THE FACTORS THAT INFLUENCE IMPULSE BUYING BEHAVIOR: AN EMPIRICAL STUDY OF MUSLIM CREDIT CARD HOLDERS IN MALAYSIA

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THE FACTORS THAT INFLUENCE IMPULSE BUYING BEHAVIOR: AN EMPIRICAL STUDY OF MUSLIM CREDIT CARD HOLDERS IN MALAYSIA

ABSTRACT

The impulse buying research was substantially conducted in developing countries by the previous researcher. However, this impulse buying behavior study was rarely conducted in Asian countries, especially in Malaysia. The empirical study of impulse buying in Malaysia is limited. Besides, a study of the variables of materialism, sale promotion, money and time availability, hedonic motivation, self-*hisbah*, credit card usage, and religiosity also rather sparsely have been done in impulse buying behavior study. In Malaysia, impulse buying behavior had been reported as one of the main factors contribute towards debt woes. Therefore, this study would like to examine the relationship of situational variable (sale promotion, money and time availability) and individual variable (materialism, hedonic motivation, and self-*hisbah*) as well as the function of credit card usage as mediation variable and religiosity as moderator variable with impulse buying behavior among Muslim credit card holders in Malaysia. This research framework was developed and tested based on the Theory of Buyer Behavior, Theory of *Maqasid Shariah*, and Engel, Blackwell, and Miniard Model (EBM Model). In terms of instrument development, this study instrument consisted of 81 items adopted and adapted from previous studies. Questionnaires were distributed to 1,000 Muslim credit card holders in Malaysia via purposive and snowball sampling and only 710 questionnaires were returned safely and only 635 usable questionnaires for final data analysis. The analysis was performed via Partial Least Square (PLS-SEM) analysis. The result found that materialism, sale promotion, money and time availability, and hedonic motivation have a significant positive relationship on impulse buying behavior, whilst self-*hisbah* has a significant negativee relationship with impulse buying behavior. This result also found

credit card usage mediates the relationship between materialism, sale promotion, and hedonic motivation on impulse buying behavior but does not mediate the relationship between money and time availability on impulse buying behaviour. In addition, the result also shows the variable of religiosity does not moderate the relationship between materialism and hedonic motivation and impulse buying behaviour. In conclusion, the Theory of Buyer Behavior, Theory of *Maqasid Shariah*, and Engel, Blackwell, and Miniard Model (EBM Model) are an appropriate basic theory of this study as it can clarify the relationship between the variables.

Keywords: Impulse Buying Behavior, Credit Card Usage, Partial Least Square (PLS-SEM), Religiosity

FAKTOR-FAKTOR YANG MEMPENGARUHI TINGKAH LAKU MEMBELI TANPA PERANCANGAN: KAJIAN EMPIRIKAL DALAM KALANGAN PEMEGANG KAD KREDIT MUSLIM DI MALAYSIA.

ABSTRAK

Kajian berkaitan dengan tingkah laku membeli tanpa perancangan sudah banyak dilaksanakan di negara-negara yang membangun oleh para penyelidik yang terdahulu. Walau bagaimanapun kajian tingkah laku membeli tanpa perancangan ini tidak banyak dilaksanakan di negara Asia khususnya di Malaysia. Kajian empirikal berkaitan dengan tingkah laku membeli tanpa perancangan ini sangat terhad di Malaysia. Di samping itu, kajian berkaitan dengan pemboleh ubah seperti materialisme, promosi jualan, ketersediaan wang dan masa, motivasi hedonik, kawalan kendiri, penggunaan kad kredit, dan keagamaan juga tidak banyak dilakukan dalam kajian tingkah laku membeli tanpa perancangan. Di Malaysia, tingkah laku membeli tanpa perancangan telah dilaporkan sebagai salah satu sebab utama yang menyumbang kepada masaalah hutang. Oleh itu, kajian ini bertujuan untuk mengkaji hubungan di antara pemboleh ubah situasi (promosi jualan dan ketersediaan wang dan masa) dan pemboleh ubah individu (materialisme, motivasi hedonik, kawalan kendiri, penggunaan kad kredit, dan keagamaan) dengan tingkah laku membeli tanpa perancangan di kalangan pengguna kad kredit yang beragama Islam di Malaysia. Rangka kerja kajian ini dibangunkan dan diuji berdasarkan Teori Perilaku Pembeli, Teori Maqasid Syariah dan Model Engel, Blackwell, dan Miniard (EBM Model). Dari segi pembangunan instrumen, terdapat 81 soalan yang telah diadaptasi dari kajian lepas yang mana bersesuaian dengan kajian ini. Sebanyak 1000 soal selidik diedarkan kepada semua pemegang kad kredit yang beragama Islam di Malaysia melalui kaedah persampelan bertujuan (Purposive) dan bola salji (Snow Ball). Sebanyak 710 soalan yang berjaya dikutip semula dan hanya 635 soalan yang boleh digunakan untuk tujuan analisis yang sebenar. Analisis data telah dijalankan dengan menggunakan

analisis Partial Least Square (PLS-SEM). Hasil kajian menunjukkan pemboleh ubah materialisme, promosi jualan, ketersediaan wang dan masa dan motivasi hedonik mempunyai hubungan positif yang signifikan dengan tingkah laku membeli tanpa perancangan, manakala kawalan kendiri mempunyai hubungan negatif yang signifikan dengan tingkah laku membeli tanpa perancangan. Hasil kajian ini juga menunjukan penggunaan kad kredit menjadi pengantara di antara hubungan pemboleh ubah materialisme, promosi jualan, dan motivasi hedonik dengan tingkah laku membeli tanpa perancangan dan tidak berfungsi menjadi pengantara untuk pemboleh ubah ketersediaan wang dan masa. Sementara itu, hasil kajian ini juga menunjukan faktor keagamaan tidak menunjukan kesan moderator terhadap hubungan di antara materialisme dan motivasi hedonik dengan tingkah laku membeli tanpa perancangan. Kesimpulanya, penggunaan Teori Perilaku Pembeli, Teori Maqasid Syariah, dan Model Engel, Blackwell, Miniard (EBM Model) adalah teori asas yang sangat sesuai dengan kajian ini kerana dapat menjelaskan hubungan antara pembolehubah dengan sebaiknya.

Kata Kunci: Tingkah Laku Membeli Tanpa Perancangan, Penggunaan Kad Kredit, Partial Least Square (PLS-SEM), Keagamaan.

ACKNOWLEDGEMENT

TABLE OF CONTENT

CHAPTER ONE: INTRODUCTION

CHAPTER TWO: LITERATURE REVIEW

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATION

AIF: Asian Institute Finance

AKPK: Agensi Kaunseling dan Pengurusan Kredit

AVE: Average Variance Extracted

BNM: Bank Negara Malaysia

BR1M: Bantuan Rakyat 1 Malaysia

CB-SEM: Covariance Based Technique

CCU: Credit Card Usage

CCUQ: Credit Card Usage Question

CFA: Confirmatory Factor Analysis

CIMB: Commerce International Merchant Bankers Berhad

CR: Composite Reliability

CSI: Consumer Style Inventory

EBM: Engel-Blackwell-Minard

EFA: Exploratory Factor Analysis

EKB: Engel-Kollat-Blackwell

EPF: Employees Provident Fund

H1a: Hypothesis 1a

H1b: Hypothesis 1 b

H1c: Hypothesis 1c

H1d: Hypothesis 1d

H2: Hypothesis 2

H3: Hypothesis 3

H4a: Hypothesis 4a

H4b: Hypothesis 4b

H4c: Hypothesis 4c

H4: Hypothesis 4d

H5a Hypothesis 5a

H5b: Hypothesis 5b

HM: Hedonic Motivation

HMQ: Hedonic Motivation Question

HTMT: Heterotrait- Monotrait Ration

IBB: Impulse Buying Behavior

IBBQ: Impulse Buying Behavior Question

KMO: Kaiser-Meyer-Olkin

KDNK: Keluaran Dalam Negara Kasar

LV: Louis Vuitton

MAH: Mahalanobis

MTA: Money and Time Availability

MTAQ: Money and Time Availability Question

MTRL: Materialism

MTRLQ: Materialism Question

PLS: Partial Least Square

RCI-10: Religious Commitment Inventory-10

RLG: Religiosity

RLGQ: Religiosity Question

SD: Standard Deviation

SH: Self-*Hisbah*

SHQ: Self-*Hisbah* Question

SP: Sales Promotion

SPQ: Sales Promotion Question

SPSS: Statistical Package for Social Science

SEM: Structural Equation Model

S.W.T: May He be glorified and exalted (Subhanahu wa ta'ala)

UOB: United Overseas Bank

VIF: Variance Inflation Factor

LIST OF APPENDICES

CHAPTER 1: INTRODUCTION

Buying activities is a part of the essential things in consumer life and in business management. Consumer perceived buying activities as part of life routine which are required to do and the retailer perceives anything related to consumerism as essential for business development. Performing buying activities make consumer feel contented as they are able to fulfill their need and demand. While, knowing everything related to consumer behaviour facilitates the retailer in making their strategic marketing plans effectively and efficiently. Great marketing strategies capture the attention of potential consumers, which results to the intention to purchase or purchase impulsively. This situation can be seen every day, consumers do their purchasing activities as they are attracted to the ways retailers display and promote their goods and services.

In Malaysia, consumer expenditure growth sustained at 7.0% in 2017 compared to 6.0% in 2016. Although the increment is moderate, but the spending of emoluments was high and influenced the growth of Malaysia's economy and spending pattern. One of the main factors that influences this is the incentives given by the Government, for instance; employment growth, wage increment, increase in the minimum wage, the rise of household disposable income, the reduction of an employee's EPF contribution from 11% to 8%, a higher amount *of Bantuan Rakyat 1 Malaysia* (BR1M) payout, and the special tax relief for the 2015 assessment year (Central Bank of Malaysia, 2016, 2017). In addition, the credit card remained the highest extensively used payment card in 2016 which contributed 77% of the total transaction amount (Central Bank of Malaysia, 2016,2017) which implies that Malaysian consumers attaching themselves with the credit payment service is increasing. For instance, a survey by the Asian Institute of Finance (AIF) found that 47% of the Generation Y engaged in credit card borrowing where 70%

tends to pay the minimum monthly payment (Madden, 2015). This young group utilizes the credit card payment service for their expenditures such as booking hotel accommodations, buying airline tickets, groceries, and also products of fashion by the credit card (Vijaindren, 2017). While a survey by United Overseas Bank Limited (UOB) Malaysia on the spending pattern of Generation Y found that online spending growth was at 38% in the first six months in 2016 with the Generation Y spending 1.4 times more than other age groups (Ismitz Matthew, 2017). The Malaysians tend to spend beyond what they can afford and frequently indulges in impulse buying behaviours as well as engaged in credit card and personal loans where they obviously find themselves in a debt trap (Ismitz Matthew, 2017). In addition, other study also reported that 40% of online shopping come from online impulse buying (Liu, Li, & Hu, 2013). Accordingly, it is a likelihood that the growth of consumer income, easy access to credit (Parahoo, 2012; Chahal, Sahi, and Rani, 2014; Omar et al. 2014; Cakarnis and D'Alessandro, 2015), new product developments, tempting sale promotions and online shopping (Pradipto, Winata, Murti, & Azizah, 2016) that resulted to the increase of the spending pattern which in turn is expected to influence impulse buying behavior among Malaysian.

Impulse buying behaviour is one of the common type of buying behaviours which is frequently exercised among consumers in this modern age. This behaviour is normal and occurs to anyone intentionally or unintentionally. Previous studies reported that, relatively 62% of purchases decision are made at a time of purchase (Hulten and Vanyushian, 2011) and 30-50 % of purchase comes from impulsive decision (Tariq Khan et al, 2015). While, in the United States, according to a survey by Princeton Survey Research Associates International for Credit Card.com, three out of four Americans have made an impulsive purchase when they feel excited, sad, bored, intoxicated as well as in a bad mood. Men tend to make impulsive buying when intoxicated and women tend to

buy impulsively when they are sad (Merzer, 2014). Meanwhile, in Malaysia, a study by the Asian Institute of Finance (AIF) indicate that impulse buying behaviour was one of the main causes of debt woes among the Generation Y group (Asian Institute of Finance, 2015).

This impulsive buying is triggered by several internal and external factors such as time, location, economy, personality and the ease of purchase which is the main factor that creates impulsive buying among consumers. Ease of purchase is the feeling of pleasure from having enough money and time and the fact that the purchase process requires less physical and mental effort to make. When the consumer has sufficient money and time, experience less physical activity heading to a place of purchase, and has a great schedule of flexibility for shopping at any store, thus, there is a higher likelihood that the consumer will practice impulsive buying (Stern, 1962). For instance, the presence of online shopping stimulated consumers to practice impulse online shopping frequently as this method of shopping is very easy (Akram et al., 2017; Akram et al., 2018). As reported by The Nielsen Global Survey of E-commerce (2014), the number of consumers in Malaysia making online shopping grew in the past two years and more than half of worldwide consumers shopped groceries online (The Nielsen Global Retail Format Preferences Survey, 2015). This demonstrates that the ease of shopping, price promotion, attractive advertisement encourages consumers to practice their shopping activities frequently and it is possible to claim that this situation stimulates the consumer to engage in impulsive buying (Liu et al., 2013). However, there is also another factor that stimulates and influences impulsive purchases among consumers which are categorized into two main areas, namely; situational variable and individual variable.

In the academic field, previous studies conducted on impulse buying behaviour from a retail purchasing context revealed that there are varieties of factors that contribute to this behaviour. As mentioned by Meng and Xu (2012), previous studies on impulse buying focused on three perspectives, namely; individual variables (e.g. lack of self-control), product factors (e.g. low and high price), as well as a situational variable (e.g. store environment). As stated by Sharma, Sivakumaran, and Marshall (2013), further research is essential to investigate the role of individual and situational variables in order to develop a more comprehensive impulse buying conceptual framework in both goods and services. Therefore, to answer this call, this study would like to look at impulse buying behaviour in the goods and services context from consumer and economic administration perspective by incorporating the situational variable and individual variable as the main variables to examine in this impulse buying behaviour study.

Even though, many previous studies have explored on impulse buying behaviour (Badgaiyan and Verma, 2015; Sharma, Sivakumaran, and Marshall, 2010a; Brici et al. 2013; Punj, 2011; Park et al. 2012), however, those studies were mainly focused on the benefit towards the marketer or retailer which lacks study linking to consumer and economic administration side in issues of the impact of impulse buying behaviour. While,in terms of the respondents of study, a study of impulse buying behavior is more likely be conducted among non- specific buyer (Wu and Lee, 2015; Ozer and Gultekin, 2015; Bad./gaiyan and Verma, 2015; Hulten and Vanyushyn, 2011; Chang, Yan, and Eckman, 2014) and among university and college students (Beatty and Elizabeth Ferrell, 1998; Rook and Fisher, 1995; Youn and Faber, 2000; Luo, 2005; Wells, Parpoteeah, and Valacich, 2011; Sultan, Joireman, and Sprott, 2012; Duarte, Raposo, and Ferraz, 2013; Burgess, Yaoyuneyong, and Gibbs, 2014;Thompson and Prendergast,2015; Chuang,

Tian, and Lin, 2015; Lucas and Koff, 2017) but rarely are conducted among spesific group of consumer.

Therefore, this study takes this opportunity by studying the factors that influence and stimulate impulse buying behaviour in aiming to decrease this impulsive buying from different angles of study such as different places, respondents, method, and variables. Precisely, this study examines the factors that influence impulse buying behavior among Muslim credit card holders either by credit or cash transaction and how the factors of religiosity and credit card usage as moderator and mediator variables influence Muslim credit card holder in practicing impulse buying. This study incorporates a framework that classifies independent variables into two categories, namely; situational variables (sales promotion, money and time availability) and individual variables (materialism, hedonic motivation, self-*hisbah,* credit card usage, and religiosity) as well as Muslim credit card holders in Malaysia as the respondents of this study. Hence, the outcome of this study definitely will contribute towards the consumer and country policy maker in aiming to decrease and solve the financial issues among Malaysian. Meanwhile, the selection of variables and respondents of this study is according to less exploration and concern of these variables (materialism, sales promotion, money and time availability, self-hisbah, hedonic motivation, credit card usage, as well as religiosity) and Muslim respondents in impulse buying behaviour study by previous studies. Accordingly, this results this study to be different from previous studies.

1.1 BACKGROUND OF STUDY

In the realm of the customer buying behaviour study, impulse buying behaviour is one of the types of decision making process experienced by the customers during a purchase period. Impulsive buying has been defined in numerous ways such as an

unplanned purchase with less deliberation and accompanied by a feeling of urge, pleasure, as well as enthusiasm to obtain goods and services (Rook, 1987).

This study's general objective is to examine and explore the factors that influence impulse buying behaviour among Muslim credit card holders in Malaysia and how far the factors of religiosity and credit card usage influence impulse buying behavior through incorporating the situational variables (sale promotion, money and time availability) and individual variables (materialism, hedonic motivation, and self-*hisbah*) as independent variables and credit card usage as a mediator variable as well as religiosity as a moderator variable. In addition, this study also observed consumption from an Islamic perspective and how Islam perceives impulsive buying generally. Since there is not much impulse buying studies conducted in Malaysia, therefore, the researcher believes that by undertaking this topic of study, it is imperative to fill the knowledge gap.

The independent variable of this study was selected based on the development of previous studies in impulse buying behaviour. The seven variables of this study which are materialism, sale promotion, money and time availability, hedonic motivation, self-*hisbah*, credit card usage, and religiosity are rarely used in prior research. For instance, the variable of self-*hisbah* was tested and discussed in an education study (Makhsin, Ilias, and Noh, 2014) but is rarely done in an impulse buying study. Previous researchers tend to study about self-control which is fundamentally from the conventional background rather than self-*hisbah* which is derived and discussed from the Islamic perspective. This is one of the main contributions of this study in the impulse buying behaviour field. On the other hand, the function of religiosity as the moderator is also crucial in this study as one of the general objectives of this study is to observe to what extent the factor of religiosity influences Muslim consumer in their purchasing activities. In addition, the

variable of religiosity is also less tested and discussed in impulse buying in prior studies (Ding and Tseng, 2015; Salimon, Yusoff, and Mokhtar, 2017; Badgaiyan and Verma, 2015; Xu and Huang, 2014). To sum it up, the researcher believes that by undertaking this study it will contribute towards a body of knowledge.

1.2 CHRONOLOGY AND DEFINITION OF IMPULSE BUYING BEHAVIOUR.

The study about impulse buying behaviour was first conducted over 50 years ago. The Du Pont Consumer Buying Habits Study by the Film Division of the Du Pont company (Stern, 1962) and a study sponsored by the Point of Purchase Advertising Institute were the first impulse buying behaviour studies conducted circa 1948-1965 (Rook, 1987). Subsequently, extensive studies by other researchers were done in order to explore and investigate comprehensively impulse buying behaviour. Initially, previous studies tend to identify and define the meaning and factors of impulse buying behaviour (Applebaum, 1951; Clover, 1950; West, 1951; Stern, 1962; Kollat and Willett, 1969). In terms of defining what exactly is impulse buying behaviour, researchers had contradicting opinions in regards to this matter as depicted in Table 1.1. Generally, prior scholars unanimously defined impulse buying behaviour as "unplanned buying" (Abratt and Goodey, 1990; Clover, 1950; West, 1951; Applebaum, 1951) and spontaneous buying (Beatty and Elizabeth Ferrell, 1998).

However, Stern (1962) had a contradicting opinion which suggested that equating impulse behaviour to unplanned buying is not very descriptive. Stern identified impulse buying into four categories, namely; *pure impulse buying*, *reminder impulse buying*, *suggestion impulse buying*, and *planned impulse buying*. On the other hand, Rook (1987) stressed that not all impulse buying is due to unplanned buying and not all unplanned buying are triggered by impulse behaviour, while (Rook and Fisher, 1995) stated that

impulse buying is likely a behaviour to be performed by immature decision making, which is irrational, wasteful as well as having the possibility of a negative outcome. However, impulse buying behaviour is still widely defined as unplanned buying behavior.

Table 1.1: *The definition of Impulse Buying Behaviour*
Sources: Developed for this study

Author	Definition of Impulse Buying Behaviour
Clover (1950), West (1951) Applebaum (1951), Abratt and Goodey (1990)	Unplanned Buying - Making a purchase without prior plans before entering the store.
Stern (1962)	Impulse buying is synonymous with unplanned buying but does not vividly explain impulsive behaviour. Unplanned buying with four types of patterns of impulse buying namely; planned pure, reminder, suggestion, and planned impulse.
Weinberg and Gottwald (1982)	Unplanned buying that is determined by affective, reactive, and cognitive of consumer behaviour, however, not all unplanned purchases are impulsively decided.
Rook and Hock (1985) Rook (1987), Rook and Fisher (1995)	Impulse buying as a spontaneous and fast buying experience regardless of the consequences which is a more emotional action than rational, then perceived as bad when consumers are unable to control themselves. Not all unplanned purchase is an impulse purchase.
Piron (1991)	Unplanned buying differs with impulse buying in terms of "on the spot" factors which is an unplanned purchase is not decided instantly at the first stage. Added to that, impulse buying can be classified into an experience or no experience of emotion and cognitive reaction.
Beatty and Ferrel (1998)	Spontaneous purchase either to buy a specific product without pre-shopping intention. Also, purchase reminder items are not included in this impulse behaviour.
Youn and Feber (2000)	Impulse buying is related to action with lack of control and emotion disorder.

From previous reviews and recent literature, prior studies tend to focus on exploring impulse buying behaviour in a general shopping context or retail format study which involves the consumption of goods impulsively, particularly pertaining to buying products such as clothes (Park et al. 2012; Hulten and Vanyushyn, 2014), snack foods (Duarte, Raposo, and Ferraz, 2013), healthy foods (Verplanken et al. 2005), and cosmetics (Wu and Lee, 2015).

In addition, there are some new studies which were conducted extensively in different contexts such as shopping at the airport (Omar and Kent, 2001; Lin and Chen, 2013), free duty shop (Sohn & Lee, 2016), online shopping (Wells, Parpoteeah, and Valacich, 2011; Park et al. 2012; Ozen and Engizek, 2014), private site shopping (Martinez and Kim, 2012), mobile auction (Chen & Yao, 2018) and tourism area shopping (Meng and Xu, 2012). Meanwhile, studies outside of Europe also tend to examine and explore impulse buying of goods in places such as shopping malls, which is the case in Singapore (Sharma, Sivakumaran, and Marshall, 2013; Pornpitakpan, Yuan, and Han, 2016), India (Atulkar & Kesari, 2018; Mohan, Sivakumaran, and Sharma, 2013; Prashar, Parsad, and Vijay, 2016), Pakistan (Read et al. 2011; Ghani and Jan, 2011), Vietnam (Tuyet Mai et al. 2003), Korea (Kwak et al. 2006), Malaysia (Falahat et al. 2017) and China (Akram et al. 2017). However, studies about impulse buying behaviour in the services context seem to be ignored and are scarce. A few studies in respect to impulse buying behaviour in services context was done such as influences of frontline service in banking services on impulse buying (Agrawal and Schmidt, 2003), as well as the recent study pertaining to types of services experiencing impulse buying (Sharma, Sivakumaran, and Marshall, 2013).

Subsequently, the chronology of impulse buying studies expanded where the researchers started to extend their interest of study by examining the factors that triggered and stimulated impulse buying behaviour. Prior studies found impulse buying in many factors including individual variables and situational variables such as consumer impulsiveness and optimum stimulation level (Sharma, Sivakumaran, and Marshall, 2010b), lack of self-control and stress reaction (Youn and Faber, 2000), fun, fantasy and self-gratification (Hausman, 2000), social influence (Amos, Holmes, and Keneson, 2013), demographic factor (Brici, Hodkinson, and Mort, 2013), as well as promotion

through electronic and non-electronic channels and store displays (Hulten and Vanyushyn, 2014). Many previous studies discuss about the factors that influence impulse buying from different scope of study, however, still many factors of this intriguing phenomenon remain unexplored (Badgaiyan et al. 2016; Badgaiyan, Dixit, & Verma, 2017), for instance, there are not many prior studies associated with the relationship of self-*hisbah*, money and time availability, sale promotion, credit card usage and the role of religiosity on impulse buying behaviour.

This study differs from prior studies in two fundamental ways. First, it focuses on the effects of situational variables (sale promotion, money and time availability) and individual variables (materialism, hedonic motivation, self-*hisbah*, credit card usage and religiosity) on impulse buying behaviour which is rarely explored in impulse buying behaviour studies. Secondly, it emphasizes to reduce the impulse buying behaviour among Muslim credit card holders in Malaysia and discusses about impulse buying behaviour from consumer perspective. There are only a few small studies concerned with the relationship between, materialism, credit card usage, religiosity, sale promotion, money and time availability, hedonic motivation, and self-*hisbah* in relation to the impulse buying behaviour among Muslim and credit card holders. It is proven by previous impulse buying behaviour studies tend to study impulsive buying from students' perspective (Duarte, Raposo, and Ferraz, 2013; Thompson and Prendergast, 2015) and non-specific buyers (Badgaiyan et al. 2016; Badgaiyan, Dixit, & Verma, 2017; Wu and Lee, 2015; Ozer and Gultekin, 2015; Badgaiyan and Verma, 2015; Hultén and Vanyushyn, 2011; Chang, Yan, and Eckman, 2014). While, some of previous studies (Wells, Parpoteeah, and Valacich, 2011; Sultan, Joireman, and Sprott, 2012; Duarte, Raposo, and Ferraz, 2013) more likely conducted impulse buying behavior in marketer

side rather to look out the factor that influence impulse buying behavior in consumer side with the objective to reduce this impulsive buying behavior.

Therefore, due to the lack of exploration of the factors that stimulate and trigger impulse buying behavior from consumer side by aiming to reduce this behaviour, this study will address this gap which examines impulse buying behaviour in different variables and respondents of study as well as different perspectives namely, in the Islamic perspective. The principle of this study is to explore and test the factors that stimulate and trigger Muslim credit card holders' impulse buying behaviour which is indirectly driving some of them to adverse consequences such as financial problems, bankruptcy, severe debts as well as social relationship problem. Therefore, it is necessary to this study to look for a solution to decrease this impulse buying behaviour through examining the factors that influence this impulse buying behavior among Muslim credit card holders in Malaysia. Meanwhile, in terms of theoretical framework development, this study incorporates the variables from situational variables and individual variables as the main pillar of theoretical framework.

Previously, there are some comprehensive frameworks that link both situational and individual variables for instance in retail shopping context as stated by Mohan, Sivakumaran, and Sharma (2013). However, not many studies are conducted that involve the role of mediating and moderating factors. It is essential to highlight the role of mediating and moderating factors in an impulse buying behaviour study as this finding will contribute towards the body of knowledge for impulse buying behaviour studies. On the other hand, this study also attempts to examine the impulse buying behaviour from a religious perspective which is in the view of Islamic teachings and Muslim consumers. This study believes that it is crucial to explore the influence of religiosity factors in

impulse buying behaviour study due to the shortage of prior studies concerning this matter and the frightful cases of financial issues experienced by Muslim buyers nowadays. Therefore, this study addresses these issues as the major gap and extends the literature in the body of knowledge.

1.3   IMPULSE BUYING BEHAVIOUR IN GOODS AND SERVICE

There are three forms of buying activities which are frequently conducted by consumers, namely; "Traditional Brick and Mortar" which are shopping activities in physical stores, "Internet Visual Shopping" where buyers make transactions via wireless communication such as online shopping, and the third form of shopping is done through "Virtual Connection" but the goods are picked at the physical store. Basically, impulse buying behaviour occurs when the shoppers make their shopping trip either by brick and mortar or virtual shopping

In terms of factors that stimulate and trigger impulse buying behaviours, an overwhelming majority of previous researchers had already explored and investigated regarding it, such as (Chang, Yan, and Eckman, 2014; Kacen, Hess, and Walker, 2012; Zhuang et al. 2006; Tendai and Crispen, 2009; Mohan, Sivakumaran, and Sharma, 2013; Sharma, Sivakumaran, and Marshall, 2010b; Rook and Fisher, 1995; Huang, 2016). However, previous studies focused on impulse buying behaviour of goods and are rarely concerned the impulse purchase of services. Therefore, this study takes this opportunity by conducted implse buying among Muslim credit card holders from goods and service perspective.

Goods and services classified into two broad classes namely, consumer goods and industrial goods (Kotler, Armstrong, & Opresnik, 2018). Consumer goods is defined as goods and services consumed by final consumers for personal consumption. While,

industrial goods is defined as goods and services purchased for purpose a business. For instance, purchase vegetables for restaurant raw material. In terms of consumer goods specification, there are four main goods in buying activities namely, convenience goods, shopping goods, speciality goods, and unsought goods (Kotler, Armstrong, & Opresnik, 2018).

Convenience goods represent for goods and services that are purchased frequently, immediately, and with less comparison and buying effort. For instance, magazine, candy, bread, and fast food. This type of goods is normally low priced, readily available, and available in many places and location. Next, shopping goods are different with convenience goods in terms of their utilization. Basically, shopping goods are less frequently purchased, high price and consumers tend to make a comparison among brand on quality, price, and style. During shopping for this type of goods, consumers are more likely to spend much time and effort in gathering what suit them. For instance, purchase furniture, clothing, hotel services, credit card services, and watch. While, specialty goods refer to special purchase effort by consumer in buying the goods and services with special characteristics such as purchasing a porsche car for purpose of luxury cars collection and luxury handbeg for high status perception. Lastly, unsought goods are consumer goods which are rarely noticed by the consumer and consumer does not have strong intention to buy it. These goods and services required a massive promotion to capture consumer attention. Basically, consumers make purchases on this unsought goods and services when realiaze the importantce of that unsought goods and service for them. For instance, purchase for life insurance, funeral services, and organic goods (Kotler, Armstrong, & Opresnik, 2018).

Table 1.2: *Type of Consumer Goods*
Sources: (Kotler, Armstrong, & Opresnik, 2018)

Marketing Consideration	Convenience Goods	Shopping Goods	Speciality Goods	Unsought Goods
Consumer Buying Behaviour	Frequent purchase	Less frequent purchase	Special brand preferance	Less product awaraness
Price	Low-priced	Higher price	High price	Varies
Distribution	Widespread distribution	Seletcive distribution	Exclusive distribution	Varies
Promotion	Mass promotion	Advertising and personal selling	Targeted promotion	Aggressive advertising
Example	Toothpaste, bread,magazines	Furniture, clothing, watches	Luxury car, Branded handbeg	Life insurances

In the context of services, there are two types of approaches that are reliable to interpret and reflect the meaning of service, namely; a service performance or act which is offered by one to another party in order to meet their demands and needs. Basically, the attribute of service is intangible, although the process is sometimes tied to a physical product. Secondly, service is fundamentally related to economic activities which create value and produce benefits for customers at specific times and places (Lovelock and Wright, 1999). Generally, there are some basic differences between services and goods as illustrated in Table 1.3.

Table 1.3: *Basic Differences between Services and Goods*
Sources: Developed for this study

No	Services	Goods
1	Without permanent ownership	Permanent ownership
2	Intangible	Tangible
3	People are a part of service products	Goods itself as a main product
4	Difficult to evaluate even after consumption	Easy to evaluate
5	No inventories available for back up	Inventories available for back up
6	Time is necessary	Time is not applicable
7	Specific distribution channel	A variety of distribution channels

A service's level of attributes is measured through tangible and intangible attributes which are different from goods attributes. Tangible attributes like colors, lighting, music, and environment have a high level of impulse buying rather than

intangible attributes such as trust and knowledge. Precisely, the service component are categorized into five components of offering namely; pure tangible goods, tangible goods with accompanying services, hybrid, major service with accompanying minor goods and service, and pure service (Kotler, Armstrong, & Opresnik, 2018). Pure tangible goods refer to goods without service accompany the product such as toothpaste, sugar, and soap. However, it is different from tangible goods with accompanying service where a tangible product is accompanied by one or more services such as cell phone, car, and computer. This type of product is offered including the warranty and repair service by the seller. While, hybrid service tends to offering a product and service equally such as dining at the restaurant. Hybrid service contradicts with major service which is accompanying minor goods and service. This major service involves with goods in minor scale but major service focused on service such as airline company services. Lastly, pure service is definitely offering service only without any additional goods and product such as babysitting and maid service (Kotler, Armstrong, & Opresnik, 2018).

Table 1.4: *Categories of Service Mix*
Sources: (Kotler, Armstrong, & Opresnik, 2018)

Categories of Service Mix	Definition	Example
Pure Tangible Goods	Goods without any service	Soap, tootpaste, and sugar
Tangible Goods with Accompanying Service	Goods alongside with some of service	Cellphone, car, and computer
Hybrid	Goods and service offered together	Dining at restaurant
Major Service with Accompanying Minor Goods and Service	Service alongside with some of goods	Airline service
Pure Service	Service without any goods	Babysitting and Maid service

According to Murray and Schlacter (1990) and Sharma, Sivakumaran, and Marshall (2013), consumers have difficulties in evaluating intangible services and perceived it as having a high risk. Therefore, consumers tend to practice impulse buying behaviour during shopping for goods and not so much on services. This circumstance perhaps influenced previous researchers to extensively study impulse buying behaviour

on goods and rather sparsely on the service context. While in terms of service evaluation, consumers identify service characteristics through search attributes, experience attributes as well as credence attributes. Studies by Sharma, Sivakumaran, and Marshall (2013) stressed that, service by search attribute and tangibility such as fast food restaurants have a greater likelihood for impulse buying compared to others. It is due to the service of search attributes that facilitate the consumer to identify and evaluate their potential service easily before a purchase. They are able to observe and search further information regarding that service before consuming it. Meanwhile, services by experience attribute like comfort and fresh foot massage services are able to identify after consumers experiencing it. Even though credence attributes of services seem quite hard to identify even before and after consumption. Credence attributes are basically portrayed in services such as advertising and financial consultation services. Consumers may be unable to appraise that service whether it meets their needs or not.

Therefore, this level of attributes and evaluation properties of service is perhaps one of the reasons why impulse buying behaviour is rarely practiced in the service context. However, there are still impulse buying in services context as customers in this modern age are passionate to practice sophisticated and classy lifestyle. For instance, high school and college students also have their own credit card and vehicle. This demonstrates that the buying power among customers is gradually increasing and this might influence the presence of impulsive buyers in the services sector.

In the services context, customers practice impulse buying as they do impulse buying on goods by having a lack of consideration, planning, being tempted as well as loss of control. However, Murray and Schlacter (1990) stated that, in terms of perceived risk and variability, consumers tend to believe that services have greater risk than goods.

While Sharma, Sivakumaran, and Marshall (2013) stated that perceived risk play a vital role in the process of impulse buying, where different type of services produce varying levels of impulse buying and perceived risk. There are possibilities that consumer impulse buying behaviour is rarely practiced in service context as they are quite cautious due to the high level of risk in this context. Customers also tend to practice impulse buying behaviour on tangible services rather than intangible service.

However, according to current issues, customers seem to ignore the risks in the services context and consume intangible services impulsively such as using credit card payments services which result in increased debt. As evidence, Blankson, Paswan, and Boakye (2012) suggested that incentive by using the credit card, excellent customer service by credit card issuer, need for credit and buying power as to why they are using credit cards.

1.4   CREDIT CARD PAYMENT SERVICE

Credit card is one of the millennium payment services which is highly used by people nowadays. As a simple definition, a credit card is a payment system which holds the concept of buying now and paying later. Credit cards play a role as one of the vital mediums to assist a purchaser who is unable to pay off immediately. It also facilitates people that do not carry cash and it is reflected as a necessity among modern individuals.

The United States and China are the outstanding credit card issuers worldwide followed by United Kingdom, Canada, South Korea, Japan, and Venezuela. Counting the number of issuers per region, The Nilson Report (2017) stated that almost 29 issuers in United States, 14 issuers in China, 11 issuers in United Kingdom, 10 issuers in Canada and South Korea, 9 issuers in Japan, 8 issuers in Venezuela and Brazil as well as 51 issuers

in the rest of the other regions. In terms of the usage of consumer card payment systems in United States (credit card, debit card, electric payment) increased from 2010 to 2015. Credit card purchase transaction growth up 48%, debit card up 46%, and other electronic payment increased 45% in 2015 (The Nilson Report, 2017).

Meanwhile, in Malaysia, the main credit card issuer is from financial institutions such as Malayan Bank Berhad, Bank Islam Malaysia Berhad, Citibank Berhad, Hong Leong Bank, CIMB Bank as well as AEON Credit Service (M) Berhad for non-bank institution. There are two forms of credit card frequently used, namely; conventional and Islamic credit cards and the concept of a credit card is different from a debit card. In terms of market penetration of credit cards in Malaysia, previous researches mentioned that most people use their credit card for the first time when they are employed and the rest tend to use it when they have a stable income. However, interestingly, there are some students that started using credit cards while they are still studying (Mohd Dali et al. 2008).

As reported by Central Bank of Malaysia (2012), there are five large business activities that use credit cards for transactions, namely; for fuel or petrol expenses, retail shopping, professional and commercial services, mail and telephone order as well as for food and restaurants. However, credit card holders are most likely to swipe their credit cards for fuel or petrol and retail expenditures (Central Bank of Malaysia, 2012). It is quite similar with a survey finding conducted by Nielsen which suggests that most people used credit cards as a payment method for shopping, dining, as well as entertainment activities (Jennifer Frighetto, 2012). People tend to apply and use credit card because they are attracted with service provided by credit card issuer and characteristics of credit card itself such as promotion offered by card issuer, effective consumer service, small

installment and easy to handle (Wang et al 2011; Blankson et al 2012). This situation had effected the credit card spending in Malaysia which is demonstrated by the yearly increment. It is supported through the statement by Bank Negara Malaysia (2016) which reported that the amount of credit card spending continuously increased from RM 79.8 billion in 2010 to RM 88.8 billion in 2011, RM 94.1 billion in 2012, RM 99.7 billion in 2013, RM 105.5 billion in 2014, RM 112.7 billion in 2015, and RM 118.5 billion in 2016. Accordingly, this situation partially resulted into unfavorable effect such as debt problem among credit card holder. It is proven by previous studies (Jabatan Insolvensi Malaysia, 2014; Hashim & Syazana, 2018) which reported credit card payment services as one of the factors leading to debt problem. It is possibly due to the utilization of credit card for impulsive buying in order to meet excessive demand as reported by previous study which impulse buying behaviour is part of the antecedents that influence credit card holders to overspend on their credit cards (Omar et al. 2014) and contribute towards debt woes (Asian Institute of Finance, 2015). Therefore, it is not surprising why credit card as one of the factors that contributes towards debt issues among Malaysia. It is reliable to claim the utilization of credit card stimulates the credit card holders to practice impulsive buying (Omar et al. 2014).

