MALAYSIAN MUSLIM CONSUMER CREDIT CARD USAGE BEHAVIOR

FARID MUHAMMAD

MASTER IN ISLAMIC FINANCE AND BANKING
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By:
FARID MUHAMMAD

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ABSTRACT

The objective of this study aims to identify Malaysian Muslim consumer credit card usage behaviour. This study also identifies financial knowledge, attitude toward credit card, bank policies and lifestyle toward Malaysian Muslim consumer credit card usage behaviour. There were 86 people being chosen to be the respondent of this study by the simple random sampling method. The results which were being tested by multiple regression showed that there were significant relationship between financial knowledge and bank policies which Malaysian Muslim consumer credit card usage behaviour, financial knowledge (β=0.171, p<0.05), bank policies (β=0.677, p<0.05) while there were no significant relationship between attitude toward credit card and lifestyle with Malaysian Muslim consumer credit card usage behaviour (β=0.086, p>0.05) (β= 0.066, p>0.05). In addition, the findings which were being tested using Pearson correlation showed that there was a significant relationship between financial knowledge and bank policies with Malaysian Muslim consumer credit card usage behaviour (r 0.047, p<0.05) (r 0.000, p<0.05) and also there was no significant relationship between attitude toward credit card and lifestyle with Malaysian Muslim consumer credit card usage behaviour(r 0.387, p>0.05) (r 0.424, p>0.05). Therefore, this study concludes that financial knowledge and bank policies influencing the Malaysian consumer credit card usage behaviour. Meanwhile, attitude toward credit card and lifestyle not influencing Malaysian Muslim consumer credit card usage behaviour. To get better and accurate results, future research should increase sample size to a bigger geographic areas and larger sample and it is recommended to determine other factors which might affect Malaysian Muslim consumer credit card usage behaviour. Future research should focus on developing a consistent measure of attitude toward credit or Muslim lifestyleand also examine the relationship between Islamic financial knowledge and a variety of personal attitudes other than credit card usagebehaviour.

Keywords: Muslim, Consumer, Malaysian, Credit card, financial knowledge, Bank policies, Lifestyle

ABSTRAK

Objektif kajian ini bertujuan untuk mengenalpasti tingkah laku Muslim Malaysia menggunakan kad kredit. Kajian ini juga mengenalpasti pengetahuan kewangan, sikap terhadap kad kredit, dasar bank dan gaya hidup dengan tingkah laku pengguna Muslim Malaysia menggunakan kad kredit. Terdapat 86 orang yang dipilih sebagai responden kajian ini menggunakan kaedah persampelan rawak mudah. Keputusan yang telah diuji oleh pelbagai regresi menunjukkan bahawa terdapat hubungan yang signifikan antara pengetahuan kewangan dan dasar bank dengan tingkah laku pengguna Muslim Malaysia menggunakan kad kredit, pengetahuan kewangan ($\beta = 0{,}171$, $p < 0.05$), dasar-dasar bank ($\beta = 0{,}677$, $p < 0.05$) manakala terdapat hubungan yang tak signifikan antara sikap terhadap kad kredit dan gaya hidup dengan tingkah laku pengguna Muslim Malaysia menggunakan kad kredit ($\beta = 0.086$, $p > 0.05$) ($\beta = 0.066$, $p > 0.05$). Di samping itu, hasil kajian yang telah diuji menggunakan korelasi Pearson menunjukkan terdapat hubungan yang signifikan antara pengetahuan kewangan dan dasar bank dengan tingkah laku Muslim Malaysia. Tingkah laku pengguna Muslim Malaysia menggunakan kad kredit ($r\ 0{,}047$, $p < 0.05$) ($r\ 0.000$, $p < 0.05$) dan juga tidak terdapat hubungan yang di antara sikap terhadap kad kredit dan gaya hidup dengan tingkah laku pengguna Muslim Malaysia menggunakan kad kredit ($r\ 0{,}387$, $p > 0.05$) ($r\ 0{,}424$, $p > 0.05$). Oleh itu, kajian ini menyimpulkan bahawa pengetahuan kewangan dan dasar bank mempengaruhi tingkah laku pengguna Muslim Malaysia menggunakan kad kredit. Sementara itu, sikap terhadap kad kredit dan gaya hidup tidak mempengaruhi tingkah laku pengguna Muslim Malaysia menggunakan kad kredit. Untuk mendapatkan keputusan yang lebih baik dan tepat, kajian masa depan perlu meningkatkan saiz sampel kepada kawasan geografi yang lebih besar dan sampel yang lebih besar dan ia disyorkan untuk menentukan faktor-faktor lain yang mungkin mempengaruhi tingkah laku pengguna Muslim Malaysia menggunakan kad kredit. Kajian akan dating perlu member focus kepada membangunkan langkah konsisten sikap terhadap kredit atau cara hidup Islam dan juga mengkaji hubungan antara pengetahuan kewangan Islam dan pelbagai sikap peribadi yang lain daripada tingkah laku penggunaan kad kredit.

Kata kunci: Muslim, Pengguna, Malaysia, Kad kredit, Pengetahuan, Bank, Gaya hidup

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter introduces the background of the Islamic banking product such as credit card and Muslim consumer behavior particularly in Malaysia where the study was conducted. This chapter consists of seven parts which highlight the background of the study, problem statement, research question and objective of the study, followed by the significance of the study, scope of the study, and definition of key terms. The chapter concludes with the explanation regarding scope of the study.

1.2 Background of the study

Islamic credit card is one of the most successful products of Islamic banking that has been recognized as Shariah compliant product by Shariah advisory council of Bank Negara Malaysia (BNM). Islamic credit card is primarily based on Shariah which makes Muslim consumers confident to apply for credit card from Islamic financial institution. It uses Islamic purchase contracts such as *bay, al-inah murabaha, ijarah,kafalah, wakalah* and *tawarruq*. It is free from interest which is consistent with the teachings of Islam. Since Islamic credit card does not involve *riba*, it is becoming popular to Muslim consumers.

Aside from being one of the pioneers of Islamic banking in the world, Malaysia is also the first country in the world that produces Shariah-based Islamic credit card. Islamic credit cards which is better known as a credit card-i was first introduced by AmBankBerhad in 1996 under the name al-Taslif. Regarded as one of the best known credit card internationally, this credit card is known today as Al-TaslifAmIslamic Bank Card-i which can be found in the various categories of Classic, Gold or Platinum.In Malaysia, UOB has issued credit cards that are uniquely designed for women with attractive rewards relating to shopping, beauty, health and other promotions at selected restaurants and cafes. These credit cards offer attractive promotions in boutiques which are typical favorites of Malaysian women like.

Generally credit card or plastic money is one of the payment systems that financial institutions including Islamic banks produced to make it convenient for a consumer to use for payment instead of real physical cash, thus it provides more safety for the consumers. Islamic credit card was created by BNM on 1 August 2004 under the Shariah Advisory Council Guidelines. Generally, a number of models have been applied by financial institutions to produce Islamic credit card around the world. These models are generally based on as bay, *al-inah, murabaha, ijarah, kafalah, wakalah* and *tawarruq.*

There are times when the public confuses a credit card from a debit card, although they may be used for the same purpose and transaction. A debit card is used when a consumer makes purchases and the cost of purchase is directly deducted from the available money in the consumer's bank account. On the other hand, a conventional

credit card allows consumer to reuse the money balance imposing a charge known as interest (*riba*).Credit card have form and size that are same, as laid down by standard ISO 7810 (Choo, 2005).

There are three factors which influence credit card financial industry. First, credit card is a main product and medium for banks due to operating cost that is relatively low. Second, most credit card market in developing countries still grows and has not yet achieved saturated level. Third, credit card can cause chaos in economic if not being supervised effectively.

Muslim consumers' credit card usage is growing rapidly particularly in Malaysia. According to Bank Negara Malaysia (BNM), in 2011, a total of 8.21 million credit card has been issued by banks and other financial institutions in Malaysia, involving around 28.6 million people in Malaysia. Based on these statistics, one out of every three Malaysians have at least one credit card. Based on 2012 survey on financial loans conducted by Counseling and Debt Management Agency, also known as AKPK, out of 1,002 respondent aged between 18 to 35 years old, 39% were found to have a credit card. 90% of them have up to two credit cards, while 10% have credit cards.

Islamic banking which is based on Shariah also is seen as the same as conventional banking because Islamic bank also try to emphasize profit from the transaction. However Islamic banking is not allowed to deal with any business that involves

interest (*riba*) and products such as liquor, pig and other things prohibited in Islamic law. Some conventional banking products are not offered in Islamic banking because they involve interest.

According to 2012 Nielsen Global Survey of Investment Attitudes, Malaysia ranked second from the bottom in the list of full payment of credit card balances in Asia with a rate of about 50%, a better neighbor than Vietnam (27%).The same survey also found that only 18% of Malaysians who have a credit card pay the minimum amount of 5% of their credit card balances each month, while only 15% pay more than the minimum monthly balance. According to the Statistical Malaysian Department of Insolvency, a total of 4,875 users have declared bankruptcy due to credit card debt. This amount represents 4.18% of the total number of 116,488 individuals declared bankrupt in the period 2007 to 2013.

