attitude, subjective norms, and perceived behavioral control) are claimed to have a significant influence to the intended behavior. Therefore, this study is to find out the influence of these dimensions on the intention to purchase halal products among consumers in Malaysia.

2.9   Development of research hypotheses

The development of hypotheses of this study includes the following relationship:

2.9.1   Attitude and Intention to Purchase

There are few studies that showed the effect of attitude on buying intention of an individual. For instance, Alam and Sayuti (2011) found that there is a significant relationship between the attitude and intention in purchasing Halal products. Research in organic food by Chen (2007) showed that consumer's attitudes and purchase intentions in Taiwan is significantly influenced by variables which are attitude, subjective norm, behavioral control, and perceived difficulty. Ajzen (1988) also indicated that the attitude is described as the most important factor in expecting and explaining the human behavior.

Alam and Sayuti (2011) supported the definition of Theory Planned Behavior which indicated that the attitude is positively influenced toward the intention to purchase. The result showed that the attitude factor positively contributed to the intention of consumers to purchase Halal products. Ramayah and Suki (2006) also found that there is positive relationship between attitude and intention to use mobile personal computers among Master of Business Administration students. Iakovleva, Kolvereid, and Stephan (2011) also proved that the attitude has a significant relationship with the entrepreneurial students' intention in developing and developed countries.

However, Page and Luding (2003) found that the attitude does not positively influence the intention behavior. They found that the attitude was not positively effects

toward the marketing media used. In short, the intention to purchase bank services by direct marketing was not strong.

Based on this statement, the following hypothesis is developed:

H4a: There is a significant influence of attitude on intention to purchase Halal products.

2.9.2 Subjective Norms and Intention to Purchase

Several researches have proved the effect of subjective norms (SN) on the intention to purchase. Mukhtar and Butt (2011) in their research entitled "The Role of Religiosity in Intention to Purchase Halal Products" revealed that there is a significant influence of the SN on ITP factors. The result also indicated that the SN and attitude were the important antecedent of Pakistani Muslims intention to choose Halal products. In other similar studies, but using different theory which is TRA, it shows that attitude and SN were a significant influence to the intention of choosing Halal products among consumers (Lada et al, 2009; Mukhtar & Butt, 2012).

There are several studies of social psychology that showed the behavioral intentions are predicted by the SN (Buttle & Bok, 1996). In addition, Liou and Contento (2001) believed that the motivation and expectations of the family and friends is the key to assess the social pressure on the person's behavior to perform or not to perform. Leo and Lee (2010) agree with the definition of TPB as they believe that the subjective norm is the one's perception of whether people important to the person think that behavior

should be performed or not. However, previous research by Ajzen (1991) showed that the role of subjective norm was not clear which regard to the buying intention and behavior toward the organic food. Sparks and Shepherd (1992) found that the SN dimension does not give a strong significant to the intention dimension.

Based on this statement, the following hypothesis is developed:

> H4b: There is a significant influence of subjective norms on intention to purchase Halal products.

2.9.3 Perceived Behavioral Control and Intention to Purchase

Ajzen (1991) described perceived behavioral control (PBC) as the level to which individuals feel that they are able to be engaged in the behavior. Other research, such as Chen (2007) refers PBC as the degree to which an individual is able to control the perception over performing the behavior.

According to Alam and Sayuti (2011) PBC is not a critical factor on behavior intention while other research by Boone and Verbeke (2008) showed that the PBC is a critical factor in purchasing Halal food among consumer. In addition, Han, Gu, Mao, Ge, Wang, and Ma (2010) and Han and Kim (2010) studies on consumer intention to stay at Green Hotel found that there is a significant influence of PBC dimensions on intention.

There are several studies indicated that the perceived behavioral control has a positive relationship toward behavioral intention. For instance, study by Karijin et al.

(2007) found that the perceived behavioral control positively influenced the intention to consume Halal meat in Pakistan. Omar, Nik Mat, Ahmad Imhemed and Ahamad Ali (2012) supported the definition in theory of planned behavior. They found that the perceived behavioral control significantly influenced the intention of international Muslim consumers in purchasing Halal products.

Based on this statement, the following hypothesis is developed:

> H4c: There is a significant influence of perceived behavioral control on intention to purchase Halal products.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0   Chapter Introduction

This chapter presents the research methodology adopted in this study, which describes the research design, research sample and population, data collection and method, measurements of variables and data analysis.

3.1   Research Design

The purpose of this research is to predict the Theory of Planned Behavior (TPB) toward the intention of the consumers to purchase Halal products. Therefore, hypothesis testing is employed in this study to examine the significance level, direction, and magnitude of the standardized evaluations of paths that relate the independent variables with the dependent variable. Quantitative research design was applied and survey was conducted through questionnaires. The research was designed in accordance with the principles of cross-sectional field survey where data was collected once from September to October in 2014.

A questionnaire was used for the data collection due to its practicality where time and budget are the main constraints. In addition, handling the questionnaire is relatively easy while at the same time provides the breadth and speed in terms of its coverage. The items of the questionnaire were adapted from several studies.

3.2   Population and Sampling Design

The target population for this research is the consumers in Malaysia which consists of 30,372,219 million (Department of Statistics Malaysia, 2014). According to Krejcie and Morgan (1970), 384 are needed to represent a total population of Malaysia. On the other hand, Yamane (1967) provided a table to determine the sample size according to the number of population. Based on the table of sample size by Yamane, as the population size, $N = 15000$, sample size $(n) = 99$, when $N = >20000$, thus, 100 sample are required $(n = 100)$.   As the population of this study exceeded 20000 people, 384 samples are selected in order to obtain a more accurate result. The convenience sampling design was employed since the list of population element is not available. The unit analysis of this study is an individual which is consumer.

3.3   Questionnaire Design

The questionnaire of this study consists of 31 questions and divided into two sections, Section A and Section B. In section A, seven questions were asked related to demographic profile measurement. In Section B, 23 items are related to the independent and the dependent variables.

Section A: Demographic profile information

This part consists of seven items that asked about the profile information such gender, age, race, religion, level of education, personal income, and the state of living of the respondent. The main purpose of this section is to gather the important information of the respondent.

Section B: Factors influencing the intention to purchase

The main purpose of this section is to gather the information of respondents regarding the Attitude, Subjective Norms (SN), Perceived Behavioral Control (PBC) and Intention to Purchase (ITP). There are 23 items that based on the independent and dependent variables of the study.

3.4   Data Collection and Method

The primary data was collected through survey. The questionnaires were distributed by hand to the respondents at the nearby area. In order to increase the rate of response and to cover and represents all consumers from different states in Malaysia, the questionnaires were also distributed through online (i.e., Facebook and email). From the 384 questionnaires distributed, only 200 questionnaires were returned which giving a 52.1% response rate.

3.5   Measurement of Variables

The questionnaire was divided into two sections where the section A captured the general information such gender, age, race, religion, level of education and states. In this part, the questionnaire is designed using nominal and ordinal scale. In section B, there are 23 items that will be related to the independent and dependent variable of the study. All the variables adapted from previous studies as indicated in the Table 3.1.

Table 3.1
Measurement of Variables

Variables	Items	Adapted From	Questions	Measurement
Intention to Purchase (ITP)	7 items	Tarkiainen and Sundquist (2005) Shaari and Ariffin (2010)	I intend to buy Halal products I choose to purchase Halal products even not familiar with the brand I plan to buy Halal products more often I choose to purchase Halal products even it is quite expensive I will buy Halal products in the future I expect to purchase Halal products in the future It is likely that I will purchase Halal products in the near future	**Likert Scale** Strongly disagree (1) Disagree (2) Neutral (3) Agree (4) Strongly agree (5)
Attitude	5 items	Lada *et al.* (2009) Teo and Lee (2010) George (2004) Tarkiainen and Sundquist (2005)	I intend to buy Halal products in the near future. Choosing Halal product is a good idea. I like to choose Halal products. I look forward to buy Halal products Choosing a Halal products is a wise idea	
Subjective Norms (SN)	7 items	Teo and Lee (2010) Tarkiainen and Sundquist (2005) George (2004) Lada *et al.* (2009)	People who are important to me think that I should buy Halal products. People who are influence in my behavior think that I should buy Halal products People whose opinions I value will encourage me to buy People who are important to me will support me to but Halal products Most people who are important to me choose the Halal products. Halal products My family members prefer Halal products My friends would think that I should choose Halal products	
Perceived Behavioural Control (PBC)	4 items	Tarkiainen and Sundquist (2005) Shaari and Ariffin (2010)	I am capable of buying Halal products Buying Halal products is entirely within my control I have resources to buy Halal products I have knowledge to buy Halal products.	

3.6   Data Analysis

In this study, there are several analyses was used which includes frequency distribution analysis, reliability analysis, descriptive analysis, independent sample T-test, One-way ANOVA, Pearson Correlation Analysis and Multiple Regression Analysis. Below is the description of the analyses that has been conducted in this study.

3.6.1   Frequency Distribution Analysis

The frequencies were computed to examine the respondents' profile in term of gender, age, states, religion, races, level of education and frequency level of consumers' intention to purchase Halal products.