Ultimately, according to the above discussion and statement, the vital question to argue is what are the factors that trigger Muslim credit card holders to spending beyond means and impulsively either by credit or cash as well as how far are the factors of religiosity and credit card usage play a role as moderator and mediator the relationship between the independent variables and impulse buying behavior. In terms of religiosity and credit card usage as the moderator and mediator variable, this study noticed that previous studies in consumer behaviour are more likely to examine the relationship of religiousity or religious factors on other aspects of buying behaviour such as customer

satisfaction (Eid and El-Gohary, 2015), consumer loyalty (Al-Hyari et al. 2012), taboo advertisement (Sabri, 2012), type of banks and financial services selection (Souiden and Rani, 2015; Alam et al. 2012; Sayani and Miniaoui, 2013; Awan and Bukhari, 2011; Youssef et al. 2015) as well as product involvement (Yousaf and Malik, 2013). Meanwhile, previous studies on credit card more likely discussed credit card in scope of relation to demographics and the given benefits (Wang, Lu, and Malhotra, 2011; Teoh, Chong, and Yong, 2013; Amin, 2012; Hussin, Kassim, and Jamal, 2013), budget constraint, (Omar et al. 2014), easy access to credit cards, credit card features and service quality (Chahal, Sahi, and Rani, 2014;Omar et al. 2014), media awareness and perception (Ismail et al. 2014), materialism (Omar et al. 2014; Cakarnis and D'Alessandro, 2015; Khare and Varshneya, 2015), lifestyle (Noordin et al. 2012), and knowledge of credit cards (Amin, 2012; Noordin et al. 2012). There are not many studies that focus religiosity and credit card usage on the impulse buying behaviour area. Thus, it is crucial to conduct this study as it will considerably contribute towards the body of knowledge as well as answer the objectives of this study.

1.5   ISLAMIC CONSUMPTION

In this contemporary world, emerging issues in consumption among Muslim consumers are constantly changing from small scale towards immerse issues such as overspending, massive debt, bankruptcy, as well as financial crime which resulted into detrimental effect on life and society. Islam never banned and prohibited consumerism, but Islamic teachings and values stipulated the rule and regulation in consumption. There are things compulsory to practice and to avoid in consumption activities. Practicing something that leads to negative consequences such as spending wealth or money inappropriately is definitely disapproved in Islamic doctrine. Allah S.W.T has warned in

the Quran pertaining to wealth and consumption management, a Muslim must not engage with extravagance and spendthrift behaviour. Allah S.W.T says which brings a meaning:

"And give to the relatives his due, and to the needy, and to the wayfarer but spend not wastefully in the manner of spendthrift. Verily, the profligate are brothers of the devils, and the devils are ever ungrateful to his Lord" [1](Translation Al-Quran, 17: 26-27).

These are Allah's words portraying squandering in expenses and consumption of wealth while ignoring the needy is loathed in Islamic teaching. From Islamic teachings, the ways to consume and utilize wealth were mentioned in Islam through the application of *Maqasid Shariah*. The *Maqasid Shariah* is an Arabic term which is a combination of two words, *Maqasid* and *Shariah* (Oladapo & Rahman, 2016). According to *Maqasid Shariah*, there are five basic elements in the spirit of *Shariah* which are to protect and take account, namely; life, religion, dignity, intellect and wealth. These five things are essential to preserve as they are the pillars and roots of a Muslim's life. On the other hand, consumption from an Islamic teaching encompasses five crucial elements, namely; ownership, purification and *halal,* moderation, beneficial and ethics or *akhlak* (Ghani, Harjin, and Ghani, 2008).

In Islamic teachings and values, mankind frequently enjoins to being moderate and average in practicing any worldly activities including consumption. In addition, Islam also forbids the element of miserliness such as not spending money on one's family or others because of the fear of being poor and extravagance such as excessive expenses on unnecessary and superfluous things. Every action associated with the worldly matter should be done in balance and moderation. Any extreme activity that drives to

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[1] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

wrongdoing is prohibited and disapproved in Islamic doctrine. Islamic legislation *(Maqasid Shariah)* in consumption stipulated that mankind should spend their wealth and money based on their needs and abilities.

According to Al-Ghazali (1997), there are three level of needs in the Islamic perspective which implies the level of human needs and desire namely; *Daruriyah* (basic necessities of life), *Hajiyah* (human needs that comprise all things and activities that are not key to the preservation of faith (religion), life, intellect, offspring, and property (wealth), but are necessary to alleviate life's hardships and difficulties), and *Tahsiniyah or Kamaliat* (human needs that refer to things and activities that satisfy and embellishes lives of people) (Auda and Khan, 2008). Thus, in consumption and spending of wealth, Islam encourages to be moderate by fulfilling the basic need and alleviating life's hardships and difficulties. This is due to Islam wants human beings to live in a comfortable environment which facilitates and eases them to implement their obligation as a Muslim comprehensively, perfectly and appropriately. Excessive lifestyle and behaviour surely will result to bad manners such as being arrogant, egoistic, greedy and unthankful (Rahman, 1975; Hasan, 2001). Besides that, extravagances also contribute to financial hardship such as debt and bankruptcy (Hashim & Syazana, 2018). Therefore, any excessive consumption is impermissible in the Islamic doctrine.

In the realm of Islamic consumption, impulse buying behaviour is definitely one of the things that should be practiced moderately. Generally, impulse buying behaviour is an ordinary behaviour that occurs in everyone. However, as mentioned above, over impulse buying behaviour contributes to negative effects such as debt, bankruptcy, and social problem which are surely prohibited in Islamic doctrine. Islamic teachings never tolerate with something that results to wrongdoing, wastefulness and extravagance.

Pertaining to impulse buying behaviour in Islamic perspective, this study stands to believe that some impulse buying behaviour is still considered acceptable in a Muslim lifestyle as sometimes, humans do something for sensible reasons. For instance, *reminder impulse buying* behaviour as mentioned by Stern (1962), which is buying something at the store impulsively when recalling that it is out of the stock at home and may have to be accepted as an accustomed impulse behaviour compared to other impulsive buying attributes. In an Islamic view, this kind of impulsive buying is permissible. This is parallel with what Allah mentioned in Al-Quran, namely, practicing moderation and balance in consumption.

"And who, whenever they put their money to use, are neither wasteful nor niggardly, but always maintain a just mean between the two" [2](Translation Al-Quran, 25: 67).

Thus, *reminder impulse buying behaviours* seems to be an ordinary action which might be included as moderate act in consumption. Buying something essential and needed for basic life such as food, beverages and groceries without prior planning is permissible as long as it is not extravagant and wasteful. However, practicing pure impulse buying behaviour on unnecessary things would obviously result to wastefulness and exaggeration, which is loathed and forbidden in Islam.

Although there are small discussions that touch on impulse buying from an Islamic perspective, this study believes that any excessive or extravagant consumption is surely forbidden and impermissible in Islamic teachings. Thus, any impulse buying that contributes to wastefulness and financial hardship should be avoided.

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[2] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

1.6   PROBLEM STATEMENT

The vital problem that the researcher of this study wants to explore is pertaining to the impulse buying behaviour among Muslim credit card holder in Malaysia. Impulse buying behaviour has been defined as unplanned buying behaviour by prior researchers (Abratt and Goodey, 1990; Clover, 1950; West, 1951; Applebaum, 1951; Kollat and Willett, 1969), which frequently occurs in our life. Generally, practicing impulse buying behaviour in shopping activities is a prevalent behaviour and is sometimes difficult to refrain from. Purchasing items that are not in a shopping list is still acceptable as long as the items are necessities. However, the problem occurs when unplanned buying is exercised without wise decision making, which results into disappointment, guilt, and financial hardship (Rook, 1987; Pradipto, Winata, Murti, & Azizah, 2016), increasing the amount of credit card debt, shame and regret over their overspending (O'Guinn and Faber, 1989; Liang, 2012; Hashim & Syazana, 2018), and psychological impacts on consumers (Bahrainizad & Rajabi, 2018). A wise consumer will think thoroughly before making any purchase decision. Poor financial management such as making impulsive buying and loss of self-control make the consumers vulnerable to a miserable life with severe debt woes (Pradipto, Winata, Murti, & Azizah, 2016; Hashim & Syazana, 2018). A study by Asian Institute of Finance (2015) indicated impulse buying behaviour as one of the factors that leads to debt woes among the Generation-Y in Malaysia. It is possible to claim that this impulse buying behaviour as having a correlation with poor financial management.

Precisely, impulse buying behaviour is related to poor financial management. Failure to manage personal financial resource appropriately result into unfavorable effects such as financial and personal life problems (Hashim & Syazana, 2018; Yong and Tang, 2017). This situation is similar to the effect of impulse buying behaviour which also results into unfavorable effects such as financial problem because of spending money

excessively (Liang, 2012; Rook, 1987; Pradipto, Winata, Murti, & Azizah, 2016) and increasing the amount of debt such as credit card debt (Hashim & Syazana, 2018; O'Guinn and Faber, 1989). This situation created negative consequences towards the consumer such as feeling disappointment and guilt (Rook, 1987), shame and regret over their overspending (O'Guinn and Faber, 1989), low self-esteem (Zhang and Shrum, 2009), highly risk of life (Liang, 2012), post-purchase regret (Cook and Yurchisin, 2017), product return behaviour (Kang and Johnson, 2009) and unethical behaviour (Bossuyt et al. 2017). These unfavorable effects of impulse buying behavior obviously demonstrated that impulse buying behaviors have an intensely correlation with failure to manage finances. Accordingly, it is obviously demonstrated that consumers who get engaged in impulse buying behaviour have lack of financial planning during shopping activities (Zhang and Shrum, 2009) and ultimately, experienced financial problem (Rook, 1987; Pradipto, Winata, Murti, & Azizah, 2016) and an unfovarable effect on consumers' psychology (Bahrainizad & Rajabi, 2018). Meanwhile, the utilization of credit cards also stimulate consumer to be engaged in impulse buying behaviour (Omar et al. 2014). According to Central Bank of Malaysia (2012), there are five business activities that use credit cards for transaction; fuel or petrol expenses, retail shopping, professional and commercial services, mail and telephone orders as well as for food and restaurant spending.

According to The Financial Planning Association (FPA), financial planning is the capacity and ability to manage personal financial resources effectively and efficiently in order to achieve life goals (McLellan, 2012). Failure to manage personal finance such as misuse of credit card results into financial problem such as debt and bankruptcy (Yong and Tang, 2017). According to AKPK and Jabatan Insolvensi Malaysia, poor financial planning is the main factor that drives Malaysian into bankrupt and massive debt (Hashim

& Syazana). Lack of financial management knowledge as well as failure to differentiate between need and demand is the top reason for accumulative axcessive debt among Malaysia (Hashim & Syazana, 2018). Therefore, according to above statement, it is reliable to state impulse buying behavior have a correlation with financial planning problem and the main financial issues created from the problem of impulse buying behaviour in Malaysia is debt.

Although the growth in household debt continued to be moderate during the year 2016: 5.4% to 2017: 4.9% and household debt such as housing loan, borrowing for the purchase of cars and non-resident properties decline from previous year, however, the household in the urban area still burdens with personal financing and credit card debt (Bank Negara Malaysia, 2016). According to Central Bank of Malaysia (2017), 47% of Malaysian youth burden with high credit card debt and 38% with personal loans. It is supported via the report by (Jabatan Insolvensi Malaysia, 2016) which stated credit card debt (11.48%) and personal loan debt (31.32%) are among the highest reason for bankruptcy among Malaysian in 2016. This demonstrated debt problem among some of credit card holders in Malaysia continuously occurs until declared as bankrupt. In addition, Malaysians with monthly income of RM 3000-RM 5000 are the largest borrower vulnerable to unexpected income and expenditure shock. This group has a negative financial margin namely, has a higher risk to pay their debt (Central Bank of Malaysia, 2017). Having a debt problem with housing and vehicle loan is normal as these two things (house and vehicle) are basic necessities in human life. However, being bankrupt with credit card debt is something need to avoid.

As reported by The Credit and Debt Management Agency (AKPK), up to 31st of January 2016, almost 121,673 individuals have attended financial counseling service

which is an increase of 10 % from 84,664 persons in the previous year (AKPK, 2017). Interestingly, AKPK, 2017; Hashim & Syazana (2018) also mentioned that the 50.1% of the main reason for default or debt problem of poor financial planning including poor control of credit card usage and luxurious lifestyle. This statement is also similar with the main reason of bankruptcy as stated 24.41% of the main reason for bankruptcy is due to poor financial management (Jabatan Insolvensi Malaysia, 2016). In addition, heavy debt constantly occurs as some Malaysians are unaware of credit card debt amounted from lavish spending (Nazimah, 2011) and ignored to pay their debts as required (Noordin et al. 2012). Despite of impulse buying behaviour is not as the largest reason of credit card debt, but this impulse buying behavior which is also attributed as poor financial management reported as the top reason of debt problem in Malaysia including credit card debt (Hashim & Syazana, 2018; Nazimah, 2011; O'Guinn and Faber, 1989). Therefore, this study looks this consumption debt (credit or cash) by impulse buying as the issues required to handle soundly. Accordingly, in order to decrease the impulse buying behaviour among Malaysian, this study had examined the factors that influence impulse buying behaviour among Muslim credit card holders and how far the factors of religiosity and credit card usage influence the Muslim credit card holders in practicing impulse buying

On the other hand, this study has identified three main gaps of impulse buying behaviour studies (Chan, Cheung, & Lee, 2017) which are required to be filled, namely; small impulse buying behaviour study conducted among credit card holders particularly in Malaysia, the variable of self-*hisbah*, religiosity, money and time availability, sale promotion, and credit card usage, which were rather sparsely discussed by prior researcher in impulse buying behaviour study, and incorporating the theory of buyer behaviour and the theory of *maqasid shariah* as well as discussing impulse buying from

an Islamic perspective. Therefore, referring to those gaps, the finding of this study will definitely fill impulse buying knowledge gaps appropriately

In addition, many previous studies found that the variables of materialism, sale promotion, money and time availability, hedonic motivation have a significant positive relationship with impulse buying behavior as well as self-control which is similar to self-*hisbah* has a significant negative relationship with impulse buying behavior. Accordingly, the specific objective of this study is to examine whether these variables also have a significant positive and negative relationship with impulse buying behavior or not in the different context of the study.

1.7 RESEARCH QUESTIONS

In order to figure out the factors influencing and stimulating impulse buying behaviours and the role of religiosity factors and credit card usage as a moderator and mediator on this study, five main research questions were designed to facilitate the process of this study;

1) Do materialism, sale promotion, money and time availability and hedonic motivation have significant positive relationship to impulse buying behaviour?

2) Does self-*hisbah* have a significant negative relationship to impulse buying behaviour?

3) Does credit card usage have a significant positive relationship to impulse buying behaviour?

4) Does credit card usage mediate the relationship between materialism, sale promotion, money and time availability, and hedonic motivation and impulse buying behaviour?

5) Does religiosity moderate the relationship between materialism and hedonic motivation and impulse buying behaviour?

1.8   RESEARCH OBJECTIVES

The general objective of this study is to investigate the factors that influence impulse buying behaviour among Muslim credit card holders in Malaysia and how the factors of religiosity and credit card usage influence Muslim credit card holder in impulse buying activities. This general objective will examine through the specific objective by examining the mediating effect of credit card use and the moderating effect of religiosity on the relationship between situational variables (sale promotion and money and time availability) and individual variable (materialism, hedonic motivation, self-*hisbah*) with the impulse buying behaviour. The specific objectives are as follows:

1) To examine the significant positive relationship between materialism, sale promotion, money and time availability, hedonic motivation and impulse buying behaviour.

2) To ascertain the significant negative relationship between self-*hisbah* and impulse buying behaviour.

3) To evaluate the significant positive relationship between credit card usage and impulse buying behaviour.

4) To investigate the mediating role of credit card usage on the significant relationship between materialism, sale promotion, money and time availability, hedonic motivation and impulse buying behaviour.

5) To assess the moderating role of religiosity on the relationship between materialism and hedonic motivation on impulse buying behaviour.

1.9   SIGNIFICANCE OF STUDY

There is considerable significance of this study specifically in the marketing field. Generally, there are two specific potential areas connected with this study, namely; in marketing research and government administration.

Firstly, in marketing research, there is a growing stream of researches on customer buying behaviour. In terms of specific shopping behaviours such as impulse buying behaviour, previous studies discussed about it thoroughly and numerously. However, in order to refresh the knowledge and fill the gaps of the body of knowledge, further studies are still needed to explore impulse buying behaviour in different contexts of study through new and different variables of study. For instance, one of this study's objective is to explore the function of religiosity as a moderator and the influence of self-*hisbah* on impulse buying activities among Muslim credit card holders which contributes towards a new perspective in impulse buying studies.

Secondly, this study is also significant for government policy makers. The authorities who are accountable for a country's economic performance and development can utilize this information in order to produce an effective and efficient policy particularly in financial aspects such as the requirements for a credit card application and

pricing monitoring of the market. On the other hand, this study finding also benefits towards the authority such as AKPK (Agensi Kaunseling dan Pengurusan Kredit) as the additional information in educating public in financial management as well as decreasing the impulse buying behavior among Malaysian.

1.10   SCOPE OF STUDY

This study was conducted among Muslim credit card holders in Malaysia only. As previous studies rarely conducted impulse buying behaviour study among Muslim consumer and credit card holders, therefore, this study takes this opportunity to fill the knowledge gaps appropriately. In addition, the main reason why Muslim group was selected as the respondents in this study is due to the largest population in Malaysia are Muslims and prior studies (Burgess, Yaoyuneyong, and Gibbs, 2014; Thompson and Prendergast, 2015; Chuang, Tian, and Lin, 2015; Lucas and Koff, 2017) in impulse buying behavior are also rarely conducted among Muslim group.

In terms of study variables, this study would like to examine the relationship between situational variable and individual variable with impulse buying behaviour. The situational variable comprises of the variable of sale promotion as well as money and time availability, while individual variables are materialism, self-*hisbah*, hedonic motivation, credit card usage, and religiosity. This study also examines the role of religiosity as a moderating variable and credit card usage as mediating variable. The utilization and selection of these variables is due to the lack of previous studies on these variables in impulse buying behaviour studies.

On the other hand, this study focused on impulse buying behavior on low involvement in shopping goods category only (goods and services) among Muslim credit

card holder either by credit or cash excluding the reminder impulse buying in this study. Although impulse buying does not essentially happen on low involvement goods and services, but they can. As this study is about impulse buying behavior which is associated with the type of consumer decision making, therefore, the discussion of consumer buying behavior is covered only within consumer buying decision making.

1.11 ORGANIZATION OF STUDY

This study report is set out into five chapters, namely; chapter one (Introduction), chapter two (Literature Review), chapter three (Research Methodology), chapter four (Analysis and Finding), and chapter five (Conclusion and Recommendation).

Chapter one consists of the general explanation of the study concerning to the introduction of study, objective of study, research questions, problem statement, hypothesis, scope of study and organization of study. Chapter two is an extensive chapter, it comprehensively discussed the variables of the study which is the backbone of the study. In this chapter, the researcher explored and explained in depth what is impulse buying all about and the factors that relate to this behaviour.

In terms of methodology operation, an exhaustive explanation written in chapter three which encompasses items linked to research methodology such as research design, data collection, research instruments and data analysis. Next, for data analysis and interpretation, chapter four will explain it in depth. Lastly, in chapter five, a discussion on the finding is included. Recommendation for further research, limitation, and conclusion for this study are also explained in this last chapter.

1.12   CONCLUSION

In light of the above discussion and study ideas, it is crucial to undertake this study as the extension of impulsive buying knowledge particularly in goods and services context. Studies associated with impulse buying undertaken previously, however, limited studies concerned impulse buying of goods and service as well as looking at it from Islamic perspective. It is essential to study about impulse buying in a religious perspective as this behaviour obviously contributes to drawbacks that outweigh the benefits such as wastefulness, overspending and massive debt which is contradicted to Islamic teaching and value

CHAPTER 2: LITERATURE REVIEW

INTRODUCTION

The buying behaviour study is a study about how humans react and think about their self-needs, desires, achievements, as well as social status. This study area is quite interesting to explore as it is indirectly related to human beings' life activities. Previous marketing and psychology scholars had studied this topic broadly and extensively. However, continuous study related to this matter has never stopped as knowledge is never ending. Therefore, past studies about impulse buying behaviour have clearly indicated that numerous studies have the potential to be explored in the context of customer buying behaviour. Thus, this chapter will explain the details about the independent variables of the study that are derived from incorporating the situational variables (sales promotion, as well as money and time availability) and individual variables (materialism, hedonic motivation, and self-*hisbah*); the mediator and the moderator of the study (credit card usage and religiosity); as well as the dependent variable of the study (impulse buying behaviour). In addition, this chapter explains about the theoretical framework of the research, the theory of buyer behaviour, the Engle, Blackwell, and Miniard Model (EBM model) as well as the theory of *maqasid* shariah, which plays the role as the background theme in this study.

2.1 THE CONCEPT OF CONSUMER BEHAVIOUR

The discipline of consumer behaviour, which involves human relationship with everything that surrounds them was substantially discussed by previous scholars (Hawkins and Mothersbaugh, 2010; Kotler, Armstrong, & Opresnik, 2018; d'Astous and Landreville, 2003; Demangeot and Broderick, 2010; Shim, 1996; Mokhlis and Salleh, 2009; Jin, Yong Park, and Sang Ryu, 2010; Dhaundiyal and Coughlan, 2016; Schulz,

Dority, and Schulz, 2015; Alavi et al. 2015). Originally, consumer behaviour is the main element in marketing strategies, which include pricing, plans, promotion, place (McCarthy, 1960) and three more proposed in service marketing mix namely, people, physical, and process (Booms and Bitner, 1981). It is the consumers who make the buying decisions and their behaviour determine the success or failure of the marketing process (Runyon, 1977). Hunger, thirst, love, status, spirituality, and self-development fulfillment are part of the demands and desires that usually customers attempt to obtain in their buying activities.

In a nutshell, consumer behaviour study explores the process that identifies the why, what, who, when, and how of what a consumer purchases (Kotler, Armstrong, & Opresnik, 2018; Lake, 2009; Schiffman, Kanuk, and Hansen, 2007) and how they think and act during the buying process and consumption (Howard, 1994). The field of consumer behaviour consists of three main activities, namely; shopping, buying, and consuming (Tauber, 1972). These three activities are explained differently and the shopping behaviour is related to the famous question of "why do people shop by entering the store for the first time?" Generally, the answer to this question is that people shop because they need to purchase something (Tauber, 1972). Buying is a process that involves consumers making the decision to purchase and choose the goods or services that they want to buy and pay for those goods or services. Meanwhile, consuming behaviour is related to the condition of the consumers while consuming the goods or services that they had purchased. At this moment, consumers will evaluate the goods or services that they had purchased.

Precisely, the defination of consumer behavior had been defined by various prominent scholar in this area by various of meaning but still in similar direction.

According to Engel, Blackwell, and Miniard (1995) and Blackwell et al. (2012) consumer behavior as activities related to obtaining, consuming, and disposing of goods and services which involves the decision making process that comes before these actions. While, others scholars such as (Kotler, Armstrong, & Opresnik, 2018) define consumer behavior is the personal process conducted by individual by buying goods and services for their personal consumption. Meanwhile, Hawkins and Mothersbaugh (2010) have a different opinion where they claim consumer behavior does not only involve individuals but also is related to group and society. The consumer behavior involved the process to select, secure, use, and dispose of products, services, experiences, or ideas by individuals, organizations or groups in order to meet their needs and have the impact towards individual, group, and society. This similar definition of consumer behavior is also formed by Solomon et al, 2006; Schiffman, Kanuk, and Hansen (2007) in which they describe it as activities involving select, purchase, use, evaluate, and dispose of goods, services, experience, or idea to satisfy and meet need and desire by individual or groups.

Although there are various of definitions of consumer behavior, that definitions definitely have similar view namely consumer behavior involves the process to select, secure, use, evaluate and dispose of products, services, experiences, or ideas by individuals or groups in order to meet their needs and want through the decision making process and the impact that the process has on the individual, group, and society (Kotler, Armstrong, & Opresnik, 2018; Hawkins and Mothersbaugh, 2010; Solomon et al, 2006; Engel, Blackwell, and Miniard, 1995; Blackwell et al,2012; Schiffman, Kanuk, and Hansen, 2007).

On the other hand, Kotler, Armstrong, & Opresnik (2018) through their study explained the comprehensive understanding of consumer behavior via stimulus-response

model. This model demonstrated marketing stimuli (product, price, place, and promotion) and environmental (economic, technology, political, and cultural) influence consumer's sensibilities which in turen lead the consumer's characteristic and buying decision process to implement a certain purchasing. However, this stimulus-response model did not eplain the consumer behavior and buying decision process comprehensively as conducted by other model such as Engel, Blackwell, Miniard (EBM) model. The EBM model, which was developed and extended from the original Engel, Kollat, and Blackwell Model (EKB model) was founded in 1968 (Bray, 2008). The EBM model explain the consumer buying behaviour comprehensively by incorporating the input, process, and output of consumer buying decision making in their model. This EBM did not have a huge contradiction with other model but it has a comprehensive explanation how consumer behavior and consumer decision making are implemented by the consumer. Therefore, this study adopted this EBM model as the fundamental of this study framework which explains how the process and factor that influence impulse buying behavior. The detail explanation of Engel, Blackwell, Miniard (EBM) model is under subtopic of theory and model in this chapter of this study.

Meanwhile, in terms of factors that influence consumer behavior, the scholars (Kotler, Armstrong, & Opresnik, 2018; Hawkins and Mothersbaugh, 2010; Solomon et al, 2006; Engel, Blackwell, and Miniard,1995; Blackwell et al,2012; Schiffman, Kanuk, and Hansen, 2007) believe the factors of environmental differences (cultural, social class, family), individual differences (personality, knowledge, attitude), and psychological (learning, information process) as the main factors that contribute towards consumer behavior and buying decision making.

Table 2.1: *Definition of Consumer Behavior*
Sources: Developed for this study

Authors	Definition of Consumer Behaviour	Keywords
Kotler, Armstrong, & Opresnik (2018)	Individual that buy goods and services for personal consumption.	Pesonal Consumption, Individual
Hawkins and Mothersbaugh (2010)	Buying process to select, secure, use, and dispose of products, services, experiences, or ideas by individuals, organizations or groups in order to meet their needs and have the impact towards individual, group, and society	Select,Secure, Use,and Dispose, Individual, Group
Solomon et al (2006)	Activities involving select, purchase, use, or dispose of goods, services, experience, or idea to satisfy and meet need and desire by individual or groups.	Select,Purchase, Use, Dispose, Society
Engel,Blackwell,and Miniard (1995) and Blackwell et al. (2012)	Activities related to obtaining, consuming, and disposing of goods and services which is involving the decision making process that come before these actions	Obtaining, Consuming, Disposing,
Schiffman, Kanuk, and Hansen (2007)	Behaviour for searching, purchasing, using, evaluating, and disposing goods and services in order to satisfy their needs.	Searching, Puchasing, Using, Evaluating, and Disposing.

In the mean time, these scholars (Schiffman, Kanuk, and Hansen, 2007; Hawkins and Mothersbaugh, 2010; Kotler, Armstrong, & Opresnik, 2018; Solomon et al, 2006; Engel, Blackwell, and Miniard,1995; Blackwell et al., 2012) also have mutual understanding regarding to the buying decision process which consists seven primary stages namely, need recognition, search for information, evaluation for alternatives, purchase, consumption, post-consumption evaluation, and divestment. Further explanation of this seven stage will be discussed as subtopic of consumer decision making model in this chapter of this study.

2.2 CONSUMER DECISION MAKING

Consumer behaviour is also described as a decision making process and in this decision making process, the main actor is the consumer. Consumers have to make decisions as to which goods and service that they want and can afford to buy as most of them have limited resources (Runyon, 1977). According to Schiffman, Kanuk, and

Hansen (2007), Kotler, Armstrong, & Opresnik (2018), Engel, Blackwell, and Miniard (1995) and Blackwell et al., (2012), consumer decision making can be regarded as three different but interlocking stages namely, the input stage, the process stage, and the output stage. The input stage demonstrated the stimuli that influence the consumer need and want. These stimuli come from two major information namely, the firm's marketing strategy (product, price, promotion, place, people, process, and physical evident) and the external influence (family, friend, neighbor, social class, and cultural). This input influences the consumer decision making and how they use that input for final buying decision making. Next, the process stage refers to how consumer makes a decision. In this process, the individual's psychology factors such as motivation, perception, learning, personality, and attitude influence how the external input contributes towards consumer need and want, search for information, and evaluate for alternatives. Lastly, the output stage consists of two main decision making namely purchase behavior and post purchase behavior. The clear visualization of consumer decision making can be viewed in Figure 2.1.

On the other hand, the consumers also need to understand what kind of consumers they are. Thus, they will avoid problems during shopping activities as there are some consumers who spend beyond their means. Basically, these kind of consumers are not aware of the drawback of their buying decision style such as impulse buying decision style. This unplanned buying behaviour will drive the consumer into severe problems such as financial and social problems. Therefore, it is important to study and have some understanding pertaining to consumer buying decision making.

(INPUT)
External Influence

Firm'd Marketing Efforts
Price
Promotion
Product
Place
People
Process
Phycology Evident

Sociocultural Environment
Family
Informal Sources
Other Non-Commercial Sources
Social Class
Culture and Sub-Culture

(PROCESS)
Consumer Decision Making

1.Need Recognation

2.Pre-Purchase Search

3.Evaluation of

Alternatives

Psychological Field
1.Motivation
2.Perception
3.Learning
4.Personality
5.Attitudes

Experiences

(OUTPUT)
Post-Decision Behaviour

Purchase

1.Trial

2.Repeat Purchase

Post-Purchase Evaluation

Figure 2.1: A Simple Model of Consumer Decision Making
Sources: Schiffman, Kanuk, and Hansen (2007)

2.2.1 Types of Consumer Decision Making

The consumer decision making style has been interpreted by Sproles and Kendall (1986) as "a mental orientation characterizing a consumer's approaches to making choices". It is a normal consumer personality that consists of cognitive and effective characteristics. There are eight basic characteristics or type of consumers' decision making, namely; high quality consciousness or perfectionism, brand consciousness, novelty fashion consciousness, recreational or hedonistic shopping consciousness, price and value for money shopping consciousness, impulsiveness, confusion from over choice, as well as habitual and brand loyal orientation toward consumption. These eight basic Consumer Style Inventory (CSI) represent a consumer's approach towards choosing in buying activities (Sproles and Kendall, 1986) and are categorized into three orientations, namely; utilitarian, social/conspicuous, and undesirable orientation (Shim, 1996). In terms of level of decision making, previous scholars categorize the level of decision making through two product involvement, high and low product involvement via specific level of consumer decision making namely, complex buying behavior, dissonance-reducing buying behavior, extended problem solving, habitual buying behavior, limited problem solving and variety seeking buying behavior (Kotler, Armstrong, & Opresnik, 2018; Solomon, 2006; Schiffman, Kanuk, and Hansen, 2007). However, as this study is about impulse buying behavior, therefore, futher explanation of level and type of decision making only concern of eight types of consumer decision making as mentioned above.

For the first characteristic, high quality consciousness and perfectionist consumers refer to the group of consumers who tend to shop more carefully. They are more likely to make a prior systematic and comprehensive observation and comparison towards the goods or services that they want to buy. They are not impressed with goods that are just good enough but prefer the perfect, high quality, and the best ones. This type of

consumers' decision making is quite difficult to handle as some of them will dismiss impulsive buying. These consumers are categorized as utilitarian orientation consumers as price and quality are their priority (Shim, 1996). The second characteristic of consumer decision making is identified as a brand conscious decision maker. This group of consumers are fanatic towards branded, well-known, exclusive, and expensive things. They prefer to spend only on popular and branded goods or services and they believe that better quality comes from expensive price. This type of buying decision making consumers will make decisions wisely only for branded and expensive goods.

Next, consumers tend to make decisions through trying something new in the market. They are interested with new products that are rarely used by others and keep hunting for them. These novelty fashion consciousness consumers are excited to possess new products in the market. They tend to keep up with new styles and being stylish, elegant, and cool are essential to them. On the other hand, there are some consumers who make the buying decision according to their feelings. This group of consumers tend to shop according to recreational and hedonistic shopping consciousness. They are concerned about enjoyable feeling such as fun, excitement, and entertaining. This group of consumers will buy anything as long as they feel enjoyment and pleased. Basically, this group of consumers will make a buying decision according to recreational and hedonistic feeling.

Meanwhile, for the price conscious and value for money characteristic, this group of consumers prefer to make a buying decision based on the best price offered and they are also known as comparison shoppers. They will make an effective investigation and observation for the best price. Basically, this group easily makes a decision to buy during sales promotion and getting the best value for their money is their concern. Shim (1996)

through his study that is related to adolescent consumer decision making classified these four styles of consumer decision making as social orientation consumers who seek popular and branded items and shop for recreation only.

On the other hand, the group of impulsive decision style tends to make a buying decision spontaneously. They are unconcerned about what types of things they spend on and how much they spend. These impulsive buying decision making consumers basically experience financial problems such as debt and social relationship problems (Rook, 1987). The second last characteristic refers to the group of consumers who make decisions by being confused through over choice. This group of consumers experience a hard time to make a buying decision as they are confused with the many brands and stores that they need to choose from and this group is identified as undesirable consumers who make poor decision making because of impulsiveness and confusion (Shim, 1996). They are also known as product and retail oriented consumers (Rezaei, 2015). For the last characteristic, habitual and brand loyal consumer orientation refers to the group of consumers who make a buying decision only for their favorite brands and stores. This type of buying decision making is a well-known consumer decision making, which is called the general characteristic of buying decision making.

Previous studies on consumer decision making style included consumer decision making in individual learning style (Sproles & Sproles, 1990), cross culture (Kamaruddin & Kamaruddin, 2009), Generation Y decision making style (Mokhlis, 2009a), gender differences (Mokhlis and Salleh, 2009), marketing practice (Rezaei, 2015), consumer intention and satisfaction (Alavi et al. 2015), as well as consumer decision style in automobile buying (Nayeem and Casidy, 2013). Thus, this study chooses impulsive decision making style among credit card holders as the main topic to explore as this topic

was rarely covered in previous studies and the researcher believes that the outcome of this study will contribute towards the body of knowledge.

2.2.2 The Consumer Decision Process Model

The consumer decision process model represents the consumers' mind about buying decision making. This model certainly facilitates the marketer and manager in their sales strategy, communication, and production. This model illustrates the process that occurs when consumers make a buying decision and how internal and external factors affect the ways the consumers think, evaluate, and act. Although this consumer decision making process model illustrates a sound and robust flow of decision making, yet some consumers do not consciously go through every step of the decision process (Runyon, 1977). They tend to cut the process short and make purchases without conscious deliberations, as in the case of impulsive buying. As depicted in Figure 2.2, consumers basically experience seven main stages when making decisions, namely; need recognition stage, search for information stage, pre-purchase evaluation stage, purchase stage, consumption stage, post-consumption evaluation stage, and finally, divestment stage (Engel, Blackwell, and Miniard, 1995).

The beginning point of any buying decision is consumer recognition. This level of buying decision making demonstrates the condition when the consumers experience differences between what they wish to be the ideal and the actual states that they have. Consumers pay for things that are believed to solve their problem. Therefore, in this beginning stage, the consumers will identify their problem and recognize the solution for it (Engel, Blackwell, and Miniard, 1995).

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                    ┌─────────────────────────────┐
                    │      Need Recognition       │
                    └─────────────────────────────┘
                                  ↓
                    ┌─────────────────────────────┐
                    │      Search Information      │
                    └─────────────────────────────┘
                                  ↓
                    ┌─────────────────────────────┐
                    │  Pre-Purchase Evaluation for│
                    │         Alternatives        │
                    └─────────────────────────────┘
                                  ↓
                    ┌─────────────────────────────┐
                    │          Purchase           │
                    └─────────────────────────────┘
                                  ↓
                    ┌─────────────────────────────┐
                    │         Consumption         │
                    └─────────────────────────────┘
                                  ↓
                    ┌─────────────────────────────┐
                    │  Post-Consumption Evaluation│
                    └─────────────────────────────┘
                                  ↓
                    ┌─────────────────────────────┐
                    │          Divestment         │
                    └─────────────────────────────┘
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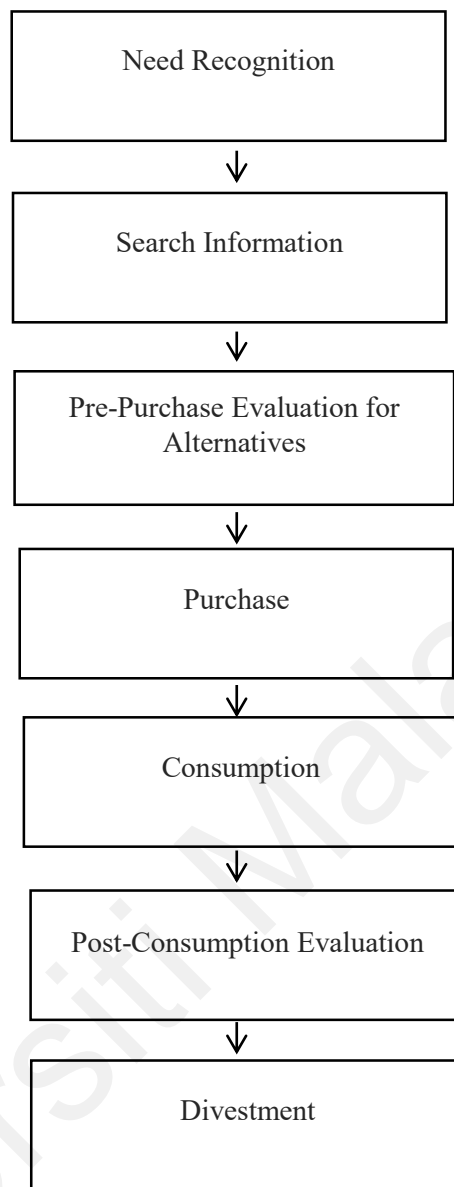
Figure 2.2: *How Consumers Make Decisions for Goods and Services*
Sources: Engel, Blackwell, and Miniar, (1995) and Blackwell et al. (2012)

After completing the need recognition process, consumers will search for information regarding the things that they want to buy through internal or external sources. Internal sources refer to retrieving information from memory or genetic tendencies and external sources are collecting information from peers, family, and the marketplace (Engel, Blackwell, and Miniard, 1995). There are two sources that consumers will engage during searching for information, namely; marketer dominated and non-marketer dominated sources. Marketer dominated sources refer to anything related to marketers' activities such as advertising, sales people, and websites. Meanwhile, non-marketer dominated sources

are referred to for further understanding about the things that they intend to purchase. This group of non-marketer dominated sources includes friends, family, media, testimonials, and opinion leaders.

The next stage of consumer buying process is pre-purchase evaluation. In this stage, consumers will evaluate the potential goods or services that they intend to purchase. The comparison proses will be undertaken in this stage in order to know which goods or services are the best to purchase. After experiencing the comparison process, the consumers will make purchase decision and pay for goods or services that meet their demand and desire. At this moment, the consumers feel confident and pleased with the goods or services that they purchase. In this stage, consumers are unable to make any evaluation towards their goods or services until they reach the consumption stage.