1.2.1 Justification of the study

Islam takes the matter of debt very seriously and warns against it and urges the Muslim to avoid it as much as possible, credit card one of the factor that involve Muslim to debt. This study try to investigate the factor that involve Muslim consumer to credit card debt and to prevent them to involve in credit card debt by given the knowledge on consumer credit card usage behavior. It was narrated from 'Aa'ishah that the Prophet (PBUH) used to say in his prayer: "*Allaahumma inni a'oodhi bika min al-ma'tham wa'l-maghram* (O Allah, I seek refuge with you from sin and heavy debt)." Someone said to him: "How often you seek refuge from heavy debt!" He said:

"When a man gets into debt, he speak and tells lies, and he makes a promise and breaks it." Narrated by al-Bukhari and Muslim (589).

These stern warnings about debt only came because of the negative consequences to which it leads both on an individual level and on a community level. Our scholars said: It is a disgrace and a humiliation because it preoccupies the mind and makes one worried about paying it off, and makes one feel humiliated before the lender when meeting him, and feeling that he is doing one a favor when accepting a delay in payment. Perhaps he may promise himself that he will pay it off then break that promise, or speak to the lender and lie to him, or swear an oath to him then break it, and so on. Moreover, he may die without having paid off the debt so he will be held hostage because of it, as the Prophet (PBUH) said: "The soul of the believer is held hostage by his debt in his grave until it is paid off." Narrated by al-Tirmidhi, (1078).

1.3 Problem statement

BNM (2008) showed that from July to December 2007, only 30% of all credit card users paid their dues in full at the end of the month, while the other 70% did not paid full at the end of the month. Almost half of the credit card holders pay the minimum amount on time and living the rest forward. BNM (2008) stated the number of people declared bankrupt due to credit card debt in 2007 increased to 1,873 from 1,656 in 2006. In 2005, there were 1,479 people declared bankrupt while in 2004, there were only 1,397 people. Based on this report, the increase of number of people going bankrupt is due to consumers' attitude toward credit card. The researcher investigated the major factors that influence consumers' credit card usage behavior among

Malaysian Muslim consumers based on four independent variables namely financial knowledge, attitude toward credit card, bank policies, and lifestyle. As we know a lot of research was conduct before on consumer credit card usage behavior but few of research that focus on Muslim consumer, the researcher wanted to know which variable has the strongest impact on credit card usage behavior among Malaysian Muslim consumers.

Financial Knowledge is a major factor that can affect the usage behavior of credit card users. Financial knowledge is very important especially if there is a lack of validation for the parties who are involved in the contract. According to Barker & Sekerkaya (1992), in order to minimize the unethical conduct, consumer must have knowledge when making online purchasing. With financial knowledge consumer can apply the pin code systems when using credit card and the pin code must be changed if the consumer make online purchasing in unsafe website to avoid getting scammed by other parties. Lacking knowledge will prevent the Muslim consumer from becoming wise purchased.

Attitude toward credit card is another factor to be considered. According to Choo, Lim, & Sanusi (2007), consumer normally has more than one credit card and every credit card has credit limitation if the number of the credit added will be more than a thousand dollar. Overuse of credit cards will become an attitude for consumers and the consumer may simply spend more than the actual income. Using credit card from conventional bank is haram because the bank lends the money to the user in return for the interest. This interest is the price of the annual subscription to the credit card because the contract is based on financing, as well as the other interest will be charged

if the consumer of credit card makes a late payment. Summary of literature review many studies only covered attitude of consumer behavior in western country not in Malaysian especially Muslim behavior this study try to investigate Muslim behavior in Malaysia.

Consumer is also required to sign an agreement where consumer is responsible to pay late payment charges if payment is made after the maturity date. Late payment charges are also illegal because Muslims do not allow doing anything contrary to Shariah. Consumer think they can pay the loan by the date, but in the event of unforeseen circumstances in which they cannot make payment by that date, then they finally engage with the interest that must be paid to the bank. According to Rahman (2008), such agreement with the consumer is not allowed in Islam because it involves interest by requiring the consumer to pay the price of the credit financed. Moreover a consumer who pays less than the maturity date also has to pay late charges.

According to Ma'sum (2001) if charges are calculated as a cost management which aims to solve the problem of credit card defaults, then this is allowed. But if the charge is always calculated as late payment charges, then it is prohibited. However, the question that arises is why the late payment charges is calculated based on the outstanding account balance which is multiplied by a certain percentage, and not set on a certain fixed rate. Although the bank stated that late charge is calculated as the cost of maintenance, it is unreasonable because the calculation is made in the form of a percentage. Maintenance costs should be treated as fixed rate and not according to the balance outstanding. Are there differences in management costs if the minimum

outstanding balance is RM1 million or RM100? Therefore, it is proposed that late charges should be imposed with a fixed rate without taking into the minimum outstanding balance (Ma'sum, 2001).

1.4 Research questions

The main goal of this study is to investigate the factors that influence the credit card usage behaviour among Malaysian Muslim consumers in University Utara Malaysia. In addition, the researcher aims to understand the consumer behaviour toward credit card usage among Malaysian Muslim consumers. In this context, the following research questions were developed:

RQ1- Is there relationship between financial knowledge and Malaysian Muslim consumer credit card usage behaviour?

RQ2- How attitude toward credit card influence Malaysian Muslim consumer credit card usage behaviour?

RQ3- Is there relationship between bank policies and Malaysian Muslim consumer credit card usage behaviour?

RQ4- How lifestyle influence Malaysian Muslim consumer credit card usage behaviour?

RQ5- Which factor most significant influence Muslim credit card usage behaviour?

1.5 Research objectives

The research objectives of this study are the following:

1- To assess the relationship between financial knowledge and Malaysian Muslim consumer credit card usage behaviour,

2- To investigate the relationship of attitude toward Malaysian Muslim consumer credit card usage behavior,

3- To identify the relationship between bank policies and Malaysian Muslim consumer credit card usage behaviour, and

4- To examine the relationship between lifestyle and Malaysian Muslim consumer credit card usage behaviour.

5- To find out the most significant factor influence Muslim consumer credit card usage behaviour.

1.6 Significance of the study

To develop wise wage of consumer this study will give the awareness of consumer how to spend their credit card and not to involve in heavy credit card debt. The finding of this study will give knowledge to the consumer to be more careful when using credit card. This study also benefit academicians, bankers and other industry practitioners, policymakers and the general public by providing new knowledge and country-specific evidence on the relationship between financial knowledge, attitude

toward credit card, bank policies, and lifestyle and Malaysian Muslim consumer credit card usage behaviour. More specifically, this study will contribute knowledge to the community especially to the youth and parents in dealing with credit cards. Policymaking on credit card usage can also be improved by the government if it can ascertain which factor can influence the credit card usage behavior among Malaysian Muslim consumers. With this, the government could develop more programs and events to enhance financial knowledge among Muslim consumers as well as to establish and to improve more Islamic financial education in Malaysia.

1.7 Scope of the study

This study focuses on Malaysian Muslim consumer credit card usage behavior. It will identify factors that provide significant influence credit card usage behavior in Malaysia. The study treats financial knowledge, attitude toward credit card, bank policies, and lifestyle as independent variables that affect credit card usage behavior among Malaysian Muslim consumers which is the dependent variable. The study will be conducted in University Utara Malaysia (UUM) which is located in Sintok, Kedah and it will focus on the Muslim administrative staff of UUM with income level of RM 900 to RM 3000.

The main reason why it is conducted in UUM is because it is one of the higher public education institutions in Kedah that offer Islamic Finance and Banking course (Jamshidi & Hussin, 2013). Furthermore, the researcher is currently pursuing his master in UUM, thus gives the advantages to the researcher to collect data within

stipulated time. This study focuses on UUM Muslim staff and Islamic finance and banking students because they are believed to have basic Islamic finance knowledge as the background of their study. Even though they have the knowledge on Islamic finance, it may not be guaranteed that they have the ability to use their knowledge to manage their financial resources efficiently and effectively according to Muslim behavior. It is important for the researcher to conduct a survey on them in other to determine their behavior on credit card usage.

1.8 Definition of variables

In this section the researcher would like to present the conceptual definition of variables that are included in the research framework. In this study, the research framework has been defined by combining the same construct in prior studies. The three construct identified in the research are financial knowledge, attitude toward credit card, demographic factor. The Muslim consumer and subjective norm construct have various dimensions. Moreover the research framework attempts to investigate the determinants of credit card usage behavior among Malaysian Muslim consumers.

1.8.1 Financial Knowledge

Financial knowledge is defined as the experience gained from the use of credit in daily life by family or friends or personal experience especially the use of credit card (Hilgerth & Hogarth, 2003).

1.8.2 Attitude toward credit card

According to Godwin (1998) attitude toward credit card is defined as the willingness to borrow and the ability of consumer to borrow that could influence the amount of household debt. Attitude toward credit card is the intention of the consumer to buy on credit (Norton, 1995).

1.8.3 Bank Policies

Bank policies refer to the macroeconomic policy laid down by the central bank. It involves management of money supply and interest rate. In the demand side, it relates to the economic policy used by the government of a country to achieve macroeconomic objectives like inflation, consumption and growth and liquidity. Bank policies also refer to the regulation set by bank to a consumer who makes a contract with the bank (Balasundram and Ronald, 2006).

1.8.4 Lifestyle

Life style is defined as the habits, attitudes, tastes, moral standards, economic level that together constitute the mode of living of an individual or group. Lifestyle is one of the factors that influences consumer spending. Based on lifestyle, the marketer makes a strategic sale planning (Krishnan, 2005).

1.9 Organization of the thesis

This thesis consists of five chapters. Chapter 1 provides the introduction and briefly explains the background of the study and problem statement. It then outlines the research question and research objective, followed by significance of study, definition of variables, and scope of study.