3.6.2   Factor Analysis

The factor analysis was used to verify the construct validity. According to Sekaran and Bougie (2010), the factor analysis is important in evaluating the goodness of measurement. In addition, factor analysis is multivariate technique that affirms the theory dimensions, and also signifying which of the items are suitable for each element.

3.6.3   Reliability Analysis

Cronbach's alpha was used to estimate how highly the items in the questionnaire are related in order to determine the reliability of the instrument (Hayes, 1998) or to test the coefficient of reliability in this research (Othman & Owen, 2001). Cavana, Delahaye, and Sekaran (2001) describe the reliability of a measure is established to

test for both the consistency and the stability of the instrument. According to Sekaran and Bougie (2010), the result of reliabilities that less than 0.6 are considered to be poor, 0.6 to 0.8 acceptable and those that over 0.8 considered good as indicated in Table 3.2.

Table 3.2
Internal Consistency Measurement

Cronbach's Alpha	Internal Consistency
a= 0.9	Excellent
0.8= a < 0.9	Good
0.7= a < 0.8	Acceptable
0.6= a < 0.7	Questionable
0.5= a < 0.6	Poor
A < 0.5	Unacceptable

Source: Sekaran and Bougie (2010)

3.6.4 Descriptive analysis

Descriptive analysis was used to find out the mean and standard deviation of each statement. Pallant (2011) described that the descriptive analysis was used for three functions; firstly, to describe the character of sample; secondly, descriptive analysis can check the variables for any violation of the assumptions underlying the statistical techniques that uses to address the research questions; thirdly, it is a way to address specific research questions.

3.6.5 Independent Sample T-test

The main purpose of using the T - test analysis is to compare the differences between the two means of two groups in order to identify whether there is a significant difference between the means (Hair, Money, Page & Samouel, 2007). In this study,

the T-test analysis was used to analyze the difference of ITP between male and female consumers.

3.6.6   One-way ANOVA

One-way ANOVA used to test the difference between at least three groups or more than two groups on one factor or variable. According to Sekaran and Bougie (2010), the test is compatible to be implemented on purpose to test the hypothesis which involved a demographic profile that consist more than two groups such race, religion, level of education, and more. In this study, the One-way ANOVA was used to see the differences of age, race, religion, level of education and the state of living with intention to purchase Halal products.

3.6.7   Pearson Correlation Analysis

The purpose of Pearson Correlation is to examine the relationship between the independent and dependent variable and to explain the strength of the relationship as well as the direction of the relationship. In this study, this test was used the analyzed the relationship between attitude, subjective norms, and perceived behavioral control on intention to purchase Halal products.

3.6.8   Multiple Linear Regression

The multiple regression test was used to analyze the data which involving several independent variables with a dependent variable. The objective of this test to investigate which independent variables are mostly contributed to the dependent variable. Before proceeding with the test, a preliminary assumption of linearity, normality of error and homoscedasticity was examined. Coakes and Steed (2007)

mentioned that, another assumption that is important to this analysis are ratio of cases of independent variables, outliers, and multicollinearity should be used to examine the data before proceed with the regression analysis. Then, the finalized result will show the value of variance in the independent variables that are being affected by the independent variable.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.0   Chapter Introduction

Chapter four discusses the finding of the researcher based on the interpretation of the statistical results. The chapter consists of (1) Descriptive statistics of data, (2) Reliability of independent and dependent variables, (3) Independent sample T-test, (4) One-way ANOVA, (5) Pearson Correlation, (6) Regression Assumptions, and (7) Regression Analysis. Below is the list of the statistical analysis used in this study;

- Factor Analysis

- Descriptive Statistics (Frequencies and means);

- One-way ANOVA;

- Independent Sample T-test;

- Correlation Analysis;

- Multicollinearity diagnostic

- Normality analysis

- Homoscedasticity analysis

- Multiple regression analysis

4.1   Demographic Background

The demographic profiles of the study include gender, age, ethnic groups, religion, level of education, income, and state.

4.1.1   Gender of Respondents

Table 4.1 shows the gender of the respondents involved in this study. The sample profiles show a higher number of female (146) respondents than male (54) which representing a ratio of 73% and 27%.

Table 4.1
Gender of Respondents

Variables	Frequency (N=200)	Percentage
Gender		
• Male	54	27%
• Female	146	73%

4.1.2   Age of Respondents

Table 4.2 shows the age of the respondents involved in this research. The result indicates that most of the respondents are aged between 15-24 years (121 respondents or 60.5%). The second highest is the age between 25-34 years (55 respondents or 27.5%) followed by the age between 35-44 years (15 respondents or 7.5%). Last but not least is the age of 45 years and above (9 respondents or 4.5%).

Table 4.2
Age of Respondents

Variables	Frequency (N=200)	Percentage
Age (Years)		
• 15-24	121	60.5%
• 25-34	55	27.5%
• 35-44	15	7.5%
• 45 and above	9	4.5%

4.1.3   Ethnic Groups of Respondents

Based on Table 4.3 below, most of the respondents are Malays (169 respondents or

84.5%), followed by Chinese (21 respondents or 10.5%), Indian (5 respondents or

2.5%) and others race (5 respondents or 2.5%).

Table 4.3
Ethnic Groups of Respondents

Variables	Frequency (N=200)	Percentage
Ethnic Groups		
• Malay	169	84.5%
• Chinese	21	10.5%
• Indian	5	2.5%
• Others	5	2.5%

4.1.4   Religion of Respondents

Table 4.4 below shows the percentage of the respondent's religion involved in this

study. Based on the table, most of the respondents are Muslims (173 respondents or

86.5%), followed by Christians (4 respondents or 2.0%), Buddhists (19 respondents or

9.5%) and Hindus (4 respondents or 2.0%).

Table 4.4
Religion of Respondents

Variables	Frequency (N=200)	Percentage
Religion		
• Muslims	173	86.5%
• Christians	4	2.0%
• Buddhists	19	9.5%
• Hindus	4	2.0%

4.1.5 Level of Education of Respondents

Level of education of respondents is illustrated in Table 4.5. Based on the table, most of the respondents are Bachelor Degree (111 respondents or 55.5%), followed by Postgraduate (59 respondents or 29.5%), Sijil Pelajaran Malaysia (SPM) (17 respondents or 8.5%), Penilaian Menengah Rendah (PMR) and below (2 respondents or 1.0%) and others (4 respondents or 2.0%).

Table 4.5
Level of Education of Respondents

Variables	Frequency (N=200)	Percentage
Level of Education		
• Postgraduate	59	29.5%
• Bachelor Degree	111	55.5%
• SPM	17	8.5%
• PMR and below	2	1.0%
• Others	4	2.0%

4.1.6   Residential States of Respondents

Table 4.6 shows the residential states of the respondents. Based on the table, most of the respondents are from Kedah (28 respondents 14%), followed by Perak (21 respondents or 10.5%), Pulau Pinang (24 respondents or 12%), Perlis (18 respondents or 9%), Kuala Lumpur (18 respondents or 9%), Putrajaya (16 respondents or 8%), Selangor (12 respondents or 6%), Negeri Sembilan (13 respondents or 6.5%), Melaka (11 respondents or 5.5%), Johor Bharu (9 respondents or 4.5%), Pahang (9 respondents or 4.5%), Kelantan (8 respondents 4 %), Terengganu (2 respondents or 1%), Sabah (8 respondents or 4 %) and Sarawak (3 respondents or 1.5%).

Table 4.6
States of living of Respondents

Variables	Frequency (N=200)	Percentage
States		
• Perak	21	10.5%
• Kedah	28	14%
• Pulau Pinang	24	12%
• Perlis	18	9%
• Kuala Lumpur	18	9%
• Putrajaya	16	8%
• Selangor	12	6%
• Negeri Sembila**n**	13	6.5%
• Melaka	11	5.5%
• Johor Bharu	9	4.5%
• Pahang	9	4.5%
• Kelantan	8	4%
• Terengganu	2	1%
• Sabah	8	4%
• Sarawak	3	1.5%

4.2   Goodness of Measurement

Factor analysis and reliability analysis was performed to check the validity and reliability of the instrument of the study as explained in the following sections:

4.2.1   Factor Analysis

The main purpose of factor analysis is to verify the construct validity. Sekaran and Bougie (2010) described that this type of validity is important in order to evaluate the goodness of the measurement developed. Moreover, Jali (2009) mentioned that the factor analysis function is to test the linear relationships into separate patterns and to determine linear combinations of variables in dimensions of good public sector governance. In addition, the factor analysis act as the multivariate technique that affirms the theory dimensions and it's also able to state clearly, operationally and signifying on which items that are most suitable for each element.

In this study, all items of the variables were subjected to principal components analysis (PCA) using SPSS version 21.0. Prior to perform PCA the suitability of data for factor analysis was assessed. The result of KMO, Correlation Matrix, Scree Plot, and PCA are shown in the following tables and figures:

- Table 4.7 KMO

- Table 4.8 Correlation Matrix

- Table 4.9 PCA

- Figure 4.1 Scree Plot

Table 4.7 and Table 4.8 shows the Kaiser-Meyer-Olkin (KMO) index valued and Correlation Matrix values of intention, attitude, SN and PBC. The index valued of intention is 0.927 while the index value of independent constructs are 0.911 (attitude), 0.886 (SN) and 0.853 (PBC). Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above.