The consumption stage is achieved when consumers take possession of the product. The consumption process may occur immediately or may be delayed. In this stage, the consumers will experience the moment to use the product and it is also the beginning step to evaluate the product. After experiencing the consumption stage, the consumers will experience the sixth stage, namely; post-consumption evaluation. In this stage, the consumers experience a sense of either satisfaction or dissatisfaction with the product or service that had been consumed. Satisfaction is achieved when the performance of the good or service meets the consumer's expectation and if performance falls short of expectation, dissatisfaction occurs. If consumers are satisfied, subsequent buying decision becomes easier. After completing the consumption and post-consumption evaluation, the last stage is divestment which is how consumers choose to manage their goods. If the consumers are highly satisfied with the product or service, they will keep it close to them and have loyalty on it, but if the product or service is unable to

impress the consumer, then the consumer may choose to dispose it by auction or selling it in the market.

2.3   DETERMINANTS OF CONSUMER BEHAVIOUR (INDIVIDUAL)

Consumers are considered king with different characteristics and abilities. Some consumers have a lot of money but little time, and other consumers may have a lot of time but little money with similar desire and demand. This situation reflects that consumers with different backgrounds will practice different buying behaviours. Basically, in consumer decision making process, the individual variable determinants of consumer decision making include gender, age, income, lifestyle, personality (Blackwell et al. 2012), attitude, motivations, beliefs, as well as intention (Sirakaya and Woodside, 2005). In a nutshell, the internal influences referred as personal thought and feeling come from within the consumers such as self-concept, lifestyle, motivation, emotion, attitude, and intention, which are called psychological or individual influences (Lake, 2009). Several substantial previous studies on impulse buying behaviour (Burgess, Yaoyuneyong, and Gibbs, 2014; Nayebzadeh and Jalaly, 2014; Thompson and Prendergast, 2015; Badgaiyan and Verma, 2015; Vinatagamoorthy and Kannan, 2015; Lins et al. 2015) explored the relationship and reliability between individual influences and impulse buying behaviour. However, in this study, the researcher attempts to explore and examine the individual influence variable that are rarely tested in impulse buying behaviour studies such as religiosity, self-*hisbah*, hedonic motivation, and materialism. Religiosity variable is usually identified as a variable under environmental or cultural element in buying behaviour. However, this study takes a different step from previous studies and clarifies as well as categorizes religiosity as part of the individual variable. Comprehensive overview about this matter is explained in the theoretical and model section.

2.4 DETERMINANTS OF CONSUMER BEHAVIOUR (SITUATIONAL)

The next element that influences consumers in their buying decision making is situational or environmental element comprising culture, social class, family, personal influence, and situation behaviour. These things will influence how consumers create their buying pattern. Numerous impulse buying behaviour studies have been conducted pertaining to the correlation between situational variable and impulse buying behaviour. For instance, Luo (2005) who studied about how shopping with peers and family members influence impulse buying behaviour indicated that shopping with peers increases the level of impulse buying. These situational variables are also known as external factors and environmental factors. Some researchers tend to choose situational variables as the terminology for environmental factors. Five groups of situational characteristics were identified by Belk (1975), namely; psychical surroundings, social surroundings, temporal perspective, task definition, and antecedents states. The environmental variables tested in this study include sales promotion and money and time availability. The selection of these two variables are due to the lack of previous studies related with these variables in impulse buying behaviour. Therefore, the researcher believes this effort will contribute new knowledge in the consumer buying behaviour field.

2.5 CONSUMPTION FROM ISLAMIC PERSPECTIVE

Basically, consumption is created by consumers through utilitarian orientation and hedonic orientation approaches. These approaches form the objective of consumption. Utilitarian consumption refers to consumption based on task through the function, benefit, consequences of the product and goal oriented consumption (Lee & Wu, 2017). Meanwhile, hedonic orientation consumption is created based on effective preferences, namely; buying something according to wants and desires. This hedonic orientation

consumption is concerned with sensory experience of something artful and beautiful, sensual pleasure, fun, and fantasy (Hirschman and Holbrook, 1982). This is how conventional scholars explained the types of consumption among human beings. This study believes that the utilitarian orientation consumption and hedonic orientation consumption are compatible with the Islamic hierarchy of needs. Utilitarian and hedonic consumption is consistent with the concept of Islamic hierarchy of needs namely; *Dharuriyah* (necessities), *Hajiyah* (conveniences) and *Tahsiniyah* (refinements luxuries) concepts as explained in 2.5.1 below.

2.5.1 Islamic Hierarchy of Needs

Islamic principles stipulate the hierarchy of human needs into three main levels, namely; *Dharuriyah* (necessities), *Hajiyah* (conveniences), and *Tahsiniyah* (refinements/ luxuries) levels. Islamic consumption is regulated according to these three levels of needs. The main priority is the *Dharuriyah* (necessities) need which contains the basic requirements for life such as shelter, clothes, food and beverage, as well as transportation. These are the basic things needed to meet humans' daily consumption. According to Quoquab and Ahmad (2015), the renowned Islamic scholar Imam Al-Shatibi had mentioned five basic things that need to be protected under the *Dharuriyah* level, namely; *al-iman* (faith), *al-nafs* (life), *al-ma'al* (wealth), *al-aqal* (intellect), and *al-nasal* (offspring). The second Islamic human need is *Hajiyah* (conveniences).

Basically, humans have their own self-regulation and desire for something. After fulfilling the necessities need, humans will move to the convenience need which is for comfort and satisfaction, such as renovating a house or buying a new car. Islam recognizes *Hajiya*h (convenience) consumption as this level of consumption is purposely for convenience and removes any difficulties and restrictions in life. For instance, buying

a big car to transport a huge family is permissible as long as it does not result in detrimental effects such as massive debts and a miserable life. Ultimately, the last stage of human needs is *Tahsiniyyah* (refinements/ luxuries), which is declared as the highest human desire and demand. Any consumption in this level is not suggested in Islam as in this level, humans start to consume and pay for unnecessary goods and services such as luxury houses as well as expensive cars, clothes, and foods. However, Islam does not prohibit the *Tahsiniyyah* (refinements/ luxuries) consumption as long as it does not lead towards negative effects such as extravagance, wastefulness, egoism, profligation, and boastfulness. Allah says in the Quran:

"And give the relative his right, and also the poor and the traveler, and do not spend wastefully. Indeed the wasteful are brothers of the devils, and ever has Satan been to his Lord ungrateful" [3](Translation Al-Quran, 17: 26-27).

Islam recognizes consumption activities as long as it does not relate with prohibited things as Allah says in the Quran:

"But Allah has permitted trade and has forbidden interest" [4](Translation Al-Quran, 2: 275)

Muslims are expected to be moderate in their consumption activities to avoid a miserable life. Allah says in the Quran:

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[3] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran
[4] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

"And do not make your hand as chained to your neck or extend it completely and thereby become blamed and insolvent" [5](Translation Al-Quran, 17: 29).

Therefore, this study concludes that consumption activities are permitted in Islam as long as these comply with Islamic regulations and Islam commands the Muslim to be moderate in their consumption activities.

2.5.2   The Moderation Concept in Islam

In Islamic principle, the concept of moderation is well-known in Arabic as *"Al-Wasatiyyah"*, which originates from the word *wasat*. Originally, this term is derived from the phrase *ummatan wasatan* (the moderate people*)* in the admonition of Allah S.W.T in Al-Quran (Hanapi, 2014). Allah says in the Quran:

"Thus we have made you the community (*ummah*) of the middle way, so that you may stand witness against the rest of mankind, and the Messenger shall be a witness against you. We appointed the direction of prayer which you formerly followed in order that we might distinguish those who follow the Messenger from those who turn on their heels. It was indeed a hard test except for those whom God has guided. God would never have let your faith be in vain. God is Compassionate and Merciful to mankind [6](Translation Al-Quran, 2: 143)*.*

There are substantial interpretations by Islamic scholars regarding the term *wasata.* Previous prominent religious scholars *(mufassirin)* interpreted this term as being obedient and fair to the Islamic teachings and values and not to be extreme in worldly and

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[5] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran
[6] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

religious matters (Zuhaili, 2013). Meanwhile, Qutb (1979) explained that the Arabic term *wasat* is used in the Quran in a very broad sense. In a nutshell, Sayyid Qutb interpreted *wasatiyyah* as balance and moderation between spiritual asceticism and materialism as well as body and soul, which means to satisfy them both for the purpose to uplift spirituality and enhance the quality of human life. Therefore, this study defines the concept of moderation *(wasatiyyah)* as not to be extreme in the worldly life and the hereafter.

Accordingly, the prior interpretation *(tafsir)* of Allah's words in the Al-Quran by the religious scholars demonstrated that Allah has ordered humans to be moderate and balanced in worldly life and the hereafter. However, the concept of *wasatiyyah* (moderation) does not mean taking a 50:50 stand, such as between good attitude and bad attitude or between being rich and being poor. Becoming rich is not wrong as long as we do not forget the needy and always assist them with what we possess. For instance, Abdul Rahman bin Auf r.a donated his property to the needy and never forgot them (Hanapi, 2014). This is aligned with Allah's saying in the Quran:

"And who, whenever they put their money to use, are neither wasteful nor niggardly, but always maintain a just mean between the two" [7](Translation Al-Quran, 25: 67).

According to this verse, Allah S.W.T commanded the real servants to lead a balanced life. Islam creates balance in the life of the individual and society by cultivating this balance concept through educating the Muslims and also through the legal system. Although Allah S.W.T accepts private ownership, it is not compulsory for a Muslim to

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[7] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

use and waste his/her wealth without restriction. A Muslim is required to practice a balanced and a moderate life by avoiding extravagance and miserliness as these negative attitudes contribute detrimental effects towards the individual, community, and money itself. Both these extreme attitudes, overspending and withholding money result in an imbalanced economy and social status as well as unhealthy effect on people's health and morality (Qutb, 1979). To sum up, the concept of moderation *(wasatiyyah)* appropriately functions as a fundamental of life, which is comprehensively related with human nature. This concept educates human to be humble, moderate, grateful, and not being extreme in either the worldly or the hereafter. Therefore, it is crucial to be moderate in consumption activities as this positive attitude will lead towards quality and harmony of life.

2.5.3 Impulse Buying from Islamic Perspective

Basically, Islam defines any economic activity as a part of Muslim worship *(ibadah)*. Any human behaviour is considered as the act of worship *(ibadah)* when it is conducted for the sake of Allah. In consumption activities, a transaction will be considered as *ibadah* if the transaction is parallel with the conditions stipulated by *shariah* rule such as made with righteous intention, beneficial for the *ummah* (public), and performs the responsibility as a Muslim (Rahman, 1975; Hassan and Ahmad, 2005). Righteous intention is crucial as Allah SWT will judge the action by the intention. Therefore, when we buy something fancy and expensive, Allah will judge our behaviour according to the purpose of our transaction. If the intention of buying fancy and expensive goods or services is for showing off *(riya')* or high perception by others, it is considered impermissible in Islam as that action causes negative consequences such as jealousy and egoism. Muslims are required to follow *shariah* rules in consumption activities such as avoiding wastefulness, massive debts, prohibited transactions, as well as spending on unbeneficial goods and services that do not provide any benefit for *ummah* (public)

(Rahman, 1975). Thus, the question is whether or not impulse buying behaviour is permissible and approved in Islamic consumption.

Firstly, Islam does not like any attitude that leads to dangerous and negative impacts. Impulse buying behaviour, which is also known as unplanned buying by making an urgent and spontaneous buying without prior plan before entering the stores (Clover, 1950; West, 1951; Applebaum, 1951; Kollat and Willett, 1969; Abratt and Goodey, 1990) results in detrimental effects such as financial hardships, guilt, regrets, non-financial problems, and emotional trauma (Rook, 1987; Bahrainizad & Rajabi, 2018). This negative behaviour is obviously prohibited in Islam as it results in detrimental effects such as self-destruction. As Allah S.W.T mentioned in the Al-Quran:

"Give generously for the cause of God and do not with your own hand throw yourself to ruin. Preserve in doing well, for God loves those who do good" [8](Translation Al-Quran, 2: 195).

This verse demonstrates the words of Allah S.W.T about the command to avoid self-destruction. Miserliness and materialism obviously lead towards self-destruction for the individuals and also the community (Qutb, 1979). Therefore, it is clearly demonstrated that impulsive buying is unacceptable in Islamic consumption as the presence of the element of self-destruction in this consumption is prohibited in Islamic doctrine.

Secondly, impulse buying behaviour also creates the elements of wastefulness and extravagance that result in financial hardships such as massive debts (Rook, 1987; Pradipto, Winata, Murti, & Azizah, 2016). Islam strictly prohibits the elements of

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[8] Translation of Al-Quran derived from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

wastefulness and exaggeration in life (Rahman, 1975) as Allah S.W.T commanded in the Quran:

"And give to the relatives his due, and to the needy, and to the wayfarer but spend not wastefully in the manner of spendthrift. Verily, the profligate are brothers of the devils, and the devils are ever ungrateful to his Lord." [9](Translation Al-Quran, 17: 26-27).

In addition, narrated by Al-Mughira bin Shu'ba r.a, the Prophet Muhammad S.A.W said, "Allah has forbidden for you (1) to be undutiful to your mothers, (2) to bury your daughters alive, (3) to not pay the right of the poor and others, and (4) to beg of men. And Allah hates for you (1) sinful and useless talk like backbiting or that you talk too much about others, (2) to ask too many questions (in disputed religious matter) and (3) to waste the wealth (by extravagance and with lack of wisdom and thinking)" (Al-Bukhari, 1997b). Narrated by Ibn Mas'ud r.a, the Prophet Muhammad S.A.W said "there is no envy (or not to wish to be like of) except in two: a person whom Allah has given wealth and he spends it in the right way, and a person whom Allah has given wisdom (religious knowledge of the Quran and Sunnah) and he gives his decision accordingly and teaches it to the others" (Al-Bukhari 1997a). This implies that impulse buying behaviour, which involves engaging with unplanned buying that finally results in wastefulness and extravagance obviously is despised by Allah S.W.T as stated through the Quranic verses and hadiths above. Allah S.W.T has granted humans with wisdom and knowledge as well as the Quran and the hadiths as the main references in their lives. Thus, they should be grateful for this favor.

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[9] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

Thirdly, in Islamic consumption, the elements of organizing and clarification are crucial as any doubtful thing will lead to negative impact. As Allah S.W.T has prohibited the element of *gharar* (ambiguity) in consumption, thus, it is possible to claim that in buying behaviour we need to clarify what we need, what we can afford, and how to obtain it. Clearly prepared consumption objectives will facilitate buying activities without any barrier such as financial hardships due to unplanned buying (impulsive buying). Systematic consumption is crucial in order to avoid any unexpected negative impact. Islamic doctrine has taught the Muslims regarding the importance of organizing, consultation, deliberation, and planning in life. Allah S.W.T in the Quran says:

"Consult with them on the conduct of public affairs" [10](Translation Al-Quran, 3: 159).

This verse was addressed to the Prophet Muhammad S.A.W who must have felt uncomfortable over his people in the Battle of Uhud. In a nutshell, this verse clarifies about the Islamic method in organizing the Muslim society and the basic essence of Islamic government, as well as interpreting the importance of consultation or deliberation to examine all aspects before making a wise decision and taking action (Qutb, 1979). This verse is compatible with the impulse buying behaviour issue which unplanned buying without appropriate deliberation will ultimately result in detrimental effects in our lives. Effective planning and consultation will lead to wise financial utilization.

The consumers ought to organize their consumption activities appropriately before making a final decision. For instance, before paying for luxury and expensive handbags, the consumers ought to consider their financial affordability and whether it is

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[10] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

crucial to buy those goods. The same consideration should be given before using a credit card for impulsive buying that is the consumers ought to realize their debts and the consequences of excessive spending. Through their wisdom and knowledge, the consumers need to think of the consequences if they buy something that they cannot afford. Therefore, impulse buying behaviour is definitely unacceptable in Islam as Islam does not approve or like any unplanned behaviour that leads towards unfavorable effects.

However, how about a normal impulse buying behaviour or also known as suggestion impulse buying and reminder impulse buying? Normal impulse buying behaviour is classified as impulsive buying that does not frequently occur and its behaviour does not really create an adverse effect compared to pure impulse buying. This normal or suggestion impulse buying that involves the items purchased on suggestion are basically perceived as rational and functional purchases (Stern, 1962). For instance, sometimes when we are at the store, we feel craving for an expensive chocolate cake. We pay for it because we really need it and can afford to pay for it. This buying transaction is called impulse buying when we never have any intention to buy it before entering the store. Therefore, this study believes that this normal impulse buying is acceptable in Islam as long as this action does not result in negative effects such as wastefulness. However, as Muslims, we are advised to educate our desires to be low for worldly matters and avoid any prohibited elements in consumption activities.

To sum up, fundamentally the behaviour of impulsive buying demonstrates the element of ungratefulness, which is prohibited in Islam. Impulsive Muslim consumers tend to ignore Allah's command regarding wastefulness and extravagance and freely utilize their temporary wealth, which ultimately result in financial hardship, emotional trauma, and self-destruction. They are not concerned about what Allah has prohibited and

they fulfill their utmost desires. This is one of the ungrateful attitudes with the favors of Allah and disobedience of Allah's command. On the other hand, the impulsive Muslim consumers also ignore the element of moderation *(wasatiyyah)* and are concerned more to their desire of worldly matters. Therefore, this study concludes that impulse buying behaviour, which leads to adverse effects such as financial hardship, emotional trauma, self-destruction, and miserable life is absolutely unacceptable and disapproved in Islamic doctrine. However, normal impulse buying such as reminder impulse buying and suggestion impulse buying are permissible as the reminder impulse buying does not result in negative and dangerous effects.

Meanwhile, for suggestion impulse buying, as long as this behaviour does not contribute towards negative consequences and the goods or services are rational and functional, it is considered acceptable in Islam. Islamic consumption practices the element of moderation, which is a balance between worldly and spiritual matters. Any excessive or extreme behaviour is not permissible in Islam. However, some Muslim consumers still ignore the Islamic rule in consumption activities and make impulsive buying, which result in severe effects such as massive debts and miserable lives due to bankruptcy. Therefore, it is crucial to this study to examine what are the factors that influence Muslim credit card holders in practicing impulse buying behavior and the function of religiosity and crdit card usage in this impulse bying behavior issues.

2.6   VARIABLES OF THE STUDY

The main purpose of this study is to examine the factors that influence impulse buying behaviour, the mediating role of credit card usage, and the moderating role of religiosity among Muslim credit card holders towards impulse buying behaviour. Previous scholars had studied on impulse buying behaviour with a variety of variables.

Generally, previous scholars in marketing study revealed that there are considerable factors that affect consumer buying behaviour and buying decision such as individual and psychological factors, culture, promotional strategies, as well as social and environmental variables.

In the realm of impulse buying behaviour study, studies in this area mostly employed the external and internal variables as the indicators of investigation. These external and internal variables are also labeled as situational and individual variables, which were popularized by Belk (1975). This study uses a synthesis of variables among the situational and individual variables. For situational variable or environmental variable, physical surroundings (sales promotion) and temporal perspective (money and time availability) were selected and the rest were derived from non-situational or individual variable (materialism, self-*hisbah*, hedonic motivation, credit card usage, and religiosity). Prior researchers have explored and investigated these variables in buying behaviour studies but are rarely conducted in impulse buying behaviour studies, particularly in Malaysia. Therefore, this study addresses these gaps by highlighting this as the purpose of this study, which will contribute extensively towards the body of knowledge.

2.6.1 IMPULSE BUYING BEHAVIOUR

Impulse buying is often driven by ambitious marketing campaigns to influence consumer behaviour. Likewise, the presence and adoption of new and innovative technologies in commercial and retail business help to create a diverse range of shopping channels that attract consumers to use given their availability and convenience (i.e. Amazon, Lazada, Shopee). Impulse buying behaviour is driven by the ease by which consumers can use credit cards and gain quick and easy access to Internet banking, 24-

hour shopping venues, and online retailing. With the rapid growth of social media sites (i.e. Facebook, YouTube, and Instagram), posting and discussing information on products and services have also facilitated the rise of impulse buying behaviour. Consumers will engage in consumption due to two reasons, namely; hedonic reasons and utilitarian reasons (Kang and Poaps, 2010). Impulse buying behaviour is fundamentally related to the ability to control self-gratification. Furthermore, the ability to control self-gratification or satisfaction will probably reduce the tendency or urge to act without thoughtful or proper consideration. The failure to self-control oneself also contributes to impulsive buying. These factors are indirectly related to how humans manage and control their desires or *Nafs* to meet their needs and demands.

The definition of impulsive buying behaviour by researchers and academics varies, especially within the marketing sector or domain where the term and meaning invariably changes. Research into impulse buying began in the early 1950s resulting from the advent of the retail industry. During this period, Du Pont conducted a series of studies on impulse buying behaviour, notably, *Consumer Buying Habits Studies* (1948-1965) sponsored by the Point of Purchase Advertising Institute. The studies concluded that impulse buying behaviour is defined as unplanned buying and these studies further created an impulse buying behaviour model that was used for much of the earlier research (Rook, 1987). Subsequently, numerous studies examined the influence and regularity of customer impulse buying behaviour in various forms including; sales patterns (Clover, 1950), food and cosmetics (West, 1951), as well as the consumer types and buying patterns (Applebaum, 1951). Further, extensive studies were undertaken by researchers such as (Stern, 1962) on impulse buying behaviour to understand further the different types of buying and the different range of products that could be classified into two distinct categories which are impulse and non-impulse products. Usually, within the

context of marketing, impulse buying does not explicitly refer to any specific type of product and service, except for buying decisions related to food (Kollat and Willett, 1969).

Two issues were found in earlier studies relating to impulse buying behaviour. First, to identify and classify products into impulse or non-impulse buying, the theoretical framework needed to guide the empirical work was inadequate (Rook, 1987). Regarding the classification of impulse buying product attributions, previous scholars and researchers had conflicting thoughts and ideas on this issue. Some scholars claimed that impulse buying was not about products, but is all about consumers who perform or practice impulse buying behaviour (Rook and Hoch, 1985). However, other scholars mentioned that products are in fact, part of the reasons for consumer impulse buying. Consumers will practice impulse buying towards certain products which attract both their attention and desire. Previous scholars suggested that low price and low involvement products are more likely to be associated with impulse buying. However, impulse buying products will extend beyond low price and low involvement to include high priced and the involvement of products such as furniture, kitchen appliances, an additional television set, a vacation, cruise and so forth (Rook, 1987).

The second issue was that prior scholars and researchers had a different school of thought (i.e. mindset) concerning the definition of impulse buying behaviour and how to interpret or define buying behaviour as impulse buying. Initially, Abratt and Goodey, (1990), Clover (1950), West (1951), Applebaum (1951), and Kollat and Willett (1969) unanimously defined impulse buying behaviour as unplanned buying by making an urgent purchase without previously planning to do so, before entering the retail store. Indeed, this is consistent with recent studies which state that impulse buying behaviour is

often viewed in parallel with that of unplanned buying with similar characteristics; not being mindful or careful deliberation and smart shopping decision making (Kalla and Arora, 2011; Brici, Hodkinson, and Mort, 2013).

However, the definition of an unplanned purchase in relation to impulse buying was considered to be too vague as it incorporates various behaviours. For instance, remembering to buy a packet of sugar while shopping does not indicate impulse buying behaviour. This form of behaviour is called reminder impulse buying, which is more about needing something, by thinking spontaneously, realising that the item at home or elsewhere is out of stock (Stern, 1962). Apparently, not all unplanned buying is decided by an impulse to buy, as there are many situations where consumers will buy items recorded on their shopping list. Although in this case, brand names of the products are impulsively decided upon (Rook, 1987). Meanwhile, (Rook and Fisher, 1995) suggested that impulse buying behaviour in making a decision is judged as 'false work' or is brought about due to lack of self-control by immature, irrational, wasteful, and risky behaviour.

Furthermore, to make the statement that unplanned buying is construed as impulse buying behaviour, it is quite problematic (Pollay, 1968) as the term 'planning', is subjective and quite vague. Moreover, planning behaviour can change given "environmental circumstances" (Rook, 1987) and can include many different varieties and types of actions (Kollat and Willett, 1969; Stern, 1962). Furthermore, customer hesitation and the unwillingness to express pre-purchase intention have equally been recognised as being a problem for scholars to accurately define impulse buying (Kollat and Willett, 1969). However, what has not diminished or reduced, is the volume of impulse buying behaviour among consumers as in fact, this behaviour is rapidly growing.

Conversely, referring to the adverse consequences of impulse buying behaviour (Rook, 1987) in his study reported that 80 percent of respondents claimed to experience some difficulties as a result of impulse buying. Most of the respondents were reported to experience financial difficulties, guilt, regret, and disappointment with the impulsively purchased goods, and several claimed that this has impacted on their non-financial plans (i.e. such as their healthy diet program being spoilt due to impulse buying). Indeed, impulse buying will often reflect negative attitudes such as financial problem (Pradipto, Winata, Murti, & Azizah, 2016) , low self-esteem, immaturity, lack of financial planning (Zhang and Shrum, 2009), post-purchase regret (Cook and Yurchisin, 2017; Gardner and Rook, 1988), product return behaviour (Kang and Johnson, 2009), and unethical behaviour (Bossuyt et al. 2017).

In a study by Brici, Hodkinson, and Mort (2013) two general aspects were found to trigger impulse buying behaviour; internal and external cues. An external cue is more likely to involve a variety of external factors such as the store, retail outlet or shopping mall environment (Mohan, Sivakumaran, and Sharma, 2013), an in-store display (Ghani and Jan, 2011), the performance of a website (for online stores) (Wells, Parboteeah, and Valacich, 2011), the type of food and beverage (Duarte, Raposo, and Ferraz, 2013), and the availability of money and time (Beatty and Elizabeth Ferrell, 1998). The internal cue, on the other hand, is associated with individual stimulation factors such as personality attributes (Sharma, Sivakumaran, and Marshall, 2010b), self-control failure (Sultan, Joireman, and Sprott 2012), and the individual's enjoyment of visiting the store (Verhagen and Van Dolen, 2011). Conversely, previous studies have also indicated that there are other elements to consider such as fun and intense arousal of emotions which form the essence of impulse buying behaviours, such as the feelings of pleasure, excitement, and a powerful urge or obsession to buy (Verplanken et al. 2005; Rook,

1987). However, some researchers have a different view, claiming that the elements of adverse or conflicted feelings are related to impulse buying behaviour. Interestingly, some people have ignored self-control and fulfilled their desire to remain calm, and satisfy themselves and their minds (Baumeister, 2002).

In another study by Brici, Hodkinson, and Mort (2013) it was reported that, impulse buying behaviour is a strategy to alleviate or reduce problems or negative feelings, it might also be considered as compulsive buying as some researchers do not mention the differences between the two. However, previous researchers (O'Guinn and Faber, 1989) claimed that impulse buying is different from compulsive buying because compulsive buying relates to the act of buying itself, while impulse buying involves a particular item within a buying transaction. Rationally, impulse buying and compulsive buying are quite distinct regarding their stimulation, despite the similarity in both their concept and behaviour.

With regards to the relationship in this study between the variables; materialism, sales promotion, money and time availability, self-*hisbah*, hedonic motivation, credit card usage, as well as religiosity with impulse buying behaviour, previous researchers have studied these variables in various contexts. For instance, materialism is more likely to influence impulse buying behaviour during a shopping spree or venture (Tendai and Crispen, 2009). While for sales promotion, this was shown to have a positive influence on impulse buying behaviour (Badgaiyan and Verma, 2015; Kacen, Hess, and Walker, 2012; Hulten and Vanyushyn, 2011). For money and time availability, prior studies (Badgaiyan and Verma, 2015) found a positive relationship between these variables and impulse buying behaviour and (Chang, Yan, and Eckman, 2014), thereby indicating that money and the availability of time moderate the relationship between consumers' positive

emotional responses and their impulse buying behaviour. Alternately, there is a further notion that impulse buying behaviour has a significant relationship with hedonic elements (Rook, 1987; Piron, 1991; Rook and Fisher, 1995; Arnold and Reynolds, 2003). Although these variables have been examined in the previous impulse buying studies, however, impulse buying behaviour studies in the Malaysian context are limited, especially regarding the relationship with materialism, sales promotion, money and time availability, hedonic motivations, credit card usage, religiosity, and self-*hisbah*.

Many previous studies were mainly conducted in western countries, for instance, the USA (Watson, 2003; Lucas and Koff, 2017; Zhang, Winterich, and Mittal, 2010; Lins et al. 2015; Wells, Parboteeah, and Valacich, 2011; Roberts and Manolis, 2012; Sultan, Joireman, and Sprott, 2012; Chang, Yan, and Eckman, 2014; Chang, Eckman, and Yan, 2011; Bossuyt et al. 2017; Cengiz 2017), and Sweden (Hulten and Vanyushyn, 2014; Hulten and Vanyushyn, 2011). Also in the United Kingdom (Floh and Madlberger, 2013), South Africa (Tendai and Crispen, 2009), France (Hulten and Vanyushyn, 2011; Muratore, 2016), Ireland (Dhaundiyal and Coughlan, 2016), Italy (Bellini, Cardinali, and Grandi, 2017), Australia (Brici, Hodkinson, and Mort, 2013), and the Netherlands (Verhagen and Van Dolen, 2011), Turkey (Ozen and Engizek, 2014; Ozer and Gultekin, 2015). Also in Asian countries such as India (Prashar, Parsad, and Vijay, 2016; Nirmalya Bandyopadhyy, 2016; Mittal, Chawla, and Sondhi, 2016b; Badgaiyan and Verma, 2015;Atulkar & Kesari, 2018), China (Thompson and Prendergast, 2015; Chuang, Tian, and Lin, 2015; Lin and Chen, 2013; Wu and Lee, 2015; Chen and Wang, 2015; Lin and Lin, 2013), Thailand (Burgess, Yaoyuneyong, and Gibbs, 2014) , Indonesia (Tjiptodjojo and Setyawan, 2016), Singapore (Pornpitakpan, Yuan, and Han, 2016), and Malaysia (Khan et al. 2015; Falahat et al. 2017; Mokhlis, 2009b; Leong, Jaafar, & Sulaiman, 2017).

In the Malaysian context, the previous studies by Falahat et al. (2017) and Khan et al. (2015) discussed impulse buying behaviour in the apparel and footwear context among the Generation Y and female shoppers. In a study by Mokhlis (2009b), he explained more on buying behaviour and not wholly on impulse buying behaviour. Prior studies on impulse buying behaviour in Malaysia tended to investigate the subject in a more general context, i.e. within the scope of conventional consumerism. It is also difficult to locate studies that examine and discuss impulse buying behaviour from the perspective of religion. Previous researchers have tended to explain impulse buying behaviour regarding both consumerism and psychology, which are typically related to human actions, feelings, and the situation. Therefore, significant gaps need to be filled or closed through undertaking future studies. In this regard, this study attempts to fill this gap through exploring impulse buying behaviour among Muslim credit card holders in Malaysia by investigating and discussing impulse buying behaviour from an Islamic perspective. Notably, by examining the concept of consumerism and impulse buying behaviour from a different perspective, which will undoubtedly extend the body of knowledge in this area.

In terms of the type and nature of respondents in impulse buying studies, previous studies were inclined to conduct their studies among university and college students (Beatty and Elizabeth Ferrell, 1998; Rook and Fisher, 1995; Youn and Faber, 2000; Luo, 2005; Wells, Parpoteeah, and Valacich, 2011; Sultan, Joireman, and Sprott, 2012; Duarte, Raposo, and Ferraz, 2013; Burgess, Yaoyuneyong, and Gibbs, 2014; Thompson and Prendergast, 2015; Chuang, Tian, and Lin, 2015; Lucas and Koff, 2017; Seinauskiene, Mascinskiene, & Jucaityte, 2015; Sofi & Nika, 2017) and non-specific consumers (Ek Styven, Foster, & Wallstrom, 2017; Badgaiyan, Verma, & Dixit, 2016; Badgaiyan, Dixit, & Verma, 2017; Bahrainizad & Rajabi, 2018; Turkyilmaz, Erdem, & Uslu, 2015; Akram

et al., 2018; Wu and Lee, 2015; Ozer and Gultekin, 2015; Badgaiyan and Verma, 2015; Hulten and Vanyushyn, 2011; Chang, Yan, and Eckman, 2014). However, limited attention has been focused towards impulse buying behaviour among specific groups of consumers such as credit card holders and Muslim group. As Muslims form a sizeable proportion of consumers globally, examining and exploring how Muslim consumers react with impulse buying behaviour will contribute towards the body of knowledge in this field.

For data collection and analysis, previous studies (Sharma, Sivakumaran, and Marshall, 2013, 2010a; Hulten and Vanyushyn, 2011; Sultan, Joireman, and Sprott, 2012; Lin and Chen, 2013; Burgess, Yaoyuneyong, and Gibbs, 2014; Ozer and Gultekin, 2015; Wu and Lee, 2015;Chen and Wang, 2015; Floh and Madlberger, 2013; Muratore, 2016; Mittal, Chawla, and Sondhi, 2016; Pornpitakpan and Han, 2013; Tjiptodjojo and Setyawan, 2016; Cook and Yurchisin, 2017; Falahat et al. 2017) tend to practice both quantitative and qualitative data collection methods and analyse the data using analytical tools such as the Statistical Package for Social Science (SPSS) analysis, Structural Equation Model (SEM) analysis (Nayebzadeh and Jalaly, 2014; Chuang, Tian, and Lin, 2015; Roberts and Manolis, 2012; Ozen and Engizek, 2014; Badgaiyan and Verma, 2015; Lin and Lin, 2013; Dhaundiyal and Coughlan, 2016; Nirmalya Bandyopadhyy, 2016; Bellini, Cardinali, and Grandi, 2017; Chang, 2017; Parboteeah, Taylor, and Barber, 2016; Vonkeman, Verhagen, and van Dolen, 2017), and Partial Least Square analysis (PLS-SEM) (Chung, Song, & Lee, 2017; Razaei et al. 2016; Cengiz, 2017). However, there has been limited interest in using new analytical tools such as Partial Least Square (PLS-SEM) in impulse buying studies. Accordingly, it is imperative to conduct further impulsive buying studies using PLS analysis to provide a different context. Therefore, the

researcher decided to obtain this study's results through applying the PLS-SEM analysis method.

As mentioned earlier, regularly practising impulse buying will lead to unfavourable results and negative traits such as financial difficulties, lower self-esteem, regret, immaturity, a sign of wastefulness, as well as embarrassment. In the realm of Islamic teachings and values, harming ourselves and other parties as well as misusing wealth for unbeneficial purposes is prohibited. Islam provides the guidelines for permissible and impermissible consumption activities. However, nowadays, people particularly Muslims are ignoring *Shariah* regulations and are continually practising unhealthy buying behaviours such as buying without thinking first or do proper planning. Therefore, it is crucial for this study to reveal how the factor of religiosity and credit card usage influence Muslim credit card holders in their buying activities.

Regarding the operational definition of impulse buying behaviour, this study defines impulse buying behaviour as an unplanned buying behaviour (Clover, 1950; West, 1951; Applebaum, 1951; Kollat and Willett, 1969; Abratt and Goodey, 1990). Specifically, impulse buying behaviour in the context of this study is related to unplanned financial management and failure of self-control. Practising unplanned buying activities with smart financial management and appropriate self-control may not result in adverse impacts. However, unplanned buying through the failure of self-control and unplanned financial management will inevitably result in difficulties. Notably, reminder impulse buying is not included within the scope of impulse buying behaviour in this study (Beatty and Elizabeth Ferrell, 1998).

Specifically, this study measures impulse buying behaviour through three main attributes; spontaneous buying, unplanned buying, as well as quick or urge buying experiences regardless of the consequences. Therefore, this study will investigate in-depth whether the independent variables; materialism, sales promotion, money and time availability, self-*hisbah*, and hedonic motivation have a significant or insiginificant relationship with impulse buying behaviour and whether the factor of credit card usage will mediate or influence the relationship between the independent variables and impulse buying behaviour. Further, this study explores the role of religiosity in moderating the relationship of materialism and hedonic motivation with impulse buying behaviour. Notwithstanding, it is essential to study this topic as there are only a small number of studies available that have explored the relationship between these variables. Also, little attention has been concentrated on perceiving the role and effect of credit card usage and religiosity in impulse buying behaviour among Muslim consumers in Malaysia. As mentioned by Muhamad and Mizerski (2010), further studies should examine the efficacy of religiosity in the different areas of marketing. Therefore, considering the above discussion, it is intended to conduct the impulse buying behaviour study with a different scope, namely; among Muslim consumer credit card holders in Malaysia.

2.6.2 MATERIALISM AND IMPULSE BUYING BEHAVIOUR

Materialism has been widely explored in numerous studies during the past decade (Belk, 1985). In fact, previous research has suggested different meanings of materialism, each with their distinct properties. Accordingly, the term "materialism", as described by the Oxford English Dictionary[11] refers to neglecting the spiritual matter, a way of life, and other opinions but is more concerned with material needs and desires. This is in parallel with the previous notions of scholars' who defined materialism as a relationship of a

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[11]The Meaning of Materialism retrieved July 25, 2017 from
https://en.oxforddictionaries.com/definition/materialism

person with the possession of worldly goods or belongings (Belk, 1984) through the combination of three negative dimensions; possessiveness, non-generosity, and envy (Belk, 1985). Possessiveness reflects one's measure of their social status via the value of owning something (i.e. things) Non-generosity attitude relates to avoid sharing their items with others, and envy relates to the feeling when others acquire more than oneself. Some researchers have perceived materialism through applying three positive factors; centrality, happiness, and success (Richins and Dawson, 1992).

Consumers perceive the element of materialism as their centrality of life or an indicator of happiness and success by pursuing their careers and success to thereby create a sense of happiness and well-being in their lives. In other words, materialism means the importance of materialistic items or things in human life by perceiving material possessions as the central indicator to achieve happiness and success (Ilter, Bayraktaroglu, and Ipek, 2017). Therefore, by adopting this vision of life, consumers will feel satisfied and contented with their lives, as this environment creates a positive personal element for them.

Further, for an operational definition of materialism, this study adopts the three elements of materialism; centrality, happiness, and success as suggested by Richins and Dawson (1992), who believed that materialistic consumers practised impulse buying based on these three elements.

Centrality refers to the central point of a consumer's goals in life. It is related to the purpose of life and what they wish or hope to achieve in their pursuit of happiness and perceived success. Indeed, they pursue their overall life objectives in the hope of possessing happiness and satisfaction in life and will feel successful when they believe

they can achieve and possess material items and wealth. This situation is related to impulse buying behaviour where materialist consumers will tend to make any purchase to feel satisfied and content. Interestingly, sometimes they purchase things that are beyond their financial means, merely to be perceived highly by others. Sadly, this achievement makes them feel happy with their lives albeit for a short term. People honestly believe that when others acquire a positive perception of them, it is portrayed as being an achievement in their lives (Watson, 2003; Yeniaras, 2016).

In essence, one of the leading issues of materialism highlighted by previous researchers is whether materialism is a positive or a negative trait (Belk, 1985). Researchers have acquired different schools of thought on this issue through indicating materialism either positively or negatively (Richins and Dawson, 1992; Podoshen and Andrzejewski, 2012). Materialism is commonly regarded as being a negative value that involves the element of ownership through the belief that acquiring more tangible things will lead to higher happiness and success in life (Podoshen and Andrzejewski, 2012).