Chapter 2 comprises the detailed review of the previous literature which is related to this study. It covers the important discussion of credit card usage behavior of Malaysian Muslim consumers as well as the financial knowledge, attitude toward credit card, bank polices, and lifestyle that may affect the level of credit card usage behavior.

Chapter 3 presents the research methodology, research design of the study, measurement of variables, and pilot study. In addition, it also discusses the sample used in the sample, data collection and data analysis techniques, followed by a conclusion.

Chapter 4 discusses the findings of the study. It also presents the demographic profile of the respondents and descriptive results. Moreover, the result of all hypotheses tested are also discussed and presented.

Chapter 5 summarizes the findings of the study followed by the discussion. Some discussion on the theoretical and practical contribution are also included. In addition, recommendation for future research and conclusion of this research are also presented.

CHAPTER 2

LITERATURE REVIEW

2.1 Malaysian Muslim consumer credit card usage behavior.

The practice of consumer credit traces back to the era of Babylonian 3000 year ago. Consumer lending industry has been passing through different level of stages for the last 759 years. It started from the pawnbroker of the middle ages. For the non-Islamic world, lending to the mass market consumer is a phenomenon which occurred during the last decade's only (Barker & Sekerkaya, 1992).

One of the major factors that affect consumer spending behavior is liquidity. Evolution of the consumer credit is one of the major factors that involves the use of corporate power to remove liquidity constrain on consumer spending limit (Warwick & Mansfield, 2000). It brings a negative impact on economy. Evidence indicates that growth of consumer debt depends on purchase facilitates. In the USA, it is estimated that two out of every three new cars on the road have been leased on installment debt (Rosly & Che-Seman, 2003).

According to the study of Shahwan & Shah (2006) on Islamic credit card usage behavior among academicians who belong to middle class consumer in Terenganu and Kelantan, the intention of major credit card usage among this group is for purchase transactions. Given the limitation of the study and limited focus on academician in two states, the researcher proposed to conduct more research and explore the depth on the verge of user in choosing Islamic credit card (Bakhshi, 2006).

2.2 Review of literature on financial knowledge on Islamic credit card, attitude on toward credit card, bank policies, and lifestyle

2.2.1 Financial knowledge

The most important way of learning how to use credit card is based on experience, friends, and families as they are the main sources of financial knowledge (Hilgert and Howarth, 2003). Accordingly, most financial stress normally occurs in low-income families. However there is no available empirical finding that proves low-income families have less financial knowledge than the upper-income families. Warwich and Mansfield (2000) reported that there is significant difference between the sample and the rest of the users in terms of knowledge of credit card user.

Jamshidi & Hussin (2013) outlined the different level of understanding about Islamic credit card among Muslims in Lembah Pantai KualaLumpur. The study concludes that the knowledge level of Muslims in Lembah Pantai about Islamic credit card is only in the middle level. Furthermore, the study finds that the major factors that determine the

use of credit card among Muslim consumers are education background and income status. In terms of marketing strategies and promotion by card issuer, the researcher found that the main sources of knowledge about Islamic credit card among Muslim consumer are derived from the reading printed material, brochures, and internet resources and direct explanation from the officer of Islamic banks.

Based on past researches, the factor that influences most the consumer credit card usage behavior is financial knowledge. The conclusion based on past studies is that there is a significant relationship between financial knowledge and consumer credit card usage behavior. Thambiah, Ismail & Eze (2011), stated the different understanding or knowledge about financial influence the consumer spending behavior.

2.2.2 Attitude toward credit Card

According to (Godwin, 1997) one of the major factors that could influence the household amount of debt is their willingness to borrow aside from their ability to borrow. Norton (1993) argued that from 1930s to the 1990s, the dramatic increase in credit use might have been caused by consumer attitude toward credit card use. Consumers' general attitude toward the use credit has a positive relationship in the increasing consumer debt from 1983 (Norton, 1993). On the other hand, both installment debt and credit card debt have significant relationship toward consumer attitude, even after accounting of socio-economic and demographic variables. There

are several studies that show that a person who has more than one credit card with significant amount of debt have positive relationship toward credit card use. Norvilitis, Merwin, Osberg, Roehling (2006); Young & Kamas (2006); Kaynak & Harcar (2001) and Chen & Devaney (2003) however find that attitude have no significant relationship on credit card usage and behavior.

Based on Ajzen (1996), the attitude has no significant relationship toward behavior such as credit card usage behavior. It has reported that behavior is not necessarily predicted by attitude. Attitude and behavior are not always compatible as it has been show by many studies on social psychology (Ajzen, 1996).

2.2.3 Bank policies

According to Chakravorti & Emmons (2001), bank policies refer to benefit given by bank to the consumer, regulation set by bank to a consumer, the payment policy, and the qualification required for credit card application. Due to the high competitions in the credit card market, Islamic banks and conventional banks are striving to establish their own niche market through constant product improvement and benefit that consumer can get when they are using credit card (Kaynak & Harcar, 2001). Islamic banks, conventional banks and non-bank institutions offer benefit in the form of different incentives in order to entice Muslim and non-Muslim consumer in general to apply for credit card (Chakravorti, 2007).

The benefits being offered by banking and non-banking sectors include no annual fees, cash rebate, point reward, airline miles, installment payments and discount for identified purchases. From the perspective of strategic marketing, Bakhshi (2006) argued that the desire to spend by a consumer on credit card is enhanced in term of its ability to offer substantial income stream due to the viability of credit card insurance policy. The benefit could be the coverage by a consumer in case of losing the credit card or when the cardholder becomes ill or unemployed. The otherpossible benefit could be the wide acceptance of the major card association bank of the credit card in which it enhances customer's accessibility to purchase goods. According Teoh, Chong & Yong (2013). Cited that Nielsen Global Survey of Investment Attitude reported that 39% of Malaysian use credit card as a common payment method for shopping and entertainment activities.

Mansor & Mat (2009) argued that reaching the source of credit easily can lead consumer to spend more and borrow excessively. Chakravorti (2007) stated that credit card users often use their credit card to increase their limit consumption beyond their current monetary ability. Many credit card issuing Islamic bank, conventional bank and non-bank allow a minimum amount to be paid. In their effort toward transforming consumers into interest-paying consumer, bank and non-bank institutions give consumers diverse incentives (Amin, 2012) to earn above normal profit. Interest rates charged on credit card debt is normally higher than any other credit debt (Barker & Sekerkaya, 1992). Balasundram & Ronal (2006) stated that the interest rate charged results to many credit card holders ending up with a large debt.

Based on previous studies, we hypothesize that there is a significant relationship between bank policies and consumer credit card usage behavior. According to Chakravorti (2003), the benefits that are offered by banking and non-banking sectors such as no annual fees, cash rebate, point reward, airline mine, installment payment and discount for identified purchased influence consumer to spend more on credit card even beyond their monetary ability.

2.2.4 Lifestyle

Chien & Devaney (2005) focused on identifying the lifestyle of credit card consumer. The study of Krishnan (2011) on lifestyle profile of the consumer credit card usage successfully applied the lifestyle analysis for segmenting the consumer spending of branded products. Widgery, Madhukar, Angur, & Nataraajan (1997) stated that lifestyle analysis was also used to build the lifestyle profile for woman consumer. Widgery & McGaugh (1993) studied the different lifestyle between women with the modern orientation and women with the traditional orientation. This study applies lifestyle analysis for market segment for the organization in order to develop a strategic product and develop the most appropriate communication strategy to a consumer.

Krishnan (2011) argued that lifestyle analysis is important in formulating marketing strategy and to examine the consumer credit card usage behavior. Lifestyle is a principle which allows the management to access accurately the need of consumer for

the relevant market segment, because demographic profiles have proven inadequate for the lifestyle analysis Mansor & Mat (2009). Amin (2012) confirmed that the lifestyle analysis could have a remarkable value to strategic marketing manager. Product decisions are also influenced by the lifestyle of consumer. Worthington, Stewart & Lu (2007) stated that successful retailers are based on general application of lifestyle. Lifestyle is one of the important dimensions in research for consumer behavior. There is a wide application of lifestyle analysis data and some are used in promotion activities to attract the consumer to apply for credit card Kaynak & Harcar, (2001).

Lifestyle segmentation provides valuable information into the task of creating effective brand identity Krishnan (2011). The study of lifestyle often provides fresh information into the market and gives more dimensional view to the target consumer. The marketing manager may be able to improve multidimensional views of marketing strategy, uncover new branded product opportunities, and improve overall marketing strategy. A very few researches have been carried out to analyses the influence of lifestyle on the credit card usage behavior of Malaysian Muslim consumers.

Based on the past researches, it can be inferred that there is a significant relationship between lifestyle and consumer credit card usage behavior. Mansor & Mat (2009) stated that lifestyle analysis is important in formulating marketing strategy and in examining the consumer credit card usage behavior. Lifestyle is a principle which allows the management to access accurately the need of consumer for the relevant

market segment, because demographic profiles have proven inadequate for the lifestyle analysis.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the researcher describes the research methodology adopted for this study. It begins with the theoretical framework together with hypothesis development generated from the literature review in the previous chapter. Then it further discussed the method used to test the variable in the research framework and hypothesis. This chapter mainly discussed the research design, operational definition of variable, population and sample of research and the sampling method implemented. Data collection technique, measurement development and questionnaire, measurement of research variable as well discussed detail in the data analysis procedures.