All the index values are exceeded as the recommended value of 0.6 (Kaiser, 1970; 1974). The Bartlett value of all the variables are significant at the value of $\alpha = 0.05$ which reached the statistical significance and supported the factorability of the correlation matrix (Bartlett, 1954).

Table 4.7
KMO and Bartlett's Test

		Intention	Attitude	SN	PBC
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.927	.911	.886	.853
Bartlett's Test of Sphericity	Approx. Chi-Square	2707.472	1239.357	1268.575	693.075
	df	21	10	21	6
	Sig.	.000	.000	.000	.000

Table 4.8

Correlation Matrix

Intention

	i17	i18	i19	i20	i21	i22	i23
Correlation i17	1.000	.902	.887	.877	.911	.878	.900
i18	.902	1.000	.952	.951	.913	.896	.893
i19	.887	.952	1.000	.944	.907	.882	.895
i20	.877	.951	.944	1.000	.913	.929	.902
i21	.911	.913	.907	.913	1.000	.932	.946
i22	.878	.896	.882	.929	.932	1.000	.937
i23	.900	.893	.895	.902	.946	.937	1.000

Subjective Norms

	sn6	sn7	sn8	sn9	sn10	sn11	sn12
Correlation sn6	1.000	.707	.695	.665	.692	.729	.683
sn7	.707	1.000	.830	.644	.563	.579	.563
sn8	.695	.830	1.000	.721	.620	.622	.534
sn9	.665	.644	.721	1.000	.818	.784	.702
sn10	.692	.563	.620	.818	1.000	.833	.770
sn11	.729	.579	.622	.784	.833	1.000	.708
sn12	.683	.563	.534	.702	.770	.708	1.000

Attitude

	a1	a2	a3	a4	a5
Correlation a1	1.000	.796	.814	.798	.837
a2	.796	1.000	.821	.873	.866
a3	.814	.821	1.000	.878	.880
a4	.798	.873	.878	1.000	.905
a5	.837	.866	.880	.905	1.000

Perceived Behavioral Control

	pbc13	pbc14	pbc15	pbc16
Correlation pbc13	1.000	.818	.770	.748
pbc14	.818	1.000	.791	.792
pbc15	.770	.791	1.000	.816
pbc16	.748	.792	.816	1.000

Table 4.9 shows the Principle Component Analysis of intention, attitude, subjective norms, and perceived behavioral control values with eigenvalues exceeding 1. The value of intention variable revealed the presence of seven components with eigenvalues of 92.4%, 2.62 %, 1.99 %, 1.08 %, 0.778 %, 0.608 % and 0.490 %, followed by the value of attitude variable of five components with eigenvalues of 87.78 %, 4.60 %, 3.57 %, 2.26 %, and 1.79 % of variance respectively. Moreover, the Principle Components analysis also revealed the presence of seven components of subjective norms with eigenvalues 73.40 %, 10.48 %, 5.30 %, 4.23 %, 2.51 %, 2.12 % and 1.97 % and the presence of four components with eigenvalues 84.20 %, 6.82 %, 4.74 %, and 4.25 % of perceived behavioral control variable.

Table 4.9
Principle Component Analysis

Intention

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.471	92.438	92.438	6.471	92.438	92.438
2	.183	2.619	95.057			
3	.139	1.991	97.047			
4	.075	1.077	98.124			
5	.054	.778	98.902			
6	.043	.608	99.510			
7	.034	.490	100.000			

Extraction Method: Principal Component Analysis.

Attitude

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.389	87.778	87.778	4.389	87.778	87.778
2	.230	4.603	92.381			
3	.178	3.567	95.948			
4	.113	2.263	98.211			
5	.089	1.789	100.000			

Extraction Method: Principal Component Analysis.

Subjective norms

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.138	73.399	73.399	5.138	73.399	73.399
2	.734	10.479	83.878			
3	.371	5.293	89.171			
4	.296	4.226	93.397			
5	.176	2.512	95.909			
6	.149	2.124	98.033			
7	.138	1.967	100.000			

Extraction Method: Principal Component Analysis.

Perceived Behavioral Control

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.368	84.196	84.196	3.368	84.196	84.196
2	.273	6.822	91.019			
3	.189	4.737	95.755			
4	.170	4.245	100.000			

Extraction Method: Principal Component Analysis.

Figure 4.1 shows the scree plot of the intention, attitude, subjective norms, and perceived behavioral control variables. An inspection of the scree plot revealed a clear break after the first component. Using Catell's (1966) scree test, it was decided to retain all the components for further investigation.
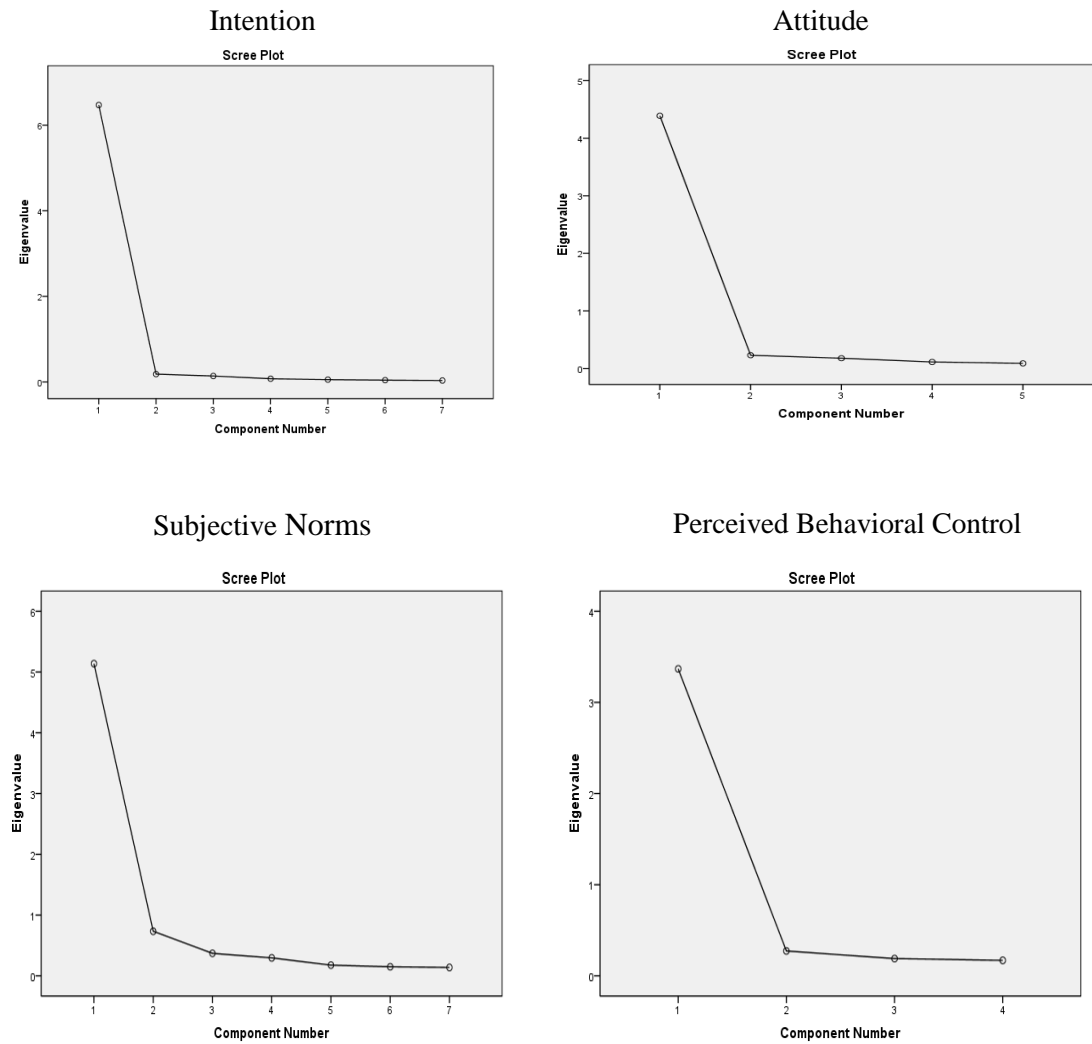
Figure 4.1 : Scree Plot

4.2.2 Reliability Analysis

Based on Table 4.10, the result indicates that the alpha value for each variable ranged from 0.927 to 0.986. The reliability values of all the variables are considered as good as they are more than 0.8. Based on Nunnaly (1980), the score below 0.60 is poor, between 0.60 and 0.70 is acceptable, and more than 0.8 is considered good, thus the reliability of each variable of this study is met.