In a separate study related to spending, it was found that saving and debt behaviour indicated that those with highly materialistic attitudes are more likely to have a positive attitude towards borrowing money and spending money on non-essential things, use credit cards (sometimes having multiple credit cards), as well as having bank or credit loans of more than $1,000 (Watson, 2003). In contrast, those with low materialism tend to invest their money and manage their wealth or spending wisely (Watson, 2003). Materialistic consumers would often feel satisfied if they are able to fulfil their worldly desires and goals such as succumbing to large sums of money to impress others and using this to generate a symbol of wealth and success (Yamauchi and Templer, 1982). Furthermore, they tend to ignore the element of religiosity or spirituality (Belk, 1984) and

have the propensity to borrow money for non-essential things, which will inevitably impact their financial management (Watson, 2003). In any religious doctrine whether Islam, Christianity, or other religions, reckless and needless actions leading to detrimental effects are prohibited. However, a materialistic person tends to ignore the elements of spirituality in their life, paying more attention to worldly possessions.

According to a previous study (Podoshen and Andrzejewski, 2012), to achieve the centrality of life, being happy, and feeling successful, materialistic consumers will tend to practice impulsive buying. Moreover, they tend to feel great when they achieve and acquire the things that make them feel happy and successful, although how they choose to do so will frequently lead to unfavourable or unsavoury results. Obviously, this materialistic behaviour reflects poorly as negative behaviour. "Does having debts to own the things that one desires create true happiness and success?" "Can happiness and success be obtained only through the possession of worldly matters?" Therefore, if this is the true meaning of happiness and success, "is it possible to claim materialism as a negative trait?" Specifically, this study would like to claim materialism as a negative trait as this variable appears to have a relationship and connection with impulse buying behaviour (Cakarnis and D'Alessandro, 2015) and contributes to unfavourable implications such as losing and forgoing life satisfaction (Ryan and Dziurawiec, 2011) and massive debts (Dittmar, 2004).

This study would further like to conclude that materialism is also associated with buying behaviour that creates a feeling of happiness, envious, cool, success, and passion towards worldly matters which prompt consumers to continuously make purchases to feel warm and a sense of contentment with their lives. However, truth be told, they frequently struggle to fulfil their desire for happiness, success, and respect. Therefore, regarding the

above discussion of materialism, it is practical and sensible to claim that the variable of materialism has a significant correlation with impulse buying behaviour. In fact, it is proven by previous studies (Podoshen and Andrzejewski, 2012; Luo, 2005; Khan et al. 2015; Atulkar & Kesari, 2018) who explored and examined the correlation between materialism and impulse buying behaviour which indicated that there is in fact, a positive relationship between materialism and impulse buying behaviour. According to the attributes of materialism as mentioned, it is further possible to claim this materialism consumer group as one of the leading groups that contribute towards impulsive buying.

Moreover, the materialistic consumer will do almost anything to feel contented and satisfied with their personal demands, and their hearts desire. However, according to previous study patterns, there is a need to study further examine the correlation between materialism and impulse buying behaviour in different contexts and points of view, given it is sparsely covered for a non-European country such as Malaysia. Therefore, this study will examine whether materialism has an important relationship with impulse buying behaviour, (or not) among Muslim credit card holders in Malaysia. If materialism has a positive relationship with impulse buying behaviour as mentioned by Podoshen and Andrzejewski (2012), then, this study is instead, motivated to claim that materialism is in fact, a negative trait and should be avoided at all costs.

Regarding the objective of this study, which is to examine the relationship between materialism and impulse buying behaviour, many studies have been conducted pertaining to materialism in various contexts such as materialism as a perspective of life (Mitchell and Mickel, 1999; Richins, 1994), materialism and life satisfaction (Ryan and Dziurawiec, 2011), materialism and buying behaviour (Watson, 2003), materialism and employee engagement (Xie, Shi, and Zhou, 2016), materialism and apparel buying

behaviour among teenagers (Ogle et al. 2014), family and television influence on materialism (Moschis et al. 2011), materialism and advertising (Cartwright and Opree, 2016), local brand buying (Shi et al. 2016), materialism among adolescents and children (Adib and Bassiouny, 2012), materialism and clothing post-purchase behaviour (Joung, 2013), materialism and clothing involvement (Goldsmith, Flynn, and Clark, 2012), materialism and status consumption and sustainability (Tascioglu, Eastman, and Iyer, 2017), materialism and experiential marketing (Chen and Fiore, 2017), materialism and consumer ethics (Bakar, Lee, and Hashim, 2013), as well as materialism and credit card usage (Khare and Varshneya, 2015; Cakarnis and D'Alessandro, 2015; Omar et al. 2014).

Although materialism has been recognised as one of the antecedents of consumer buying behaviour (Podoshen and Andrzejewski, 2012), only a few of the previous studies (Podoshen and Andrzejewski, 2012; Luo, 2005; Khan et al. 2015) explored and examined the relationship between materialism and impulse buying behaviour. Moreover, in these studies, it was found that there exists a positive relationship between materialism and impulse buying behaviour. Further, these studies determined that consumers tend to make impulsive buying to receive a positive reaction from others in maintaining their social status within society, their networks and the community at large. Notwithstanding, this finding corresponds to the previous statement by Luo (2005) who studied the influence of social factors on impulse buying, determining that the presence of the peer group during shopping activities will also influence consumers to practice impulse buying.

Prior materialism studies in different contexts were generally undertaken in European countries, the USA (Wang and Wallendorf, 2006), Australia (Cakarnis and D'Alessandro, 2015), South Africa (Duh, 2015), and Turkey (Yeniaras, 2016), and rarely in Asian countries particularly in Malaysia (Khan et al. 2015). Accordingly, this study

believes that further investigation of the materialism of impulse buying behaviour related explicitly in the Malaysian context is important to study. Indeed, a different scope of study involving different respondents in a different location, like Malaysia will also create a different outcome.

Therefore, the researcher would like to take this opportunity to examine the relationship between materialism and impulse buying behaviour from a different perspective by conducting this study among Muslim credit card holders in Malaysia. Accordingly, this study will evaluate materialism in impulse buying behaviour according to these three elements, namely; centrality, happiness, and success. It is expected that the outcomes from this study will also contribute towards the body of knowledge that is lacking in this area. Thus, the following hypothesis is proposed:

H1a: There is a significant positive relationship between materialism and impulse buying behaviour.

2.6.3 SALES PROMOTION AND IMPULSE BUYING BEHAVIOUR

In the marketing domain, promotion in any shape or form is seen as a strategic and vital tool to facilitate the marketer in supporting the business to achieve its goals (Alvarez and Casielles, 2005). In consumer retailing, marketers will aim to attract consumers using a variety of sales tactics and promotions such as by offering coupons, membership cards, member card days, personalised shopping, an attractive and friendly store environment, and providing charming and persuasive shop assistants (Tendai and Crispen, 2009). Promotions in most cases, if performed correctly, will increase the propensity to purchase among consumers (Cotton and Babb, 1978). Importantly, promotions are essential in retailing operations to sustain the business, attract new

customers while retaining existing customers and to gain a competitive advantage over other retail companies. For operational definition of this sale promotion variable, this study defines sales promotion as offering incentives to consumers to pay for products and services which usually fall within the scope of the marketing and communications function and plan of an organisation. This variable is measured according to the nature of the promotion; price discount, extra products, free gifts, and membership discount days, and so forth (Stone and Desmond, 2007).

Previous studies in buying behaviour have explored the function of sales promotion upon buying behaviour pattern and in the retailing industry by suggesting that promotional activities will often result in positive effects, such as offering free samples which may lead to an immediate purchase (Lammers, 1991). Frequently, a sales promotions will help the consumer towards deciding which brand to purchase (Alvarez and Casielles, 2005). Sales promotions typically form part of the marketing communication plan within a business that offers customer incentives to purchase products and services (Alvarez and Casielles, 2005; Peattie and Peattie, 1995). Furthermore, the retailer will develop sales promotion campaigns, often to realise immediate profits through discounting prices, offering extra products, free gifts, as well as promoting membership discount days, which inevitably captures the consumers desire to spend money (Stone and Desmond, 2007).

However, many smart consumers do not take advantage of sales promotions (Martinez and Montaner, 2006). Kotler (2000) classified sales promotions into three sections; consumer promotion (samples, coupons, cash refund offer, price-off, premiums, prizes, patronage rewards, free trials, warranties, tie-in promotions, cross-promotions, point of purchase displays, and demonstrations), trade promotions (advertising and

display allowances, and free goods), and business and sales force promotions (trade shows, conventions, and specialty advertising).

Sales promotional tools and approaches have moderately changed from traditional approaches given the advent of technology and the emergence of the Internet. Traditionally, sales promotions were primarily carried out by retail centres and outlets for packaged goods. However, service organisations are quickly utilising promotions to capture consumer attention and in support of achieving organisational goals and objectives (Hartley and Cross, 1988). Service organisations will often practice price promotion as their primary promotion method given its unique characteristics such as intangibility, inseparability, and heterogeneity which are equivalent with service attributes as intangible products (Nusair et al. 2010). However, despite the high costs and adverse outcomes which can be associated with these activities, retailers still believe that consumers will continue to be attracted and committed to making purchases due to the promotions on offer. This is supported by previous studies that explored price promotion, consumer evaluation of quality, and repeat purchasing, which indicated that consumers would tend to repeat their purchase given the store's brand and reputation as a quality service store (Huang et al. 2014). Numerous studies have been conducted on the impact of sales promotions on consumption (Rehman et al., 2017; Pelet et al., 2018; Chen, Monroe, and Lou, 1998; Osman, Fah, and Foon, 2011), store preferences (Smith and Sinha, 2000), and sales promotional techniques (Reid et al. 2015; Weng and Run, 2013; Hardesty and Bearden, 2003), and indicating both positive and negative relationships associated with sales promotion activities as a function of the marketing discipline (Gong, Hou, Zhang, & Tian, 2018; Xia & Bechwati, 2017).

On the other hand, regarding sales promotion preferences, Weng and Run (2013) indicated that the techniques associated with sales promotion will influence consumer buying behaviours, such as price promotion having a much higher influence on consumer buying behaviour than other promotional methods (Alvarez and Casielles, 2005) and percentage price presentation being utilised when substantial discounts are offered. For small promotions, bonus packs are typically offered as part of the promotion campaign (Hardesty and Bearden, 2003). Also, regarding price discounts, presentation, and consumer attraction to the structure of the promotions, consumers reported that price discount more attracted rather than gift giving (Gong, Hou, Zhang, & Tian, 2018) and price discount presentations in dollar terms influence and stimulate them to purchase expensive products rather than price discount presentations displayed in percentage terms (Chen, Monroe, and Lou, 1998).

However, other studies on budget hotel services indicated a contrary finding where consumers are more likely to access a percentage off promotion and are likely to disseminate the promotion information to their friends and others. Nevertheless, the differences between these two discount frames are not substantial, as consumers consider discounts as being of more value, regardless of the discount frame (Nusair et al. 2010). Furthermore, consumers also are more likely to be influenced by sales promotions through price discounts, additional product promotion, and free samples and gifts (Osman, Fah, and Foon, 2011; Xu and Huang, 2014). Indeed, consumers tend to enjoy and prefer non-monetary promotions rather than monetary promotions such as receiving bonus packs. Notably, organisations use this type of promotion to improve their brand equity and category value (Reid et al. 2015; Xu and Huang, 2014). Therefore, this supports the claim that sales promotions, notably price promotions pervasively influence consumer buying behaviour.

Regarding product categories, consumers tend to be attracted and influenced by different types of sales promotions for different products. For instance, price discounts appear to be more effective for promoting non-healthy food rather than receiving a bonus pack, while a bonus pack is more appropriate for the promotion of healthy foods (Mishra and Mishra, 2011). For the stock-up product category such as sugar, consumers are more likely to purchase these products during extra product promotions (e.g. buy one get one free) as they can save the additional amount for future consumption. However, for non-consumable products such as stand fans, some consumers tend to be impressed with price promotions (e.g. 70 % off) rather than additional product promotions (Sinha and Smith, 2000).

Consumers further tend to practice high impulse buying when an inexpensive product has a price discount, and an expensive product promotion offers a bonus pack (Xu and Huang, 2014). Therefore, it can be concluded that a sales promotion has a positive relationship with impulse buying behaviour. Evidently, it has also been proven how consumers perceive the element of price during sales promotion activities. For example, low price consumers will perceive price as the amount of money that must be sacrificed, and a higher price will result in an adverse effect on purchases. High price consumers use price cues as indicators in evaluating product quality, and higher prices will positively influence purchase probabilities (Lichtenstein, Ridgway, and Netemeyer, 1993). According to this statement, there is a distinct possibility that consumers will frequently practice impulse buying behaviour when they experience a sales price promotion situation or moment. This finding is also in parallel with the conclusion by Liao, Shen, and Chu (2009) stating that strong reminder impulse buying consumers tend to be influenced by instant reward promotions rather than delayed rewards. Further, they will also purchase both utilitarian and hedonic goods during sales promotion periods and

prefer to be attracted by price promotional sales rather than another type of sales promotion. The category of goods whether utilitarian or hedonic is frequently ignored during sales promotion periods as consumers tend to make purchases without prior consideration to obtain the advantage of sales promotions (Martinez and Montaner, 2006). This evidence demonstrates that there is a possibility that consumers will practice impulse buying behaviour to capture the opportunity during a sales promotion.

The correlation between sales promotion and impulse buying behaviour from previous studies suggested that sales promotions have a significant positive relationship with impulse buying behaviour (Akram et al., 2018; Badgaiyan and Verma, 2015; Kacen, Hess, and Walker, 2012; Chen and Wang, 2015). For instance, concerning a product category sales promotion, a study by Xu and Huang (2014) revealed that price discounts on hedonic products influence a greater impulse buying intention as compared to bonus gift packs. Instead, gift packs are useful for utilitarian products, where price reduction profoundly influences impulsive buying rather than price discounts (Chen and Wang, 2015). Also, for product pricing, consumers tend to practice impulsive buying when bonus pack promotions are offered for expensive products, and price discounts are offered for less expensive products. This statement is in parallel with the prior study by Tinne, (2011), that was conducted in Bangladesh. The study indicates that a pricing strategy is more likely to influence consumers to practice impulse buying, and a high-low pricing strategy will effectively influence consumer impulse buying behaviour in product and retail buying (Kacen, Hess, and Walker, 2012).

Also, a recent study suggested that sales promotion is the primary factor influencing online Internet impulse buying (Akram et al., 2018; Lo, Lin, and Hsu, 2016). Akram et al., (2018) through their study state that website sale promotion strategy

influence credit card holders to to buy impulsively via online shopping. Meanwhile, in terms of scope, many of the previous studies examined the correlation between sales promotion and impulse buying behaviour conducted among consumers and college students in western countries such as the United State (Kacen, Hess, and Walker, 2012), and Asian countries such as India (Badgaiyan and Verma, 2015) and Taiwan (Chen and Wang, 2015; Lo, Lin, and Hsu, 2016). In Malaysia, there have been only a few studies undertaken on sales promotion and impulse buying behaviour. Therefore, this study attempts to close this gap by exploring and examining the correlation between sales promotion and impulse buying behaviour in a different scope of the study, which is among Muslim credit card holders in Malaysia. This exploration involves a different location and a group of respondents which will contribute additional knowledge in the study of impulse buying behaviour. Therefore, this study believes that sales promotion has positive effects that stimulate consumers to practice impulsive buying. Accordingly, this study proposes the following hypothesis:

H1b: There is a significant positive relationship between sales promotion and impulse buying behaviour.

2.6.4 MONEY AND TIME AVAILABILITY AND IMPULSE BUYING BEHAVIOUR

Previous researchers determined that the two elements money and time availability also influence consumer buying behaviour. These studies investigated and tested the role of money availability and time availability towards influencing the consumers' urge for impulsive buying, finding that both elements have a positive relationship with impulse buying behaviour (Badgaiyan and Verma, 2015; Chang, Yan,

and Eckman, 2014; Kwon and Armstrong, 2002). However, limited studies had examined the influence of these two variables in the context of Asian consumers.

Time availability refers to the time that consumers are available on a particular day, and money availability is described as the amount of money available to spend, which reflects the capacity of the consumer to purchase using the available or extra money (Beatty and Elizabeth Ferrell, 1998). Consumers tend to browse longer if they have more time available, and their negative feelings tend to decrease while their positive feelings increase given the availability of both time and money (Beatty and Elizabeth Ferrell, 1998). Accordingly, this study anticipates that consumers will spend more time at a shopping mall browsing with less buying, due to the shortage of money. Conversely, consumers will browse less in a retail outlet when under time pressure even though they have extra money available to spend.

Therefore, this study hypothesises that there is a possibility that consumers will practice impulse buying behaviour when they have sufficient money and less time to browse and likewise, will buy impulsively when they have extra money and extra time to browse longer. The previous studies' findings, therefore, justify that money and time availability influences the urge to practice impulse buying behaviour (Badgaiyan and Verma, 2015; Foroughi, Buang, and Sadeghi, 2012; Park, Iyer, and Smith, 1989). Accordingly, time pressure also affects impulse buying, brand switching, the purchase volume, and failing to make planned buying which ultimately results in impulse buying (Park, Iyer, and Smith, 1989). Impulsive buying will not occur if consumers do not have the availability of both money and time. Money and time availability are among the main factors that influence consumer buying activities and therefore, are important variables to consider within buying activities. Many studies have been conducted using these

variables in western countries (Iyer, 1989; Gelbrich and Sattler, 2014; Chang, Yan, and Eckman, 2014; Strombeck and Wakefield, 2008).

However, as indicated earlier, in Asia and particularly in Malaysia, studies on the relationship of money and time availability with impulse buying behaviour are limited. Therefore, it is essential to examine how these two factors influence consumer impulse buying behaviour by conducting further study to explore as suggested by (Sharma, Sivakumaran, and Marshall, 2006).

Regarding the operational definition of both money and time availability, this study will apply the definition as described by Beatty and Elizabeth Ferrell (1998). Money availability is the amount of money available, which explains the capacity of the consumer to buy something using the extra money. While time availability refers to the time available to the consumer on a particular day. Indeed, consumers tend to browse longer with more time available and with extra money as their positive feelings are intensified while the negative emotions are reduced. Therefore, this study concludes that a consumer will practice impulse buying behaviour with available time and money by proposing the following hypothesis in support:

H1c: There is a significant positive relationship between money and time availability and impulse buying behaviour.

2.6.5 HEDONIC MOTIVATION AND IMPULSE BUYING BEHAVIOUR

Hedonic consumption research within the domain of marketing, termed as motivational research, started to evolve between 1950 and 1970. However, the rigour and

validity of this area came under immense scrutiny and criticism limiting the contribution over an extended period (Hirschman and Holbrook, 1982).

Since then, a considerable amount of literature has been published on hedonic motivation, examining the role and impact of hedonic motivation and consumption in varying ways. For instance, studies related to luxury fashion replica by Miller (2013) and Watson and Yan (2013) defined that fast fashion hedonic consumers tend to interpret the elements of fun, entertainment, fantasy, enjoyment, and pleasure as their hedonic motivation due to the creativity and uniqueness of the fast-paced fashion industry. While slow fashion hedonic consumers perceived art and couture as hedonic motivation. Furthermore, slow fashion hedonic consumers are more likely to be concerned about quality and tend to spend more on expensive items while avoiding buyer's remorse (i.e. regret). Whereas, fast-paced fashion consumers tend to buy in bulk and impulsively indicating that hedonic motivation influences impulsive buying through purchasing the product or service in considerable quantities with little concern for quality and affordability.

Conversely, hedonic shopping motivation and utilitarian shopping motivation are key motivational factors that influence the pattern of consumer spending (Kang and Poaps, 2010). Furthermore, in the context of hedonic shopping motivation, this most likely influences those hedonic consumers who have an inclination for excitement, fun, as well as seeking an entertaining experience during a shopping venture (Okada, 2005). Moreover, the influences of hedonic motivation in the present day, regarding consumer lifestyle dramatically expands, thereby resulting in detrimental effects such as financial hardships and lifestyle problems. For instance, there may be some fashion consumers who are keen to purchase fashionable garments and luxury goods for hedonic reasons. In a

further example, young teenagers will often compete to be perceived as being 'cool' and 'fancy', as trendsetters with others. In effect, they practice impulsive buying for hedonic purposes without thinking of the adverse consequences as a result. The sense of need for popularity overtakes their rational thinking. Hedonic consumers are instead, enthusiastic to engage in impulse buying behaviour, (i.e. fashion clothing), (Cengiz, 2017). A recent survey conducted by Ngai and Cho (2012) indicated that there are four characteristics of luxury consumption for hedonic reasons; the overseas pack, the luxury followers, the self-established cool, and the spirituals. Therefore, based on the discussion above, this study concludes that hedonic motivation is a feeling of contentment, fun, enjoyment, and excitement mainly experienced in the activities associated with shopping.

Prominent scholars Hirschman and Holbrook (1982) indicated that hedonic consumer behaviour consists of "those facets of consumer behaviours that are related to the multisensory, fantasy and emotional aspect of one's experience with products". Applying this definition, it can be considered, therefore, that hedonic motivation is created from two main types of responses; multisensory and emotional arousal (Hirschman and Holbrook, 1982). Multisensory feelings are formulated from tastes, sounds, scents, tactile impression, and visual image. Importantly, consumers will give multisensory responses to external and internal stimuli. In the case of external stimuli, consumers react towards particular products which they can see, touch, or smell through the product's features or attributes, for instance, smelling perfume. On the other hand, internal stimuli response implies that the consumer experiences the moment through historical and fantasy imagery. For example, the scent of perfume can recall a memory of someone who wore the same fragrance. Fantasy imagery may occur when a consumer creates their own perspective or thoughts towards the perfume's aroma without any prior memories or experiences. Therefore, sensory marketing related to hedonic motivation is

defined as marketing that is associated with sense and influences a consumer's perception of products or services based on the sense that they experience such as taste, smell, sound, quality, and features (Krishna, 2012).

Emotional arousal is a further type of a hedonic motivational response and is defined as the feeling of joy, jealousy, fear, rage, and happiness (Freud, 1961). Moreover, this definition has also been agreed by numerous researchers. For example, in a study of luxury products, Bearden and Etzel (1982) described hedonic motivation as a sense of enjoyment, fulfilment, and pleasure derived from luxury brands, with feelings of the consumer capturing the benefits associated with the products rather than their function. Indeed, hedonic shopping-oriented consumers tend to perceive luxurious products as exquisite, attractive, and often stunning and they strive to obtain these to fulfil their desires and personal demands, even though these goods are beyond their buying capacity and capability. Studies by Kang and Poaps (2010) and Miller (2013) have indicated that hedonic motivation triggers fashionable consumers to engage in fast replica, fast fashion, and fashion leadership referring to a consumer's multisensory illustration, fantasies, feeling, and emotional arousal in buying activities and in using products (Hirschman and Holbrook, 1982). Notably, one of the objectives set out for this study is to identify whether hedonic motivation, (i.e. the elements of joy, fantasies, happiness, fulfilment and seeking of pleasure) has a positive relationship with impulse buying behaviour among Muslim credit card holders.

Accordingly, there are many studies associated with hedonic motivation within the marketing domain that have investigated, for instance, the influence of hedonic motivation on consumers to shop impulsively when being in a utilitarian shopping environment (Yim et al. 2014). Hedonic motivation may be associated with brand loyalty,

brand experience, brand satisfaction, and brand extension (Ding and Tseng, 2015; Kuikka and Laukkanen, 2012), the positive influence of hedonic value on consumers when they shop for music online (Bui and Kemp, 2013), spa and salon visits where women perceive a spa visit as a hedonic experience and a salon visit as a utilitarian experience (Hanks and Mattila, 2012). Also, positive linkage of hedonic motivation with approach and avoidance behaviour (Arnold and Reynolds, 2012), hedonic motivation and utility of prestige goods (Adams, 2011), hedonic motivation and premium promotion (Palazon and Ballester, 2013), hedonic and shopping dimension (Cardoso and Pinto, 2010), hedonic and adoption of e-banking (Salimon, Yusoff, and Mokhtar, 2017), hedonic and motivation for e-commerce fashion retail application (Parker and Wang, 2016), hedonic and consumer motivation (Barbopoulos and Johansson, 2016), hedonic and food attributes (Maehle et al. 2015), and hedonic and cultural conditioning.

While many of the previous studies on hedonic motivation have focused on consumer buying behaviour, a small number studies have explicitly discussed the influence of hedonic motivation on impulse buying behaviour. Studies by Chaudhuri (2015), Hausman (2000), Kim (2006), Arnold and Reynolds (2003, 2012), Amos, Holmes, and Keneson, (2013) and Lee & Wu (2017) are among some of the studies which have investigated and discussed the relationship between hedonic motivation towards impulse buying behaviour, finding a distinct positive relationship between the two. Further, most of these studies examined the relationship in the context of the retail outlet and were less concerned with the service context. For instance, in a study by Park et al. (2012) that investigated web browsing and e-impulse buying on apparel shopping websites, the study highlighted that there are two types of web browsing; utilitarian and hedonic browsing.

Accordingly, this finding revealed that utilitarian web browsing tends to have a negative relationship with impulse buying, whereas hedonic browsing is linked positively with impulse buying for online shopping (Lee & Wu, 2017). In a separate study, Ozen and Engizek (2014) determined that hedonic motivation influences the impulsive buying of new products and online shopping. Whereas, Haq, Khan, and Ghouri (2014) demonstrated that hedonic consumption plays a key role as a mediator between fashion and impulsive buying.

Regarding the various kinds of products that are bought, these also vary. Kacen, Hess, and Walker (2012) suggested that hedonic product characteristics have the most significant influence on impulsive buying when grocery shopping. However, other consumers tend to practice impulsive buying on hedonic products such as luxury watches, for fun, or as a novelty, being cool, or for pleasure.

The previous studies that have been mentioned and described above demonstrate the relationship between hedonic motivation and impulse buying behaviour and that hedonic motivation has a positive relationship with impulsive buying. However, many of these were likely conducted in a retailing context rather than in a service orientated context. Also, while prior studies discussed the influence of hedonic motivation on impulse buying behaviour, there remains apparent knowledge gaps to be filled by conducting further research; notably, the lack of diversity of respondents and the place of study. As an example, Yu and Bastin (2010), Yim et al. (2014), Parker and Wang (2016), Okada (2005) and Kuikka and Laukkanen (2012) intended to conduct the study of hedonic motivation among university and college students and non-specific groups of consumers.

Therefore, this study intends to fill this knowledge gap by examining the relationship between the two variables; hedonic motivation and impulse buying behaviour among Muslim credit card holders, which has rarely been studied, if at all by researchers. The researcher of this study anticipates that this work will make an advanced contribution in this field by testing the influence of hedonic motivation on impulse buying behaviour among Muslims in Malaysia. This is considered to be an advanced step given that prior researchers tended to conduct the hedonic motivation studies without explicitly targeting any religious group.

In terms of location or place of study, previous studies of hedonic motivation were substantially targetting western countries such as; the United States (Maehle et al. 2015; Okada, 2005; Watson and Yan, 2013), United Kingdom (Parker and Wang, 2016), Nigeria (Salimon, Yusoff, and Mokhtar, 2017), Spain (Palazon and Ballester, 2013), Finland (Kuikka and Laukkanen, 2012), and Australia (Miller, 2013). However, hedonic motivation studies have been undertaken in Asian countries such as China (Yu and Bastin, 2010), Korea (Yim et al. 2014) and Taiwan (Chen & Yao, 2018) but the number of studies is relatively small. Therefore, this study makes an advanced contribution to the hedonic motivation study on impulse buying behaviour among Muslim credit card holders in Malaysia, from a different perspective.

Regarding the operational definition of hedonic motivation, this study has adopted the definition developed by Hirschman and Holbrook (1982). That is, defining hedonic motivation as the "feelings of fun, novelty, pleasure, fantasy, and surprise that stimulate consumers to practice impulse buying" (Miller, 2013; Watson and Yan, 2013). Therefore, this study will explore whether hedonic motivation has a meaningful relationship and positive role in influencing consumers to engage in impulse buying. This objective is also

supported by Chang, Yan, and Eckman (2014) suggesting expanding the exploration of hedonic motivation. Thus, this study proposes the following hypothesis:

H1d: There is a significant positive relationship between hedonic motivation and impulse buying behaviour.

2.6.6   SELF-*HISBAH* AND IMPULSE BUYING BEHAVIOUR

"Why do consumers sometimes tend to act against their better judgment by engaging in actions that result in disasters?" This characteristic of impulse buying demonstrates the fundamental factor of a failed attempt at self-*hisbah*.

Self-*hisbah* is defined as the restriction derived from self when experiencing the evaluation of something (Makhsin, Ilias, and Noh, 2014). Self-*hisbah* is a control system that involves an internal control process to ensure that *al-amr bi al-ma'rufwa al-nahyan al- munkar* (enjoining good and forbidding wrongdoing) is appropriately implemented in a Muslim's daily life to obtain wellbeing of the Muslim society and community (Makhsin et al. 2012; Makhsin, Ilias, and Noh, 2014). The variable of self-*hisbah* has rarely been studied in the marketing domain. However, Makhsin, Ilias, and Noh (2014) and Makhsin et al. (2012) conducted studies related with self-*hisbah* in the education system. Therefore, the operational definition of self-*hisbah* from (Makhsin et al. 2012; Makhsin, Ilias, and Noh, 2014) is adapted to represent the variable of self-*hisbah* in this study

According to Figure 2.3, the process of self-*hisbah* is derived from six steps; reflection practice *(muhasabah)*, promise of the heart *(musyaratah),* behaviour observation *(muraqabah),* spiritual reinforcement *(muaqabah),* purification of the soul *(muatabah)*, and struggle of desire *(mujahadah)* (Makhsin et al. 2012; Hawwa, 1998)

which results in the capability to practice self-*hisbah*. Importantly, this process will result in one of two different outcomes being either success or failure. Successful self-*hisbah* reflects that one has strong faith *(iman) and* that is he has the capacity to go against his desire and to remind him or herself about enjoining good and the forbidding of wrongdoing in Islamic values and teachings, and that the failure of self-control demonstrates that one has weak faith (*iman*). The strength or weakness in faith *(iman)* is evaluated based on a warning from Allah SWT derived from the Al-Quran, which means:

"Indeed, the wasteful are brothers of the devils, and ever has Satan been to his Lord ungrateful" [12](Translation Al-Quran, 17: 27).

"Indeed, those who fear Allah, when an impulse touches them from Satan, they remember (Him), and at once they have insight" [13](Translation Al-Quran, 7: 201).

"O you, who have believed, respond to Allah and the Messenger when he calls you to that which gives your life. And know that Allah intervenes between a man and his heart and that to Him you will be gathered" [14](Translation Al-Quran, 8:24).

According to the six steps of self-*hisbah* as depicted in Figure 2.4, the first stage; the reflection practice *(muhasabah)* means making a consideration and considering prior evil deeds and wrongdoings through repentance and asking for forgiveness from Allah SWT. It is also reflected in how we perceive and evaluate our behaviour, as good or bad deeds. Through this '*muhasabah'* practice, one will continuously realise that Allah is the

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[12] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran
[13] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran
[14] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

Almighty and humans frequently make mistakes. After going through the reflection practice process, one must make a promise to her or himself that is called the promise of the heart process *(musyaratah)*. This process explains how humans make a promise towards themselves through their heart. The heart has a strong connection with the mind, and through this connection, a promise for good deeds is created. This promise will assist humans to be in control of themselves. After making the promise, the person will observe and monitor his or her behaviour. For instance, in this study, the person must control his or her consumption activities in parallel with the promise that he or she has made, which is to avoid extravagance and wastefulness. This process is called behaviour observation *(muraqabah)*.

The next process is spiritual reinforcement *(muaqabah)*, which refers to the process of self-rehabilitation from past sins through praying for forgiveness and repenting for the major and minor sins, followed by purification of the soul *(muatabah)* process. The purification of the soul process is a self-criticising process to feel remorseful and repentance towards previous sins. This element contains a sense of self-consciousness, self-motivation, and self-development to be a better person. This process will purify one's *roh* (soul), *aqal* (mind), *qalb* (heart), as well as *al-nafs* (desire). After experiencing the purification of the soul process, humans must struggle against their desires *(mujahadah)*. *Mujahadah* illustrates persistence to go against one's desire. This term is derived from the word "jihad", which means enthusiasm and perseverance to be a better Muslim. Accordingly, this last process results in one of two possible scenarios, either the ability or the disability to implement self-*hisbah*. If a person excels at going against his or her desire, this reflects that he or she has a strong self-*hisbah* and vice versa. These six components are crucial to practice to achieve a peaceful soul *(mutma'inah)*. One who

reaches the level of *mutma'inah* will strive to go against his or her desire and lead a moderate life as suggested in Islamic doctrine.

The researchers Makhsin, Ilias, and Noh (2014) explained that the self-*hisbah* outcome is parallel with the concept of self-actualisation by Maslow (1943). Maslow's hierarchy through his self-actualisation concept emphasised the desire to achieve the highest self-potential, which is characterised by four elements; awareness, honesty, freedom, and trust. On the other hand, in a conventional concept, this self-*hisbah* has a mutual function with the element of self-control. Many studies have explored self-control in the context of consumer buying behaviour. Further, self-control has a slight similarity in philosophy with self-*hisbah*, however, the main difference of this variable is that the underlying principles and roots of self-*hisbah* are wholly derived from Islamic teachings and values, which are based on the Al-Quran and Hadith.
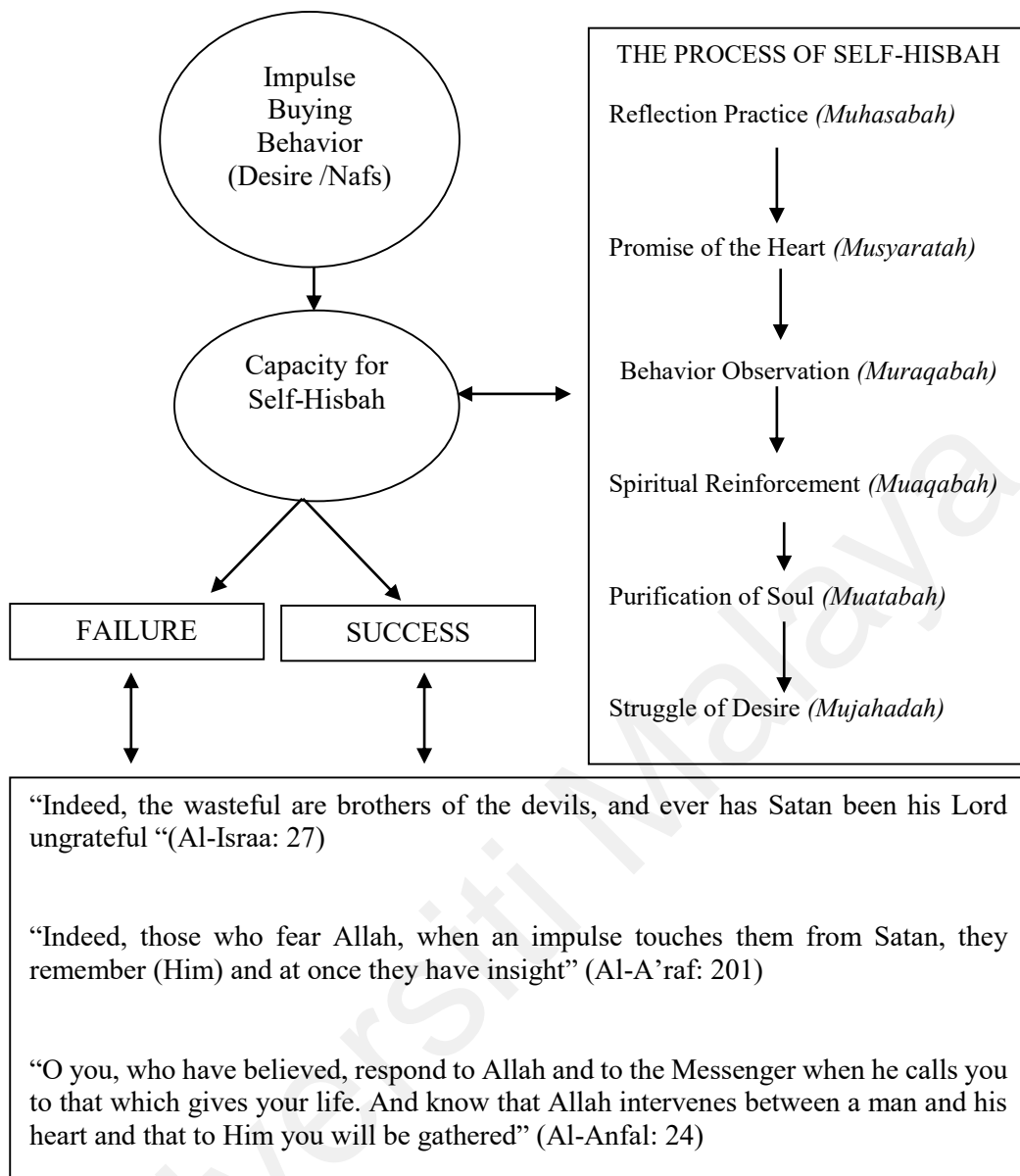
Figure 2.3: *Overview of Self-hisbah*
Source: Developed for this study

In the marketing domain, self-control has been evaluated in consumer behaviour studies particularly with regards to impulse buying behaviour by researchers such as (Pradipto, Winata, Murti, & Azizah, 2016; Roberts and Manolis, 2012; Verplanken and Sato, 2011; Baumeister, 2002; Sultan, Joireman, and Sprott, 2012). These studies indicated that the lack of self-control has both an influence and a positive relationship associated with impulsive buying. Regarding self-control studies, Baumeister (2002) used the term "self-control" and "self-regulation" interchangeably, whereby both refer to the

94

capacity to replace the initial stage of a response with another, such as resisting temptation.

In contrast with self-*hisbah*, the concept of self-control depends on three primary factors; standards, monitoring, and the capacity to change (Vohs and Baumeister, 2011). Failure to fulfil any of these elements will undermine self-control. Standards are reflected as one excels in his or her process of self-control. People control their behaviour to achieve high-standards and their long-term goals, for instance, saving money to purchase what they dream of owning. Furthermore, they struggle to maintain their standards by doing good deeds such as practising a healthy lifestyle, avoiding procrastination, ignoring wastefulness and gratification, as well as avoiding aggressive impulse buying behaviour.

However, self-control will be undermined when one is in a negative frame of mind. People who are emotionally upset and sad will negate their self-control by doing something contradictory to their standards, such as eating unhealthy foods and being extravagant in their expenditure. Indeed, they do this to make themselves feel better, satisfied and happier. The second stage is called monitoring, which is the disciplining and controlling process. In this stage, people should control their desires as their self-control will be threatened or break down when people lose track or sense of their behaviour. The thought of self-restraint is essential to maintain self-control. A study by Polivy et al. (1986) demonstrated that people who break their self-control are unable to refrain thereby stopping to keep their self-control on in-check and on-track.

Following the standards and monitoring processes, the last element is known as the capacity to alter oneself. This is the ultimate stage of the process of self-control. One who has concentrated on his or her standards and continuously monitors them will fail

when he/she is incapable of altering himself/herself appropriately. For instance, someone who spends his/her savings to buy a new home by spending these savings on other things due to the incapacity to resist temptation and desire has failed in their self-control (Baumeister 2002).