3.2 Theoretical framework

Theoretical framework is a theoretical assumption of interconnected concept which guides the study and the researcher to determine what variable will be tested and what the association will besought in the data (Sekaran & Bougie, 2013). Furthermore, according to Sekaran & Bougie (2013), the theoretical framework is a demonstration of reality and explains in detail those variables or factors in actual world that the researcher thinks to be related to the problem. It examines and demonstrates the significant association among them. In this study, the theoretical framework is needed in order to assess the relationship of one variable to another variable.

Figure 3.1
Research framework

Independent variables   Dependent variable

| Financial knowledge |
| Attitude toward credit card |
| Bank policies |
| Lifestyle |

| Malaysian Muslim consumer credit card usage behavior |
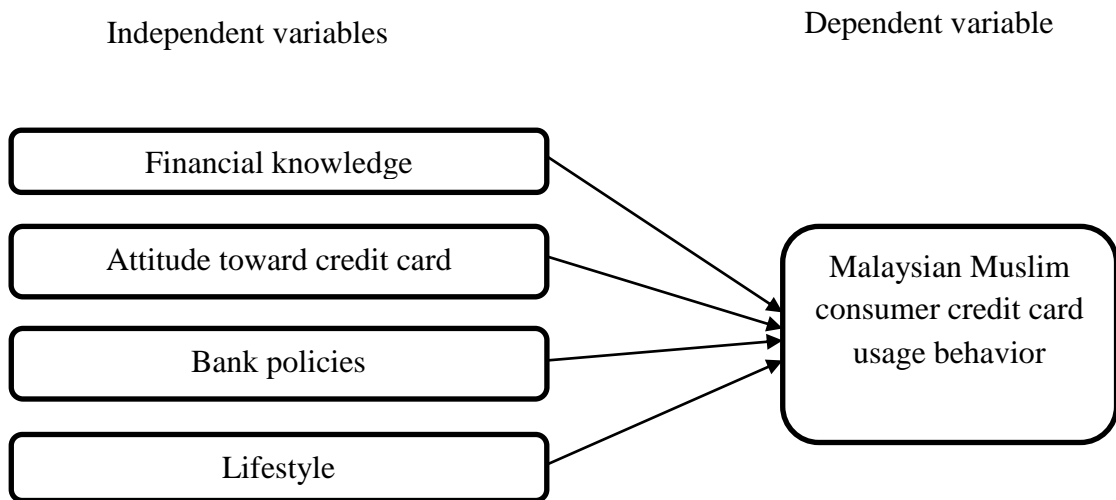
Figure 3.1 shows the research framework for this study to fit into the objective of the researcher. Based on the above proposed theoretical framework, financial knowledge, attitude toward credit card, bank policies, and lifestyle are chosen as the independent variables while the dependent variable is Malaysian Muslim consumer credit card usage behavior. Therefore, four independent variables will be used in other to test their relationship toward Malaysian Muslim consumer credit card usage behavior in UUM.

3.3 Research hypothesis

A hypothesis is defined as a statement of the relationship between two or more variable expressed in the testable statement form (Sekaran, 2003). It is a guide for the investigation into the entire process of research and it keeps the research on the main

line of the study. It is seen as the beacon that lights the path for the research study. In view of the above literature review and research question, the following research hypotheses will suffice for this research:

H1. There is a significant relationship between financial knowledge and credit Malaysian Muslim consumer credit card usage behavior.

H2. There is a significant relationship between attitude toward credit card and Malaysian Muslim consumer credit card usage behavior.

H3. There is a significant relationship between bank policies and Malaysian Muslim consumer credit card usage behavior.

H4. There is a significant relationship between lifestyle and Malaysian Muslim consumer credit card usage behavior.

3.4 Research design

This study uses quantitative method by survey research. Survey research by means of distributing questionnaire to respondents is found to be the most appropriate research strategy to be used in order to meet the objectives of the researcher. The important reasons of conducting the quantitative method by survey questionnaire are time efficiency and cheaper cost as compared to other research strategies (Sekaran & Bougie 2013).

According to Bhatti, Hee & Sundram (2012) the survey research is the most popular method of the data collection in the quantitative approach and many researchers accept this method as it provides a possibility for more truthful and unambiguous feedback or responses than other form of research approaches. All of the questionnaire will be kept on total confidentiality. Thus, the anonymity of the respondent would be high and almost 100% of respondent rate ensured (Sekaran & Bougie, 2013).

The purpose of this study is descriptive. Since the researcher is interested to study the relationship between financial knowledge, attitude toward credit card, bank policies, lifestyle, and credit card usage behavior among Malaysian Muslim consumers. Descriptive study is designated to reveal the relationship between the variables (Sekaran & Bougie, 2013). Additionally the descriptive study also enables the researcher to think systematically about the factor that might influence credit card usage behavior among Malaysian Muslim consumers.

The time horizon applied in this study is cross-sectional. Because the data for this study was gathered just at one shot in times which is within a month in order to meet the requirement of data collection. The unit of analysis is individuals. The appropriate unit analysis for the investigation of researcher concept is those individual working in University Utara Malaysia, Kedah.

3.5 Sampling design

3.5.1 Population of study

This study aims to study the influence of financial knowledge, attitude toward credit card, bank policies, and lifestyle on credit card usage behavior among Malaysian Muslim consumers specifically among administrative staff in University Utara Malaysia. Therefore, the population of interest of this study is administrative staff in Public Higher Education Institutions especially in University Utara Malaysia, Kedah. The target population of this study will focus on administrative staff in College of Business (COB) and College of Law, Government and International Studies (COLGIS) whereby the total population of them is 113 as currently stated by the UUM website http://www.umis.uum.edu.my.

3.5.2 Sampling elements

The researcher is interested in collecting the data on administrative staff of COB and COLGIS in University Utara Malaysia the researcher choose only administrative staff because the researcher want to know the consumer credit card usage behavior, when the salary of staff between RM 900 to RM 3000 did the low income of administrative staff make them involve in credit card debt?. The sample was selected according to the following criteria:

(i) Sample should be working in University Utara Malaysia, Kedah,

(ii) Sample must be an administrative staff from College of Law, Government and International Studies (COLGIS) and College of Business (COB).

(iii) Sample must be a Muslim.

3.5.3 Sampling size

Out of 113 of the population, a total 86 respondent will be considered from the total population which will serve as sample size for this study. Sekaran (2003) stated that for a population of 110, a sample size of 86 is required. Additionally Roscoe as cited in Sekaran (2003) stated that sample sizes that are more suitable for most research must be above 30 and below 500. A total of 86 respondents are sufficient for this research.

3.5.4 Sampling technique

According to Sekaran and Bougie (2013) sampling is an important characteristic of every research. The function of sampling in business research is to estimate the unidentified characteristics of the population (Sekaran & Bougie, 2013; Zikmund, Babin, Carr, & Griffin (2013). There are various sampling techniques used in the academic field. Researcher had used the simple random sampling method in selecting 86 respondents to represent the sample size. The procedure for selecting the sample is simple random sampling. The samples chosen must be a Muslim and working in College of Business (COB) and College of Law, Government and International Studies (COLGIS). Simple random sampling is a type of probability sampling

technique with the simple random sample, there is an equal chance (probability) of selecting each unit from the population being studied. The researcher using fish bowl technique in choosing the sample first the research completed listing of the member of the population, second the researcher codes of all member are written on piece of paper card and place in a container, third the researcher draw the desired number of sample from a container and make list of the sample and the sample choosing by that list.

The population of this study is College of Business (COB) and College of Law, Government and International Studies (COLGIS) in University Utara Malaysia. Sekaran and Bougie (2013) stated that the operational definition can be done by observing at the behavior dimensions, facets or properties designated by the concept in order to develop a few construct on the variable of the study such as financial knowledge, attitude toward credit card, bank policies, lifestyle, and credit card usage behavior among Malaysian Muslim consumers.

3.6 Research instrument

In order to achieve the objective of study, the main instrument used for this research is questionnaire. To collect the data needed, questionnaire were distributed to the staff in COB and COLGIS. The data collection process was conducted from 1 January 2015 and 14-30 April 2015. The researcher visited COB and COLGIS in University Utara Malaysia, Kedah in order to distribute and collect the questionnaire.

3.7 Pilot test

According to Sekaran (2000) the researcher needs to administer the instrument to a small group of target audience that has the same characteristics of the actual sample to carry out the pilot test. The objective of conducting pilot test is to ensure that the questionnaire meets the goal of the study and can be understand by the respondent. McIntire & Miller (2007) stated that in case the questionnaire fail to meet the goals, the researcher can adjust and amend the questionnaire after the pilot study. Sekaran (2003) stated that unsatisfactory item must be to remove from the instrument in collecting data. Pilot study determines the reliability and validity of an instrument. For example a researcher will be able to detect those questions that may not fit the study or those beyond the understanding of the respondent (Sekaran & Bougie, 2003).

Thirty (30) questionnaires were first set for the pilot study. The questionnaires were distributed to COB and COLGIS in University Utara Malaysia, Kedah. The respondents were asked to answer the questionnaire and provide their comment in order to test the validity and clarity of the questionnaire. After collecting the questionnaire, it must be tested using reliability analysis and factor analysis for validation to detect and remove those questions which are not fit or valid and reliable for the actual study.