Table 4.10
Reliability Analysis

Variables	Number of Items	Alpha Value
Attitude	5	0.964
Subjective Norm	6	0.927
Perceived Behavioral Control	4	0.936
Intention to Purchase	7	0.986

4.3   Descriptive Analysis of Main Variables

As illustrated in Table 4.11, descriptive analysis was conducted to check the normality and variability of the variables by using the means and standard deviations. Overall, the mean score of the item shows above average means which value ranges from 4.38 to 4.65.

Table 4.11
Descriptive Analysis of the Variables

Variables	Mean	Std. Deviation
Attitude	4.65	0.707
Subjective Norm	4.45	0.808
Perceived Behavioral Control	4.47	0.797
Intention to Purchase	4.38	0.759

From the table, it shows that the attitude towards purchase Halal products among respondents were high (mean= 4.65, SD=0.707). The mean score was also

high for subjective norms (mean=4. 45, SD= 0.808) and the perceived behavioral control (mean=4.47, SD =0.797) with values more than average (>2.5). Higher result is also obtained for intention to purchase Halal products (mean= 4.38, SD = 0.759).Overall, all respondents have high level of attitude, subjective norm, perceived behavioral control, and intention to purchase Halal products.

In terms of variability, most respondents answered similarly on all the variables investigated under study as indicated by low standard deviation (0.707 to 0.797). Detailed description of each variable is explained in the following sections.

4.3.1 Attitude

Table 4.12 shows the mean score and the standard deviation score of attitude (independent variable). From the table, the average mean of attitude is 4.70. The second item "Choosing Halal product is a good idea" was the highest score at mean (4.77) while the first item "I intend to buy Halal products in the near future" scored the lowest mean (4.59). Moreover, the average value of standard deviation is 0.07 standard deviation scores, the result indicated most of respondents answered similarly because Halal product getting popular among consumers worldwide.

Table 4.12
Mean and standard deviation (attitude)

Items	Mean	Standard Deviation
I intend to buy Halal products in the near future.	4.59	.778
Choosing Halal product is a good idea.	4.77	.640
I like to choose Halal products.	4.69	.713
I look forward to buy Halal products.	4.72	.683
Choosing a Halal products is a wise idea	4.72	.697
Average (Attitude)	4.70	.70

4.3.2 Subjective norms

Table 4.13 below illustrates the mean score and standard variation score for the subjective norms (independent variable). From the table, the highest mean score was the sixth item "My family members prefer Halal products" with 4.64. The lowest mean score was second item "People who are influence in my behavior think that I should buy Halal products" with 4.34. Hence the overall total mean score for subjective norms is 4.48. Based on the table, the average value of standard deviation is 0.88. . Not much variation of the subjective norms among respondents as indicated by low standard deviation (sd = .88)

Table 4.13
Mean and standard deviation (subjective norms)

Items	Mean	Standard Deviation
People who are important to me think that I should buy Halal products.	4.52	.845
People who are influence in my behavior think that I should buy Halal products	4.34	.963
People whose opinions I value will encourage me to buy	4.44	.917
People who are important to me will support me to but Halal products Halal products	4.52	.826
Most people who are important to me choose the Halal products.	4.52	.850
My family members prefer Halal products	4.64	.857
My friends would think that I should choose Halal products	4.38	.918
Average (Subjective norms)	4.48	.88

4.3.3 Perceived Behavioral Control

Table 4.14 shows the result of mean and standard deviation score for perceived behavioral control (independent variable). From the table, it shows that the total average mean is 4.50. The highest mean score is the second item "Buying Halal products is entirely within my control" with 4.47 while the lowest score of the mean is the fourth item "I have knowledge to buy Halal products" with the mean score of 4.36. The average standard deviation is 0.886 which explains less variation of perceived behavioral control among respondents as indicated by low value of standard deviation (SD =0.886).

Table 4.14
Mean and standard deviation (perceived behavioral control)

Items	Mean	Standard Deviation
I am capable of buying Halal products	4.58	.798
Buying Halal products is entirely within my control	4.47	.902
I have resources to buy Halal products	4.41	.936
I have knowledge to buy Halal products.	4.36	.907
Average (perceived behavioral control)	4.50	.886

4.3.4 Intention to Purchase

The table 4.15 shows the result of the mean and standard deviation score of intention to purchase (dependent variable). Based on the table, the highest score of the mean is the first item "I intend to buy Halal products" (4.41). The lowest score of mean are

found in second, third, fourth and sixth item which are "I choose to purchase Halal products, even not familiar with the brand", "I plan to buy Halal products more often" (4.34), "I choose to purchase Halal products even it is quite expensive" (4.34), and "I expect to purchase Halal products in the future"(4.34). An overall score of average mean is 4.35. Based on the table, the average value of standard deviation is 0.780. Not much variation of the response for intention to purchase among respondents as indicated by low standard deviation (SD = 0.780)

Table 4.15
Mean and standard deviation (intention to purchase)

Items	Mean	Standard Deviation
I intend to buy Halal products	4.41	.778
I choose to purchase Halal products even not familiar with the brand	4.34	.785
I plan to buy Halal products more often	4.34	.797
I choose to purchase Halal products even it is quite expensive	4.34	.785
I will buy Halal products in the future	4.35	.768
I expect to purchase Halal products in the future	4.34	.766
It is likely that I will purchase Halal products in the near future	4.35	.780
Average (intention to purchase)	4.35	.780

4.4   Independent T-test

To address the first research objective, the independent T-test was performed to test the following hypothesis:

H1: There is a significant difference of intention to purchase between genders.

Table 4.16 shows the results of T-test analysis. From the table, the female respondents (mean = 4.4041) scored more than male (mean = 4.3056). The assumption on equal variance is assumed as indicated in Levene's Test (p = 0.648, P > 0.05). However, the result shows no significant difference of intention to purchase Halal products between genders (p = 0.417, p > 0.05). Hence, H1 is rejected.

Table 4.16

Independent Sample T-test between gender and Intention to Purchase

	Gender	N	Mean	Std. Deviation	T	Significant
Intention to Purchase	Female	146	4.041	.77973	.814	0.417
	Male	54	4.3056	.70320		

		Levene's Test for Equality of Variance		T-test for Equality of Means		
		F	Sig	T	Df	Sig. (2 – tailed)
Intention to Purchase	Equal variances assumed	0.209	0.648	0.814	198	0.417
	Equal variances not assumed			0.854	104.281	0.395

4.5 One-way Anova

To answer the second objective, the One-way ANOVA was performed to test the following hypotheses:

H2a: There is a significant difference of intention to purchase among ethnic groups.

H2b: There is a significant difference of intention to purchase among religions

One-way ANOVA analysis was conducted to determine whether there is a significant difference of intention to purchase Halal products among ethnic groups and religion. The ethnic groups consist of Malay, Chinese, Indian, and other. For religion, there are Muslims, Christian, Hindu, Buddhism and other religion.

Based on Table 4.17, there is a significant difference of intention to purchase Halal products among ethnic groups. Based on Post Hoc Test (Bonferroni), the significant difference was found between Malay and Chinese with mean difference of 1.059 (p = 0.000). Hence, H2a is accepted.

Table 4.17
Result of One-way ANOVA (ethnic groups)

	Mean	MD	F	Significant
Ethnic Groups			15.602	.000
Post-Hoc Test (Bonferroni)				
• Malay and Chinese		1.059*		.000

Based on Table 4.18, there is a significant difference of intention to purchase Halal products among religion. Based on Post Hoc Test (Bonferroni), the significant difference was found between Muslim and Buddhist with mean difference at 1.003 (p = 0.000). Hence, H2b is accepted.

Table 4.18
Result of One-way ANOVA (religion)

	Mean	MD	F	Significant
Religion			14.211	.000
Post-Hoc Test (Bonferroni) • Muslims and Buddhist		1.003*		.000

4.6   Correlation Analysis

To address the third research objective, Correlation analysis was performed to test the following hypotheses:

H3a: There is a significant relationship between attitude and intention to purchase Halal products.

H3b: There is a significant relationship between subjective norms and intention to purchase Halal products.

H3c: There is a significant relationship between perceived behavioral control and intention to purchase Halal products.

Table 4.19 below shows the scale use in the correlation test.

Table 4.19
Pearson Correlation Coefficient Scale

R	Level
Above 0.70	Very strong relationship
0.50 to 0.69	Strong relationship
0.30 to 0.49	Moderate relationship
0.10 to 0.29	Low relationship
0.01 to 0.09	Very low relationship

Source: Hair et al., (2009)

Based on Table 4.20, the result shows a significant and positive relationship between Attitude and Intention to Purchase (p=0.000 < α, R = 0.594). This indicates that there is a strong relationship between attitude and intention to purchase (refer Table 4.19). The result indicates that the better the attitude, the higher the intention of the consumers to purchase Halal products. This finding is consistent with previous studies by Bonne, Vermeir, Bergeaud-Blackler, and Verbeke, (2007), Soesilowati (2010) and Tarkiainen, and Sundquist (2005).Hence, H3a is accepted.