The central contrast between self-control and self-*hisbah* is the underlying concept. Self-control tends to utilise psychological elements and cognitive efforts in managing it such as delay strategies, bargaining, and feelings of guilt or regret. To overcome temptation and maintain self-control, consumers will attempt to postpone their buying intentions by observing other alternatives or waiting for the best time to buy. This delay strategy is suggested to educate consumers to enhance their self-control. Consumers also practice bargaining strategies by thinking of other options or alternatives instead of purchasing expensive goods or services. This bargaining strategy involves consumers attempting to strengthen their self-control through finding other worthy options to buy. Lastly, feeling guilty about the immediate decision made also prompts and reminds consumers to enhance and maintain their self-control. Indeed, they will feel unpleasant when they think impulsive buying will result in failure to manage financially (i.e. financial management), their lives and personal relationships, and worse, mental breakdown (Rook and Hoch, 1985). In contrast, the self-*hisbah* concept is derived from the Al-Quran and Hadith, which is as Allah has commanded. In maintaining self-*hisbah*, consumers can still apply the three elements in self-control; delaying strategy, bargaining strategy, and guilt, however, ultimately, the self-*hisbah* concept relies on what Allah S.W.T says in the Al-Quran. One who adheres to their religion will have strong self-*hisbah* and vice versa. This is how self-*hisbah* is evaluated in this study, which is distinguished from self-control.

Therefore, in consideration of the above discussion, the study of self-*hisbah* in the marketing literature was found to be limited. Accordingly, this study will aim to address this issue as part of closing the main gaps in existing literature. Therefore, this study will examine whether the self-*hisbah* variable is related to impulse buying behaviour, and will hypothesise that there is a significant negative relationship between self-*hisbah* and impulse buying behaviour. This is in parallel with the findings of previous studies, in that, the lack of self-control has a positive relationship with impulse buying (Roberts and Manolis, 2012; Verplanken and Sato, 2011; Baumeister, 2002; Sultan, Joireman, and Sprott, 2012). Although, as the basis of self-*hisbah* is derived from Islamic teachings and values, the points of view between self-*hisbah* and self-control studies will be different. Therefore, to test this hypothesis, this study proposes that:

H2: There is a significant negative relationship between self-*hisbah* and impulse buying behaviour.

2.6.6.1 The Difference between Self-*Hisbah* and Religiosity

The variables of self-*hisbah* (conventional term is self-control) and religiosity are generally derived from mutual background which is that these two variables function as the elements to control, measure, and determine how far mankind has the capability to manage their desires and to what level of faithfulness and adherence can they afford to achieve in respect to adhering to their religious ruling, teachings and values.

Regarding the definition of these two variables, self-*hisbah* is defined as a control system involving an internal control process to ensure that *al-amr bi al-ma'rufwa al-nahyan al- munkar* (enjoining good and forbidding wrongdoing) is appropriately implemented in a Muslim's daily life, to achieve well-being of the Muslim society and

community (Makhsin, Ilias, and Noh, 2014). To create a success of self-*hisbah*, there are six levels that are required to practice; reflection practice *(muhasabah)*, promise of the heart *(musyaratah)*, behaviour observation *(muraqabah)*, spiritual reinforcement *(muaqabah),* purification of the soul *(muatabah),* and the struggle of desire *(mujahadah)* (Makhsin et al. 2012; Hawwa, 1998). When humankind has a tremendous and strong self-*hisba*h, they will be able to prevent themselves from doing evil and with less wrongdoing in their life. However, they will experience an adverse moment when they let their desires control their self-*hisbah* which results in an unfavourable effect, such as doing something that is prohibited by their religious ruling.

Accordingly, the variable of religiosity in this study has been defined as the level of a Muslim's faith and adherence to Islamic teachings and rulings in his/her consumption through the elements of *aqidah*, *shariah*, and *akhlak.* Notably, this definition was adapted from (Delener, 1990) which referred to religiosity as the level of faithfulness and adherence by individuals upon their specific religious values and ideals. There are three levels of religiosity; high, moderate, and low. In this study, the level of religiosity was evaluated by the three elements; *aqidah*, *shariah*, and *akhlak.*

As a conclusion, this study claims that there is a significant correlation between self-*hisbah* and religiosity but are both different regarding their function. The correlation that exists between these two variables can be observed through a strong self-*hisbah* that will result into a high-level of religiosity, and a weak self-*hisbah* that will be reflected as a moderate and low level of religiosity. Therefore, this explains that, self-*hisbah* functions as the factor that determines the level of religiosity. However, in this study, the variable of self-*hisbah* was tested as to whether this variable had a significant negative relationship on impulse buying behaviour. Whereas, religiosity was tested as having a moderating

effect on the relationship between materialism and hedonic motivation on impulse buying behaviour. Therefore, this study will emphasise that the variable of self-*hisbah* and religiosity share mutual backgrounds but play a different role in this study which is; self-*hisbah* as an independent variable and religiosity as a moderator effect. Nevertheless, this implies that both variables can be tested in this study as they are tested in different objectives.

2.6.7   CREDIT CARD USAGE AS MEDIATOR

Many studies within in the marketing domain have discussed the use of credit cards given the emergence of new and innovative technologies which continue to transform the medium of selling and buying. Previously, the brick-and-mortar stores were considered to be the principal medium for retailers to sell their goods and services. However, through technology advancement and the advent of the Internet, this has created new virtual channels for selling and buying through online stores, to process e-payments, mobile e-payments, and marketing using social media networks. This transformation is brought about by technology, and the online world has impacted and re-engineered how businesses now interact with consumers. For example, instead of making payment via cash, consumers are now able to use credit card payment services as one of their payment mechanisms. The use of the credit card in purchasing and in payment activities is now widely practised. Indeed, this transformation creates both positive and negative impacts regarding consumers and retailers. Given this transformational change, many studies have been undertaken to examine the factors that contribute or influence towards credit card selection and ownership, credit card usage, credit card debt, credit card user satisfaction, as well as the relationship between credit cards and bankruptcy.

In Malaysia, studies undertaken explored the factors that influenced credit card usage among credit card holders (Teoh, Chong, and Yong, 2013; Mokhtar et al. 2015; Ahmed et al. 2010). Meanwhile, for an operational definition of credit card usage, this variable is defined as the utilisation of credit card payment services by consumers in this study, which drives consumers to practice impulsive buying. The credit card usage factor is measured according to how consumers manage their financial affairs and utilise their credit cards.

Regarding credit card selection, several studies (Amin, 2013; Mohd Dali et al. 2008; Mokhtar et al. 2015) examined the satisfaction and intention towards using an Islamic credit card and the factors influencing consumers in choosing between the Islamic credit card and the conventional credit card. Studies have revealed that an individual's attitude and religious awareness are the main factors that influence credit card holders to choose and use Islamic credit cards. Further, Islamic credit card holders are concerned about the aspect of interest (*riba*), which is prohibited in Islamic belief and teaching. Therefore, people tend to choose Islamic credit cards, as they are free from any interest (*riba*). Also, people's attitude towards Islamic credit cards also influence them to patronage the Islamic credit cards.

Subsequently, researchers have explored credit card utilisation among credit card holders with specific attention towards overspending, massive debts, and bankruptcy. Many of the findings from their research have identified some interesting observations and conclusions. For example, older aged credit card holders have a different usage pattern as compared to younger credit card holders (Hussin, Kassim, and Jamal, 2013). Credit card holders aged 61 years old and above are more likely to spend higher compared to other age groups. Furthermore, the older group of credit card holders tend to use their

credit cards for grocery shopping and dining, whereas young credit card holders are more likely to use their credit cards to buy clothes and household goods. Regarding the types of products purchased via credit cards, most amounts are obtained on clothing, followed by cosmetics, accessories, and household goods (Kaynak and Harcar, 2001) and indicates that credit card holders tend to use their credit cards to purchase products in vast amounts. Married people, in contrast, usually are people in the higher income group, who tend to use their credit cards more compared to single people and those in the lower income group (Teoh, Chong, and Yong, 2013).

In terms of the variable tested on credit cards, for example attitude towards debt, money, and credit cards has more likely been examined and tested in many of the more common studies (Amin, 2012; Amin, 2013; Ahmed et al. 2010; Alam et al. 2014; Wang, Lu, and Malhotra, 2011; Kaynak and Harcar, 2001). Also, researchers were more likely to investigate aspects of utilisation or the factors that could influence and stimulate credit card holders to use credit card services, resulting in credit card misuse and debt. However, few studies have examined the correlation of credit card usage with the variables which have been identified in this study; materialism, sales promotion, money and time availability, self-*hisbah*, hedonic motivation, and impulse buying behaviour. Previous researchers were more likely to study credit card use in relation to demographics and the given benefits (Wang, Lu, and Malhotra, 2011; Teoh, Chong, and Yong, 2013; Amin, 2012; Hussin, Kassim, and Jamal, 2013), budget constraint, (Omar et al. 2014), easy access to credit cards, credit card features and service quality (Parahoo, 2012; Chahal, Sahi, and Rani, 2014; Omar et al. 2014), media awareness and perception (Ismail et al. 2014), materialism (Omar et al. 2014; Cakarnis and D'Alessandro, 2015; Khare and Varshneya, 2015), lifestyle (Noordin et al. 2012), impulse buying (Cakarnis and

D'Alessandro, 2015; Omar et al. 2014), and knowledge of credit cards (Amin, 2012; Noordin et al. 2012).

Relating to the correlation of these study variables and credit card usage, previous studies were less concerned about these areas. However, regarding the correlation between sales promotion and credit card usage, a prior study by Alam et al. (2014) discussed the relationship between promotional activities conducted by credit card issuers in relation to credit card usage. This study (Alam et al. 2014) demonstrated that promotional activities offered by credit card issuers are one of the key factors influencing consumers to subscribe and use credit card payment services. However, limited studies discussed the influence of sales promotion by retail shopping stores and other retail outlets on the pattern of credit card utilisation among credit card holders, particularly in the Malaysian Muslim context. Moreover, the remaining variables; materialism, money and time availability, self-*hisbah*, as well as hedonic motivation, it is rare to find any studies undertaken regarding credit card usage.

Furthermore, regarding the role of the credit card as a mediator, previous studies exploring compulsive buying behaviour demonstrated that credit card usage partially correlates with power, prestige, retention time, anxiety, and compulsive buying behaviour. However, in these studies, it was found that credit card usage did not mediate distrust with compulsive buying among credit card holders (Oliveira, Falciano, and Perito, 2014). While on the other hand, there is a study examining the role of credit card debt and instalment debt as a mediating factor. The study found that credit card debt and instalment debt have a positive correlation with attitude concerning credit cards, money, and debt whereas, credit card debt has a negative correlation with the attitude to risk (Wang, Lv, and Jiang, 2011).

Meanwhile, regarding the linkage between credit cards and impulse buying behaviour, credit cards are declared as part of the tools that stimulate consumers to practice impulsive buying. This is proven in the findings of previous studies determining that credit cards have a significant relationship with impulse buying behaviour (Omar et al. 2014; Cakarnis and D'Alessandro, 2015; Akram et al., 2018). Also, concerning the issues of credit card misuse, a study found that impulse buying behaviour is part of the antecedents that influence credit card holders to overspend on their credit cards (Omar et al. 2014). Furthermore, that impulse buying acts as a moderator in credit card selection among young professionals (Cakarnis and D'Alessandro, 2015).

Therefore, it is possible to claim credit card usage as one of the factors that influence Muslim credit card holders in Malaysia to practice impulse buying behaviour which ultimately results in unfavourable effects such as debt and bankruptcy. Accordingly, to confirm this statement and the role of credit card usage as a mediator effect in this study, the following hypotheses are proposed:

H3: Credit card usage has a significant positive relationship with impulse buying behaviour.

H4: Credit card mediates the significant relationship between materialism, sales promotion, money and time availability, hedonic motivation and impulse buying behaviour.

2.6.8   RELIGIOSITY AS MODERATOR

Cultural differences are regarded as one of the most important dimensions that influence consumers in their buying behaviour. The element of religion as part of the

cultural dimension has been widely investigated and discussed in diverse fields, such as psychology, marketing, and management. Although previous researchers tended to portray religion as part of the cultural dimension, this study will view the element of religion from a different perspective. It is possible to assert that religion is cultivated based on culture. However, it is also possible to assert that the same culture will produce different types of believers. Therefore, in this study, the religiosity concept is evaluated from the individual perspective, meaning that this study explores and examines whether the different levels of religiosity of the respondents will contribute towards different outcomes.

Regarding the definition of religion, there are conflicting schools of thought relating to precisely what religion and religiosity are and how they can be measured given the various, and in some case quite diverse religions globally. Despite that, scholars choose to believe that the principal element of religion is faith in spiritual being, which is composed of religious practices and rituals (Muhamad and Mizerski 2010). Initially, in the literature, the term religion was derived from the Latin word "*religio*", which is interpreted as the connection between humankind and some power higher than humans (Hill et al. 2000). Specifically, Delener (1990) referred to religion as a unified system of faith, practices, and rituals relative to sacred things, whereas defining religiosity as the level of faithfulness and the adherence by individuals upon their specific religious values, beliefs and ideals. On the other hand, in Islamic doctrine, the main pillars of Islamic religion rely on three main foundations; *Aqidah* (faith), *Shariah* (law), and *Akhlak* (ethics) (Ahmad et al., 2008). Therefore, this study adopts the suggested definitions of religious and religiosity, interpreting religiosity as the level of a Muslim's faith and adherence to Islamic teachings and rulings in his/her consumption through the elements of *aqidah*,

shariah, and *akhlaq* as the main fundamentals of religiosity scale measurement. Thus, this study perceives religiosity as the appropriate religious term to investigate.

However, Muhamad and Mizerski (2010) suggested that there are five types of religious factors that are frequently examined in buying behaviour; religious affiliation, religious commitment, religious motivation or orientation, religious knowledge, and the awareness of the social consequences of following a religion. Religious affiliation means the religious measurement of the religion to which one is affiliated with, such as Islam, Hinduism, or Christianity. Furthermore, it reflects the different schools of thought within a religion such as *syiah* and *sunni* in Islam and orthodox and protestant in Christianity. While religious commitment refers to the degree of adherence of the religious follower upon his/her religion. In the marketing literature, religious devotion is widely inscribed as "religiosity" (Delener, 1990).

Furthermore, religiosity is the measurement of the level of a believer's motivation to adhere and follow his/her religion's teachings and values. In religiosity measurement, a believer's motivation level is identified as either intrinsic or extrinsic. Intrinsic believers refer to those individuals who practice and place religion as their vital purpose in life, and intrinsic believers ordinarily tend to follow their religious teachings and rulings intensely and passionately. On the other hand, extrinsic religious individuals do not consider religion as a vital motive present in their lives (Essoo and Dibb, 2004). Instead, they tend to selectively adopt the religious teachings and values to suit their needs and goals such as overcoming financial difficulties (Allport and Ross, 1967).

For an operational definition of this variable, this study defines this variable as a believer's motivation in adhering and following his/her religion by measuring it

according to intrinsic and extrinsic factors and which rely on the elements of *Shariah, Iman,* and *Akhlak* (Worthington et al. 2003; Ahmad et al. 2008). The final two factors are religious knowledge and the awareness of social consequences of following a religion. From among these five religious influences on consumer behaviour, this study examines religiosity as the moderator effect. Therefore, it is appropriate to test religiosity, related to an individual's motivation to follow Islamic teachings and rulings in impulse buying behaviour.

In the marketing literature, particularly regarding consumer buying behaviour, researchers have started to explore the impact and influence of religiosity towards consumer buying behaviour in various areas and have found a variety of findings. In terms of the relationship between religiosity and buying behaviour, there are previous studies that have been undertaken in this area, such as the purchase decision (Ilyas, Hussain, and Usman, 2011), ecologically conscious consumption (Islam and Chandrasekaran, 2016), green product consumption (Felix and Braunsberger, 2016), brand decision involvement (Razzaque and Chaudhry, 2013), taboo advertisement (Sabri, 2012), product involvement (Yousaf and Malik, 2013), halal cosmetics and halal labelling (Jamal and Sharifuddin, 2015; Rahman, Asrarhaghighi, and Rahman, 2015), consumer satisfaction (Eid and El-Gohary, 2015), choice of banking institutions and products (Souiden and Rani, 2015; Alam et al. 2012; Sayani and Miniaoui, 2013; Awan and Bukhari, 2011; Youssef et al. 2015; Usman et al. 2017), fashionable clothing purchasing (Farrag and Hassan, 2015), consumer loyalty (Al-Hyari et al. 2012), new and foreign product adoption (Rehman and Shabbir, 2010; Mansori, Sambasivan, and Md-Sidin, 2015), luxury value (Teimourpour and Hanzaee, 2011), and shopping orientation and store attribute (Mokhlis, 2009b, 2008) which determined that the element of religiosity has significant influence and is positively related to buying behaviour and buying decision making.

Therefore, this implies that the level of faithfulness and devoutness towards religion, influences the genuine buying decision making among consumers (Teimourpour and Hanzaee, 2011). However, there are also some studies that have found that the factors of religious or religiosity have a marginal influence towards the selection of an Islamic bank (Awan and Bukhari, 2011). Furthermore, that religious belief is not the primary reference used in selecting an Islamic bank, a credit card or its utilisation among conventional credit card holders (Nazimah, 2011), purchasing foreign services and goods (Haque, Rahman, and Yasmin, 2012) and attitude towards credit card usage among banking consumers (Ismail et al. 2014).

However, some studies have revealed that there is no significant relationship and influence between religiosity and buying behaviour. This statement is evidenced by previous studies such as (Ahmed and Hammarstedt, 2011) who conducted a study on religion regarding pro-social behaviour. In this study, the element of religion was found to influence and increase cooperation in pro-social behaviour, but religiosity was found not to be related to this issue. In a separate study, Amin et al. (2011) found that religious obligations are not a significant predictor of the consumers' intention to subscribe to Islamic personal finance. Subsequently in a study by Jamaludin (2013) indicated an insignificant religious influence on investment decision making. Therefore, due to the inconsistency found in the findings of previous studies, this study believes that it is crucial to undertake further study of religiosity in a different context of research, as conducted by this study.

Besides the buying behaviour context, the study of religions and religiosity were observed to be widely carried out in various settings including the workplace (Day and Hudson, 2011; Sharabi, 2012; Mellahi and Budhwar, 2010; Khasawneh, 2011), sexual

intercourse (Mueller et al. 2010), social conflict management (Croucher, 2011), blood donation (Charseted, 2016), charitable giving (Razali and Amin, 2017), social responsibility (Ahmed and Hammarstedt, 2011), and coping with breast cancer (Ahmad, Muhammad, and Abdullah, 2011). However, previous researchers were less concerned about the variable of religiosity in impulse buying behaviour. Therefore, as impulsive buying is related to internal and external factors, this study believes that the variable of religiosity has a positive or negative correlation with impulse buying behaviour.

Further, regarding the role of religiosity as the moderator effect, some studies have tested religiosity as the moderator effect such as in depression and the cognitive function where the element of religiosity moderates the relationship between depression and the cognitive function (Foong et al. 2017). Also, the motivation to donate, which religious belief moderates the correlation between the attitude to charities and the motivation to donate (Teah, Lwin, and Cheah, 2014), and ethical behaviour by religiosity which moderates the relationship between perceived behavioural control and the intention to behave ethically (Kashif et al. 2017).

Notwithstanding, there are also limited studies on buying behaviour that have discussed and tested the variable of religiosity as the moderator effect. Although, in a study by (Souiden and Jabeur, 2015; Alam, Mohd, and Hisham, 2011) religiosity as both a moderator and mediator in the intention to purchase insurance and in buying behaviour was examined. The study also found that the factor of religiosity does not moderate the low religious Muslim to subscribe to conventional insurance and in fully mediating the correlation between the relative and contextual variable on the buying behaviour among Muslim consumer halal-labelled foods (Elseidi, 2016). In this study, religiosity was found to moderate the correlation between attitude, subjective norm, perceived control, and the

intention to purchase halal-label food products. Furthermore, the study also highlighted that religiosity moderates the correlation between fashion involvement, pro environmental attitude, and sustainable consumption (Razzaq, Ansari, Razzaq, & Awan, 2018) as well as moderate ego-defensive and conventional advertising thereby reducing feeling ego-defensive among high religious consumers but not to low religious consumers (Ariffin et al. 2016). The study also found that consumer pro-environmental behaviour intention, which is the factor of religiosity, moderates the relationship between attitude, value, concern, and knowledge on consumer pro-environmental behaviour intention (Bhuian and Sharma, 2017).

However, regarding impulse buying behaviour study, it is difficult to find previous studies discussing religiosity as a moderator effect. Therefore, this study attempts to fill the knowledge gap in this area by examining the moderating effect of religiosity with the two variables; materialism and hedonic motivation on impulse buying behaviours. As the role of religiosity is to measure the level of adherence towards religious belief teachings and values, among the five exogenous variables of this study namely, materialism, sale promotion, money and time availability, hedonic motivation, and self-*hisbah,* the variable of materialism and hedonic motivation seem to be sensible to moderate by religiosity in this impulse buying behaviour study. Also, as the variables of materialism and hedonic motivation are closely related with the consumer's inner self and derived from an individual variable, according to the findings of previous studies as mentioned above, this study believes there is a positive or negative correlation between religiosity, materialism, and hedonic motivation on impulse buying behaviour.

Regarding the correlation of religiosity and the variables of materialism and hedonic motivation on impulse buying behaviour, this study would like to claim that there

is a possibility that religiosity will moderate or not moderate these two variables on impulse buying behaviour according to the level of religiosity of the respondents in this study. Accordingly, this has been proven by previous research, indicating that highly religious consumers will tend to avoid impulsive buying and are more concerned about price, quality, and the usefulness of the goods and services compared to less religious consumers (Mokhlis, 2009b). Therefore, this demonstrates that highly religious consumers will spend their money to buy essential things and to avoid being materialistic compared to a low religious person. Furthermore, they tend to be concerned with what is precisely stipulated by religious teachings and values and are less concerned about worldly matters. Also, this study believes that the element of materialism and hedonic motivation have a negative correlation with the factor of religiosity and that this group of consumers are more likely to come from the less religious consumers. This fact was proven according to the previous study statement which found that highly materialistic attitudes are more likely to result in a positive attitude towards borrowing and spending money for non-essential things rather than in low materialism which tends to involve investments and in managing their wealth or money wisely (Watson, 2003). Indeed, this materialist consumer will feel satisfied if they are able to fulfil their worldly desires (Yamauchi and Templer, 1982) and tend to ignore the element of religiosity or spirituality (Belk, 1984) while making a consumption decision or any other thing, as well as having the propensity to borrow money for non-essential things, which will affect their financial management (Watson, 2003).

The previous study statement obviously demonstrated that the materialist consumer has less concern for religious teachings and how they value their life. Meanwhile, for the correlation between religiosity and hedonic motivation, it is feasible to claim that this hedonic consumer is also less concerned about religious teachings and

values, where this type of consumer, and the group of consumers, will tend to obey their own desires more than other things. Notwithstanding, the previous study statement, therefore, proves that hedonic shopping-oriented consumers are more inclined towards excitement, fun, and seeking an entertaining experience during a shopping venture (Okada, 2005) and tend to practice impulsive buying for hedonic purposes without considering the consequence. Thus, according to a statement by Yousaf and Malik (2013) and Mokhlis (2009b) less religious consumers tend to practice impulse buying easily. Hence, it is reasonable to claim that hedonic consumers are less religious consumers who hesitate to practice religious teachings and values in their lives.

Therefore, it is viable to claim religiosity as a variable which will moderate the relationship between materialism and hedonic motivation on impulse buying behaviour if the respondents are highly religious person and will not moderate if the respondent is a low religious person. Thus, to validate this statement, the following hypotheses are proposed:

H5a: Religiosity moderates the significant relationship between materialism and impulse buying behaviour.

H5b: Religiosity moderates the significant relationship between hedonic motivation and impulse buying behaviour.

2.7   RESEARCH THEORETICAL FRAMEWORK

The framework of this study contains the independent variables, mediating factor, moderating factor, and dependent variables as the main contents of this research. The independent variables consist of the situational variables and the individual variables as

the antecedents of impulse buying behaviour. Situational variables, which involve the factors time and the place of observation adopted in this study are sales promotion, money and time availability. These variables have been selected as there were only a few previous researchers that have examined the elements of sales promotion, money and time availability in impulse buying behaviour. Some of the earlier studies related with sales promotion and money and time availability in impulse buying behaviour are by Badgaiyan and Verma (2015), Kacen, Hess, and Walker (2012), and Yi and Baumgartner (2011) for sales promotion and Badgaiyan and Verma (2015), Chang, Yan, and Eckman, (2014) and Kwon and Armstrong (2002) for money and time availability. However, these variables in the Malaysian context, have rarely been examined in impulse buying behaviour studies. Therefore, this study will examine the relationship of sales promotion, money and time availability with impulse buying behaviour among Muslim credit card holders in Malaysia.

Regarding the individual variables; materialism, hedonic motivation, self-*hisbah*, religiosity, and credit card usage, these variables have also been scarcely explored in impulse buying behaviour. Therefore, the researcher of this study believes that there is a need to fill these gaps. As mentioned above, this conceptual framework has been developed according to the fundamentals of the EBM model and the theory of buyer behaviour. According to the EBM model and the theory of buyer behaviour, there are two main factors; internal and external factors that influence consumer buying behaviour. Therefore, the framework in this study includes the external (situational) variable and internal (individual) variable as the independent variables.

Furthermore, the framework in this study will also contain the variables for the moderating and mediating effects; the religiosity variable as the moderating effect and

credit card usage as the mediating effect, which has been less explored in previous studies on impulse buying behaviour. Therefore, the findings of this study will help to extend the knowledge of impulse buying behaviour
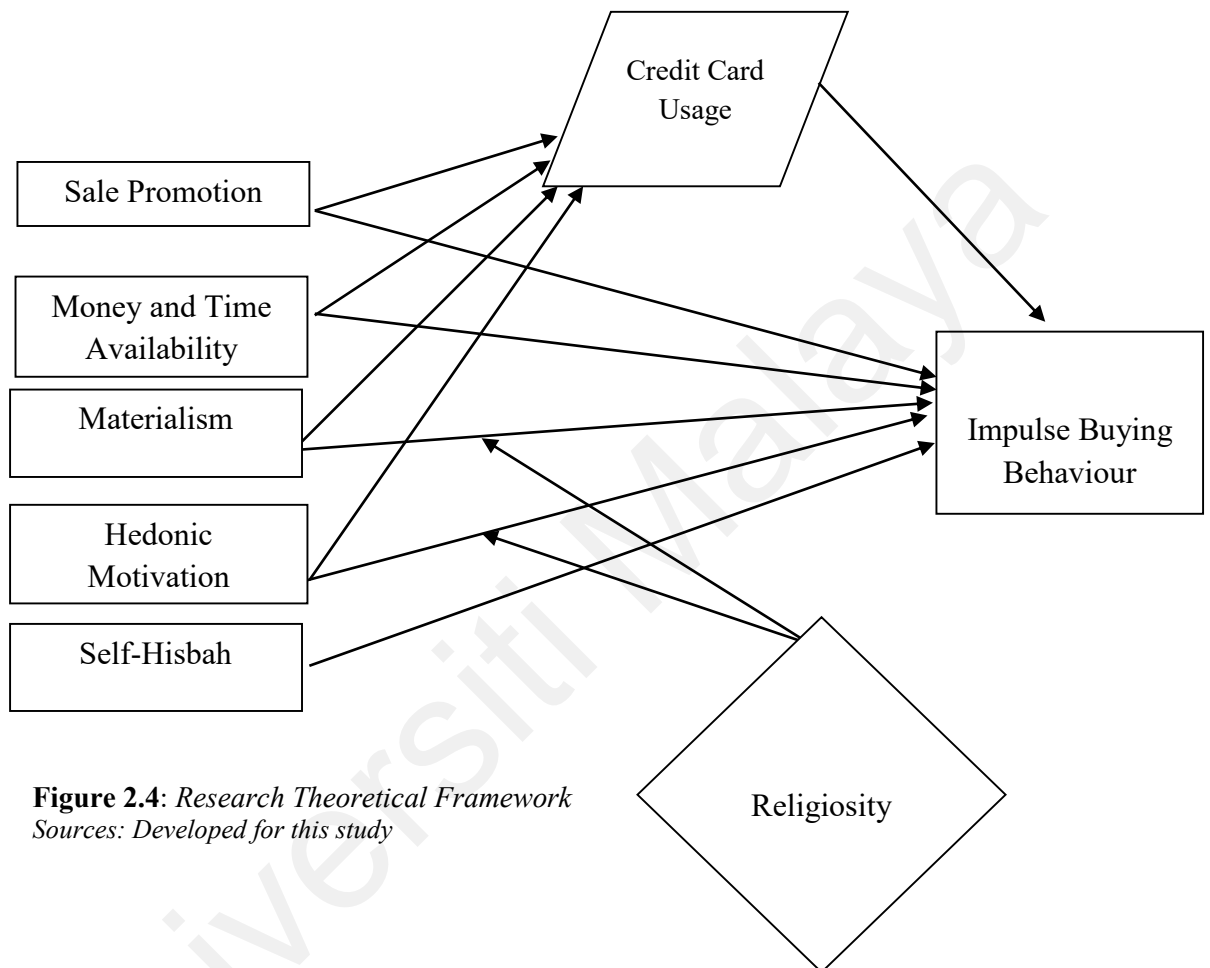
Figure 2.4: *Research Theoretical Framework*
Sources: Developed for this study

2.8   HYPOTHESIS STATEMENTS

The hypotheses presented in this study include:

H1a: There is a significant positive relationship between materialism and impulse buying behaviour.

H1b: There is a significant positive relationship between sales promotion and impulse buying behaviour.

H1c: There is a significant positive relationship between money and time availability and impulse buying behaviour.

H1d: There is a significant positive relationship between hedonic motivation and impulse buying behaviour.

H2: There is a significant negative relationship between self-*hisbah* and impulse buying behaviour.

H3: There is a significant positive relationship between credit card usage and impulse buying behaviour.

H4a: Credit card mediates the significant relationship between materialism and impulse buying behaviour.

H4b: Credit card mediates the significant relationship between sales promotion and impulse buying behaviour.

H4c: Credit card mediates the significant relationship between money and time availability and impulse buying behaviour.

H4d: Credit card mediates the significant relationship between hedonic motivation and impulse buying behaviour.

H5a: Religiosity moderates the significant relationship between materialism and impulse buying behaviour.

H5b: Religiosity moderates the significant relationship between hedonic motivations and impulse buying behaviour.

2.9 THEORY AND MODEL OF THE STUDY

As this study is about consumer buying behaviour, the Theory of Buyer Behaviour, the Engle, Blackwell, and Miniard Model (EBM model), and the Theory of *Maqasid* Shariah are employed in this study. The Theory of Buyer Behaviour and the EBM model are both compatible towards the study of consumer buying behaviour. Therefore, this both theory and model as the underpinning theory and model of this study. Further, as this study also discusses impulse buying behaviour from an Islamic perspective, the theory of *maqasid* shariah is essential to support the Islamic consumption concept as well as the variable of self-hisbah and religiosity. Moreover, previous studies that have explored impulse buying behaviour rarely utilised these theories and models, and therefore, the application of both are considered to be appropriate and sensible.

2.9.1 Theory of Buyer Behaviour

The theory of buyer behaviour was founded by Howard and Sheth (1969) to explain the brand choice behaviour of consumers. The functions of this theory are towards identifying the elements of the consumer "decision-making" process, to observe the development of buying behaviour, and to explain how a combination of factors associated with the buying decision will affect the search process. In this case, the buyers develop the process of the buying situation and to satisfy their buying motive; the buyer creates a set of rules that are used during their buying decision-making process. According to Figure 2.5, the theory of buyer behaviour consists of four sets of rules or variables that include; (1) input variables, (2) output variables, (3) hypothetical constructs, and (4) exogenous variables (Howard and Sheth 1969).

The input and output variables are classified as the least abstract variables that are directly related to reality and are operationally well defined. Further, these input and output variables are more realistic and objective for several reasons. First, for the input variable, the hypothetical constructs explain that the buyer's mental condition related to the buying decision is affected by various motivations based on the buyer's surroundings which can be categorised as commercial and social surroundings. For commercial surroundings, this is fundamentally created by the marketer to communicate directly with the buyers. The commercial motivations will attract the buyers' attention in two ways; by the significative motivation that displays the products through the physical brands, and secondly, through linguistic and photographic representations, known as symbolic motivation. Moreover, these two inputs, significative and symbolic motivations or stimuli are as depicted in the theory of buyer behaviour. For social surrounding, this is represented by social motivation where the information is derived from the buyer's social surroundings. In this case, the buyer obtains new information about the product or service

through others such as family members, friends, and the public through word-of-mouth communication.

For the output variables, these intervening variables are sometimes referred to as instrumental learning, which is a process where the buyers receive information that will assist them to achieve their buying goals. For these output variables, the theory of buyer behaviour classifies buyers' output into five variables: (1) attention, (2) brand comprehension, (3) attitude, (4) intention, and (5) purchase. Attention is defined as a psychophysical measure that interprets the opening and closing of the buyer's sensory receptors, thus, demonstrates the concentration or the deficiency of it on a particular stimulus. In simple words, this condition is described as a measure of evoking awareness of products and services simply by asking the buyers whether they are aware of the products and services. In this stage, the marketer group will devote significant financial resources and time to create and develop events to catch the buyers' attention. Next, brand comprehension refers to buyers' "unwritten statement about their knowledge of products and services". In this case, the buyers' will express their comprehension towards a certain brand through their attitude towards that brand or products. Attitude is defined as the buyers' verbal evaluation towards the potential of the products or services to satisfy their goals. After that, the buyers' will imply their attitude towards those goods or services, and the intention or buyers' expectation towards the goods or services being expressed verbally which they will then buy the brands they want the most when motivated to make a purchase. Lastly, after experiencing all these stages, the buyers' will take steps to purchase what they want.

The third variable is the hypothetical construct which is classified as the most abstract variable but is not operationally defined and is indirectly related to reality. The

hypothetical construct is categorised into two forms; a perceptual construct that functions as an information processor (perception) and a learning construct that plays a role of concept formation (learning) (Howard and Sheth, 1970). The learning construct consists of seven elements, which are motives (specific and non-specific), brand comprehension, choice criteria, confidence, attitude, intention, and satisfaction. Motives as the main point of consumer action to make the purchase are defined by two characteristics; specific and non-specific motives. Specific motive refers to the planned buying which consumers already have detailed criteria regarding the goods or services that they wish to buy. For instance, those consumers who want to purchase cereal products with motives already know the brand, price, flavour, as well as the amount of cereal they want to buy. As for the non-specific motives, consumers with non-specific motives will encounter feelings of anxiety and fear. Brand comprehension is a second learning construct. Through a learning process, consumers can gain and acquire knowledge of brand characteristics and apply these as references for satisfying their needs. A third learning construct, choice criteria, occurs when the buyer is interested in normalising alternatives with motives and by ranking a product based on consumer satisfaction. In this case, the consumer will make a buying decision for that product based on his/her level of satisfaction from the previous experience. The fourth learning construct is attitude, which functions as a judgment stage where consumers make a preference for specific brands depending on criteria and brand confidence. The fifth learning construct, intention, is when the consumer is motivated to buy something, but they may not proceed and purchase it due to environmental forces that prevent the act of purchasing. Finally, the last learning process is confidence and satisfaction, which refers to the degree of perception of the buyer towards a specific brand, based on post-purchase reflection which is utilised to inform of subsequent buying decisions.

Regarding perceptual construct, this serves to procure and process the information related to buying decision-making. When buyers begin to carry out any purchase, they will often seek information from three stimulus inputs; significative commercial stimuli, symbolic commercial stimuli, and social stimuli such as their family, a reference group, networks and social class. The perceptual construct consists of four hypothetical constructs; perceptual bias, overt search, attention, and stimulus ambiguity. Attention is created through the opening and closing of sensory receptors that monitor the process of obtaining information and determines the situation of whether the buyer is aware or does not have the information. Also, the lack of attention makes the buyer unaware of the information that is required and the adverse consequences. Next, during the procuring stage and understanding the information, the buyer experiences a feeling called stimulus ambiguity. Stimulus ambiguity refers to the situation where the buyer feels uncertain with the knowledge that he/she has received. For instance, the buyer will ignore the information he/she heard on the radio or television as they believe the information is well-known or too simple to be considered. However, the buyer will also focus towards the information when his/her ambiguity feeling increases, making him/her feel enthusiastic to understand the information.

Third, perceptual bias implies the situation where the buyer alters the meaning of the information received to make the information aggregable with his/her own knowledge, already acquired. Lastly, an overt search occurs when the buyer actively searches for the information. Indeed, this situation arises due to the buyer's ambiguity and curiosity towards the brand and experiences a confusing situation trying to decide among two or more brands.

The last variable is the exogenous variable, which describes the contexts of buying behaviour as well as market segmentation and analysis. In consideration of the above, this study has adopted the theory of buyer behaviour as the underpinning theory that supports the entire theoretical framework of this study. In this state, the theoretical framework consists of the variables that are compatible with the element in the theory of buyer behaviour. Furthermore, for independent variable development, the theoretical framework incorporates two-main variables; the situational variable and the individual variable which represent the element of the commercial surrounding and social surrounding in theory buyer behaviour. As the theoretical framework in this study is developed based on the EBM model, these variables are required for the theory of buyer behaviour to support the entire framework. Although, the theory of buyer behaviour discusses the stages or processes of buyer behaviour and buyer decision making which results in appropriate buying behaviour. However, it does not mean that experiencing the buying decision-making steps will prevent the buyer from impulse buying behaviour. Accordingly, the buyer who encounters the perceptual construct and learning construct in the buying decision-making process can practice impulsive buying at the completion of their buying activities. Therefore, it is possible to claim that the impulsive buyer instead, is the buyer who experiences the buying decision-making process.

On the other hand, the utilisation of the buyer behaviour theory will extend and add new knowledge in applying this theory towards impulse buying behaviour from an Islamic perspective which has rarely been conducted in previous studies. Further, one of the variables examined in this study, which is the variable of self-*hisbah* is also entirely new in the theory of buyer behaviour as this variable is rarely investigated in buying behaviour studies, particularly in the study of impulse buying behaviour. In the theory of buyer behaviour, the variable of self-*hisbah* and religiosity are categorised as the social

surrounding that influences buyer decision making. However, in this study, the variable of self-*hisbah* and religiosity do not measure as social surrounding, but this variable is measured among the buyers' themselves. Therefore, this study believes that buyer behaviour theory is a compatible theory to support this study.

Inputs

Stimulus Display   Perceptual Construct   Learning Construct   Outputs

Significative
a. Quality b. Price c. Distinctiveness d. Service e. Availability
Symbolic
a. Quality b. Price c. Distinctiveness d. Service e. Availability
Social
a. Family b. Reference Groups c. Social Class

Overt Search

Stimulus Ambiguity

Attention

Perceptual Bias

Confident

Attitude

Motives

Choice Criteria

Brand Comprehension

Satisfaction

Intention

Purchase

Intention

Attitude

Brand Comprehension

Attention

Figure 2.5: *A simplified explanation of the theory of buyer behaviour*
Sources:Howard and Sheth (1969)

2.9.2   Engel, Blackwell and Miniard Model (EBM Model)

To predict the buying behaviour of consumers, a variety of models have been created. Three models analyse consumer buying decision-making; the Economic Model, the Psychological Model, and the Consumer Behaviour Model (Bray, 2009). Accordingly, these models contain the summation of the entire consumer behaviour, which explains the consumer decision-making process and the complexity of consumer behaviour. Also, consumer behaviour is involved in a wide variety of individual and situational behaviours as well. Therefore, the marketer will often obtain benefits through these models by comprehending the complete story of consumer buying behaviour and decision making. In this study, the Consumer Behaviour Model (EBM Model) is adopted as the main backbone of this study.