3.8 Reliability analysis

According to Sekaran and Bougie (2013), reliability refers to the internal consistency demonstrating the homogeneity of an item measuring the variable. Reliability analysis provides information about the relationship between an individual item in the scale and its internal consistency and examines the item of measurement scale and the question that make it (Pallant, 2010). The reliability analysis of the factor was tested using Cronbach's Alpha in order to test the internal consistency reliability of the scale. Coakes & Steed (2007) stated that Cronbach's Alpha is one of the most common reliability coefficient used. It is used to identify how well a set of items measure a single one dimension latent construct (Malhotra & Peterson, 2007).

According to Hair (1998), the coefficient varies from 0 to 1 and the value of 0.6 or less indicates that the internal consistency reliability is unsatisfactory. The higher reliability of internal consistency, the closer Cronbach's Alpha is to 1. The value of Cronbach's Alpha can be increased if the average inter-item correlation is increased. If the Alpha coefficient is more than 0.9, it is considered as the excellent reliability. The reliability is considered very strong when the coefficient is between 0.8 to 0.9 meanwhile, if it is between 0.7 to 0.8, the reliability is considered is strong. If the alpha coefficient is between 0.6 to 0.7 it is considered as moderate strong in term of reliability. If the coefficient is below then 0.6, it is considered as weak.

3.9 Measurement

3.9.1 Operationalization of variables

The instrument of the independent and dependent variables in this research are measured based on five-point Likert scale starting from 1 "strongly disagree" to 5 "strongly agree". In this research, the respondents are able to choose either to agree or disagree regarding the instrument stated in the questionnaire according to their preference.

Table 3.1

Operationalization of variables

Dependent variable	Item	Resources
Credit card usage behavior among Malaysian Muslim consumers	(1)I use credit card only for emergencies (2)I make sure that if a product should be purchased by credit card (3) I like using credit card because I do not need to carry cash (4)I like using credit card when there is promotion or sale (5)Late pay back the credit card debt of the prescribed period (6)I keep the credit card payment slips (7)I allocate a certain amount of money each month to pay debts (8)I limit the number of credit card based on my needs	Jusoh & Lin (2012)
Financial knowledge	(1)In Malaysia, to apply a Islamic credit card, the applicant must earn annual income of RM 18,000 (2)I know that I might or might not receive any	Jusoh & Lin (2012)

	return when the contract is concluded	
	(3)I acknowledge uncertainty on sanctity of financial contract is strictly prohibited in Islam	
	(4)I always make sure that there is no element of interest in all financial transaction that I made	
	(5)I understand that all Islamic financing must be backed by asset	
	(6)I can only make a invest in permissible activities or service	
	(7)I am aware on the availability of Islamic instruments in the market	
	(8)In Islam, I only transact with people that I trust	
Attitude toward credit card	(1)I feel proud when using credit card	Chen & Devaney (2001) Godwin (1997)
	(2)I prefer to buy goods using credit card	
	(3)The use of credit card allows me to obtains goods and services within the shortest period	
	(4)I still use credit card for purchase, even though I cold by with cash	
	(5)I do not care about deferred payment	
	(6)Credit card causes me to make unplanned purchases	
	(7)The use of credit cards allow me to use cash for other purpose	
	(8)I like buying new goods using a credit card even the old staff can still be used	
	(9)Using a credit card can solve my financial problems	
	Credit card usage is convenient made for me	
Bank policies	1.I apply for credit card to get free gifts	Chakravorti (2003); Subramaniam &Marimuthu (2010)
	2.I spend using credit card to earn points and exchange for gifts	
	3.I was attracted by the cash rebate system, thus I always spend using credit card	
	4.I do not need to provide previous bills settlement of credit cards when I am applying another credit card	

	5.The bank offers me a credit card so I accept it	Teoh, Chong
	6.I got my credit card because the agent approached me in the shopping center and gave me a credit card	& Yong
		(2013
	7.It is easy for me to apply for more credit cards from bank once I owned a credit card	0
	8.I only need to pay the minimum required amount monthly if I cannot afford to pay in full	
	9.I always pay only the minimum required amount as I want to keep more money on hand	
Lifestyle	1.I buy many things with a charge on credit card	Plummer
	2.I like to pay cash for everything I buy	(1971)
	3.I love the outdoor	
	4. I stay home most evening	
	5. Advertising can't sell me anythingI don't want	
	6. When I must choose between the two, I usually dress for fashion not for comfort	
	7. I do more things socially most of my friends	
	8. I buy at least three suits a year	
	9. It is good to have charge accounts.	

3.9.2 Demographic profile

The respondents were asked to fill in the following demographic profile stated below.

For more information, please see Appendix A

1. Gender

2. Age

3. Income

4. Level of education

3.10 Data analysis techniques

The theoretical framework and its hypothesis were tested using SPSS statistical software package (version 20). There are many techniques employed in the analysis, namely, screening the data before data analysis and selecting the appropriate data analysis strategy (Sekaran, 2003).

3.10.1 Data screening

Data screening was carried out to ensure that the results of the analysis can be validly interpreted (Meyers, Gamst, & Guarino, 2012). Data screening process contains a number of steps in order to ensure that the characteristic of data may not negatively influence the results. It identifies data entry errors and to examine how appropriately the data meets the statistical assumptions which involves missing data, treating outliers, descriptive statistics of variables, normality, linearity, homoscedasticity, independence of error, and multicollinearity.

3.10.1.1 Missing data

Missing data is an essential step before testing the collected data. It is considered a vital part before data analysis since data is often riddled with mistakes and data entry errors which completely affect the results of analysis result (Hair, Anderson, Babin, & Black, 2010; Pallant, 2013). Prior to examining the research hypothesis, variables were tested for accuracy of missing values, data entry and satisfaction of the assumptions for multivariate analysis. Missing data refer to cases where valid values of one or more variables are entered by mistakes or are not available for data analysis, especially multivariate analysis (Hair et al*.,* 2010).

In addition, lack of understanding of some questionnaire items, unwillingness to answer or an oversight of some items are issues that must be taken into consideration because of their negative impact on the results. In this research, the data have been collected using five-point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree". The data were thoroughly checked to find whether the answers were within the range of 1 to 5.

3.10.1.2 Treatment of outliers

Treatment of outliers is an essential step after treating missing data as it will affect the result of any data analysis (Sekaran & Bougie, 2013). There are many reason causing outliers including incorrect data entry. In this study, a few cases were detected and removed.

3.10.1.3 Normality

The important data analysis technique when conducting a research is related to the normality of the data. Normality test aims to determine whether the data is normally distributed or not. As stated by Hair (1998), normal distribution is important because it provides the underlying basis for the inference made by the researcher.

Coakes & Steed (2007) stated that there a few statistics available to test normality such as normal QQ plot, Histogram, Kurtosis, Skewness, and stem and leaf plot. Kurtosis and Skewness are the most popular way used by researcher for describing the shape of the distribution of data. The observed distribution is exactly normal if its mean value for kurtosis and skewness is zero. A positive value for kurtosis is peaked

while the value for skewness is positive skewed. If there is a negative value for kurtosis, it is flatter while negative value for skewness is a negative skew.

3.10.1.4 Linearity

Linearity, which refers to the linear relationship of variables, is a statistical technique that tests the extent the change in independent variable is linked with the dependent variable. According to Hair (2010), Meyers et al. (2012), and Pallant (2013), one of the ways of assessing the linearity is to run the regression and examine the residual value (scatterplots). When the plots are close to the diagonal line, it indicates linearity by looking at the residual plots from the SPSS result (Pallant, 2013).

3.10.1.5 Multicollinearity

Multicollinearity indicates the situation in which the independent variables are extremely correlated to one another (Sekaran & Bougie, 2013). According to Sekaran and Bougie (2013), correlation values of any study must be under the threshold of 0.70 while any correlation values that is higher than 0.70 indicates the presence of multicollinearity.

There are two measures for examining multicollinearity, either by tolerance (R) value and variance inflation factor (VIF) value where the recommended value of tolerance is 0.10 and for VIF are 10 (Hair et al., 2010; Uma & Roger, 2013).

3.10.2 Descriptive analysis

Descriptive analysis is the technique which presents description of the overall responses obtained from the data collected. Descriptive analysis may be particularly

useful in order to carry out the analysis of the demographic profile and to identify the credit card usage behavior among Malaysian Muslim consumers.

The descriptive statistics option in SPSS, namely, frequency and standard deviation, was used to understand the profile of the respondents. This technique presents a description of the overall responses obtained, and at the same time, it was used to examine the data for erroneous entries.

3.10.3 Correlation analysis

According to Pallant (2010), simple bivariate correlation is also known as zero-order correlation and is the most common test of linear relationship. Coefficient may be a range of possible values from +1 to -1. The value of zero implies that there is no correlation between the two variables at all, while a value closer to +1 or -1 implies a better correlation. The perfect correlation is +1 or -1 which explains that the value of one variable can be determined precise by knowing the value of the other variable.

According to Sekaran & Bougie (2013), Pearson correlation is a tool to determine correlation between a criterion/dependent and one or more independent variables. The analysis is used in order to test the strength of correlation and the direction which exist within the two variables. This gives an indication of the direction (whether it is positive or negative) as well as the relationship strength.

3. 10.4 Multiple regression

Multiple regression analysis is the study of how a dependent variable is related to two or more independent variables. Multiple regression analysis is used to measure the relationship between several independent variables and the dependent variable (Pallant, 2013). Multiple regression analysis was also used to analyze the data collected in this study because multiple regression analysis is appropriate when studying collective and separate contributions of two or more independent variables (Pallant, 2013).