Table 4.20
Correlation between Intention to Purchase and Attitude

		Intention to Purchase
Attitude	Pearson Correlation	.594**
	Sig. (2-tailed)	.000
	N	200

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

Table 4.21 shows the results of Pearson Correlation test that has been conducted between subjective norms and intention to purchase. The result shows a significant and positive relationship between subjective norms and intention to purchase (p=0.000 < α, R= 0.571). This indicates that there is a strong relationship between subjective norms and intention to purchase(refer Table 4.19). The result indicates that the better the level of subjective norms, the higher the intention to purchase Halal products. This finding is consistent with previous studies by Lada et al. (2009), Tarkiainen, and Sundquist (2005), Chang, Lin, Chen, and Chin (2009) (2009) and Omar et al. (2012). Hence, H3b is accepted.

Table 4.21
Correlation between Intention to Purchase and Subjective norms

		Intention to Purchase
Subjective norms	Pearson Correlation	.571**
	Sig. (2-tailed)	.000
	N	200

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

From the Table 4.22, the result shows a significant and positive relationship between Perceived Behavioral Control and Intention to Purchase (p=0.000 < α, R= 0.761).This indicates that there is a very strong relationship between perceived behavioral control and intention to purchase (refer Table 4.19).This finding is consistent with previous studies by Kim, and Chung (2011), Karijin et al. (2007), Soesilowati (2010) and Omar et al. (2012).Hence, H3c is accepted.

Table 4.22
Correlation between Perceived Behavioral Control and Intention to Purchase

		Intention to Purchase
Perceived Behavioral Control	Pearson Correlation	.761**
	Sig. (2-tailed)	.000
	N	200

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

4.7   Regression Analysis

To address the final research objective, multiple linear regression was performed to determine the significant influence between independent variables (attitude, subjective norms and perceived behavioral control) and dependent variable (intention to purchase).

H4: There is a significance influence between attitude (4a), subjective norms (4b), and perceived behavioral control (4c) and intention to purchase Halal products.

Multicollinearity diagnostic, normality, and homoscedasticity analyses have been performed to check the regression assumptions. Based on the collinearity diagnostic table obtained in Table 4.23 below, neither one of the model dimensions has condition index above the threshold value of 30.0.

Table 4.23
Collinearity Diagnostics

Collinearity Diagnostics[a]

| Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	ATTITUDE	SN	PBC
1	1	3.967	1.000	.00	.00	.00	.00
	2	.018	14.674	.83	.00	.11	.07
	3	.008	21.757	.03	.11	.89	.35
	4	.006	26.099	.14	.89	.00	.58

a. Dependent Variable: INTENTION

Based on Figure 4.2, the normal P.P Plot of regression standard residual reveals that all the points (observed value) fall roughly along the straight line indicating that the variance or residuals are from a normal distribution.

Normal P-P Plot of Regression Standardized Residual
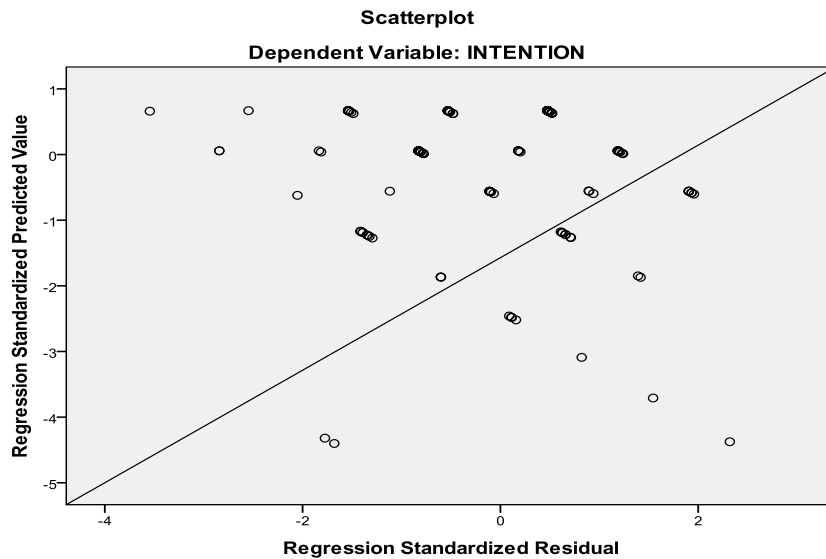
Dependent Variable: INTENTION
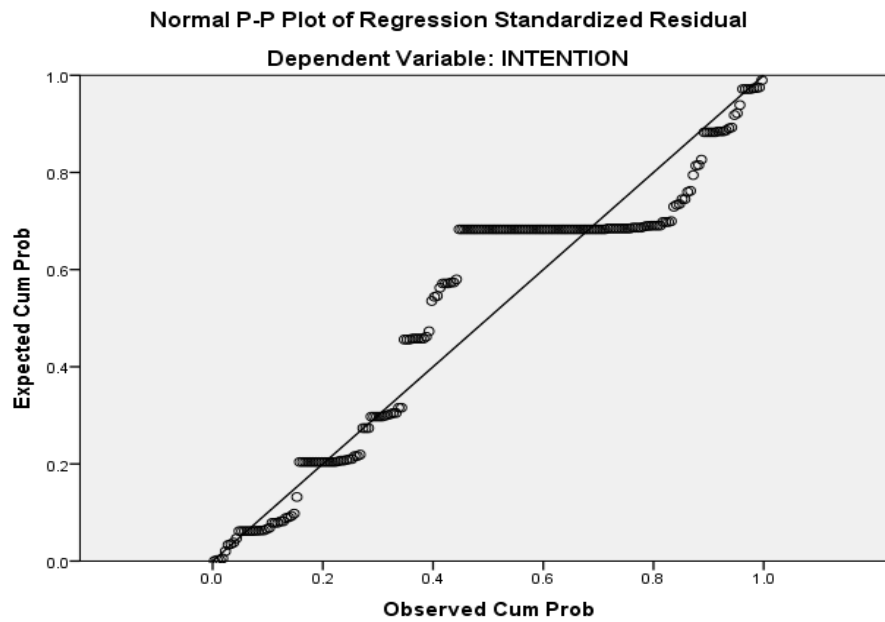
Figure 4.2: Normal P-Plot of Regression

Based on Figure 4.3, the studentized deleted residuals versus standardized predicted value reveals that all the points (observed values) fall between +3 and -3 indicating the variance or residual are normally distributed.
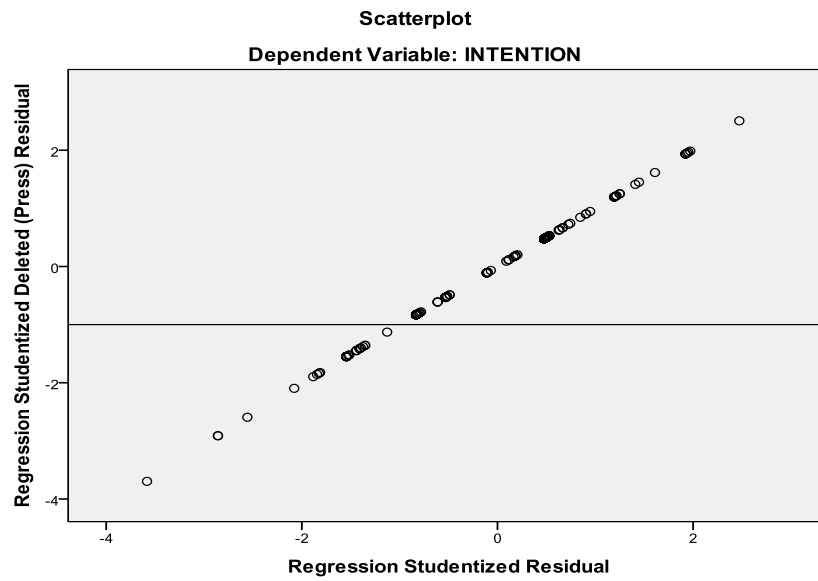
Figure 4.3: Regression Studentized Residual

Based on Figure 4.4, the standardized predicted value versus observed values shows that the result between dependent variable and the predicted value is linear and the residual variances are about equal or constant. Thus the constant variance assumption is met.

Scatterplot
Dependent Variable: INTENTION

Figure 4.4: Regression Standardized Residual

Multiple Linear Regression was performed to determine the greatest set of predictor variable in predicting dependent variable. The Coefficient of determination (R^2) was performed to measure and explain the changes of ITP (dependent variable) to the changes of Attitude, Subjective Norms and Perceived Behavioral Control (independent variables).

Based on Table 4.24, the R-squared of 0.579 indicates that the three predictor variables explain about 57.9% of the variance in the Intention to purchase Halal product. This is a good and respectable result. Based on Table 4.5, the p values of two predictor variables which are Attitude (b = 0.020, p > 0.005), Subjective Norms (b = 0.005, p > 0.05) were found to be not significant in explaining Intention. The largest beta coefficient is 0.742 which is in Perceived Behavioral Control. It shows that this variable makes the strongest contribution to explaining the intention variable, when the variance explained by all other predictor variables in the model is controlled for. It suggests that if one standard deviation increases in Perceived Behavioral Control, it will follow by 0.742 increased in standard deviation for Intention. Hence, H4 (c) is accepted, while H4 (a) and H4 (b) are rejected.