Further, there are five theoretical approaches in the study of consumer behaviour; the economic man, psychodynamic, behaviourist, cognitive, and humanistic. However, in this study, the cognitive model consisting of the analytical model and the prescriptive model is employed. The analytical model (Engel, Blackwell, Miniard Model and Theory of Buyer Behaviour) from the cognitive approach is selected as the primary backbone and a pillar of this study. The EBM model, which was developed and extended from the original Engel, Kollat, and Blackwell Model (EKB model) was founded in 1968 (Bray, 2008). Notably, this study employs the analytical model as this model provides a framework of the main elements that explain the behaviour of consumers, which is relevant to achieving the objective of this study.

According to Figure 2.6, the EBM model consists of seven points of consumer decision making. Each level of the phases describes how consumers practice their buying behaviour. It commences with problem recognition, information search, alternative

evaluation, purchase decision, purchase, and concludes with post-purchase evaluation (Blackwell et al. 2012; Engel, Blackwell, and Miniard, 1995). The seven points of consumer decision making are influenced by two factors; the memory of previous experience and differences. While the other variables affecting the decision-making process include the environmental influence and individual influence. Environmental influence consists of culture, social class, personal influence, family, and situation. On the other hand, individual influence in the decision-making process consists of consumer resources, motivation and involvement, knowledge, attitude and personality, value and lifestyle. Specifically, the first point of decision making involves the need recognition process which consumers identify dissimilarities between their current state and some desirable alternatives. This process is influenced by an interaction between the processed stimuli input and the environmental and individual variables. After identifying their needs, consumers will embark on information navigation, which is influenced by the memory of previous experiences as well as external factors. During the information navigation process, five stages of processing must be passed, namely; exposure, attention, comprehension, acceptance, and retention.

Regarding consumer decision making, almost all consumers practice these seven points during their shopping activities. However, some are less concerned with this and practice unplanned buying practices instead. In this impulse buying study, the EBM model is applied to measure the element influencing impulse buying among consumers. The EBM model is employed in this study as it is the most comprehensive behavioural model supported by a mature framework, which has the ability and capacity to sequence and factorise, thereby making the primary problem easier to analyse (Engel, Blackwell, and Miniard, 1995; Blackwell, Miniard, and Engel, 2012). The variables, sales promotion, money and time availability in this study, are categorised as the environmental or

situational influences in the EBM model, while the remainder of the variables namely; materialism, hedonic motivation, self-*hisbah*, religiosity and credit card usage are categorised as the individual influences, including impulse buying behaviour as part of the consumer decision-making process. These variables are selected and tested in this study as they have rarely been discussed with the EBM model in the study of impulse buying behaviour.

Some previous impulse buying studies employed the EBM model including the studies by (Martinez and Kim, 2012; Tendai and Crispen, 2009). However, limited studies engaged the EBM model in impulse buying behaviour, particularly within the Malaysia context. Therefore, this study believes that by using the EBM model as a pillar of this study's theoretical framework, it will contribute towards the body of knowledge in consumer behaviour particularly in impulse buying behaviour from a different perspective. Furthermore, as the development of the theoretical framework is adopted from the EBM Model, the theory of buyer behaviour is required to support the entire theoretical framework, as this theory is well-established and acknowledged.

Input	Information Process	Decision Process	Variable Influencing Decision Making

Environmental Influences

Culture

Social Class

Personal Influence

Family

Situation

Individual Differences

Consumer Resources

Motivation and Involvement

Knowledge

Attitude

Personality, Values, and Lifestyle

Need Recognition

Search

Internal Search

Pre Purchase Evaluation of Alternatives

Purchase

Consumption

Post Consumption Evaluation

Dissatisfaction

Divestment

Satisfaction

Exposure

Attention

Comprehension

Acceptance

Retention

Memory

Stimuli

Marketer dominated

Other

External Search

Figure 2.6: *Consumer Decision Model*
Sources: Blackwell et al. (2012) and Engel, Blackwell, and Miniard, (1995)

2.9.3   Theory of *Maqasid Shariah*

The Islamic *shariah* ruling has a set of ethics and norms regarding consumption derived from the Islamic teachings and values of the Quran and Sunnah. Five values proposed by Mannan (1986) suggested that the values and ethics in Islamic consumer behaviour are measured by the principles of fairness, cleanliness, simplicity, morality, and generosity. Further, Muslim consumers should refrain from the elements of stinginess, wastefulness, and overspending in practising financial and wealth consumption. Also, the theory of consumer behaviour from an Islamic perspective was developed via the fundamentals of Islamic *shariah,* which is different from the conventional theory regarding measurement and perception of the fundamental values, the motive and purpose of consumption, and the financial allocation for consumption purposes.

The discussion of consumer behaviour in Islam is embarked upon with a brief discussion on the definition and model of consumer behaviour, followed by a rational discussion regarding the economics in Islam, *maslahah* (public interest) in consumption, and derivation of the demand curve (Sriyana, 2012). Also, regarding the economic concepts and fundamentals, Islamic economics contradicts traditional economic philosophy. Islamic economics is not only employed to achieve the satisfaction of personal interest but is also concerned about social interest and the devotion to God (Allah) (Hoetoro, 2007) and practicing the five pillars of Islamic ethics in consumption; the principles of the lawful and the unlawful, the levels of need, quality, safety, moderation, as well as wisdom (Kamri, 2008). Further, Islamic economics is concerned with the topics of consumer and retailer behaviour such as production, distribution, advertising, pricing, and consumption. Apart from this, Islamic economics experiences tremendous challenges for the sake of development of the Islamic economics according

to Islamic teachings and values (Sriyana, 2012). Accordingly, these economic and consumption activities are surely conducted based on the *maqasid* of the Islamic law.

2.9.3.1 Definition of Maqasid Shariah

Fundamentally, maqasid is derived from two main words namely, *Maqasid* and *Shariah* (Oladapo & Rahman, 2016). The term '*maqsid*' (plural: *maqasi*d) which is defined as a "purpose", principle, objective, wisdom and goal in the Islamic doctrine (Oladapo & Rahman, 2016; Auda and Khan, 2008; Shinkafi & Ali, 2017; Laldin and Furqani, 2013; Saged, Alhaj & Bi, 2017) that is created to guide the human being from being led astray and instead practice the concept of moderation in their life (Hussin, 2017). While the term *shariah* refers divine Islamic law (Oladapo & Rahman, 2016) that consists all aspects of religious system (*aqidah*), human and god relationship (*ibadah*), and the relationship between human (*muamalah*) (Laldin and Furqani, 2013) which required to be obedient by a Muslim as stated by Allah S.W.T. (Saged, Alhaj & Bi, 2017; Hussin, 2017). Accordingly, maqasid shariah is regarded as a standard that encompasses the goal and objective of Islamic law (*shariah*) to be applied as reference in solving the mankind life problem. The purpose of this Maqasid Shariah is to prevent human beings from being led astray from Islamic regulations and Allah's blessing and to protect the public interest (*maslahah*) of humanity and prevent evil (Laldin and Furqani, 2013; Saged, Alhaj & Bi, 2017).

2.9.3.2 Classification Theory of *Maqasid Shariah*

There are three spesific of maqasid shariah namely; tahdhib al-fard (educating the individual), iqamah al- 'adl (establishing justice), and al-maslahah (public interest) (Abu Zaharah,1997). The issues of *maslahah* is very wide and Islamic prominent scholar have variety of nation in defining the maning of *maslahah*. Al-Ghazali (1997) define

maslahah as resisting harm and welcoming the benefit for ummah through three preservations of *maslahah* (public interest) namely; *daruriyah* (necessities), *hajiyah* (needs), and *tahsiniyah* (luxuries). Further, the *daruriyah* (necessities) are divided into five areas that need to be preserved; preserving of faith, soul, wealth, mind, and offspring (Auda and Khan, 2008).

The objective of *Daruriyah* is to fulfil the basic necessities in human life which are fundamental to humans' well-being. Humans will encounter and experience challenging lives when the *Daruriyah* items such as food, beverage, shelter, clothes, and safety are not fulfilled. Islamic scholars have unanimously suggested that the five pillars of *Daruriyah* are necessary to be preserved in a Muslim's life, namely; preserving faith, soul, wealth, mind, and offspring as depicted in Figure 2.7 (Auda and Khan, 2008). It is also crucial to preserve one's faith as it functions as the utmost principle on the *Maqasid Shariah*. Experiencing life routines are not in accordance with Islamic teachings, values, and rulings will result in chaos and uncertainties.

Next, the protection of the soul is crucial to the life that Allah S.W.T. grants to humans. Preservation of the soul is practically conducted in Islamic laws, such as *qisas* and *diyat* ordinances for offenders and casualties. Subsequently, the preservation of the mind refers to utilising this precious gift received from Allah S.W.T to comprehend the existence of Allah S.W.T and His power and blessings, as well as to monitor and prevent ourselves from committing evil and wrongdoings. Furthermore, Islam commands Muslims to utilise their minds to create and cultivate a sense of peace and harmony among each other. Regarding wealth management and preservation, Islam accepts the desire to be rich and search for the moderation of a fancy life; however, if this activity is followed by unbeneficial things such as wastefulness, extravagance, oppression, unlawfulness, and

greed, this is forbidden in Islamic teachings and laws. Next, Islam commands the preservation of honour as the Muslim's identity reflects Islam. Lastly, Islam emphasizes well-being and legitimate offspring's and descendants. It is essential to protect these due to Islam's identity as a harmonious and peaceful religion. Therefore, any ambiguous and illegitimate relationship is forbidden in the Islamic doctrine.

The second level of necessities is *Hajiyyah* (needs), which is slightly different from *Daruriyah*. *Hajiyyah* which refers to additional necessities in life that human beings perceive as part of the important things to have. In other words, *Hajiyah* plays a complementary role towards human necessities such as having transportation for daily activities, health, fresh food and beverage, household inventory, and hygienic surroundings. Inadequacy in any of these areas will result in hardship and an uncomfortable life. Further, it does not reflect that human life will be imperfect without this *Hajiyyah* necessity. Meanwhile, *Tahsiniyah* demonstrates an added value to human life that is derived from human desires and demands such as luxury cars, fanciful and luxury accommodation, branded shoes and attires, as well as dining at exclusive and expensive restaurants. These items are not crucial; however, this is permissible to practice if humans do not go beyond the Islamic principles and rulings. Specifically, humans attempt to meet the desire for these things to upgrade their lifestyles, obtain high social status, as well as for life satisfaction. Notwithstanding, Islam warns that obsession towards *Tahsiniyyah* will result in negative deeds such as unlawful transactions, dark lifestyles, greed, flaunting, and ungratefulness.
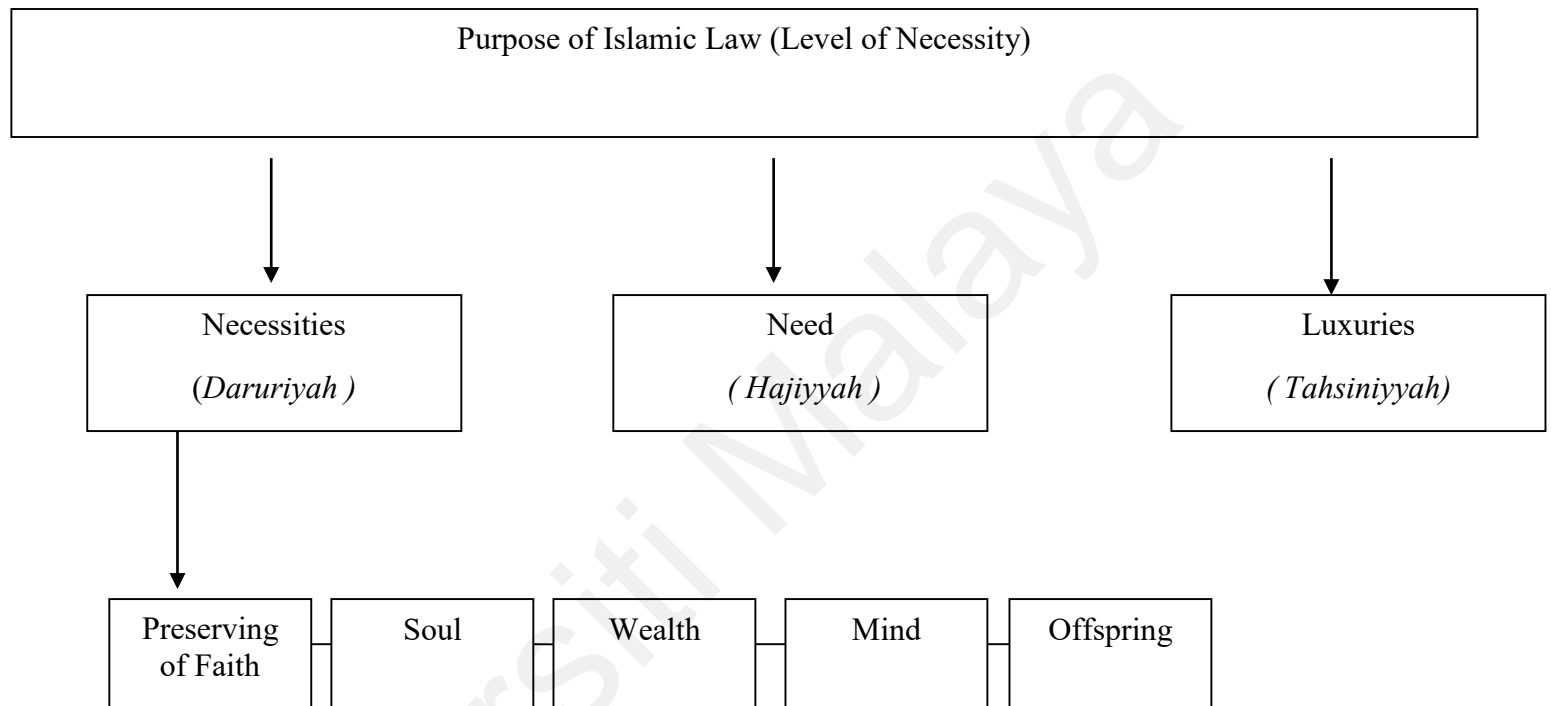
Figure 2.7: *The Theory of Maqasid Shariah*
Source: Auda and Khan(2008)

2.9.3.3 *Maqasid Shariah* in the Islamic Consumption

According to the research performed in this study on the theoretical framework, the theory of *maqasid shariah* functions to support and explain the significance of the variable of self-*hisbah* and religiosity as well as the discussion of impulse buying behaviour from an Islamic perspective. As mentioned above, the development of the variable of self-*hisbah* and religiosity and the discussion of impulse buying behaviour from an Islamic perspective are adapted from the theory of *maqasid shariah*. The theory of *maqasid shariah* plays an important role as the fundamental elements that explain the connection between the variable of self-*hisbah* and religiosity with the issues of impulse buying behaviour. Meanwhile, regarding the discussion of impulse buying behaviour from an Islamic perspective, this study discusses this issue according to the classification of *maqasid shariah* in the purpose to preserve the *maslahah* (public interest) namely, *daruriayah (*necessities*), hajiyah* (need), and *tahsiniyah* (luxuries).

Regarding the correlation between the theory of *maqasid shariah* with the variables of self-*hisbah* and religiosity, these two variables are created and measured according to the three major classifications of *maqasid shariah* namely; *daruriyyah* (necessities), *hajiyah* (needs) and *tahsiniyah* (luxuries) and the five fundamentals of necessities as mentioned earlier; preserving of faith, soul, wealth, mind, and offspring. According to these five fundamentals of necessities and the three major classifications of *maqasid shariah*, this study examines the variables of self-*hisbah* and religiosity on impulse buying behaviour among Muslim credit card holders in Malaysia through employing a questionnaire purposely developed to observe and measure the level of self-*hisbah* and religiosity according to how each reflect themselves with the Islamic ruling on the issues of impulse buying behaviour. This study has explained and discussed the status of impulse buying behaviour from an Islamic perspective by referring to what the

maqasid shariah highlighted in humankind's life, particularly in consumption activities. Notably, the nexus of *maqasid shariah* in Islamic consumption originates from preserving wealth in Islamic law as mentioned earlier. However, as consumption activities (impulse buying behaviour) are general activities in human life, the other preservation in necessities namely, preserving of faith, soul, mind, and offspring also correlate with consumption activities (impulse buying behaviour) as illustrated in Figure 2.8 below.
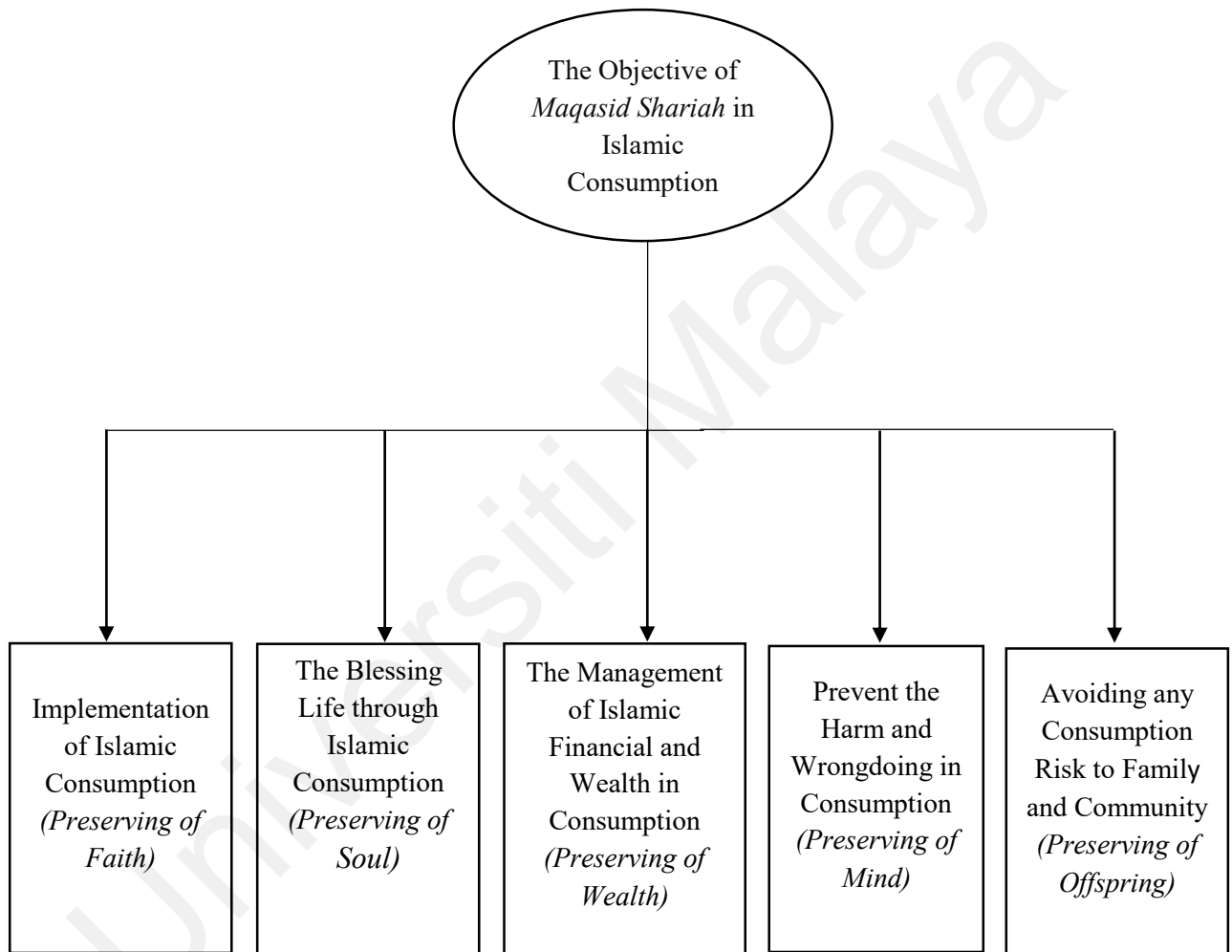
Figure 2.8: *The Objective of Maqasid Shariah in Islamic Consumption*
Source: Developed for this study

According to Figure 2.8, this study demonstrates how the objective of the theory of *maqasid shariah* is interpreted in Islamic consumption (impulse buying behaviour) through the five pillars of *Dharuriyah* (necessities) of humankind namely, preserving of faith, soul, wealth, mind, and offspring into the implementation of Islamic consumption, the blessing life through Islamic consumption, the management of Islamic financial and wealth in consumption, prevent the harm and wrongdoing in consumption, and avoiding any consumption risk to one's family and community.

Previously, the theory of *maqasid shariah* has been employed in other studies such as Islamic banking and finance (Dusuki and Abozaid, 2007; Lahsasna, 2009; Laldin and Furqani, 2013; Alam, Hassan, & Said, 2015), a consumption study (Amin, Abdul-Rahman, and Abdul Razak, 2014) and few in new field such as environment (Saged, Al-Haj, Bi, 2017) but is hardly discussed in the study of impulse buying behaviour. Therefore, this study takes the opportunity to close the gap by examining the correlation of the theory of *maqasid shariah* in impulse buying behaviour through the function of religiosity and self-hisbah variable. The variables of religiosity and self-hisbah discussed in this study according are to the the five basic elements in maqasid syariah as illustrated in Figure 2.9 namely, preserving of faith, preserving of soul, preserving of wealth, preserving of mind, preserving of offspring.

The first value Muslims are required to preserve their faith to Allah by implementing their obligation as a Muslim in consumerism activities. Regarding consumption activities, Muslims' have been commanded to follow what has been stipulated through the Islamic teachings and values and to leave or avoid any impermissible behaviour in Islam such as lavish consumption, envious behaviour, and

egoism. Islam emphasises the element of humbleness and low pride in consumption activities. As Allah S.W.T says in the Al-Quran:

"And turn not your face away from men with pride, nor walk in insolence through the earth. Verily, Allah likes not any arrogant boaster." [15](Translation Al-Quran, 31: 18).

While, with the objective to preserve soul or life, practising proper and appropriate consumption will lead to a blessing and peaceful life. As Allah S.W.T says in the Al-Quran:

"O mankind! Eat of what which permissible and good on the earth, follow not the footsteps of Satan. Verily, Satan is an enemy to you" [16](Translation Al-Quran, 2: 168).

Regarding the preservation of wealth, Islamic ruling already stipulates the rule and regulation in consumption which Allah S.W.T commands in His Al-Quran:

"And give the relative his right, and the poor and the traveller, and do not spend wastefully. Indeed, the wasteful are brothers of the devils, and ever has Satan been to his Lord ungrateful" [17](Translation Al-Quran, 17: 26-27).

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[15] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran
[16] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran
[17]Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

Meanwhile, instead of being a spendthrift, Islam commands a Muslim to practice consumption activities moderately to preserve their mind and offspring. As Allah S.W.T say in the Al-Quran:

"And those, who, when they spend, are neither extravagant nor stingy, but hold a medium between them" [18](Translation Al-Quran, 25-67) and "Eat and drink but wast not by extravagance. Certainly, Allah likes not the wasteful". [19](Translation Al-Quran, 7: 31).

Accordingly, this statement demonstrates how the theory of *maqasid shariah* is relevant to correlate with impulse buying behaviour from an Islamic perspective. The theory of *maqasid shariah* functions as the theory to support the variable of self-*hisbah* and religiosity as well as the discussion of impulse buying behaviour from an Islamic perspective.

2.11 CONCLUSION

In this study, the selection of the variables is due to the limited number of studies that have been previously conducted on these variables in the study of impulse buying behaviour. The theory of buyer behaviour, the EBM model, and the theory of *Maqasid Shariah* are compatible with the objectives of this study. Moreover, previous researchers rarely employed these theories in impulse buying behaviour studies (Chan, Cheung, & Lee, 2017). Therefore, this study believes that the application of the theory of *Maqasid Shariah* in the study of impulse buying behaviour will contribute towards extending the body of knowledge in this area.

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[18] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran
[19] Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

On the other hand, the selection of the variables of this study; materialism, sale promotion, money and time availability, hedonic motivation, self-*hisbah*, credit card usage, and religiosity will help to create a new path in the study of impulse buying behaviour, particularly in the Malaysian context. Given that prior studies have rarely employed these variables in studying impulse buying behaviour, having the opportunity to explore and examine these variables and in closing the knowledge gap in this area is paramount.

CHAPTER 3: RESEARCH METHODOLOGY

INTRODUCTION

The purpose of this study is to examine the factors influencing Muslim credit card holders' impulse buying behaviour in Malaysia. In order to measure the seven proposed variables (materialism, sales promotion, money and time availability, hedonic motivation, self-*hisbah*, credit card usage, and religiosity), quantitative method was employed in this study. The quantitative method is appropriate to be applied in this study in order to obtain reliable and practicable findings. Therefore, this chapter is organized into seven main sections, namely; research design, research paradigm, research ethic, data collection, measurement, questionnaire development, data analysis, and conclusion.

3.1 RESEARCH DESIGN

Research design is essential as it plays a role in the plan and procedure that spans the decision from broad hypothesis to specific methods of data collection and analysis. It is related to crossing of philosophical assumption, strategies of inquiry, and specific methods (Creswell, 2013). In this study, the quantitative method is employed in order to obtain reliable and acceptable research findings.

In terms of the nature of the study, according to Sekaran and Bougie (2013) and Cooper & Schindler (2014), there are three nature of the study namely, exploratory, descriprtive, and causal. The objective of the study will determine which nature of study is related to our study. Exploratory study is conducted when the study attempts to explore new area where there is no information available regarding to how similar issue and problem have been resolved. While, descriptive study is more likely to describe some of characteristics of phenomena, and causal study related to study which investigates

137

whether or not the assumption relationship had been supported (Sekaran and Bougie, 2013).

Accordingly, this study nature is exploratory study which is conducted by quantitative technique as similar with previous impulse buying behavior studies (Bahrainizad & Rajabi, 2018; Seinauskiene, Mascinskiene, & Jucaityte, 2015; Leong, Jaafar, & Sulaiman, 2017). The objective of exploration study may be conducted by different research techniques either qualitative or quantitative although exploratory study relies more on qualitative technique (Ahmad et al. 2014; Cooper & Schindler, 2014). For instance, this exploratory study has been conducted via quantitative method through data analysis of PLS-SEM as referring to (Hair et al. 2017) claim that PLS-SEM tool analysis is primarily used for exploratory study and extended or development of theory. On the other hand, exploratory study is undertaken only when small or no previous studies exist on how the variable are related (Sekaran and Bougie, 2013; Hair et al. 2017). Therefore, it is suitable with this study characteristic namely examining the variable of self-hisbah and religiousity which are difficult to find the correlation of these variables with impulse buying behavior in previous studies. Hence, this study seeks to expand the existing of impulse buying behaviour framework through developed, explored, and tested factors on the influence of impulse buying behavior among Muslim credit card holder in Malaysia.

In terms of data collection technique, the self-administered survey questionnaire is distributed and circulated among the potential respondents. In summary, before undertaking the research methodology, understanding the concept of research paradigms is essential.

3.2   RESEARCH PARADIGMS

Research activities are essential to provide a better life for human beings. From research, new knowledge that provides current information is discovered and developed and this knowledge facilitates human beings in understanding about social problems. Thus, research paradigm is known as beliefs and assumptions about the development of knowledge (Saunders, Lewis, and Thornhill, 2016). Research paradigm can be explained by three vital assumptions, namely; assumption about the reality that the researcher experiences in research (ontology), assumption about human knowledge (epistemology), and methodology (Saunders, Lewis, and Thornhill, 2016).

3.2.1   Ontology of This Study

Ontology is concerned with nature of reality (Saunders, Lewis, and Thornhill, 2016) or is also defined as fundamental categories of reality. Formal ontology is concerned with something   common about reality, whilst domain ontology says something regarding the different areas of reality (Ahmad et al. 2014). This terminology also is defined as the assumptions that researchers have about what they will learn (Saunders, Lewis, and Thornhill, 2016) or the new knowledge they would like to develop. Ontology assumption creates the space and ways as to how the researchers decide to study their research objects, such as consumption in marketing management. Therefore, the ontology assumption will determine what new knowledge in marketing management that the researchers intend to explore.

In the context of this study, the issue is whether impulse buying behaviour is considered as an objective entity that has a reality external to society or a social construction that develops from the perceptions and actions of the society (Bryman and Bell, 2007).

3.2.2 Epistemology of This Study

Previous researchers defined epistemology as the question of what is regarded as acceptable knowledge in a discipline (Bryman and Bell, 2007). Other researchers defined epistemology as the assumption about knowledge, what acceptable knowledge is, and how to share and interact knowledge with others (Burrell and Morgan, 2016). After the researchers have made the ontology assumption regarding their research fields, the next thing is how to get the knowledge. This is called epistimology. For instance, in this study, impulse buying behaviour is known as unplanned buying behaviour that is making a purchase without prior consideration and decision before entering the store. This impulse buying behaviour already exists in this world as this knowledge was created by God. Therefore, it is humans' responsibility to probe and discover that knowledge through apropriate channels. The art of discovery is referred to as methodology. In Islam, we have four main channels to discover knowledge, namely; Al-Quran, the Sunnah of Prophet Muhammad (peace be upon him), ijma' of Islamic scholars, and qiyas (Muhamad and Mizerski, 2010; Muhamad, 2008).

In this study, the epistimology concept is applied in the question of how marketing knowledge can overcome unlimited desires among the consumers. What does Islam say about impulse buying behaviour and what are the factors influencing impulse buying behaviour? What kind of consumptions are permissible in Islam? How does Islamic marketing cope with unlimited desires among the consumers? The answers to these questions should be discovered through the appropriate channels, such as the four main channels in Islam as mentioned above. This epistimology lead the researchers to decide how and what kind of research methodology should be applied in this study, either quantitative, qualitative, or both.

3.2.3   Methodology of This study

The final vital element that goes into the research paradigm is the specific method of data collection and analysis. There are three types of research approach for data collection and analysis, namely; a quantitative, a qualitative, and a mixed method (Creswell, 2003). However, this study uses a quantitative method as the main approach for data collection. The attribute of this quantitative method such as pre-determined, instrument-based questions, performance data, attitude data, observational data, census data, statistical analysis, as well as statistical interpretation (Creswell, 2009) obviously fit with this study's objective.

As this study applies full statistical analysis by using Partial Least Square-Structural Equation Modeling (PLS-SEM) and collects the observational data by self-administration of the questionnaire distribution, the quantitative method is applied because it is more appropriate and valid with this study's objectives and obstacles.

3.3   RESEARCH ETHICS

Sometimes, ethical issues in the research area are deemed as a minor concern. Some researchers believed that ethical issues are obstacles in their research activities. However, ethical issues cannot be ignored as these issues are related to the integrity and discipline of the researchers while conducting their studies. The credibility, reliability, and validity of research are indirectly related to ethics. Transgression of research ethics demonstrates incompetency and unprofessionalism of the researchers in doing their tasks. Therefore, unethical research should be banned from any publication and collection of knowledge. This study will explain about research ethics from three perspectives, namely; ethics in survey data collection, interview, and writing process. Ethics in business research refers to a code of conducts that is required to be practiced while conducting

research. This code of ethics applies to all related parties in research such as the researcher, respondents, organization, as well as the member that funded that researcher (Sekaran and Bougie, 2013). Basically, the fundamental of research ethics is related with two issues, namely; voluntary participation and no harm to the research subject (Babbie, 2007) as well as other four main areas of concern, namely; whether there is harm to participants, lack of informed consent, invasion of privacy, and deception (Bryman and Bell, 2007).

3.3.1 Ethics in Survey Data Collection and Interview Session

During conducting the data collection survey, the researchers need to practice some ethical behaviour in order to ensure that the process of obtaining information related to the study runs smoothly. Basically, there are four main ethical issues that the researchers need to be concerned with while conducting data collection, whether through survey or interviews. Firstly, the researchers need to confirm that their behaviour do not harm the participants during data collection. Research that is harmful to participants is regarded as unacceptable. Issues of harm facing the participants include psychical harm, harmful to participants' self-esteem, stress, and harmful to future employment. Further, harm to participants is also related to confidentiality. This means that identities and records of individuals must be preserved unless permission has been granted to reveal their identities. Secondly, to address the issue of lack of informed consent, the researchers have to confirm that permission with regard to everything related to the participants' involvement has been obtained. Undertaking the research without mutual agreements among the researchers and the participants is considered unethical. Next, the researchers need to be concerned about respondents' or participants' privacy. It is crucial to avoid invasion of their privacy. Doing something hurtful and being impolite over

participants' privacy are definitely unethical and hence, researchers should exercise caution over this matter. Unethical practices such as touching on sensitive issues might give the participants a genuine opportunity to withdraw. Further, researchers need to avoid the element of deception or anything that leads to false information as these are also regarded as ethical issues in research. The researchers should give proper explanation about the research that they are conducting and how it is related to the respondents (Bryman and Bell, 2007). In addition, the researchers are required to give a guarantee on the confidentiality of respondents' identities. Giving false words and statements to capture respondents' attention is also deemed as unethical. Therefore, the researchers should pay more attention to their actions and statements to avoid being perceived as unethical.

3.3.2 Ethics in the Writing Process

At the final stage of research, the researchers also need to practice the code of ethics during the writing session. There are two important things that the researchers need to be aware of in their research process, namely; misrepresenting other author's work and plagiarism (Sekaran and Bougie, 2013). These things usually occur during the writing and publication process. It is crucial to avoid this misbehaviour. Purposely misreporting the work of other authors include giving false statements on their viewpoints, ideas, findings, interpretations, and conclusions are considered as unethical behaviour, which should not be practiced in research. Plagiarism or copying another's original works is also considered as unethical behaviour, whether or not done with purpose. As long as the researchers did not mention the original author of the work and the accurate sources, the researchers are considered as frauds.

3.4   DATA COLLECTION

Data collection is one of the most crucial parts that needs more emphasis in this study. The techniques and procedures of data collection should be done in proper ways and comply with research ethics. This section will explain how the data collection process is applied in this study.

3.4.1 Sampling and Data Collection Procedures

The sampling technique is essential in research in order to reduce the amount of data collection by considering subgroup data rather than the entire possible elements or cases (Saunders, Lewis, and Thornhill, 2016). In order to clarify and comprehend the sampling technique of this study, the sampling process and procedure by Churchill and Iacobucci (2009) is depicted in Figure 3.1

STEP 1
Define the target population

STEP 2
Identify the sampling frame and unit of analysis

STEP 3
Select a sampling method

STEP 4
Determine the sampling size

STEP 5
Collect data from the sample
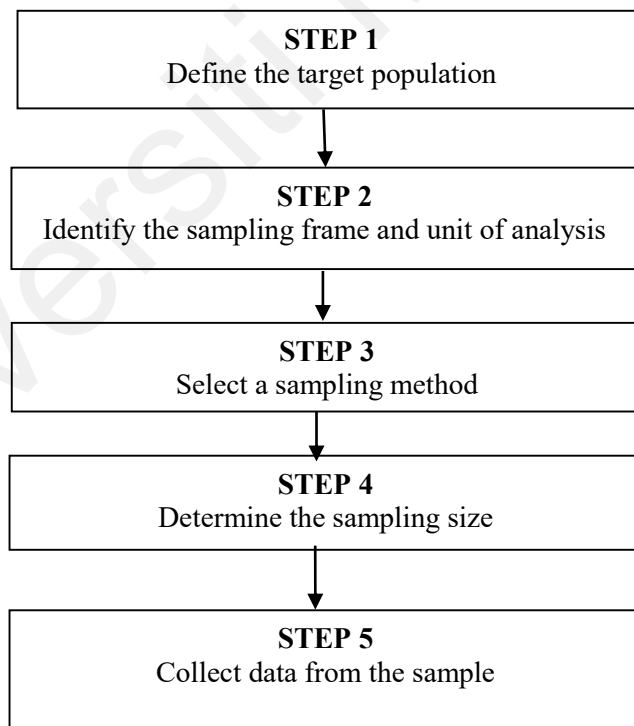
Figure 3.1*: Sampling and Data Collection Procedure*
Sources: Churchill and Iacobucci (2009) and Dali (2014).

i)   Definition of the target population

The target population is defined as something more manageable and a subset of the population. It may be difficult to examine the entire population as not

all components or cases are easy to access or known to the researcher (Saunders, Lewis, and Thornhill, 2016). Specifically, target population refers to the whole group of people, things, or events of interest that the researcher intends to investigate (Sekaran, 2003). The target population in this study is Muslim credit card holders in Malaysia.

ii)   Identification of the sampling frame and unit of analysis

The sampling frame or population frame is a listing that represents the entire component in the population from which the sample is drawn (Sekaran and Bougie, 2013). It is also known as a subset of the entire population and the sampling frame should be complete, accurate, and as up-to-date as possible (Saunders, Lewis, and Thornhill, 2016). However, the database of credit card users of the banks is impermissible to be accessed due to the Islamic Banking Act 1983 and the Payment System Act 2003 that stipulates that information associated with consumers is disallowed to be disclosed to the public and the banks need to adhere to secrecy provisions. Hence, due to no specific listing of credit card holder in Malaysia, therefore, this study obtained necessary information of sampling frame through non-probability sampling method namely via purposive and snow ball sampling.

Presicely, the unit of analysis in this study is an individual that was represented by credit card holder which is determined based on five criteria, namely;

1) Muslim credit card holders regardless of their race (Malay, Chinese, Indian, and others)

2) Possess either conventional credit cards, Islamic credit cards or both type of credit cards

3) Aged from 21 until 65 years old

4) Income of RM2,000 and above

5) Have a Malaysian citizenship.

This study only focuses on these five criteria as the characteristics of respondents as compatible with this study scope which is among Muslims who utilize credit card service in Malaysia. Firstly, the selection of Muslims only due to few factors such as the examination of variable of Islamic religiosity. In this study, previous studies are more likely to be conducted among non-specific religious group of respondents (Beatty and Elizabeth Ferrell, 1998; Rook and Fisher, 1995; Youn and Faber, 2000; Wells, Parpoteeah, and Valacich, 2011; Sultan, Joireman, and Sprott, 2012; Duarte, Raposo, and Ferraz, 2013; Burgess, Yaoyuneyong, and Gibbs, 2014; Thompson and Prendergast, 2015; Chuang, Tian, and Lin, 2015; Lucas and Koff, 2017) and the highest numbers of bankrupt in Malaysia come from Muslim group. As reported by (Jabatan Insolvensi Malaysia, 2016), Malay group (52.43%) is among the highest declared as bankrupt between the year 2012-2016 in Malaysia followed by Chinese (29.42%), Indian (13.25%), and other group (4.9%). As the majority of Muslim in Malaysia comes from Malay group and few from another race group, therefore, it is possible of this study to fill up the study gap through conducting this impulse buying behaviour study among the Muslim. In addition, it is also crucial to explore the factors that triggered Muslim consumers to practice impulse buying behaviour as Muslim group is also one of the main markets need to be penetrated by the marketer worldwide.