In addition, it will also show how much of the variance in the dependent variable is being influenced by the independent variables through R square (R^2) that is obtained from the analysis.

3.11 Summary

In this chapter, all the steps of the research methodology applied in this study had been discussed. This chapter used research design which is based on quantitative approach through the use of the structured survey questionnaire. This chapter conducted a pilot study to deal with validity issues. The population, sample size, and the survey procedures were discussed along with the minimum sample size requirement. The analysis uses SPSS 20.0 and the results of the analysis will be presented in Chapter 4.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter includes the result of analysis in SPSS 20.0 in which the data were gathered from the questionnaire distributed to the selected respondents. The result of descriptive analysis will be discussed and more importantly, the relationship between all the variables is also discussed in order to confirm if the objectives of the study are fully achieved. In addition, a summary of the results and data analysis will be presented at the end of the chapter.

4.2 Response rate

In order to collect sufficient number of usable data, a total of 98 questionnaires were distributed to the respondents. Out of 98 questionnaires, 90 were returned which suggests a response rate of 91.83%. According to Sabri (2006), the response rate within the universal range is from 46% to 96%. Therefore, it can be considered adequate for the researcher to conduct data analysis.

After a thorough checking of the questionnaires that were returned, it shows that only 86 were used for analysis. Hence, the useable response rate is 87.75%.

Table 4.1
Summary of the total questionnaires and the response rate

Minimum sample size of the study	86
Distributed questionnaires	98
Returned questionnaires	90
Returned but not usable questionnaire (outliers)	4
Response rate	91.83%
Usable response rate	87.75%

4.3 Reliability test

Table 4.2
Summary of reliability analysis

List	Variable	No. of item	Cronbach's Alpha
DV	Malaysian Muslim consumer credit card usage behavior	7	0.910
IV1	Financial Knowledge	8	0.849
IV2	Attitude toward credit card	10	0.852
IV3	Bank Policies	9	0.851
IV4	Lifestyle	9	0.817

Based on the result for reliability test using SPSS 20.0 Cronbach's Alpha for Muslim consumer credit card usage behaviour is 0.909, financial knowledge is 0.820, attitude toward credit card is 0.864, bank policies are 0.867, and lifestyle is 0.777. The reliability analysis of the factor was tested using Cronbach's Alpha in order to test the internal consistency reliability of the scale. For the purpose of the study, any Alpha

value that is 0.5 or less generally indicate unsatisfactory those exceeding 0.6 indicate

acceptable and over 0.8 are considered significant (Sekaran & Bougie, 2013).

4.4 Data screening

4.4.1 Missing data

A frequency test has been carried out for every variable to detect any missing

responses. Based on the frequency test, all the returned questionnaires were found to

have no missing responses. A review of the data set showed that there were complete

responses in all parts of the questionnaire.

4.4.2 Outlier detection

Outliers is another essential step after the missing data checking in the data screening

process which have a high influence on the result of any statistical data analysis. The

use of any multivariate technique calls for the identification and treatment of outliers

in the responses (Hair et al., 2006). The mahalanobis distance to detect the outliers

was examined through Boxplot as recommended by Meyers et al. (2012) and Pallant

(2013).

According to Pallant (2013), IBM SPSS defines points as outliers first, if it appears as

little circle with a number attached (ID number of the case) which means it extend 1.5

box length from the edge of the box. Second, extreme points indicated with an

asterisk, *) that extend more than three box-lengths from the edge of the box. The

results show data sets or survey form number 4, 46, 8, and 50 are identified as

outliers. If points appear like this, the researcher has to decide what to do with them subjectively (Pallant, 2013).

These surveys form have to be discarded because it is possible that these respondents might have misinterpreted the instructions that may lead to inaccurate findings (Bhatti, Hee, & Sundram, 2012). However, if the researcher feels that the data set is very important for the research, the researcher can keep them for analysis (Hair et al., 2006; Pallant, 2013). For this study, the researcher subjectively removes four data sets for accurate findings. Figure 4.1 shows the result of Mahalanobis distance in the boxplot.

Figure 4.1
Mahalanobis distance
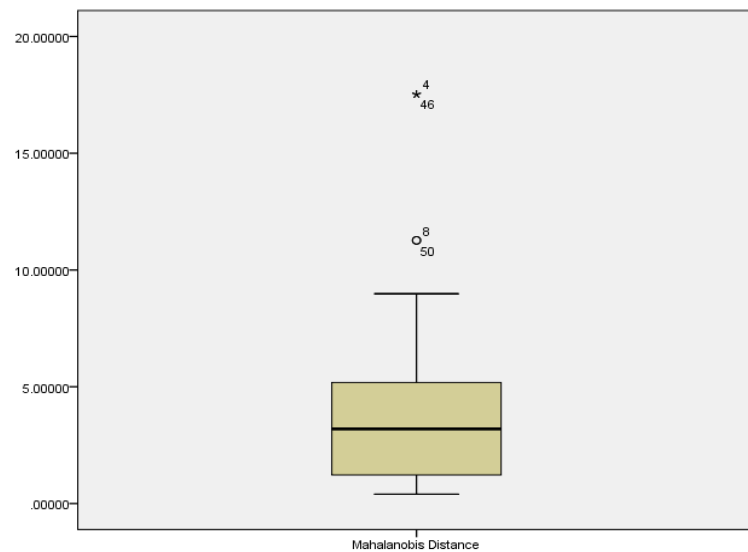
4.4.3 Normality test

Normality is the fundamental assumption for multivariate techniques such as multiple regressions, indicating the shape of the distribution of the data for an individual metric variable and it is similar to the normal distribution. Hair et al. (2010) said that normality as the benchmark for statistical approach. The difference in the normal

distribution is supposed to be small. For the large variation, this will cause all statistical measurements resulting from the analysis to be invalidated (Hair et al., 2010).

There are many ways to test whether the data distribution deviates from the normal distribution. One of these is Normal Q-Q plot which is used to distinguish the normality of the data. Data that has achieved the normal distribution on a normal probability plot will align the plots in a straight line (Coakes & Steed, 2003). Skewness and kurtosis however, are the most popular ways used by many researchers for describing the shape of the data distribution.

Skewness is an indicator that shows to what extent the distribution of data leans from the center (symmetry) around the mean (Hair et al., 2010). According to Hair et al. (2010), values of skewness that are outside the range of +1 to -1 imply a substantially skewed distribution. In this study, the skewness values of all variables are within the +1 to -1 limit.

Kurtosis is a test of flatness or peakedness of the data distribution. Negative values for kurtosis refer to shape flatter than normal while the positive value for the kurtosis refers to the data distribution more peaked than normal (Hair et al., 2010). Similar to skewness measurements, kurtosis is considered within a normal range if it falls anywhere between +1 to -1 (Fabrigar, Wegener, MacCallum, & Strahan, 1999; George & Mallery, 2006). Kurtosis has been examined and found that all variables are within the +1 to -1 limit. Table 4.3 illustrates the skewness and kurtosis of each variable.

Table 4.3
Summary of skewness and kurtosis value of the variables

Variables	Skewness		Kurtosis	
	Statistics	Std. Error	Statistics	Std. Error
Financial knowledge	-0.568	0.291	-0.007	0.574
Attitude toward credit card	0.370	0.291	0.938	0.574
Bank policies	-0.203	0.291	0.39	0.574
Lifestyle	-0.331	0.291	0.507	0.574
Credit card usage behavior among Malaysian Muslim consumers	0.368	0.291	0.062	0.574

4.4.4 Testing the homoscedasticity, linearity, and independence errors

This study investigates the homoscedasticity, linearity, and independence of the errors

by looking at the scatterplot of the residuals and predicted value (Pallant, 2013).

Figure 4.2
Scatterplot of the residuals (Dependent variable: Credit card usage behavior among Malaysian Muslim consumers)
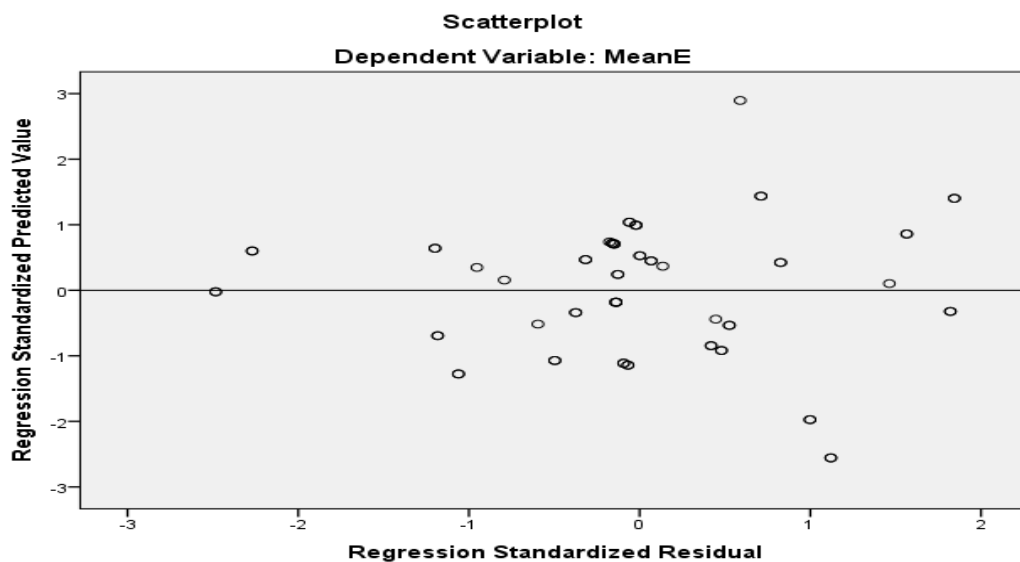
The scatterplot in Figure 4.2 shows that there was no clear relationship between the residual and the predicted value. Following the suggestion of Hair et al. (2010), since the scatterplot showed no clear relationship between residuals and predicted values, it confirms the assumption of homoscedasticity, linearity, and independence of residuals.