Table 4.24
Result of Regression Analysis

	Variables	Beta	b	t	P
R^2 = 0.579					
P = 0.000					
	Attitude	0.020	0.021	0.256	0.798
	SN	0.005	0.005	0.069	0.945
	PBC	0.742	0.707	9.228	0.000

4.8   Summary of Hypotheses Testing

Based on Table 4.25, out of nine hypotheses statements, six hypotheses were supported and three hypotheses were not supported.

Table 4.25
Summary of Hypotheses Testing

Hypotheses	Descriptions	Results
H1	There is a significant difference of intention to purchase between genders	Rejected
H2a	There is a significant difference of intention to purchase between ethnic groups	Accepted
H2b	There is a significant difference of intention to purchase between religion	Accepted
H3a	There is a significant relationship between attitude and intention to purchase Halal products	Accepted
H3b	There is a significant relationship between subjective norms and intention to purchase Halal products	Accepted
H3c	There is a significant relationship between perceived behavioral control and intention to purchase Halal products	Accepted
H4a	There is significant influence of attitude on intention to purchase Halal products	Rejected
H4b	There is significant influence of subjective norms on intention to purchase Halal products	Rejected
H4c	There is significant influence of perceived behavioral control on intention to purchase Halal products	Accepted

CHAPTER FIVE

DISCUSSION, RECOMMENDATION AND CONCLUSION

5.0   Chapter Introduction

This final chapter concludes the study findings and provides the implications and recommendations for future research.

5.1   Discussion of study findings

The objective of this study is to examine the influence of attitude, subjective norms (SN), and perceived behavioral control (PBC) on consumers' intention to purchase Halal products. The following sections discuss the results from the hypotheses testing.

5.1.1   H1: There is a significant difference of intention to purchase between genders among consumers.

The results from independent sample t-test (refer Table 4.16) disclosed no significant difference of intention to purchase Halal products between gender (p = 0.814, p > 0.05). This finding indicates that the intention of Halal products is not differ between male and female. One of the possible reasons is due to high awareness of Halal products since most respondents involved in the study were from higher level education.

5.1.2   H2a: There is a significant difference of intention to purchase among ethnic groups.

The results from One-way Anova analysis (refer Table 4.17) showed a significant difference of intention to purchase Halal products among ethnic groups ($p =0.000$, $p < 0.05$).Based on post-hoc test, Malay consumers were found to have higher level in intention to purchase Halal products compared to Chinese. This is because, Malay consumers are exposed to the Halal products since in the early age compared to other ethnic groups.

5.1.3   H2b: There is a significant difference of intention to purchase among religion.

The results from One-way Anova analysis (refer Table 4.18) showed a significant difference of intention to purchase Halal products among religion ($p=0.000$, $p < 0.05$). Based on post-hoc test, Muslim consumers were found to have higher level in intention to purchase Halal products compared to Buddhist. This is because, Muslims consumers are obliged to consume Halal products which might lead them to be more aware when purchasing products.

5.1.4   H3a: There is a significant relationship between attitude and intention to purchase Halal products among consumers.

The results from correlation analysis (refer Table 4.20) showed a positive relationship between attitude and intention purchase ($p = 0.000$, $p<0.01$). The positive value of the Pearson correlation ($r= 0.594$) shows that the attitude has a strong relationship toward intention to purchase Halal products among consumers. This finding consistent with previous studies by Soesilowati (2010) and Bonne et al. (2007) as they also found a

significant relationship between attitude and intention to purchase. The significant relationship between attitude and intention to purchase describes that perception (attitude) would positively influence individuals to purchase Halal products. Attitude can be regarded as a kind of perception towards a certain thing or people and the customer attitude is important to ensure a good perception towards Halal products. If the customer holds a positive attitude toward certain product, it will influence the customer perception and consequently their purchase intention.

5.1.5   H3b: There is a significant relationship between subjective norms and intention to purchase Halal products among consumers.

The results from correlation analysis (refer Table 4.21) showed a positive relationship between subjective norms and intention to purchase (p = 0.000, p<0.01). The positive value of the Pearson correlation (r= 0.571) shows that the subjective norms have a strong relationship toward intention to purchase Halal products among consumers. This finding aligns with previous research by Chang et al. (2009) and Omar at al. (2012).The significant relationship between subjective norms and intention to purchase indicates that the important people of an individual, families and friends, motivated an individual to purchase Halal products. Subjective norm is the perceived social pressure to engage or not to engage in a behavior which is determined by the total set of accessible normative beliefs concerning the expectations of important referents. An individual intention to some extent is influenced by the people who are very important to them. Thus, the individual purchase behavior Halal products will be influenced by the people nearby.

5.1.6 H3c: There is a significant relationship between perceived behavioral control and intention to purchase Halal products among consumers.

The results from correlation analysis (refer Table 4.22) exhibited a positive relationship between perceived behavioral control and intention to purchase (p = 0.000, p<0.01). The positive value of Pearson correlation (r= 0.761) shows that the subjective norms have a very strong relationship toward intention to purchase Halal products among consumers. This finding was consistent with previous studies by Soesilowati (2010), and Omar et al. (2012). They found that perceived behavioural control has a positive relationship with intention to purchase. Perceived behavioral control refers to people's perception of their ability to perform a given behavior. Moreover, perceived behavioural control is determined by a total set of access control beliefs, and it could be an important way to predict the customers' behaviors. If the individual believes that they should consume Halal products, they would possibly perform the behavior. Thus, this statement signifies the relationship between perceived behavioral control and intention to purchase.

5.1.7   H4a: The Influence of Attitude on Intention to Purchase

The Muliple Linear Regression results (refer Table 4.24) revealed that attitude is not significantly influence the intention to purchase Halal products (b = 0.021, p > 0.05). The result indicates that the increase in attitude will not increase the consumers' intention to purchase Halal products. The finding constant with previous research by Page and Luding (2003).They found that the attitude toward the marketing media used has no significant influence on the intention to purchase.

67

5.1.8   H4b: The Influence of Subjective Norms (SN) on Intention to Purchase

The Muliple Linear Regression results (refer Table 4.24) showed that subjective norms does not have a significant effect on the intention to purchase Halal products (b= 0.005, p > 0.05). This indicates that the important person of an individual does not play an important role in determining the Malaysian consumers' intention to purchase Halal products. The finding was consistent with the study of Nurul Huda, Nova Rini, and Purnama Putra (2012). They described that the role of subjective norms was not significant in influencing the respondent's intention to pay *Zakah*. This is because the intention to pay *Zakah* is highly dependent on one's self.

5.1.9   H4c: The influence of perceived behavioral control on intention to purchase

The Muliple Linear Regression results (refer Table 4.24) showed that perceived behavioral control (PBC) has a significant influence on the intention to purchase Halal products. The regression analysis of PBC presents highest value (b = 0.707, p < 0.05). This indicates that the increase in PBC will increase the level of intention. This finding aligns with previous studies (e.g., Kim & Chung, 2011; Soesilowati, 2010; Omar et al., 2012; Sentosa & Nik Mat, 2007). In these studies, they found that the PBC significantly influenced the intention. The significant relationship indicates that if an individual believes they should consume Halal products, they would possibly perform the actions. Perceived behavior control refers to people's perception of their ability to perform a given behavior, thus, perceived behavioral control is determined by a total set of access control beliefs, and it could be an important way to predict the customer's behaviours.

5.2   Implications of Study

The finding of the study is beneficial to manufacturers and marketers as it can provide a better understanding on consumers' intention to purchase Halal products. Lada et al. (2009) stated that diverse marketing approaches or techniques should be used to stimulate Halal products versus regular consumption.

The findings of the study would also help marketers to develop effective strategies to increase the purchase intention of Halal products among Malaysian consumers. The marketers must consider applying Halal certification and a recognized Halal logo to inform and ensure that their products are Halal. In addition, this study would also help the marketers to create a better strategy in order to attract more consumers to purchase Halal products especially among Chinese ethnic group. For instance, marketers might consider the effort to raise the awareness level of Chinese consumers on the importance and the benefits of purchasing Halal products.

Moreover, this study also beneficial to students and other researchers as it would contribute to the marketing topics on TPB in the context of halal products. Furthermore, it also would provide latest information and knowledge on the current information about Halal products so that new finding can be obtained from the updated information.

5.3   Limitations

The first limitation of the study is that it does not consider testing other variables that might mediate or moderate the relationship between independent and dependent variables. The second limitation is the sample size. A sample of 200 respondents is

considered small. Finally, the population selected in this study is only limited to the Malaysian consumers.

5.4   Recommendation for Future Research

In response to the limitation of variables in this study, Delener (1994) suggested that the role of religiosity should be used as a moderating factor. Furthermore, Omar et al. (2012) pointed out that Halal consumers' confidence should be considered for future research as he found that it was one of the predictor of Halal food purchase among consumer in Malaysia. Karijin et al. (2007) suggest other variables should be considered for future research such as habit and self-identity.

In response to the sample size of the study, the total number of respondents should be increased in order to represent the whole population in Malaysia. The recommended number of respondents should be 384 (Krejcie & Morgan, 1970) so that a better review can be made in order to generalize the intention of consumers to purchase Halal products in Malaysia.