Secondly, Muslim credit card holder who possess either conventional credit cards, Islamic credit cards or both type of credit cards are selected due to this kind of credit card utilize by Muslim group in Malaysia (Mohd Dali, Yousafzai, & Hamid, 2015). Meanwhile, for age and income criteria, the determination of age and figure of income according to the stipulated rules for credit card application by the credit card operator in Malaysia which states that applicant must age from 21 until 65 years old and income RM 2,000 above. Lastly, as one of this study general objectives is to know the factors that influence impulse buying among Muslim credit card holder in Malaysia, therefore the respondents of this study only focused to those who have a Malaysian citizenship only.

iii)   Selection of sampling method

There are two types of sampling methods, namely; probability or representative sampling and non-probability sampling. Probability sampling is used when the researchers know the target population who are possible to answer the research questions and accomplish research objectives via determining the characteristics of the target population from the sample.

Meanwhile, non-probability sampling is defined as the techniques applied when the researchers are unable to identify their target population and it is impractical to complete the research objectives and research questions which require identifying the statistical assumptions pertaining to the characteristics of the target population. However, researchers are still able to generalize the target population from non-probability sampling but not on statistical grounds (Saunders, Lewis, and Thornhill, 2016).According to (Bryman and Bell,

2007), non-probability sampling is a sampling method that is conducted to cover all forms of samplings that are not conducted according to probability sampling method, which is unable to be generalized to the population (Sekaran, 2003) and does not have any possibility to be chosen as sample subjects (Sekaran and Bougie, 2013). Despite having some weaknesses, this non-probability sampling has the ability to offer some important useful information related to the population (Sekaran and Bougie, 2013) and is the only way that the researcher can achieve the objective of data collection (Sekaran, 2003).

There are three main types of non-probability sampling, namely; convenient sampling, purposive sampling and the snowball sampling (Sekaran, 2003; Sekaran and Bougie, 2013; Cooper & Schindler, 2014). Convenience sampling is known as the simple way to obtain the respondents for non-probability sampling method as researcher is able to select any willingly available individual as respondents (Cooper & Schindler, 2014) and the chances for the questionnaire to be returned are high (Bryman and Bell, 2007). However, this sampling method has a drawback in terms of their inability to generalize the population because we do not know what population this sample is representing. Although non-probability sampling itself already has this weakness, convenience sampling seems to have less ability in terms of generalization of the population. This does not mean that the convenient sampling should not be used (Bryman and Bell, 2007) because this sampling method is frequently practiced during the exploratory phase of a research project and it is the best way to obtain the data quickly and effectively (Sekaran and Bougie, 2013).

The second non-probability sampling method is purposive sampling. This sampling method has a similar fundamental with convenient sampling method but differs in its operation, which is more focused on target groups. Purposive sampling refers to the sampling that is specific by the researcher. This sampling is derived from specific groups that are able to provide and offer desired information because they are the only groups that have that information that are parallel with the research objectives and have some criteria required by the researcher (Sekaran and Bougie, 2013).

In other words, purposive sampling involves the way how the researchers use their judgment to choose the respondents according to their study's objectives. There are two types of purposive sampling, namely; judgment sampling and quota sampling (Sekaran and Bougie, 2013). Judgment sampling is related to the selection of the best group of people who are most advantageously placed to provide the required information. This judgment sampling that is also known as purposive sampling (Saunders, Lewis, and Thornhill, 2007) has the ability to obtain the required information from target group. However, the use of this sampling method may diminish the generalizability of findings due to using a sample that is only conveniently available to the researcher. Nevertheless, as it is the only sampling method available to obtain the required information, choosing it as a sampling method is appropriate. Meanwhile, quota sampling is usually practiced for interview surveys of large population with sample size between 2,000 and 5,000 and is able to be set up quickly with less cost (Saunders, Lewis, and Thornhill, 2016). It is intensively practiced in commercial research (Bryman and Bell, 2007). The aim of the quota sampling is to obtain the sample that reflects a population of people in different groups

such as gender, ethnicity, and socio-economy (Bryman and Bell, 2007; Sekaran and Bougie, 2013) with a convenient basis (Sekaran and Bougie, 2013). However, it seems that quota sampling is not appropriate for this study as this study only focused on Muslim credit card holders in Malaysia as the respondents regardless the type of gender, ethnicity, and socio-economy.

Lastly, snow ball sampling method. This snowball sampling seems practical in this study as the researcher has difficulties to recognize the representative of the population. As the researcher has a difficulty to access the list of credit card holders in Malaysia, snowball sampling technique definitely facilitates the researcher in data collection process. Through snowball sampling technique, the researcher is able to establish initial networking with a small group of people who are related to the research objective and then through them, obtain connection with other potential credit card holders. Although this sampling technique seems to have a biased element as respondents tend to suggest potential respondents who are similar and have connection with them only, which results in a homogeneous sample and difficulty in finding new potential respondents, yet this snowball sampling technique is still sensible to practice due to the difficulty to identify the population of respondents (Saunders, Lewis, and Thornhill, 2016).

Therefore, in this study, the researcher has chosen non-probability sampling by employing the purposive sampling (judgment sampling) and snowball sampling to identify and reach the target respondents, namely; Muslim credit card holders in Malaysia. In addition, these non-probability sampling by

purposive and snowball samplings also were employed in previous credit card studies (Dali, 2014; Putit and Johan, 2015; Nazimah, 2011).

iv)   Determination of sample size

Sample size determination is an essential element in any research survey, which is associated with time and cost (Adams et al. 2007). Meanwhile, for determining the sample size, several methods can be applied such as census for a small population, sample size of previous studies, published sample size table, and formula to calculate sample size (Israel, 1992). Generally, the method of census for a small population uses the whole population as the sample. This approach is appropriate to apply for small population of 200 or less. Another method is by referring to the sample size of previous studies that has similar context and content with the current study. Next, the most frequently used method is by referring to published tables such as the Krejcie and Morgan sample size table (Sekaran, 2003) and using a formula to calculate the sample size, such as the Cochran's sample size formula (Cochran, 1977).

On the other hand, the level of precision, the level of confidence or risk, and the degree of variability are the three main criteria that the researcher needs to be concerned with during determining the appropriate sample size (Israel, 1992). The level of precision or also called sampling error is the range of true value estimated and is expressed in percentage points (e.g.; ±5%). The next criterion that the researcher has to be concerned with for determining the sample size is the confidence level of the sample. If a 95% confidence level were selected, 95 out of 100 samples is a true population value. The third criterion is the level of variability, which refers to the level of distribution of

attributes in the population. A large sample size is required for a more heterogeneous population and a small sample size is for a more homogeneous population. In addition, a proportion of 50% demonstrates a greater level of variability than either 20% or 80% as 20% and 80% mean that the majority do not or do have the attribute of interest. A proportion of 50% is most frequently used in determining the sample size as this value indicates the maximum variability in a population (Israel, 1992).

In terms of what sample size is required to collect in this study, as the number of this study respondent's population of is unknown, therefore, according to suggestion of sample size by Krejcie and Morgan (1970) which stated sample size 384 is required for population equal to 1000000 or more and (Roscoe, 1975) suggested that sample size of larger than 30 and less than 500 is appropriate and reliable. Meanwhile, Blaikie (2003) suggested that sample size of 1,000 is quite sufficient and satisfactory and sample size of 2,000 will be very satisfactory for large population. However, Blaikie (2003) suggested that sample size of around 300 is adequate, but 500 would be better, and 1,000 would be even more preferable. While, a large sample size is required for a more heterogeneous population (Israel, 1992) and a large sample size is better (Blaikie, 2003). According to above statement, 1000 sample size had been collected in this study as to be more preferable (Blaikie, 2003).

v) Collection of the data from the sample

Data collection is the final stage of sampling and data collection procedure. In this stage, the researchers need to identify the method that they will use in the process of data collection. As this study's data collection uses non-

probability sampling, the data collection process is conducted through purposive sampling and snowball sampling using two ways, namely; contact network and self-assessment (Bryman and Bell, 2007; Rowley, 2014). The researcher decided to apply self-administrated data collection by distributing the questionnaire among the credit card holders. In addition, for long distance respondents such as those from Sabah and Sarawak, the researcher applied the network method whereby data had been collected by the appointed assistants among the researcher's family and friends. Detailed data collection process of this study is explained in chapter four.

3.5 MEASUREMENTS

In order to achieve the research objective and research questions of this study, the questionnaire for this study was adapted and adopted from previous studies' questions that are related to this study area as depicted in Table 3.1 below:

Table 3.1:
Scale Measurement of Questionnaire
Sources: Developed for this study

Variables	Sources	Adopt / Adapt
Impulse Buying Behaviour	Rook and Fisher (1995)	Adapt
Sales Promotion	Karbasivar and Yarahmadi (2011)	Adapt
Money and Time Availability	Beatty and Farrell (1998)	Adapt
Materialism	Richnis and Dawson (1992) and Richnis (2004)	Adapt
Hedonic Motivation	Hausman (2000) and Arnold and Reynolds (2003)	Adapt
Self-*Hisbah*	Mardzelah, Ilias, and Noh (2014)	Adapt
Credit Card Usage	Roberts and Jones (2001)	Adapt
Religiosity	Ahmad et al (2008) and Worthington et al (2003)	Adapt

The questionnaire of this study consists of measurement items that are derived from previous studies that have been tested successfully by previous researchers in impulse buying study and other fields of study. The measurement items in the

questionnaire consist of impulse buying behaviour, sales promotion, money and time availability, materialism, hedonic motivation, self-*hisbah*, credit card usage, as well as religiosity.

To measure consumers' impulse buying behaviour, this study adapts the impulse buying scale developed by Rook and Fisher (1995) that includes urge and spontaneous characteristics. There are nine items of questions for impulse buying scale where five items are related to spontaneous characteristic and four are related to urge to purchase. This part of the questionnaire requires the credit card holders to evaluate their impulse buying behaviour on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Examples of statements to measure spontaneous buying and urge buying are "I am a person who make unplanned purchase" and "I buy things according to how I feel at that moment".

For materialism variable measurement, the scales developed by Richins and Dawson (1992) and Richins (2004) were adapted with fifteen items of questions which are related to the effects of materialism on impulse buying behaviour. One example of statements to measure materialism of human is "I admire people who own expensive homes, cars, and clothes". As materialism is rarely tested in impulse buying behaviour, few researches have utilized this scale in impulse buying behaviour studies previously. Meanwhile, for sales promotion variable measurement, the study scale developed by Karbasivar and Yarahmadi (2011) is adapted by this study. This scale was tested in previous studies such as a study by Badgaiyan and Verma (2015) on impulse buying behaviour. This promotional approaches scale contains four items that evaluate free products and price discounts. In order to ensure reliability and validity of the questions, this study also adds and creates more questions for the promotional scale, namely; "I

prefer to make an unplanned buying of goods that offer buy one free one" and "I tend to make an unplanned buying on membership's days at the store". An additional of new item purposely to evaluate promotional approaches that is related to impulse buying behaviour which reflected one of the characteristics of sale promotion in this study. These items are analyzed for validity via factor analysis and reliability through Cronbach Alpha.

In terms of self-*hisbah* measurement, this study adapted and adopted the self-*hisbah* scale that was developed by Makhsin, Ilias, and Noh (2014). This scale measures the internal control of respondents towards impulse buying behaviour. It consists of six components, namely; *Muraqabah* (behavioural observation), *Musyaratah* (promise of the heart), *Muhasabah* (reflection practice), *Muaqabah* (spiritual reinforcement), *Mujahadah* (struggle of desire), and *Muatabah* (purification of the soul).

Furthermore, for hedonic motivation and religiosity measurement, this study adapted and adopted an established scale by previous researchers, namely; hedonic motivation scale from (Hausman 2000; Arnold and Reynolds, 2003) for the hedonic motivation variable and religiosity scale developed by the religious commitment inventory (RCI-10) by (Worthington et al. 2003; Ahmad et al. 2008). Lastly, for credit card usage measurement, this study adapted and adopted the credit card usage scale developed by (Roberts and Jones, 2001). All items were recorded on a five-point Likert scale, which ranged from 1 = strongly disagree to 5 = strongly agree. High scores on this scale reflects irresponsible use of credit cards.

3.5.1 Back-to-back Translation

The data were obtained by administering a paper questionnaire. In order to avoid unclear information of the measurements among the respondents, this study utilized the

155

back-to-back translation method from English to Malay. The measurements were examined by a language expert after performing the back-to-back translation method (Lins et al. 2015).

3.6   QUESTIONNAIRE DEVELOPMENT

In this study's questionnaire, there are two main sections that need to be answered by the potential respondents. Each section represents every variable of this study. Section A covers impulse buying behaviour, sales promotion, money and time availability, materialism, hedonic motivation, self-*hisbah*, credit card usage, and religiosity. Section B contains some information about the respondent's background.

Section A, which contains questions pertaining to dependent, independent, mediating, and moderating variables such as impulse buying behaviour applied the buying impulsiveness scale that was adopted and adapted from (Rook and Fisher, 1995). There are nine items of questions in this section that evaluate impulse buying behaviour among credit card holders. The questions are about the elements of spontaneity and urge to purchase, which reflect impulsive buying behaviour. Next, the independent, mediating, and moderating variables, which are related to the situational variable, namely; sales promotion and money and time availability, were adopted and adapted from (Karbasivar and Yarahmadi, 2011; Beatty and Elizabeth Ferrell, 1998). All of these questions used the Likert scale as the measurement scale.

Meanwhile, for individual or personality variables, namely; materialism (Richins and Dawson 1992; Richins 2004), self-*hisbah* (Makhsin et al. 2012), hedonic motivation (Hausman 2000; Arnold and Reynolds 2003), credit card usage (Roberts and Jones, 2001), religiosity (Ahmad, Rahman, Seman, et al. 2008; Worthington et al. 2003),

156

questionnaires from previous studies were adopted and adapted using the Likert scale as a measurement scale. The last section, which is the background of respondents for instance their age, marital status, income, and education background, covers detailed information of the respondents. A five-point Likert scale ranging from strongly disagree = 1 to strongly agree = 5 was used to measure each variable. Refer to Table 3.2 below for a summary of the questionnaire design.

Table 3.2: *Questionnaire Design for Actual Data Collection*
Sources: Developed for this study

Section	Variables	No. of Original Items	No. of Items After Pilot	Elements Of Evaluation	Adopt/ Adapt
Section (A)	Impulse Buying Behaviour	9	6	Unplanned Buying	Adapt
	Materialism	15	8	Centrality Happiness Success	Adapt
	Sale Promotion	5	5	Price Discount Extra Product Promotion Free Gift Membership Discount Days	Adapt
	Money and Time Availability	5	3	Money Available Time Available	Adapt
	Hedonic Motivation	15	15	Adventure Gratification Social Value Idea	Adapt
	Self-*hisbah*	22	17	Reflection Practice Promise of the Hearth Behaviour Observation Spiritual Reinforcement Purification of Soul Struggle of Desire	Adapt
	Credit Card Usage	11	5	Financial/ Credit Management	Adapt
	Religiosity	18	14	Shariah *Iman* *Akhlak*	Adapt

Section B	Demographic	8	8		Adapt
Total of Items:	-	108	81	-	-

3.7 VALIDITY AND RELIABILITY PROCESS

In order to obtain a reliable and valid questionnaire, there are three main steps of the measurement instruments that need to be undertaken, namely; to specify the dimension of the study: validity and reliability.

3.7.1 VALIDITY - Content Validity

For the first stage of the measurement instrument, this study will specify the dimension of the study, namely; to identify and clarify the definition of every variable of the study such as impulse buying behaviour, materialism, sales promotion, money and time availability, self-*hisbah*, hedonic motivation, religiosity, and credit card usage through content validity process. A validity process is essential in order to validate the contents of the instrument. As suggested by Churchill (1979), it is essential to specify what is included and excluded in the definition of the study's content. On the other hand, validity is also referred to as the process of identifying the ability of questionnaire or measurement to whether represent what exactly the study wants to measure or not (Saunders, Lewis, and Thornhill, 2012). Therefore, for the measurement instruments, this study identified content validity first and this is followed by reliability and construct validity tests (Churchill, 1979).

This study established the content validity process, or also known as face validity, via four main methods, namely; thoroughly identifying the definition and dimension of variables of this study through literature review, constructing the items of the questionnaire, expert reviews, as well as pre-test process.

i. Conduct the Literature Review

In order to identify the validity and reliability of the measurements, this study conducted exhaustive literature review to clarify and identify the definition of variables of the study and to generate previous items' scales that are related with this study.

ii. Construct the Items of Questionnaire

Initially, the questionnaire is constructed by adopting and adapting established questions from previous studies. It is essential to adopt and adapt some questionnaires from previous studies as those questionnaires were already tested successfully and frequently. The questionnaire from previous studies is said to be adopted if the items of that questionnaire comprehensively fit and were related with this study. However, when only some questionnaire items are related with this study, only those related questions will be employed in this study, and this is referred as adapted questionnaire.

iii. Expert Evaluation

After the constructing process, the questionnaire will be evaluated by experts in order to confirm the validity and reliability of that questionnaire for this study. For questions that are not applicable to this study, the experts would make other suggestions. This study's questionnaire was evaluated by three academic experts, namely; a content expert who evaluates content validity (impulse buying behaviour and marketing), a language expert who reviews and evaluates face validity (language), and a measurement and scale expert for criterion validity. In addition, a few PhD students who are acquainted with the marketing context were consulted to review and test the clarity of the study instruments. A formal letter,

an appreciation certificate, and a token was provided by the researcher during this expert evaluation process.

iv. **Pre-Test**

In order to measure the reliability, validity, and the understanding of potential respondents of the questions, the questionnaire was circulated among similar potential respondents in order to confirm their understanding. Respondents were required to answer those questions and make comments on the confusing questions that they found difficult to understand. The respondents in this study's pre-test evaluation include postgraduate students who are acquainted with the marketing context, marketing lecturers, as well as government and private servants from various backgrounds. It is essential to circulate the pre-test questions among respondents from different backgrounds as the actual respondents of this study also come from different backgrounds. Therefore, getting a variety of reviews and comments from those of different backgrounds facilitated the researcher to identify the mistakes and weaknesses of the questionnaires.

3.8 PILOT TEST

It is imperative to conduct a pilot test prior to undertaking the actual data collection. Pilot test was conducted in this study among 150 credit card holders in Malaysia. Complete questionnaire was distributed online among credit card holders throughout Malaysia and the pilot test result indicated that 27 of the 100 items of the questionnaire had to be deleted to enhance the validity and reliability of the questionnaire. After obtaining the returned questionnaire, the validity test (Exploratory Factor Analysis) and reliability analysis (Cronbach's Alpha) were undertaken.

3.8.1 Construct Validity

After the reliability process, the next step required is to perform construct validity. Construct validity is conducted to measure the extent to which the measurement/questionnaire correlates with other constructs in the study (Churchill, 1979). Construct validity is assessed through two types of validity, namely;

3.8.1.1 Convergent Validity

This validity process refers to the correlation between two different scales that share the same concept that is intended to measure the same construct (Hair et al. 2014; Sekaran, 2003; Churchill, 1979). High correlation demonstrates that the scale is measuring the concept that researcher intends to measure.

3.8.1.2 Discriminant Validity

On the other hand, for discriminant validity, this process involves two different concepts that do not correlate with each other (Sekaran, 2003). The low correlation between these two concepts indicates that the summated scale is distinctly different from other similar concepts (Hair et al. 2010).

3.8.2 Exploratory Factor Analysis (EFA)

The main purpose of exploratory factor analysis (EFA) is to summarize, regroup, and isolate the items of variables. EFA facilitates the researcher to interpret and understand relationships and patterns via summarizing the data. On the other hand, EFA also operates to regroup variables into specific clusters through shared variance and facilitate the researcher to isolate between constructs and concepts. EFA is suitable for studies that utilize a few or hundreds of variables through an interpretation of the underlying concepts of the study.

The dataset of respondents for this pilot test are 150. As mentioned by (Guadagnoli and Velicer, 1988), a small sample size is sufficient if the dataset has some high factor loading scores. Prior to running EFA, the missing data, outlier test, and reversing code were conducted in order to gain a complete and comprehensive data collection. The Principle Axis Factor method was used as the extraction method. This method is applied when the data breaches the principle of multivariate normality (Costello and Osbourne, 2005; Fabrigar et al. 1999). As this study utilizes a non-parametric test, it is appropriate to use the principle axis factoring method. For rotation method, which is to clarify and simplify the data structure, the scholars are still arguing between orthogonal and oblique rotation. Generally, the literature recommended to use oblique rotation, however, orthogonal method is still the most frequently used in studies. This study used oblique method as this method is more appropriate for social science study (Beavers et al. 2013). In factor analysis test, there are five main tests highlighted namely; Correlation Matrix (Determinant), Kaiser-Meyer-Olkin (KMO), Bartlett's Test, Eigenvalues, and Total Variance Explained. These five analyses are explained below for every variable.

Referring to Table 3.3, the test was conducted via Statistical Package for the Social Scence (SPSS) by analyzing the dimension reduction of factor analysis. In terms of extraction and rotation method, this study's EFA used the Principle Axis Factoring and Oblique (promax) method. For the first stage, in order to check whether this study's dataset is suitable for EFA, the correlation matrix would indicate whether or not the patterned relationship among variables exist. In this study's test, the result of determinants of correlation matrix value for all variables ranged between 0.002 and 4.306, which are above the rule of thumb of 0.00001. This demonstrates that the problem of multicollinearity is absent. For the overall significance of all correlations among the

variables, the Bartlett's Test indicated sufficient correlation among the variables by reaching the significant level of 0.000, which is less than 0.05 (p < 0.05) and the Kaier-Meyer-Olkin (KMO) also demonstrated that this dataset is suitable for exploratory factor analysis as the KMO for all the variables ranged between 0.517 and 0.903 (> 0.5). To determine the number of significant factors, Total Variance Explained via eigenvalues, cumulative variance, and inspection of the screen plot were from 54.34% to 81.96% for the variances of all the variables.

Table 3.3: *Factor Loading of Variables*
Sources: Developed for this study

No.	Variables	Factors	Correlation Matrix	Kaier-Meyer-Olkin (KMO)	Bartlett's Test of Sphericity Significance	Eigenvalues	Total Variance Explained
1	Impulse Buying Behaviour	1)Unplanned Buying	0.055	0.8660	0.000	3.804	54.34%
2	Sale Promotion	1) Discount	0.074	0.871	0.000	3.427	68.53%
3	Money and Time Availability	1)Money Availability 2) Time Availability	0.728	0.517	0.000	1)1.545 2)1.239	55.68%
4	Materialism	1)Success 2)Happiness 3)Centrality	0.041	0.874	0.000	1) 4.230 2)1.004 3)0.892	68.07%
5	Hedonic Motivation	1)Gratification 2)Value 3)Role 4)Adventure 5)Idea 6)Social	4.31	0.895	0.000	1)7.545 2)1.289 3)1.123 4)0.880 5)0.818 6)0.640	81.97%
6	Self-*hisbah*	1)Muraqabah 2)Muaqabah 3)Muatabah 4)Muhasabah 5)Musyaratah 6)Mujahadah	3.95	0.903	0.000	1)7.783 2)1.743 3)1.170 4)0.918 5)0.767 6)0.661	76.71%
7	Credit Card Usage	1)Credit Card	0.200	0.789	0.000	2.778	55.56%

| 8 | Religiosity | 1) *Iman* 2) Shariah 3) *Akhlak* | 0.002 | 0.815 | 0.000 | 1)5.042 2)1.971 3)1.315 | 55.52% |
| | | Managemen t | | | | | |

3.8.3 RELIABILITY - Cronbach's Alpha

After the content validity process, the questionnaire's reliability was assessed next. Reliability refers to a procedure or process for testing both consistency and stability, which is to verify how well the items are measuring the concept that the researcher intends to measure (Sekaran, 2003). The research that replicates previous studies' research design and have been measured many times would be seen as reliable if the research obtained parallel findings with previous studies (Saunders, Lewis, and Thornhill, 2016; Adams et al. 2007). Nevertheless, reliability should be assessed as this process is concerned with the robustness of questionnaire, which requires producing consistent results when tested again under two conditions, namely; different time and condition (Saunders, Lewis, and Thornhill, 2012), or similar time and condition (Adams et al. 2007; Ahmad et al. 2014).

However, this still does not mean that the questionnaire is valid. In other words, as long as this measurement produces consistent outcomes, it will be considered reliable (Adams et al. 2007). A crucial part of reliability lies in the unambiguous definition of the variables. If this requirement is not fulfilled, it will be difficult to make sensible and reliable generalization from the study's findings. Therefore, there are two methods for assessing reliability, namely; by using the test-retest method and by examining internal consistency or applying the split-half method (Adams et al. 2007).

On the other hand, a method of examining consistency that is most popular in the academic area is the Cronbach's Alpha, which is the most frequently used and adequate

method to calculate internal consistency reliability in research (Saunders, Lewis, and Thornhill, 2012; Sekaran, 2003). Cronbach's Alpha functions to indicate how well the items in a questionnaire are correlated to one another by computing the average inter-correlation among the items, and high internal consistency and reliability are obtained when the Cronbach's Alpha is closer to 1 (Sekaran, 2003). In addition, the lower limit for Cronbach's alpha is 0.70 but 0.60 is still acceptable in exploratory research (Hair et al. 2014). Further, reliability is also assessed by measuring item variable by using (R^2), scale variable by using composite reliability (CR), and average variance extracted (AVE). In order to examine the consistency reliability, pilot test study was conducted in this study by circulating 150 questionnaires among targeted respondents who are credit card holders in Malaysia.

Table 3. 4*: Cronbach's Alpha of the Variables*
Sources: Developed for this study

Variable	No. of Items	Cronbach's Alpha
Impulse Buying	6	0.847
Materialism	8	0.843
Sale Promotion	5	0.884
Money and Time	3	0.455
Hedonic Motivation	15	0.926
Self-*hisbah*	17	0.904
Credit Card Usage	5	0.790
Religiosity	14	0.848
Total :	73	

Referring to Table 3.4, the total items in the questionnaire decreased from 100 to 73 after the EFA and Cronbach's Alpha test were conducted. The entire variables demonstrated strong Cronbach's Alpha of 0.790-0.931. However, one of the variables, namely; money and time availability shows a moderate Cronbach's Alpha of 0.455. Referring to (Jackson, 2009), correlation coefficient is categorized into three levels, namely; weak, moderate, and strong. Strong correlation coefficients are in the range of 0.70-1.00, moderate at 0.30-0.69, and 0.00-0.29 means weak correlation coefficient.

Therefore, correlation coefficient for money and time availability variable of 0.455 is categorized as moderate and acceptable. This study also believes that it is crucial to retain this variable in this impulse buying behaviour study as this variable is rarely conducted in impulse buying behaviour study with different context of study. Therefore, there is a possibility that the results of this variable on this study have similarity with previous study's finding or not. Thus, this study will confirm this hypothesis appropriately.

In terms of deleting of items, four variables namely; impulse buying behaviour, materialism, money and time availability, as well as religiosity had several items deleted in order to gain a perfect value of Cronbach's Alpha. For impulse buying variable, item no. 9 was deleted in order to increase the value of Cronbach's Alpha from 0.716 to 0.847. For materialism and religiosity, one item was deleted from each variable. Item no. 6 was deleted from materialism, thus, increasing the Cronbach's Alpha to 0.834 and item no. 5 was deleted from religiosity, thus, increasing the Cronbach's Alpha to 0.848. Furthermore, two items from money and time availability variable were deleted, thus, gaining a value of Cronbach's alpha of 0.455.

The rest items of these variables such as impulse buying behaviour (items 6 & 7), materialism (items 3, 7, 8, 9, 10 & 12), self-*hisbah* (items 1, 2, 14, 15 & 17), credit card usage (items 1, 3, 4, 9, 10 & 11), and religiosity (items 6, 17 & 18) were deleted during validity procedures as these item are non-significant loading items and to solve this issues, the analysis was rerun without these items.

Table 3.5: *Deleted items after Validity and Reliability Procedures*
Sources: Developed for this study

VARIABLES	ITEMS DELETED
Impulse Buying Behaviour	(6) I buy goods according to how I feel at the moment (7) "Just do it" describe the ways I buy things (9) I carefully plan most of my purchase
Materialism	(3) I don't place much emphasis on the amount of material objects people own as a sign of success (6) I don't pay much attention to the materials objects other people own (7) I usually make impulse buying for only the things I need (8) I try to keep my life simple, as far as possessions are concerned (9) The things I buy impulsively are not all that important to me (10) Buying spontaneously without prior thinking gives me a lot of pleasure (12) I have all the things I really need to enjoy life
Sales Promotion	No deleted items
Money and Time Availability	(1) I have limited time available to make unplanned purchases (3) do not feel I can afford to make any impulse purchases whether I have enough money
Hedonic Motivation	No deleted items
Self-*Hisbah*	(1) I always avoid to be arrogant (2) Observe human good behaviour as my life guidance (14) I feel regret after give charity (15) I love to count my good deeds that bring me to heaven (17) When I feel far away from Allah, I will read Al Quran
Credit Card Usage	(1) My credit card is usually at their maximum credit limit (3) I always pay via credit card when I go shopping with my friend and family (4) I always worry how I will pay off my credit card debt (9) I don't use my credit card for something not on my shopping list (10) I never take cash advances on my credit cards (11) I have more than one credit card
Religiosity	(5) Sometimes I pray late for "*solat fardhu*" (obligatory prayers) (6) I ever miss to pay zakat fitrah every year (17) My earnings are from own effort and not Allah's will (18) Death and destiny are determined by Allah alone

3.9   DATA ANALYSIS

This study employed the Structural Equation Model (SEM) analysis technique via Partial Least Squares (PLS) in order to meet the objective of this study. In addition, exploratory factor analysis for testing the selected items of the questionnaire and descriptive analysis for the general angle of respondents were also applied in this study. For statistical tools, this study was analyzed and run through Partial Least Squares (PLS) technique.

3.9.1 Structural Equation Model (SEM)

Structural Equation Model (SEM) is a second generation multivariate data analysis that analyzes multiple variables simultaneously. SEM also functions to analyze exploratory and confirmatory studies. Researchers started using SEM as a second generation technique in order to overcome the limitation of first generation techniques such as the postulation of a simple model structure, the assumption that all variables are able to be considered as observable, and the speculation that all variables are measured without any error which limited their applicability in other research situation (Haenlein and Kaplan, 2004).

This statistical analysis functions to identify inter-relationship among the variables in a model simultaneously. SEM uses various types of models and estimates and analyzes whether the variables have a relation with each other. This technique designs a model that contains the consolidation of quantitative data and the correlation or causal assumptions (Zainuddin, 2011; Schumacker and Lomax, 2010). The main goal of SEM analysis is to identify the extent to which the sample data support the theoretical model of the study. If the theoretical model was positively supported by the sample data, then the theoretical model is able to hypothesize appropriately and if it was not supported by the sample data, then, this theoretical model should be fixed and modified for better establishment of the study (Schumacker and Lomax, 2010).

There are two major types of variables in SEM, namely; latent variable and observed variable. Latent variable is derived from observed variable, that is, it is indirectly measured, for instance; religiosity is a latent variable that represents a personality variable construct. Meanwhile, observed variable is a set of variables that define the latent variable. For instance, individual variable or situational variable is an

168

observed variable on this study, which defines the latent variable, namely; religiosity and sales promotion. The SEM has considerable strength to solve any statistical problem such as (Zainuddin, 2011):

1) Analyzing and performing the Confirmatory Factor Analysis (CFA)

2) Running and analyzing multiple regression models simultaneously

3) Running and analyzing regression with multicollinearity problem

4) Running and analyzing the path analysis with multiple dependents

5) Running and analyzing the correlation and covariance in a model

6) Running and analyzing the inter-relationship among variables in a model

3.9.2 PARTIAL LEAST SQUARES (PLS)

When applying the SEM analysis, we should be concerned with two types of methods, namely; covariance based technique (CB-SEM) and variance based partial least square (PLS-SEM). Although both methods have a similar characteristic, CB-SEM certainly is the most well-known among previous marketing researchers rather than PLS-SEM (Hair et al. 2012).

Initially, PLS was introduced under the name of NIPLAS (nonlinear iterative partial least squares) by the Swedish statisticians, Herman Ole Andreas Wold and Svante Wold. This method functions to increase the variance of the dependent variable demonstrated by the independent variable instead of recreating the empirical covariance matrix. The principal idea of PLS is quite uncomplicated, which involves estimation of the weight relations, calculation of case values of unobservable variables, and using the case values in a set of regression equation to ascertain the parameter for the structural relations. One of the outstanding benefits of PLS-SEM is that this method is able to

control and handle non-normal data and complex models with a large number of constructs (Hair et al. 2014).

As this study's data are non-normal data, PLS-SEM is an appropriate method to use for this study's data analysis. Further, PLS-SEM is also appropriate to use for small sample size with highly complex model and is able to handle both reflective and formative constructs. This is supported by a study of the reasons for using PLS-SEM by Hair et al (2012), which identified 204 PLS-SEM applications in marketing research published in a 30-year period (1981-2010). Their study reported that the most frequent reason for using PLS-SEM by previous studies are related to data characteristics. Table 3.7 demonstrates the reasons for using PLS-SEM by previous researchers.

Table 3.6: *Reasons for using PLS-SEM in previous studies*
Sources: Developed for this study

No.	Reason for Using PLS-SEM	Number of Studies
1	Analysis of non-normal data	102 studies (50.00%)
2	Small sample sizes	94 studies (46.08%)
3	Formative measurement of latent variables	67 studies (32.84%)
4	Explain the variance of the endogenous construct	57 studies (27.94%)
5	Exploratory research and theory development	35 studies (17.16%)
6	Ability to cope with highly complex models	27 studies (13.24%)
7	Ability to cope with categorical variables	26 studies (12.75%)
8	Appropriate for testing well-established, complex theories.	25 studies (12.25%)

3.9.3 CHARACTERISTICS OF PARTIAL LEAST SQUARES (PLS-SEM)

Prior to using the statistical tool analysis, the researcher is required to know the attributes and properties of partial least square (PLS-SEM). There are four main parts of characteristics that the researcher needs to know and understand before applying this statistical tool analysis, namely; data characteristics, model characteristics, PLS-SEM algorithm properties, and model evaluation issues (Hair et al. 2017).

3.9.3.1 Data Characteristics

For data characteristics, the four things that make PLS-SEM different from other tool analysis are sample size, distribution, missing values, and scale of measurement (Hair et al. 2017). In PLS-SEM, small sample size (less than 100) is allowed and generally high level of statistical power is achieved with a small sample size. However, large sample size increases the consistency of PLS-SEM estimation. As for data distribution proses, PLS-SEM is a good tool for analyzing non-parametric data. This is one of the reasons for applying PLS-SEM for this study, as this study is related with non-normal data collection. As no distributional assumption in PLS-SEM, therefore, normality test is not required to conduct in this study. Next, missing value is considered highly robust when the value is below a reasonable limit, which is less than 5% value missing per indicator. For measurement of indicators, PLS-SEM algorithm requires metric data on a ratio or interval, however, it also works well with ordinal scale with equidistant data point and binary code data.

3.9.3.2 Model Characteristics

In terms of PLS-SEM model characteristics, PLS-SEM is able to conduct a single and multi-item measurement as well as incorporate reflective and formative measurement models. Further, PLS-SEM also functions to handle complex models such as many structural model relations and allows no circular relationship in the structural model.

3.9.3.3 Algorithm Characteristics

PLS-SEM algorithm functions to reduce the amount of unexplained variance and data inadequacies are not affected to construct scores. Generally, when estimating data from common factor models, structural model relationships are underestimated and measurement model relationships tend to be overestimated.

3.9.3.4 Model Evaluation Issues

There are two measurement models in PLS-SEM model evaluation, namely; reflective model and formative model. For reflective model, the assessment of validity and reliability are conducted by multiple criteria, and for formative model, assessment is conducted for validity, significance, relevance of indicator weights, and indicator collinearity. Further, PLS-SEM also functions to analyze additional tests such as mediating effects, multi-group analysis, moderating effects, measurement model variance, hierarchical component models, and impact component matrix analysis.

3.10   PATH MODEL

Path model is the layout used to visually illustrate the hypothesis and variable relationships that are tested in SEM analysis (Hair et al. 2017). In path models, constructs or variables are symbolized as circles or ovals and the indicators (items or manifest variables) are symbolized as rectangles. Meanwhile, arrows in path models function to represent the relationship between constructs and their assigned indicators. Arrows in PLSP-SEM are always illustrated as single-headed and reflect directional relationships with strong theoretical support. These single-headed arrows also can be interpreted as causal relationships.

There are two elements in PLS-SEM path models, namely; structural model (inner model) and measurement models (outer models). The structural model represents the constructs (circle or oval) and displays the relationship between the constructs, for instance, the relationship between independent variables and dependent variables. Meanwhile, the measurement models display the relationship between the constructs and the indicator variables (items) in the path models. In PLS-SEM, independent variables

are referred as exogenous latent variables and dependent variables are referred as endogenous latent variables.

Path models are developed based on theories. Two types of theories are required to develop the path models, namely; measurement theory and structural theory (Hair et al. 2017). Measurement theory illustrates how the constructs are measured and structural theory demonstrates the relationship among the latent variables.

3.10.1 MEASUREMENT MODELS

Initially, in PLS-SEM model systematic assessment, the initial stage that needs to be conducted is the estimation of the measurement models. In this stage, the researcher needs to clarify and identify their research constructs as either reflective models or formative models. The reason is that the evaluation process for both of these models has a different evaluative measure.

3.10.1.1 Reflective Measurement

The objective of reflective measurement approach is to maximize the overlap between interchangeable indicators. The reflective measurement or also referred as Mode A measurement in PLS-SEM has been normally practiced in social science since a long time ago and is directly based on classical test theory. The reflective measurement represents the effects of underlying constructs and causality of this measurement from the constructs to their measures. The characteristic of reflective measurement is that individual items are interchangeable, which reflects that any single items removed will not affect and change the meaning of the constructs. Also, the indicators related with a particular construct should be highly correlated to each other and the indicators should be indicated by the same construct. If the constructs were changed, then all items or

indicators of the constructs will change simultaneously. Based on this reflective measurement's criteria, this study is considered as a reflective measurement model.