4.4.5 Multicollinearity

Multicollinearity appears when any individual predictor variable is highly correlated with another group of predictor variables (Sekaran & Bougie, 2013). Based on the multicollinearity results illustrated in Table 4.4, the results shows that the tolerance value range between .383 to .536, and the variance inflation factor (VIF) value is ranging from 1.865 to 2.612. Showing that the tolerance value is substantially greater than 0.10 and the VIF is less than 10, it can be concluded that there is no multicollinearity among the variables.

Table 4.4
Testing for multicollinearity on assessment of the tolerance and VIF values

Variables	Tolerance	VIF
Financial knowledge	0.532	1.878
Attitude toward credit card	0.445	2.249
Bank policies	0.383	2.612
Lifestyle	0.536	1.865

4.5 Demographic profile of respondent

Table 4.5
Distribution of the respondent

List	Item	Frequency	%
Gender	Male	28	32.6%
	Female	58	67.4%
Age	21-30	61	70.9%
	31-40	15	17.4%
	41-50	10	11.6%
Education level	Degree	50	58.1%
	Diploma	25	29.1%
	STPM	6	7.0%
	SPM	5	5.8%
Income	900-1500	58	67.4%
	1600-2000	21	24.4%
	2100-2500	2	2.3%
	2600-3000	5	5.8%
Status	Single	20	23.3%
	married	63	73.3%
	widow/widower	3	3.5%

In this study, the questionnaire asked each respondent to provide demographic data such as gender, age, education level, income, marital status. Thus, the result in Table 4.5 revealed the demographic profile of 86 respondents consisting of the COB and COLGIS administrative staff in UUM. Based on the table the result showed that the number of female respondent is more than the number of a male respondent. Out of 86 respondent 58 (67.4%) of them are female while the other 28 (32.6%) are male.

With respect to age, 61 (70.9%) of the respondents are between 21-30 years old, 15 (17.4%) are between 31-40 years old, and 10 (11.6%) are between 41-50. Therefore the finding indicate that the respondent age category between 21-30 years old is the

largest number of respondent in this study followed by the age category between 31-40 years old, as well as the respondent age between 41-50.

4.6 Descriptive analysis

Descriptive statistics, such as mean and standard deviation were used as a way of explaining the situation of each construct variable (dependent and independent). The mean value of the variables was established using a five point Likert scale in which the greater the number of the five point Likert scale, the greater the goodness will be for each variable. According to Bhatti, Hee & Sundram (2012), values close to zero are considered bad, while values close to five are considered better, a value score equal or less than were considered low, while a value score equal or more than 4 a consider high agreement and a mean score of 3 was considered as a moderate agreement (Hair, 2006). A descriptive analysis of all five variables is illustrated in Table 4.6.

Table 4.6
Descriptive statistics for variables

Component	N	Minimum	Maximum	Mean	Std. Deviation
Consumer behaviour	86	1.00	4.43	3.1595	.97666
Financial knowledge	86	1.63	5.00	3.7863	.66223
Attitude toward credit card	86	1.40	4.10	2.8979	.76179
Bank policies	86	1.33	4.89	2.9610	.74394
Lifestyle	86	1.67	4.67	3.5245	.58934

The Table 4.6 illustrates the mean, min, max and standard deviation of the variable. For this study the mean value is generally moderate in nature respectively. The mean score between financial knowledge, attitude toward credit card, bank policies, and lifestyle ranges from 2.80 to 3.78 which reflect some moderate agreement on Muslim consumer credit card usage behavior. The standard deviation is ranging from 0.58 to 0.97. The value implies that there is variability in answering the questionnaire among the respondents. In other words, the answer of the respondent is somehow different from one respondent to another.

4.7 Pearson correlation coefficient analysis
Table 4.7
Pearson correlation coefficient

Variable	correlation	Sig.
Financial knowledge	0.206*	.047
Attitude toward credit card	0.592**	.387
Bank policies	0.744**	.000
Lifestyle	0.306**	.424

Table 4.7 shows the result for the correlation between financial knowledge, attitude toward credit card, bank policies, lifestyle with Malaysia Muslim consumer, credit card usage behaviour. The (**) sign show that there is significant relationship at the confident level of 99% where the value of significant is 0.01 or less while the star (*) sign shows that there is a significant relationship at the confident level of 99% where the value of significant is 0.05.

Based on the table shown, the result indicate that the correlation between financial knowledge and Malaysian Muslim consumer credit card usage behaviour, the correlation between both variable is 0.206 in which the correlation is significant at 0.05 level. In additional the significant value for correlation of financial knowledge is 0.047. This show there a positive relationship between financial knowledge and Malaysian Muslim consumer credit card usage behaviour. As a result hypothesis (H1) is accepted.

As for attitude toward credit card factor and Malaysian Muslim consumer credit card usage behaviour, the correlation between both variable is 0.592 which is significant at

0.05 level and the significant value between both variable is 0.387. This indicate that there a no correlation between both variable. Thus, hypothesis (H2) is rejected.

As for bank policies factor and Malaysian Muslim consumer credit card usage behaviour, the correlation between both variable is 0.744 in which the correlation is significant at 0.05 levels. In addition, the significant value for correlation of bank policies is 0.000. This show that there a positive relationship between bank policies and Malaysian Muslim consumer credit card usage behaviour. As a result, the hypothesis (H3) is accepted.

Lastly the correlation between lifestyle and Malaysian Muslim consumer credit card usage behaviour is also shown in Table 4.7. It can be seen that, the correlation of both variable is 0.306 whereby the correlation is significant at 0.05 level. Besides that, the significant value for the correlation is 0.424 so it can be confirm that there is no correlation between both variable. As a result the hypothesis (H4) is rejected.

4.8 Multiple regression analysis

According to Avana, Delahaye & Sekaran, (2001), multiple regressions is a measure that includes one dependent variable with two or more independent variables. The test is used to assess simultaneous impact of many independent variables on a dependent variable. This measure helps the researcher to understand how much of the variance in the dependent variable is explained by a set of independent.

Table 4.8
Multiple regression analysis

Model	Standardized coefficient Beta	t	Sig.
(Constant)		-2.072	.041
Financial knowledge	.171	2.019	.047
Attitude toward credit card	.086	.870	.387
Bank policies	.677	6.826	.000
Lifestyle	.066	.803	.424

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.781[a]	.610	.591	.62493

The regression between Malaysian Muslim consumer credit card usage behaviour and financial knowledge, attitude toward credit card, bank policies, lifestyle. The Table 4.8 show that the value of R-Square for this study is 0.610 which indicates that 61.0% of the variation in Malaysian Muslim consumer credit card usage behaviour can be explained by four independent variables (financial knowledge, attitude toward credit card, bank policies and lifestyle).

Based Table 4.8 shows the result of the multiple regression. The beta (β) for financial knowledge and bank policies is significant and positive, showing that there is positive relationship between financial knowledge and bank policies which Malaysian Muslim consumer credit card usage behaviour. Financial knowledge (β=0.171, $p<0.05$) bank policies (β=0.677, $p<0.05$). This support the hypothesis one (H1) There is a

relationship between financial knowledge and credit card usage behaviour among Malaysian Muslim consumers and hypothesis three (H3) There is a relationship between bank policies and credit card usage behaviour among Malaysian Muslim consumers.

As for attitude toward credit card and lifestyle factor beta (β) ($\beta=0.086$, $p>0.05$) ($\beta=0.066$, $p>0.05$) are found to be insignificant since the significant value is above 0.05. Thus, this does not support the hypothesis two (H2) there is a positive relationship between attitude toward credit card and credit card usage behaviour among Malaysian Muslim consumers and (H4) there is a positive relationship between lifestyle and credit card usage behaviour among Malaysian Muslim consumers.

4.9 Summary

Table 4.9 summarizes the results of multiple regression in relation to the hypotheses

of this study.

Table 4.9
Result of hypothesis testing

No.	Hypothesis	p-value	Result
H1	There is a positive relationship between financial knowledge and credit card usage behaviour among Malaysian Muslim consumers.	0.047<0.05	H1 is accepted
H2	There is a positive relationship between attitude toward credit card and credit card usage behaviour among Malaysian Muslim consumers.	0.387>0.05	H2 is rejected
H3	There is a positive relationship between bank policies and credit card usage behaviour among Malaysian Muslim consumers.	0.000<0.05	H3 is accepted
H4	There is a positive relationship between lifestyle and credit card usage behaviour among Malaysian Muslim consumers.	0.424>0.05	H4 is rejected

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

This topic elaborated and identified the factors that influence the credit card usage behaviour among Malaysian Muslim consumers such as financial knowledge, attitude toward credit card, bank policies, and lifestyle. It is important for any research that the result obtained can answer the research questions and can achieve the objectives of the study. This chapter will elaborate the findings based on the results obtained in Chapter 4.