Halal product is consumed by worldwide consumers. Therefore, further studies need to conduct on a large scale and including diverse locations. Future studies should also consider a cross-cultural research between Asian countries. By doing so, we are able to compare and provide workable direction in Halal products in those countries.

5.5   Conclusion

As a whole, this study is concerned with the influence of attitude, subjective norms, and perceived behavioural control on intention to purchase Halal products. Based on the findings of this study, only the PBC was found to have the influenced toward the intention of consumers to purchase Halal products. While, the attitude and SN were found not to have any influence with the intention of consumers to purchase Halal products. This study also found that Malay has highest intention to purchase Halal products compared to other ethnic groups. Furthermore, Muslims also was found to have the highest intention to purchase Halal products than any other religion.

Based on these findings, marketers need to put an extra effort to build a better strategy in order to attract more non-Muslims consumers to purchase Halal products especially among Chinese consumers. As indicated by Karijin et al. (2007), non-Muslims' consumer prefer to have Halal certified products as it carry the quality aspects of the products. On top of that, the government and related agencies should take more actions such as campaign, exhibition, pamphlet, and any other potential ways to expand the awareness on Halal products so that the aim to establish Malaysia as a global Halal hub can be realized.

References

Ahmad, N. A., Abaidah, T.N., & Abu Yahya, M. H. (2013). A study on halal food awareness among Muslim customers in Klang Valley.*4ᵗʰ International Conference on Business and Economic Research, Bandung, Indonesia, paper,* 1073-1087.

Ahmed, A. (2008). Marketing of halal meat in the United Kingdom: supermarkets versus local shops. *British Food Journal*, 655-670.

Ajzen, I. (1987). Attitude, traits, and actions: Dispositional prediction of behavior in personality and social psychology. *Advances in Experimental and Social Psychology,20,* 1-63.

Ajzen, I. (1988). Attitude, personality, and behavior. Open University Press, Milton Keynes. Buckingham.

Ajzen, I. (1991). Theory of planned behavior. *Organization Behavior and Human Decision Process,50*, 179-211.

Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. *Prentice-Hall, Eaglewood Cliffs, NJ*. Retrieved on September 9, 2014 from http://www.people,umass.edu

Alam, S. S., & Sayuti, N. M. (2011). Applying the theory of planned behavior in halal food purchasing. *International Journal of Commerce and Management, 21* (1), 8-20.

Al-Nahdi, M. T. S. M., Ismail, I., Haron, H., & Islam, M. A. (2009). Intention to patronage halal restaurants among Malaysian Muslims - An Issue of Halal Perception. *Paper presented at the Global Business Summit Conference.*

Al-Qaradawi (2002). A comparative study of Zakah, regulations and philosophy in the light of Qur'an &Sunnah (Volume 1) , translated, Monzer Kahf, Scientific Publishing Centre King Abdulaziz University Jeddah, Kingdom of Saudi Arabia, page xxxix.

Anssi, T., & Sanna, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal,107*(11),808-22.

Armitage, C. J., & Conner, M. (2001). Efficacy of theory of planned behavior: a meta-analysis review. *British Journal of Social Psychology, 40,*471-99.

Bartlett, M. S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society, 16* (Series B), 296-298.

Bonne, K., & Verbeke, W. (2008). Muslim consumer trust in halal meat status and control in Belgium. *Meat science, 79*(1), 113-23.

Bonne, K., Vermeir, I., Bergeaud-Blackler, F., & Verbeke, W. (2007). Determinants of halal meat consumption in France. *British Food Journal, 100*(5), 367-386

Bosnjak, M., Obermeier, D., & Tuten, T. L. (2006). Predicting and explaining the propensity to bid in online-auctions: A comparison of two action-theoretical models. *Journal of Consumer Behavior, 5,* 102-116.

Buttle, F., & Bok, B. (1996). Hotel marketing strategy and the theory of reasoned action. *International Journal of Contemporary Hospitality Management, 8*(3), 5-31.

Catell, R. B. (1966). The scree test for number of factors. *Multivariate Behavioral Research,1*, 245-276.

Cavana, R., Delahaye, B., & Sekaran, U. (2001). Applied business research: qualitative and quantitative methods, (3rd ed.) *John Wiley & Sons Australia, Ltd.* Chang, M.K. (1998). Predicting unethical behavior: a comparison of the theory of reasoned action and the theory of planned behavior. *Journal of Business Ethics, 17*(16), 1825-33.

Chang, C. C., Lin, C. Y., Chen, Y. C., & Chin, Y. C. (2009). Predicting information seeking intention in academic digital libraries. *The Electronic Library*, *27*(3),448-460.

Chauvel, D., & Despres, C. (2002). Knowledge management- What is it? A thematic analysis of the thinking in knowledge management Inc. Despres and D Chauvel (Eds). *Knowledge horizons: the present and the promise of knowledge management. Baton: Butterworth-Heinemann.*

Chen, M. (2007). Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: Moderating effect of food-related personality traits. *Food Quality and Preference, 18* (7), 1008-21.

Chung, J. E., Stoel, L., Xu, Y., & Ren, J. (2012). Predicting Chinese consumers' purchase intentions for imported soy-based dietary supplements. *British Food Journal, 114*(1), 143-16.

Conner, M., & Sparks, P. (1996). The theory of planned behaviour and health behaviours in Conner, M. and Norman, P. (Eds). *Predicting Health Behaviour. Open University Press, Buckingham,*121-62.

Coakes, S. J., & Steed, L. (2007). SPSS version 14.0 for Windows: Analysis without anguish. Melbourne: Wiley.

Cook, A. J., Fairwheather, J., & Campbell, H. (2000). New Zealand farmer and grower intentions to use genetic engineering technology and organic methods.

Research Report No. 243, Agribusiness and Economics Research Unit Lincoln University, Cantebury.

Delener, N. (1994). Religious contrast in consumer decision behavior patterns: their dimensions and marketing implication. *European Journal of Marketing, 28* (5), 36-53.

Department of Statistics Malaysia (2014). Retrieved on December 3, 2014 from http//www/statistics.gov.my/

Dewan Ekonomi (2011). Meningkatkan Daya saing industry halal. Retrieved on December 20, 2014 from http://dwnekonomi.dbp.my/wordpress/?p=363

Eagly, A. H., & Chaiken, S. (1993). The psychology of attitudes. *Fort Worth, TX: Harcourt.*

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7,* 117-140.

George, J. F. (2002). Influences on the intent to make internet purchase. *Internet Research: Electronic Networking Applications and Policy, 12*(2), 165-80.

George, J. F. (2004). The theory of planned behavior and internet purchasing. *Internet Research, 14* (3), 298-212.

Gopi, M., & Ramayah, T. (2007). Applicability of theory of planned behavior in predicting intention to trade online. *International Journal of Emerging Markets, 2* (4), 348-360.

Halal Development Corporation (2011). The global halal market: the opportunities and challenges. Kuala Lumpur.

Halal Development Corporation Vibe (2008). 2008 Reflections and Looking Forward to The Future. Kuala Lumpur. Retrieved on October 15, 2014 from

http://knowledge.hdcglobal.com/en/docs/49.pdf.

Han, H., & Kim, Y. (2010). An investigation of green hotel customers' decision formation: developing an extended model of the theory of planned behavior. *International Journal of Hospitality Management, 29*(4), 659-668.

Han, S., Gu, X., Mao, L., Ge, J., Wang, G., & Ma, Y. (2010). Neural substrates of self-referential processing in Chinese Buddhists. *Social Cognitive and Affective Neuroscience, 5*, 332–339.

Hansen, T., Jensen, J. M., & Solgaard, H. S. (2004). Predicting online grocery buying intention: a comparison of the theory of reasoned action and the theory of planned behavior. *International Journal of Information Management.*

Hair, J., Money, A., Page, M., & Samouel, P. (2007). *Research Method for Business*. England: John Wliey and Sons.

Hayes, B. E. (1998). Measuring Customer Satisfaction: *Survey Design, Use, and Statistical Analysis Methods, 2nd Edition*, ASQ Quality Press, Milwaukee, Wisconsin.

Hanzaee, K. H., & Ramezani, M. R. (2011). Intention to halal products in the world markets. *Interdisciplinary Journal of Research in Business, 1*(5), 1-7.

Honkanen, P., Olsen, S. O., & Verplanken, B. (2005). Intention to consume seafood-the importance of habit. *Appetite, 45*, 161-8.

Hornby, C., & Yucel, S. (2009). Halal food going mainstream in Europe: nestle. Reuters, Retrieved on September 15, 2014 from http://reuters.com/article/2009/11/17/idINIndia-44025720091117

Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education + Training, 53*(5),353-370.

JAKIM (2014). *Halal Definition.* Retrieved on Decemebr 2, 2014 from *http://www.halal.gov.my/v4/index.php/en/garis-panduan/takrifan-halal*

Jarvenpaa, S. L., & Todd, P. A. (1997). Consumer reactions to electronic shopping on the world wide web. *International Journal of Electronic Commerce,1* (2),59-88.