5.2 Recapitulation of the study

The study was conducted based on the earlier objective mentioned in Chapter 1. In this chapter, the discussion is continued based on the results and findings obtained. Below are the research objectives of the study:

1- To assess the relationship between financial knowledge and Malaysian Muslim consumer credit card usage behaviour.

2- To assess the status of attitude toward credit card and Malaysian Muslim consumer credit card usage behaviour.

3- To examine the relationship between bank policies and Malaysian Muslim consumer credit card usage behaviour.

4- To examine the relationship between lifestyle and Malaysian Muslim consumer credit card usage behavior.

5.3 Discussion

The main focus of this study is Malaysian Muslim consumer credit card usage behaviour, which is the fundamental factor that plays a vital role on how well Muslim consumers manage their behavior on credit card usage. Several researchers have studied consumer credit card usage behavior by analyzing its factor such as financial knowledge, attitude toward credit card, bank policies, and lifestyle but not specific to Muslim consumer credit card usage behavior (Jusoh & Lin, 2012).

5.3.1 Financial knowledge and Malaysian Muslim consumer credit card usage behaviour

The first research question deals with the relationship between financial knowledge and credit card usage behavior among Malaysian Muslim consumers. Accordingly, hypothesis one (H1) states that, "there is a significant relationship between financial knowledge and credit card usage behavior among Malaysian Muslim consumers". The result of the regression analysis shows that there is a positive and significant relationship between financial knowledge and credit card usage behavior among Malaysian Muslim consumers ($\beta=0.171$, $p<0.05$). The value of beta in the model implies that the variable has the strong influence on credit card usage behavior among Malaysian Muslim consumers which answers the research question one that states, "What is the relationship between financial knowledge and Malaysia Muslim

consumer credit card usage behaviour" and supports the hypothesis one (H1) that states, "there is a significant relationship between financial knowledge and credit card usage behavior among Malaysian Muslim consumers".

The result of this study is similar to Chien & Devaney (2005), Hilgert and Howarth (2003), and Worthingthon (2006) which show evidence on the positive relationship between financial knowledge and consumer credit card usage behaviour. In additional, this study supports Chien & Devaney (2005) who confirms that there is significant relationship between financial knowledge and consumer credit card usage behaviour.

Therefore, the current study result shows that financial knowledge give positive and significant influence on credit card usage behavior among Malaysian Muslim consumers. This means that financial knowledge is one of the factors that influence credit card usage behavior among Malaysian Muslim consumers.

5.3.2   Attitude toward credit card and Malaysian Muslim consumer credit card usage behaviour

The second research question deals with the relationship between attitude toward credit card and credit card usage behavior among Malaysian Muslim consumers. Hypothesis two (H2) states that, "there is a significant relationship between attitude toward credit card and credit card usage behavior among Malaysian Muslim consumers". From the result obtained in the Chapter 4, it appears that attitude toward

credit card has no relationship with Malaysian Muslim consumer credit card usage behaviour (β=0.086, p>0.05).

The result of this study does not supports Godwin (1997), Norton (1993), Leah and Turner (1999), Chen and Devaney (2001) which found evidence on the positive relationship between attitude toward credit card and consumer credit card usage behaviour. Maybe the sample of the current study is focus only on Muslim consumer, the attitude of Muslim consumer is different than a non-Muslim consumer because of the regulation of Islamic law that bring the different result from previous study.

5.3.3 Bank policies and Malaysian Muslim consumer credit card usage behaviour

This research attempts to identify the factors that influence the Malaysian Muslim consumer credit card usage behaviour in University Utara Malaysia thus, bank policies factor could become one of the factors that can influence the credit card usage behavior among Malaysian Muslim consumers.

The third research question deals with the relationship between bank policies and credit card usage behavior among Malaysian Muslim consumers. Accordingly, hypothesis three (H3) states that, "there is a significant relationship between bank policies and credit card usage behavior among Malaysian Muslim consumers". The result of the regression shows that bank policies have the highest positive beta value and have a significant influence on credit card usage behavior among Malaysian Muslim consumers (β=0.677, p<0.05). This answers the third research question that

states, "what is the relationship between bank policies and Malaysian Muslim consumer credit card usage behaviour" and supports hypothesis three (H3) that states, "there is a significant relationship between bank policies and Malaysian Muslim consumer credit card usage behaviour".

The result of this study also supports the study of Chakravorti (2003), Subramaniam & Marimuthu (2010) and Barker & Sekerkaya (1992) that found evidence on the relationship between bank policies and consumer credit card usage behaviour. This study supports the previous research that confirms bank policies give positive and significant influence on Malaysian Muslim consumer credit card usage behaviour.

Therefore the current study result shows that bank policies give the strongest positive and significant influence on credit card usage behavior among Malaysian Muslim consumers. This means that the more favourable is the regulation on banking to consumer, the higher is the increase in the level of credit card usage behaviour among Malaysian Muslim consumers (Teoh *et al*., 2013). Aggressive marketing strategy by bank and flexible policies make bank policies the most significant influence to Malaysian Muslim consumer credit card usage behaviour.

5.3.4   Lifestyle and Malaysian Muslim consumer credit card usage behavior

This research attempts to identify the factor that influences the Malaysian Muslim consumer credit card usage behaviour. Lifestyle becomes one of the factors that could influence the credit card usage behaviour among Malaysian Muslim consumers.

The fourth research question deals with the relationship between lifestyle and credit card usage behaviour among Malaysian Muslim consumers. Hypothesis four (H4) states that, "there is a significant relationship between knowledge and credit card usage behaviour among Malaysian Muslim consumers". The regression reveals that lifestyle has no significant influence on credit card usage behaviour among Malaysian Muslim consumers (β= -0.001, p<0.05). Therefore, it doesn't support hypothesis four (H4). This might be due current study focus only on Muslim consumer, Muslim lifestyle which is different from non-Muslim because of Islamic regulation and law that prevent the different lifestyle between Muslim and non-Muslim.

The result of this study does not support the study of Krishnan (2011); Jamshidi & Hussin (2013), and Malhotra & Peterson (2006) who found significant relationship between lifestyle and consumer credit card usage behaviour. On the other hand, this study supports Krishnan (2005) who found that there is no significant relationship between lifestyle and consumer credit card usage behaviour because of the different culture in the Indian that their lifestyle and culture is different from other study.

5.4 Contribution of the study

The findings of this research are useful to many parties due to the prominence of to the Islamic banking sector in Malaysia. Thus, the finding provides contribution and implications that are classified in the following section.

5.4.1 Theoretical contributions

This research provides additional empirical evidence on the factors that affect credit card usage behavior among Malaysian Muslim consumers. The study also provides valuable data to university and academicians, by which where they would be able to offer effective course to students, seminars, and other programs about the effect of financial knowledge, attitude toward credit card, bank policies, and lifestyle on credit card usage behavior among Malaysian Muslims consumers. This may increase the level of understanding about credit and the behavior of consumer. The study also gives some insights to academicians to write new literature related to this study and come out with better findings.

5.4.2 Practical contributions

This study provides some insights to the community on the influence of financial knowledge, attitude toward credit card, bank policies, and lifestyle on credit card usage behavior among Malaysian Muslims consumers. This can be practically useful especially to working youth and parents who have to manage their credit card. In terms of policymaking, this study provides benefit to the policy maker especially to the government to ascertain the factor that might influence the credit card usage behavior among Malaysian Muslim consumers. With this, the government could develop more programs and events to enhance financial knowledge among Muslim consumers. In addition, the government can establish and to improve further Islamic financial education in Malaysia. This study also provides an important data to

financial advisor to identify the credit card usage behavior among Malaysian Muslim consumers.

5.5 Limitations of the study

There is some limitation that appeared in the current study. First, due to time constraints, this study is limited only to the staff of COB in University Utara Malaysia to represent the Muslim consumer. The chosen population is located in University Utara Malaysia, Kedah. The researcher faced some scarcity like funds, books, and research papers for the purpose of the study.

Furthermore, the reliance on survey methodology gives a possibility that respondent expresses their beliefs and not only their action. In spite of these limitations, these results of the research provide a platform for future assessment and analysis to improve the study of credit card usage behaviour among Malaysian Muslim consumers. Due to the adoption of the questionnaires this research might not be able to capture the actual behaviour of the Muslim consumer.

5.6 Recommendation for future research

This research only investigates COB staff in University Utara Malaysia. Thus, this study could be generalized to a large number of populations by examining the Malaysian Muslim consumer credit card usage behaviour to Muslim in other states in Malaysia. In addition, this could be extended through cross country studies and compare Malaysia and other countries in Muslim consumer credit card usage behaviour.

Furthermore, lifestyle does not significantly influence credit card usage behaviour among Malaysian Muslim consumers. Hence, these results need further investigations which may be carried out for future research to improve our knowledge about it and to provide more details regarding its influence on credit card usage behaviour among Malaysian Muslim consumers

Another useful research worth pursuing is to carry out other independent variables specially by examining the existing relationship between financial knowledge, attitude toward credit card, bank policies, and lifestyle toward Muslim consumer credit card usage behaviour.

5.7 Conclusion

This study identifies the factors that could influence the credit card usage behaviour among Malaysian Muslim consumers. The factors are financial knowledge, attitude toward credit card, bank policies, and lifestyle. The findings of this study have identified that financial knowledge, attitude toward credit card, and bank policies, have positive and significant influence on credit card usage behaviour among Malaysian Muslim consumers. Moreover, bank polices have the strongest influence among the three variables based on the regression results.

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