Joey, F. G. (2002). Influence on the intent to make internet purchase. *Internet Research, 12*(2), 165-80.

Joey, F. G. (2004). The theory of planned behavior and internet purchasing. *Internet Research,14*(3),198-212.

Kaiser, H. (1970). A second generation Little Jiffy. *Psychometrika, 35,* 401-415.

Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika, 39,* 31-36.

Kang, H., Hahn, M. Fortin, D., Hyun, Y. J., & Eom, Y. (2006). Effects of perceived behavioral control on the consumer usage intention of e-coupons. *Psychology and Marketing, 23* (10), 841-64.

Karijin, B., Iris, V., Florence, B. B., & Wim, V. (2007). Determinants of halal meat consumption in France. *British Food Journal,* 109 (5), 367-86.

Kim, H. Y., & Chung, J. E. (2011). Consumer purchase intention for organic personal care products. *Journal of con-sumer Marketing, 28*(1), 40-47.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement.*

Lada, S., Tanakinjal, H., & Amin, H. (2009). Predicting intention to purchase halal products using theory of reasoned action. *International Journal of Islamic and Middle Eastern Finance and Management, 2* (1), 66-76.

Leo, T., & Lee, C. B. (2010). Explaining the intention to use technology among student teachers. *Campus-Wide Informa-tion Systems, 27*(2), 60-67.

Liou, D., & Contento, I. R. (2001). Usefulness of psychosocial theory variables in explaining fat-related dietary behavior in Chinese Americans: Association with Degree of Acculturation. *J Nutr Educ., 33*(6), 322–331.

Maria, K. M., Anne, M., & Hustri, U. K. (2001). Attitude towards organic food among Swedish consumers. *British Food Journal,103* (23),209-26.

Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research, 2*(3),173-91.

Mian, N. R. (2010). *Fundamentals of Halal foods and certification*. Retrieved on Decemeber 10, 2014 from http://www.preparedfood.com/article/Feature_Article/BNP_GUID_9-5-2006_A_10000000000000734431

Mohamed Nasir, K., & Pereira, A. A. (2008). Defensive dining: notes on the public dining experiences in Singapore. *Contemporary Islam, 2*, 61-73.

Mohamed Omar, K., Nik Mat, N. K., Ahmed Imhemed, G., & Ahamed Ali, F. M. (2012). The direct effects of halal product actual purchase antecendents among the international Muslim consumers. *American Journal of Economics,* 87-92.

Mohammad Sadek (2006). Marketing niche for halal food supply: a framework for the establishment of an international halal food market. In Shaikh Mohd, S.M.S and Azrina, S. (Ed.). *Food and Technological Progress an Islamic Perspective,* 85-100.

Mohani, A., Hashanah, I., Haslina, H., & Juliana, J. (2009). SMEs and halal certification. *China-USA Business Review ,*8,1-9.

Mohd Yusoff, H. (2004). Halal certification scheme. *Standard and Quality News, 11,* 4-5.

Mukhtar, A., Butt, M. M. (2012). Intention to choose halal products: the role of religiosity. *Journal of Islamic Marketing, 3* (2),108-120.

Nik Mat, N. K., & Sentosa, I. (2008). The integration of theory of planned behavior (TPB) and technology acceptance model in internet purchasing: a structural equation modeling (SEM) approach. *Proceedings of Applied International Business Conference.*

Nunnally, J. O. (1978). *Psychometric Theory*. New York: McGraw-Hill.

Nurul Huda, Nova Rini, & Purnama Putra (2012). The analysis of attitudes, subjective norms, and behavioral control on muzakki's intention to pay zakah. *International Journal of Business and Social Science, 3*(22).

Othman, & Owen (2001). Adopting and measuring customer service quality (SQ) in islamic banks: a case study in Kuwait finance house. *International Journal of Islamic Financial Services, 3*(1).

Page, C., & Luding, Y. (2003). Bank managers' direct marketing dilemmas - customers' attitudes and purchase intention. *International Journal of Bank Marketing , 21*(3), 147-163.

Pallant J. (2011). *SPSS Survival Manual.* Open University Press.

Pavlou, P. A. (2002). What drives electronic commerce? A theory of planned behavior perspective. *Academy of Management Proceedings, Denver, CO,* 1-6.

Pavlou, P. A., & Chai, L. (2002). What drives electronic commerce across cultures? A cross-cultural empirical investigation of the theory of planned behavior. *Journal of Electronic Commerce Research, 3*(4), 240-253.

Pew Forum (2011). The future of the global muslim population- projections for 2010-2030. Analysis. Retrieved on December 1, 2014 from http://www.pewforum.org/The-Future-of-the-Global-Muslim-Population.aspx

Pointing, J., Teinaz, Y., & Shafi, S. (2008). Illegal labelling and sales of halal meat and food products. *The Journal of Criminal Law, 72* (3),206-213.

Ramayah, T., & Suki, M. N. (2006). Intention to use mobile PC among MBA students: implications for technology integration in the learning curriculum. *UNITAR E-Journal,1*(2), 1-10.

Rezvani, S., Dehkordi, G., Rahman. M., Fouladivanda, F., Habibi, M., & Eghtebasi, S. (2012). A conceptual study on the country of origin effect on consumer purchase intention. *Asian Social Science, 8* (12), 205-215.

Salman, F., & Siddiqui, K. (2011). An exploratory study for measuring consumers awareness and perceptions towards halal food in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business, 3*(2), 639-653.

Samin, R., Goodarz, J. D., Muhammad, S. R., Firoozeh, F., Mahsa, H., & Sanza, E. (2012). A conceptual study on the country of origin effect on consumer purchase intention. *Asian Social Science, 8* (12), 205-215.

Sekaran, U. (2003). Research methods for business (4th ed.). *Hoboken, NJ: John Wiley & Son.*

Shaari, J. A. N., & Ariffin, N. S. (2010). Dimension of halal purchase intention: a preliminary study. *International Review of Business Research Papers, 6*(4), 444-456.

Shafie, S., & Othman, M. N. (2006). Halal certification: an international marketing issues and challenges. *Faculty Business and Accountancy*. Retrieved on September 29, 2014 from http://www.halalrc.org.

Shahidan, S., & Md Nor Othman. (2006). Halal certification: an international marketing issues and challenges. Kuala Lumpur, 1-11.

Shaikh Mohd, S. M. S. (2006). Aspects of food safety from the Islamic perspective. In Shaikh Mohd, S. M. S and Azrina, S. (Ed.). *Food and Technological Progress an Islamic Perspective. Kuala Lumpur: MPH*,143-157.

Soesilowati, E. (2010). Business opportunities for *halal* products in the global market: muslim consumer behaviour and *halal* food consumption. *Journal of Indonesian Social Sciences and Humanities, 3*, 151-160.

Sparks, P., Shepherd, R., & Frewer, L. J. (1995). Assessing and structuring attitudes towards the use of gene technology in food production: the role of ethical obligation. *Basic and Applied Social Psychology,16*(3),67-285.

Sparks, P., & Shepherd, R. (1992). Self-identity and the theory of planned behavior: assessing the role of identification with green consumerism. *Social Psychology Quarterly,* 55 (4), 388-99.

Suh, B., & Han, I. (2003). The impact of customer trust and perception of security control on the acceptance of electronic commerce. *International Journal of Electronic Commerce, 7*(3),135-61.

Seyed Danesh, M. M., Chavosh, A., & Nahavandi, M. (2010). Comparative analysis of the Muslim's and non-Muslim's satisfaction with halal Products", *IEEE.*

Tarkiainen, A., & Sundquist, S. (2005). Subjective norms, attitudes and intentions of Finish consumers in buying organic food. *British Food Journal, 107* (11), 808-22.

Taylor, S., & Todd, P. (1997). Understanding the determinants of consumer composting behavior. *Journal of Social Applied Psychology,27,* 602-28.

Teo, T., & Lee, C. B. (2010). Explaining the intention to use technology among student teachers: An application of the theory of planned behavior (TPB). *Campus-Wide Information Systems, 27*(2), 60-67.

Verbeke, W., Vermeir, I., & Vackier, I. (2004). Impact of values, involvement and perceptions on consumer attitudes and intentions towards sustainable food consumption, in De Tavernier, J. and Aerts, S. (Eds). *Proceedings of the EURSAFE – Science, Ethics and Society, Centre for Agricultural, Bio- and Environmental Ethics, Leuven*,81-5.

Wan Hassan, W. M., & Hall, C. M. (2003). The demand for halal food among Muslim travelers in New Zealand. In C. M. Hall, L. Sharples, R. Mitchell, N. Macionis and B. Cambourne (Eds.). *Food Tourism Around the World: Development, management and markets*,81-101.

World Muslim Population (2004). Muslim population in the world. Retrieved on 5 October, 2014 from http://www.muslimpopulation.com/World/

Yamane, Taro. (1967). Statistics: an introductory analysis, 2nd Edition, New York: Harper and Row.

Yousef, D. K. (2010). Halal food numbers look tasty. *Gulf News, September 8.*