Internal consistency reliability and validity are assessed on reflective measurement model by three assessments, namely; composite reliability, convergent validity, and discriminant validity. The traditional criterion for internal consistency is Cronbach's Alpha. However, due to some limitations with Cronbach's Alpha, composite reliability is applied for more appropriate estimation. However, Hair et al. (2017) has suggested to consider and report both, as the true reliability usually lies between the Cronbach's Alpha as the lower bound and the composite reliability as the upper bound.

i) Composite Reliability

Generally, the composite reliability's interpretation is similar to Cronbach's Alpha that is indicating higher value for higher level of reliability. Specifically, values between 0.70 and 0.90 are considered satisfactory, however, values above 0.90 are not desirable as it indicates that the entire indicators have a strong similarity. Therefore, this value is not valid to measure the constructs. Meanwhile, composite reliability values of 0.60 to 0.70 are regarded as acceptable and values below 0.60 demonstrate a lack of consistency reliability (Hair et al. 2017).

ii) Convergent Validity

Convergent validity functions to estimate the extent to which a measure correlates positively with other measures of the same constructs. To evaluate convergent validity of constructs, the outer loadings of the indicators and the average variance extracted (AVE) are assessed by PLS-SEM for reflective

measurement models. Higher outer loading of the indicators demonstrates that similarity among the indicators (items) is high. The length of the outer loading is also called indicators' reliability. A common rule of thumb for the outer loading is it should be 0.708 or above and a value of 0.70 is acceptable as it is considered close enough to 0.708. This outer loading size represents how much the variation in an item is explained by the construct. However, at present, in social science studies, researchers frequently obtained weaker outer loadings below 0.70, particularly for research that is related with newly developed scales (Hulland, 1999).

However, before removing the weaker outer loading, the researcher needs to be cautious of the effects towards composite reliability and content validity of the constructs. Basically, outer loading with values between 0.40 and 0.70 should be considered for deletion if the indicators lead to an increase in the composite reliability or the average variance extracted (AVE). Further, outer loading below 0.40 should be eliminated from the constructs (Hair, Ringle, and Sarstedt, 2011; Bagozzi, Yi, and Phillips, 1991).

A second assessment in convergent validity is the average variance extracted (AVE). The AVE is the grand mean value of the squared loadings of the indicators related to the constructs. The rule of thumb for AVE is the value should be 0.50 or higher which the constructs explain more than partial of the variance of the indicators. In contrast, an AVE below 0.50 indicates that more variance remains in the error of the items than in the variance explained by the constructs (Hair et al. 2017).

iii) Discriminant Validity

Discriminant validity is conducted to estimate the extent to which a construct is different from other constructs by empirical standards. This assessment will demonstrate that a construct is not represented by other constructs in the model. As a rule, there are two approaches to assessing discriminant validity, namely; cross-loading and Fornell-Larcker criterion.

Firstly, cross-loading approaches explain that the values of the indicator's outer loading should be greater than any of its cross-loading on other constructs. The perfect way to estimate and report cross-loading is in a table with rows for indicators and columns for the latent variables.

The second approach is Fornell-Larcker criterion which functions to compare the square root of the AVE values with the latent variable correlations. Specifically, the square root of each construct's AVE should be higher than its correlation with any other construct. However, recent researches have some issues related to the performance of both cross-loading and Fornell-Larcker criterion concerning reliability to detect discriminants validity issues (Henseler, Ringle, and Sarstedt 2015). Therefore, heterotrait-monotrait ratio (HTMT) has been proposed as an alternative to assessing discriminant validity. The HTMT approach functions to assess the actual correlation (also referred as disattenuated correlation) between two constructs if they are completely reliable. An actual correlation between two constructs indicates a lack of discriminant validity when they are close to 1, however, the threshold value of the HTMT is still debatable. Recent researchers Henseler, Ringle, and Sarstedt (2015) suggested that a threshold value of above 0.90 demonstrates a

lack of discriminant validity when the constructs are conceptually very similar. However, when constructs in the path models are conceptually very different, a threshold value below 0.85 seems to be acceptable.

3.10.1.2 Formative Measurement

Formative measurement models or also referred as Mode B in PLS-SEM illustrates causal indicators in the form of linear combinations to form the constructs. Unlike reflective measurement, the formative measurement indicators are not interchangeable. Every indicator for formative constructs captures a specific aspect of the construct's domain.

However, in order to determine which measurement models are appropriate, previous researchers in various disciplines have engaged in considerable debates and yet, the issue is not fully resolved. Therefore, one of the best ways to identify the measurement model is by applying an analysis called confirmatory tetrad analysis for PLS-SEM (CTA-PLS). This analysis is operated by an analysis of the null hypotheses. Rejection of the null hypotheses indicates that the formative measurement should be used for constructs operationalization (Gudergan et al. 2008).

3.10.2 STRUCTURAL MODEL

After confirming the validity and reliability of the constructs measurement, the next assessment is for the structural model results. The structural model assessment is conducted to estimate the model's predictive capability and the correlation between the constructs. There are six steps involved when conducting structural model assessment. The first step is to examine the collinearity of the structural model to remove high level of collinearity among the predictor constructs which the path coefficients might be biased.

The next key criteria in assessing the structural model in PLS-SEM is the estimation of the significance and relevance of structural model's correlations (Step 2), the Level R^2 values (Step 3), the f^2 effect size (Step 4), the predictive relevance Q^2 (Step 5), and lastly, the q^2 effect size (Step 6) (Hair et al. 2017) .

i. **Step 1: Collinearity Estimation**

To estimate collinearity, the researcher needs to examine each predictor construct separately. Two measures can be applied in this assessment, namely; tolerance and VIF values as practiced in formative measurement models. If the tolerance value is below 0.20 or the VIF value is above 5 in the predictor construct, then it is considered as a critical level of collinearity. To treat collinearity problem, three solutions need to be implemented, namely; eliminating constructs, merging predictors into a single construct, or creating higher-order constructs.

ii. **Step 2: Structural Model Path Coefficients**

A second step in structural model measurement is structural model path coefficients, which are obtained to display the relationship between the constructs. Estimation of path coefficients reports a strong positive relationship when the path coefficient is close to +1, a strong negative relationship when it is close to -1, and very low relationship when values are close to 0. Basically, the significance of coefficient is obtained by referring to the standard error, which is obtained from bootstrapping analysis that is able to compute the t values and p values for all structural path coefficients. A coefficient is considered significant when the t value is greater than the critical value. The rule of thumb that is commonly used for the two-tailed test are 1.65

(significant level = 10%), 1.96 (significant level = 5%), and 2.57 (significant level = 1%). Meanwhile, critical values for one tailed tests are 1.28 (significant level = 10%), 1.65 (significant level = 5%), and 2.33 (significant level = 1%). Generally, in marketing area, researchers tend to apply a significant level of 5%, and 1% in consumer research studies by experimental method (Hair et al. 2017). However, for exploratory studies, researchers tend to apply a significance level of 10% and ultimately, the determination of significance level and type of test (one or two tailed) depends on the study's content and objective. Basically, most researchers tend to use p values to measure significance levels which is rejecting a true null hypothesis. The p value must be smaller than 0.05 when assuming significance level of 5% by concluding that the coefficient is significant at a 5% level.

iii.   **Step 3: Assess the Level of R²**

 The third step in the structural model assessment is to measure coefficient of determination (R² Value). This assessment functions to measure the model's predictive power and calculates the squared correlation between endogenous constructs and predictive values. This R² Value represents the amount of variance in the endogenous constructs explained by the exogenous constructs which value ranges from 0 to 1. Higher levels demonstrate higher levels of predictive accuracy. However, the rule of thumb for acceptable R² Value depends on the research discipline. For instance, in consumer behaviour discipline, R² values of 0.20 are considered high and in studies related with exploratory of factors influencing the variables, researchers tend to consider much higher values of 0.75 and above. In marketing discipline, R² values of

0.75 is described as substantial, 0.50 as moderate, and 0.25 as weak (Hair et al. 2017).

iv. **Step 4: Assess the *f²* effect size**

The f² effect size functions to evaluate the effect of the exogenous constructs on the endogenous constructs through evaluating the change in the R^2 value when a specific exogenous construct is omitted from the model. The effect size can be calculated as:

$$f^2 = \frac{R^2 \ included - R^2 \ excluded}{1 - R^2 \ included}$$

Guidelines for evaluating *f²* are represented by small (0.02), medium (0.15), and large (0.35). However, there is no effect if the effect size values are less than 0.02 (Cohen et al. 2003).

v. **Step 5: Assess the Predictive Relevance Q²**

The predictive relevance Q^2 value is an indicator of the model's out of sample predictive relevance or predictive power. Q^2 higher than zero in the structural model indicates the path model's predictive relevance for a particular dependent constructs. The Q^2 value can be obtained by using the blindfolding procedure. This blindfolding procedure is normally practiced for endogenous constructs that have a reflective measurement model specification and also for endogenous single-item constructs. This blindfolding procedure is estimated by means of two types of approach, namely; first, using information from the structural model to predict the score of the latent variables and second, using the predictive score of reflective endogenous latent variables to predict the

eliminated data points of the indicators in the measurement model. In this procedure, the elimination and prediction of data points depend on the omission distance (D), which are compulsory to determine in order to conduct the blindfolding procedure. In this blindfolding procedure, D value between 5 and 10 should be used. On the other hand, if Q^2 values are higher than zero, this demonstrates that the exogenous constructs have predictive relevance for the particular endogenous constructs.

vi. Step 6: Assess the q^2 effect size

The effect size of the predictive relevance is able to measure the q^2 effect size by applying this formula as follows:

$$q^2 = \frac{Q^2 \; included - Q^2 \; excluded}{1 - Q^2 \; included}$$

In this q^2 effect size estimation, a value of 0.02 represents that the exogenous constructs have a small predictive relevance for the particular endogenous constructs, and values of 0.15 and 0.35 represent the medium and large predictive relevance respectively.

3.10.3 MEDIATOR AND MODERATOR ANALYSIS

The study related to the mediator and moderator variables has been substantially conducted in previous research within several disciplines. However, similar studies in impulse buying behaviour are rarely conducted.

Despite recent researchers' enthusiasm to explore and undertake the studies of the mediating variables, previous psychologists have long discovered the imperative of mediating variables in research (Baron and Kenny 1986). The term mediator refers to the

variable that mediates the relationship between two latent variable constructs (exogenous and endogenous variable). This mediator or intervening variable is also called the third variable and is represented as M on the research model (Nitzl and Cepeda, 2016). In addition, the mediator functions to clarify how extrinsic physical events take on internal psychological significance and demonstrates how and why such effect develop (Baron and Kenny, 1986).

The meaning of mediating is able to understand through the causal chain of mediating effect as demonstrated by Figure 3.2 which is there are three causal paths created into the outcome of mediating effect namely, path a for independent variable to the mediator, path b for impact of mediator to dependent variable, and path c for direct effect of independent variable to dependent variable. In addition, before the variable declared as mediator variable, there are some standards and properties that are required to be met as depicted in Figure 3.3, namely; (1) independent variable is significantly correlated with the mediating variable (path a), (2) mediating variable significantly correlated with dependent variable (path b), and (3) when direct relationships between independent variable and dependent variable are controlled, a prior significant relationship between these two variables is no longer significant, which demonstrates that the mediating effect occurs when the direct relationship between the independent variable and dependent variable is zero (path c) (Baron and Kenny 1986).
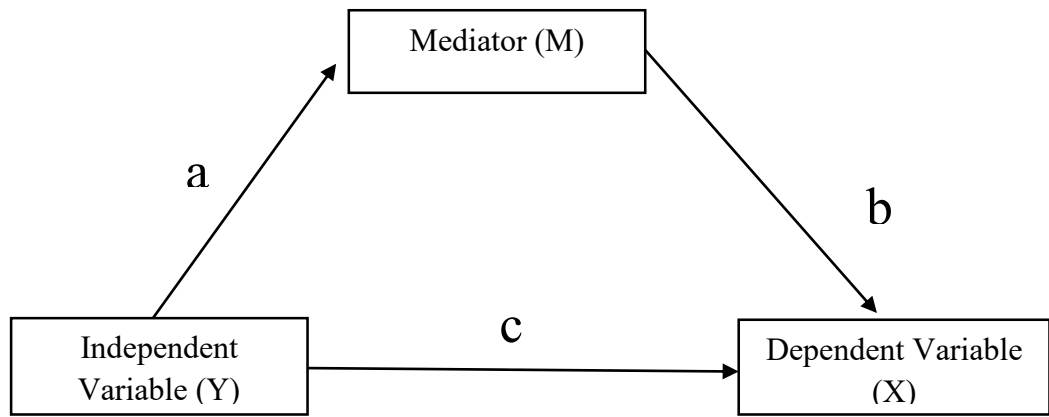
Figure 3.2: *Causal Chain of Mediating Effect*
Sources: Ramayah et al, (2018)

According to Barron and Kenny's method, there are two categories to analyze mediating effect namely, implicit procedure and explicit procedure. In implicit procedure, to determine whether mediating variable (M) functions as mediating effect or not, Barron and Kenny's method analyses these three regressions through four steps. Precisely, this four steps are also able to view as depicted in Figure 3.2 and Figure 3.3 namely, the variable of independent variable (X) must have a significant relationship on dependent variable (Y) in the absence of mediator, the independent variable (X) have significant relationship on mediator (M), the mediator variable (M) have a significant relationship on dependent variable (Y) as well as the presence of mediator (M) shrinks upon the effect of independent variable (X) on dependent variable (Y) and if the relationship is not significant, thus, the relationship between X and Y completely mediates by mediator variable. Otherwise, if the relationship between X and Y did not change which is the relationship is still significant, then, this relationship between X and Y is declared as partially mediated by mediator variable (Baron and Kenny 1986). In terms of the determination of mediation function, according to Baron and Kenny's method, the classification of moderation effect was determined through mediator or not mediator only without applying further explanation of mediating effect (Rungtusanatham, Miller, and Boyer, 2014).

In addition, for explicit procedure, this procedure relates to the methods to conduct statistical analysis to determine the presence and absence of mediation effect. There are variety of statistical method to analyze mediation effects such as Sobel Test, the Distribution of Product Method, Bootstrapping, Monte Carlo Simulation, and Bayesian Estimation. These five statistical methods have their own advantages and disadvantages but have a mutual function which is to analyze the presence and absence of mediation effect of the study. However, this study analyzes the mediation effect through bootstrapping statistical method as the data of this study analyzes through PLS-SEM tools analysis and the main reason to use bootstrapping as the data of this study is non-normal data which is fit with bootstrapping method (Rungtusanatham, Miller, and Boyer, 2014).

Therefore, this study analyzes mediation effect through PLS-SEM tool analysis and apply Barron and Kenny's method to determine that mediation effect. The selection of Barron and Kenny's method as this Barron and Kenny's method has been the prominent and predominant method in social science study (Zhao, Lynch, and Chen, 2010).
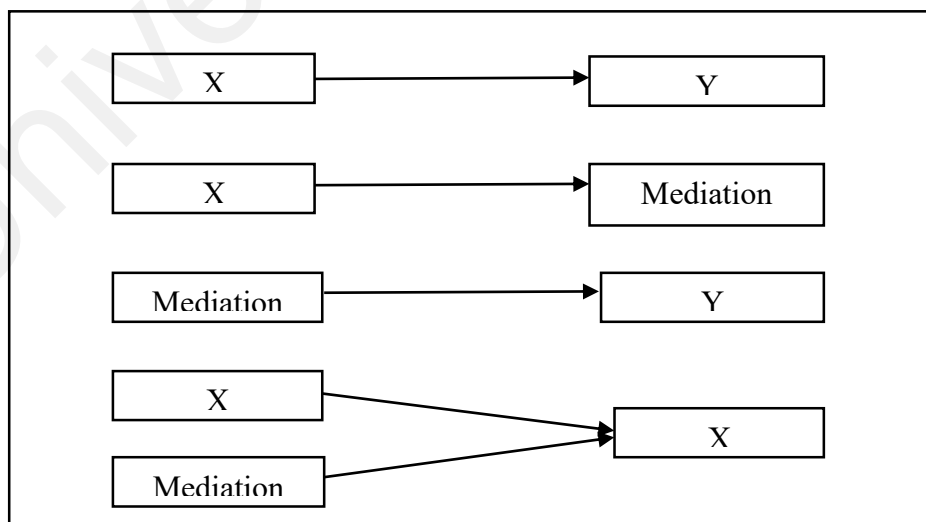
Figure 3.3: *Barron and Kenny's Formula of Mediation Analysis*
Sources: Ramayah et al, (2018)

In this study, the variable of credit card usage was tested as the mediating factor that mediates the relationship between the independent variable (materialism, sales promotion, money and time availability, and hedonic motivation) and the dependent variable (impulse buying behaviour). Since few previous studies have examined the variable of credit card usage as the mediating effect in impulse buying study, the researcher of this study is enthusiastic to discover to what extent the variable of credit card usage influences the other factors in engaging with impulsive buying. To estimate the mediating effect, SMART- PLS (partial least square) was used. The significance of the mediation analysis was tested using bootstrapping routine in PLS analysis (Hair et al. 2017).

Meanwhile, the moderating variable is defined as the variable that changes the direction of a relationship between two constructs in the model, namely; the independent variable and the dependent variable (Baron and Kenny, 1986; Hair et al. 2017). Specifically, a moderator plays the role of a third variable that influences the zero order correlation between two other variables within a correlation analysis framework (Baron and Kenny 1986). For instance, in this study, the variable of religiosity functions as a moderating effect on the relationship of hedonic motivation and materialism with impulse buying behaviour. Another characteristic of the moderating variable is that it frequently functions as an independent variable due to moderator and predictor (independent variable) sharing a similar role as causal variable antecedents, whereas mediating events transfer their function from effect to cause, depending on the objective of the study (Baron and Kenny 1986).

In terms of how the moderating variable occurs, a moderating effect is claimed as the moderator when there are changes in the direction of the correlation between the

independent variable and the dependent variable (Hair et al. 2017). In structural model, the moderating variable can be present in two different forms, namely; as observable variable such as gender, race, or income, and as unobservable variable (latent variable) such as religiosity (Hair et al. 2017). In terms of the measurement items, the moderating variable is able to measure with a single item or multiple items by using reflective or formative measurement models in SMART-PLS analysis.

On the other hand, in understanding how moderating effects are modeled, Figure 3.4 below shown example of this study path model of moderating effect namely religiosity as a moderator variable (M), influencing the relationship between materialism (Y_1) and impulse buying behavior (Y_2).
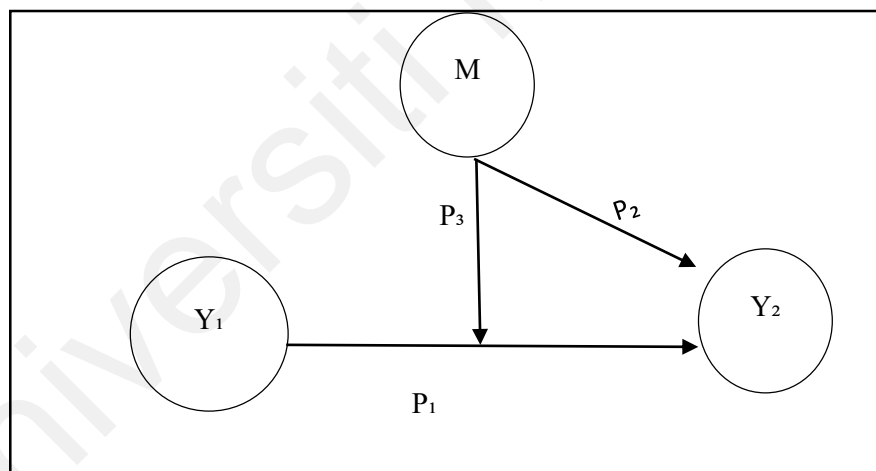
Figure 3.4: *Example of a Moderating Effect*
Sources: Hair et al (2017)

aThe moderating effect (p_3) is represented through an arrow pointing at (p_1) which is the effect linking between (Y_1) and (Y_2). Futhermore, the direct relationship between the moderator effect to independent variable also is created in this PLS-SEM analysis. This direct effect is represented by an arrow (p_2) pointing at (Y_2). It is crucial to (p_2) included in this moderating effect model as it

functions to control direct effect between moderator effect and dependent variable. If the path p_2 was to be excluded, the influence of M on the correlation between Y_1 and Y_2 would be high. This implies moderation effect also is similar to mediation effect as a third variable affects the strength of a relationship between independent variable and dependent variable. However, it is still having a distinction between moderating and mediating effect which moderator variable does not rely on the independent variable. Precisely, the path model of moderating effect in Figure 3.4 can also be illustrated mathematically through the following formula:

$$Y_2 = p_1 . Y_1 + p_2 . M + p_3 . (Y_1 . M)$$

Accordingly, it is essential to explore the functions of the moderating and mediating effects on impulse buying behaviour for the purpose of looking at impulsive buying from another perspective. In this study, these mediating and moderating effects analyzed using structural model via PLS-SEM tool analysis.

3.11   SUMMARY OF RESEARCH QUESTIONS AND DATA ANALYSIS

In order to obtain the results of the research questions, three main data analyses were undertaken in this study as demonstrated in Table 3.7 below:

Table 3.7: *Summary of Research Questions and Data Analysis*
Sources: Developed for this study

NO	RESEARCH QUESTIONS	DATA ANALYSIS
1	Do materialism, sales promotion, money and time availability, and hedonic motivation have a significant positive relationship to impulse buying behaviour?	Direct Relationship PLS-SEM Structural Model
2	Does self-*hisbah* have a significant negative relationship to impulse buying behaviour?	Direct Relationship PLS-SEM Structural Model

3	Does credit card usage have a significant positive relationship to impulse buying behaviour?	Direct Relationship PLS-SEM Structural Model
4	Does credit card usage mediate the relationship between materialism, sales promotion, money and time availability, and hedonic motivation and impulse buying behaviour?	Mediating Effect PLS-SEM Structural Model
5	Does religiosity moderate the relationship between materialism and hedonic motivation and impulse buying behaviour?	Moderating Effect PLS-SEM Structural Model

3.12   CONCLUSION

The process of research methodology is important in order to obtain valid and reliable findings. Proper and complete measurement, data collection, data analysis, and data interpretation will result in reliability and validity of the findings. Therefore, a complete and comprehensive operation in research methodology is essential to accomplish the objectives of the study.

CHAPTER 4: DATA ANALYSIS AND RESULT

INTRODUCTION

In this chapter, the researcher presents and discusses the results of the data analysis employing Partial Least Square (PLS)-Structural Equation Modelling (SEM) based on the five research questions as described in Chapter 1. In Section 4.1, the data collection process and survey response are discussed followed by presenting the results of the non-response bias in Section 4.2. This is then followed by Section 4.3 describing the data cleaning process including the detection of missing data and the existence of outlier. Section 4.4 presents and describes the descriptive analysis performed including the respondents' profiles, Finally, Section 4.5, discusses and examines the results from the measurement model analysis and structural model analysis, including mediation and moderator analysis.

4.1   DATA COLLECTION FROM THE SAMPLE

Data for this study were collected between 12 February 2017 to 30 April 2017 by distributing a questionnaire among Muslim credit card holders in Malaysia. The demographics included the northern zone (Kedah, Penang and Perlis), the central zone (Kuala Lumpur, Selangor, and Negeri Sembilan), the southern zone (Johor and Melaka), the east zone (Kelantan, Terengganu, and Pahang) and Sabah and Sarawak. As the data in this study is regarded as nonprobability sampling, the data collection activities were undertaken via purposive sampling and by snowball sampling using two techniques; the contact network and through self-assessment (Bryman and Bell, 2007; Rowley, 2014). The contact network method included family, friends, work colleagues, relatives and acquaintances. Employing this method, the researcher was able to use this network to assist in distributing the questionnaires to Muslim credit card holders in the locations

described above. Where longer distances were involved, the questionnaires were delivered via post. To facilitate the contact network (assistants), the researcher included a 'return back' envelope to assist respondents in returning the questionnaire once completed. Notably, this helped in the overall efficiency of distributing the questionnaire to participants. For the self-assessment method, the researcher delivered the questionnaire in person, to each participant in a public area, such as; a bank, shopping mall, mosque, carnival event, and at academic and non-academic workshops. This method proved to be quite challenging as each person needed to be individually approached by the researcher without having any knowledge whether they were credit card holders. Although, the approach was found to be quite exciting and satisfying given the researcher was able to fine-tune their communications skills by explaining the purpose of the study, and also affording the participant with the opportunity to discuss and clarify any questions that they may have wanted to ask regarding the study and questionnaire.

In order to facilitate the researcher during data collection process, the number of questionnaire distribute each state divided into two groups of number namely, 100 questionnaires for each six states and 50 questionnaires for each of the rest of states. The allocation of numbers is according to the status of the states. A total of 100 questionnaires were distributed to each of the six states namely; Selangor, Wilayah Persekutuan Kuala Lumpur, Sarawak, Johor, Sabah, and Penang, based on having the highest gross domestic product (KDNK), (Department of Statistics Malaysia 2015). This approach enables the targeting of respondents in these states to be undertaken efficiently, as according to (Jabatan Insolvensi 2014), the primary groups in each state are predominantly involved with debt problem, including business people, the private sector and the government sector. Therefore, in this case, the researcher believed that the number of credit card holders in these six states would undoubtedly be high. The questionnaire was then

distributed to the remaining states; Perak, Melaka, Negeri Sembilan, Pahang, Kelantan, Terengganu, Kedah, and Perlis. A total of 50 questionnaires were distributed in each of these states, where the total number of questionnaires distributed throughout Malaysia was 1,000. Given the population size in Malaysia, the sample size of around 1,000 was considered to be sufficient in generalizing the overall size of the population (Blaikie, 2003).

Following the distribution of the 1,000 questionnaires used to survey Muslim credit card holders in Malaysia, 710 were ultimately returned. After reviewing the returned questionnaires, 635 were determined to be usable for the data analysis in the study. The questionnaires that were not considered (incomplete question) were primarily due to the respondents not answering all of the questions, or not meeting the criteria as a credit card holder. One of the reasons for this problem may have also been attributed towards the misunderstanding of the requirement expected of participants, insufficient time to complete the questionnaire, not being motivated to answer the questions, having other priorities or simply forgetfulness. Table 4.1 shows the results of the return rate for each state. Notably, Selangor and Wilayah Persekutuan Kuala Lumpur displayed the highest return rate compared to the other states

Table: 4.1: *Total of Questionnaire and Response Rate by States*
Sources: Developed for this study

Number of State	State	Questionnaire Distribute	Return Questionnaire	Return Rate	Useable Questionnaire
1	Selangor	100	95	95%	91
2	Wilayah Persekutuan Kuala Lumpur	100	94	94%	92
3	Sarawak	100	45	45%	39
4	Johor	100	77	77%	73
5	Sabah	100	37	37%	34
6	Penang	100	73	73%	68
7	Perak	50	39	78%	34
8	Melaka	50	33	66%	26
9	Negeri Sembilan	50	43	86%	35

10	Pahang	50	39	78%	31
11	Kelantan	50	42	84%	35
12	Terengganu	50	33	66%	27
13	Kedah	50	29	58%	24
14	Perlis	50	31	62%	26
	Total	1000	710	71%	635

4.2   NO RESPONSE BIAS

The no response bias test was performed by employing the t-test to compare the similarities between the mean, standard deviation, and standard error from among the early and late responses in the dependent variable (impulse buying behaviour), independent variable (materialism, sale promotion, money and time availability, hedonic motivation, and self-*hisbah*), mediating variable (credit card usage) and moderating variable (religiosity) through SPSS analysis. Table 4.2 displays the final results of the non-response bias test. The samples (questionnaires) were divided into two groups. Group 1 representing the 275 questionnaires that were returned earlier than one month following distribution, and Group 2 representing the remaining 360 questionnaires that were returned after one month from the date of distribution, called the late response group. Therefore, the result implies that there were no significant t-statistics at the level $t < 1.96$ and the p-value was higher than 0.05 ($p > 0.05$). Accordingly, this indicates that there are no significant differences among each variable and response group and the data was free from response bias.

Table 4.2: *No Response Bias*
Sources: Developed for this study

Measure	Timeline	N	Mean	SD	t-value	p-value	Result
Impulse Buying Behaviour	Early	275	11.4945	3.45605	-19.783	0.097	Not Significant
	Late	360	17.2833	3.79748	-20.034		
Materialism	Early	275	21.5564	6.34181	-.307	0.277	Not Significant
	Late	360	21.7083	6.03896	-.305		
Sale Promotion	Early	275	12.8109	4.17158	-1.101	0.786	Not Significant
	Late	360	13.1778	4.15528	-1.100		
Money and Time Availability	Early	275	11.3200	2.05742	-.623	0.130	Not Significant
	Late	360	11.4194	1.94038	-.618		

Hedonic Motivation	Early	275	34.4473	10.53461	-1.104	0.399	Not Significant
	Late	360	35.3611	10.18835	-1.099		
Self-*Hisbah*	Early	275	69.1127	8.42474	.452	0.941	Not Significant
	Late	360	68.8111	8.24573	.451		
Credit Card Usage	Early	275	10.5491	3.99091.	-1.054	0.877	Not Significant
	Late	360	10.8917	4.10814	-1.058		
Religiosity	Early	275	53.6618	6.41609	.585	0.694	Not Significant
	Late	360	53.3639	6.30632	.584		

4.3   DATA CLEANING

The data cleaning process was performed to clarify and verify the accuracy of the data and the proper correlation between the variables. Accordingly, all data in this study were subjected to data cleansing to ensure the accuracy of the data before being entered into a data file, and to also avoid any occurrences of missing data and outlier (Tabachnick and Fidell, 2007). The data cleaning process was performed using a two-step approach; identifying missing data and identifying the existence of outliers following the process of editing, coding, saving, and analysing the data using SPSS.

4.3.1   Detection of Missing Data

Missing data is one of the most commonly found issues in performing data analysis. In this case, missing data was found if the respondents failed to appropriately answer one or more questions (Hair et al. 2014) whether accidentally or intentionally (Bryman and Bell, 2007). Following the data filtering and coding process, no missing data was found in this study. Indeed, missing data will result in an adverse impact regarding the sample size. When there are occurrences found of missing data, the researcher will need to gather additional observations to fulfil the sample size requirement for the study to avoid any obstacles in the data analysis process. Therefore, a thorough examination is essential during the data collection process, data filtering and coding

193

process to prevent this occurrence from happening. According to (Hair et al. 2014), missing data below 10 percent is still acceptable, and a variable with as small as 15 percent missing data is possible to be terminated, but a higher level of missing data of 20 or 30 percent is considered appropriate to recover the data.

4.3.2   The Existence of Outlier

After detecting any missing data, the existence of outliers needs to be identified for accuracy as inaccurate data will result in inaccurate outcomes. Outlier occurs when there are strange or unfamiliar values observed which are distinctly different with other observations. The outlier can be embodied through acquiring unique characteristics such as high and low values on the variable which appears different from other observations. Outlier does occur due to data entry errors or coding mistakes (Hair et al., 2014). (Tabachnick and Fidell 2013) identified four reasons why outliers occur; (1) incorrect data entry, (2) failure to determine and denote missing values or computer code which is ultimately read as real data, (3) outlier excluded as part of the sample which the researcher requires. In this case, these should be deleted immediately, and lastly, (4) outliers are included as the population in the study but the distribution of the variable has higher values than the normal distribution.

To assess the existence of multivariate outlier, this study employed the Mahalanobis distance (D^2) method which measures the distance of a case from the centroid of the observation and measures each case using x^2 distribution (Tabachnick and Fidell, 2013; Hair et al., 2014). After performing the measurement, there were seven (7) from 646 respondents from the MAH-1 column with a value more than 24.322 Chi-Square that were deleted and 4 respondents from the SDR-1 column with a value more than 3 (3.000) which was also deleted. Therefore, the findings demonstrated that there

were eleven instances of outliers in some of the variables which were deleted to ensure validity and reliability of the data analysis.

4.4 RESPONDENTS' PROFILES

The descriptive analysis, Table 4.3 to Table 4.86 illustrate the profile of the 635 Muslim credit card holders in this study applying seven categories; gender, age, education, job status, income, state, type of credit card and credit card numbers.

Table 4.3: *Gender*
Sources: Developed for this study

		Frequency	Percentage
Valid	Male	249	39.2
	Female	386	60.8
	Total	**635**	**100**

Table 4.3 shows the gender type of the respondents. Females represented 60.8 percent (n = 386) of the sample population, while males represented 39.2 percent (n = 249).

Table 4.4: *Age*
Sources: Developed for this study

	Age (years)	Frequency	Percentage
Valid	22 to 30	98	15.4
	31 to 41	299	47.1
	42 to 50	173	27.2
	51 to 65	65	10.2
	Total	**635**	**100**

Next, for the respondent's age. This ranged between 31 to 41 years old with the 'majority' score of 47.1 percent (n = 299), followed by 27.2 percent (m = 173) representing the 42 to 50 years old age group. This was then followed by 15.4 percent (n = 98) for ages ranging between 22 to 30 years old with the minority age group ranging between 51 to 65 years old.

195

Table 4.5: *Education*
Sources: Developed for this study

		Frequency	Percentage
Valid	Secondary School	27	4.3
	Diploma/Certificate	75	11.8
	Degree	168	26.5
	Master	260	40.9
	Doctor of Philosophy	105	16.5
	Total	**635**	**100**

Regarding the respondents' educational background, there were five categories to classify the education of each respondent. The majority are Master holders at 40.9 percent (n = 260), followed by 26.5 percent (n = 168) and 16.5 percent (105) of those who hold a Degree or are a Doctor of Philosophy holder, respectively. Next, 11.8 percent (n = 75) were represented as graduates with a diploma/certificate level of study, and lastly, secondary school holders representing the minority group at 4.3 percent (n = 27).

Table 4.6: *Job Status*
Sources: Developed for this study

		Frequency	Percentage
Valid	Government	387	60.9
	Private	189	29.8
	Self-Employed	34	5.4
	Retired	7	1.1
	Unemployed	18	2.8
	Total	**635**	**100**

The descriptive analysis identified that the majority of Muslim credit card holders were employed as government servants at 60.9 percent (n = 387), followed by the private sector at 29.8 percent (n = 189). While 5.4 percent (n = 34) represented those who were self-employed, followed by 2.8 percent (n = 18) who were currently unemployed with only 1.1 percent (n = 7) who were retired.

Table 4.7: *Income*
Sources: Developed for this study

		Frequency	Percentage
Valid	RM 2,000 until RM 3,000	95	15.0
	RM 3,001 until RM 6,000	298	46.9
	RM 6,001 until RM 9,000	184	29.0
	RM 9,001 and above	58	9.1
	Total	**635**	**100**

The income of Muslim credit card holders indicated that most received an income ranging between RM3,001 to RM6,000, representing 46.9 percent (n = 295). While, 29.0 percent (n = 184) reported receiving income ranging between RM 6,001 to RM 9,000, followed by 15.0 percent (n = 95) with income between RM 2,000 to RM 3,000, and finally, 9.1 percent (n = 58) receiving income of RM 9,000 or higher.

Table 4.8: *State*
Sources: Developed for this study

		Frequency	Percentage
Valid	Kuala Lumpur	92	14.5%
	Selangor	91	14.3%
	Johor	73	11.5%
	Melaka	26	4.1%
	Negeri Sembilan	35	5.5%
	Pulau Pinang	68	10.7%
	Kedah	24	3.8%
	Perlis	26	4.1%
	Perak	34	5.4%
	Terengganu	27	4.3%
	Kelantan	35	5.5%
	Pahang	31	4.8%
	Sabah	34	5.4%
	Sarawak	39	6.1%
	Total	**635**	**100**

Regarding the demographics of the participants, this was represented as follows. Selangor at 14.3 percent (n = 91); Kuala Lumpur and Johor at 14.5 percent (n = 92) and

11.5 percent (n = 73) respectively. Followed by Penang at 10.7 percent (n = 68); Kedah

at 3.8 percent (n = 24); Perak at 5.4 percent (n = 34); and Sarawak at 6.1 percent (n = 39).

Lastly, 5.5 percent (n = 35) from Kelantan, 4.8 percent (n = 31) from Pahang; 4.1 percent

(n = 26) from Melaka; 5.5 percent (n = 35) from Negeri Sembilan; 5.4 percent (n = 34)

from Sabah; 4.3 percent (n = 27) from Terengganu; and 4.1 percent (n = 26) from Perlis.

Table 4.9: *Type of Credit Card*
Sources: Developed for this study

		Frequency	Percentage
Valid	Islamic Credit Card	330	52.0
	Conventional Credit Card	186	29.3
	Islamic and Conventional Credit Card	119	18.7
	Total	**635**	**100**

The majority of Muslim credit card holders used an Islamic credit card, at 52.0

percent (n = 330). The remaining number of credit card holders used a conventional credit

card, and an Islamic credit card either individually or had both, indicated a slight

difference at 29.3 percent (n = 186) to those who used a conventional credit card and 18.7

percent (n = 119) using both an Islamic credit card as well as a conventional credit card.

Table 4.10: *Number of Credit Cards*
Sources: Developed for this study

		Frequency	Percentage
Valid	One Only	406	63.9
	Two and more	229	36.1
	Total	**635**	**100**

Finally, for the number of credit cards held by Muslim credit card holders. The

majority of respondents had only one credit card at 63.9 percent (n = 406) and 36.1

percent (n = 229) having two and more credit cards.

4.5 DATA ANALYSIS RESULT

This section presents the results of the data analysis, including the results of the measurement model and structural model conducted through PLS-SEM analysis.

4.5.1 PLS-SEM Analysis

Two models are measured in the PLS-SEM analysis; the measurement model and the structural model. The assessment of measurement model includes two analyses namely; convergent validity and discriminant validity. While, in the structural model, the estimation comprises the coefficient of determination (R^2), predictive relevance (Q^2), size and significance of path coefficients, f^2 effect size, and q^2 effect size.

4.5.2 ASSESSING PLS-SEM MEASUREMENT MODEL RESULT

The PLS-SEM measurement model assessment begins with the measurement model estimation that is used to determine if the indicators (items) are reliable and valid to the constructs. The measurement model (PLS Algorithm) includes two analyses; convergent validity and discriminant validity. Convergent validity incorporates three additional analyses namely; Outer Loading Analysis, Average Variance Extracted (AVE) and Composite Reliability (CR) function to measure the extent to which a measured item correlates with other items in the same construct (Hair, Hult, Ringle, & Sarstedt, 2017). The discriminant validity assessment also performs three analyses, namely; Fornell-Larcker Criterion, Cross Loading, and Heterotrait-Monotrait Ratio (HTMT). Accordingly, discriminant validity is conducted to determine the extent to which a construct differs from another construct.

4.5.2.1 Convergent Validity

Construct validity is assessed by estimating the cross loading and outer loading. Further, the outer loading is conducted to identify the items that have high and low loading. Accordingly, the low loading needs to remove, and the high outer loading determines how much the indicator has in common. A standard rule of thumb for standardising outer loading should be 0.708 or higher (Chin, Gopal, Salisbury, & David, 1997; Hair et al., 2017). However, in social science studies, researchers frequently obtain a weaker outer loading lower than 0.70 mainly when related to newly developed scales (Hulland, 1999). Table 4.11 demonstrated the remaining items loading from the model assessment and the values of average variance extracted (AVE), composite reliability, and Cronbach's alpha.

Table 4.11:
Average Variance Extracted (AVE), Composite Reliability, and Cronbach's Alpha Assessment
Sources: Developed for this study

Construct	Items	Loading	Average Variance Extracted (AVE)	Composite Reliability	Cronbach's Alpha
Credit Card Usage	CCUQ1	0.649	0.562	0.863	0.800
	CCUQ2	0.636			
	CCUQ3	0.836			
	CCUQ4	0.863			
	CCUQ5	0.736			
Hedonic Motivation	HMQ1	0.656	0.502	0.933	0.922
	HMQ2	0.677			
	HMQ3	0.772			
	HMQ4	0.813			
	HMQ5	0.679			
	HMQ6	0.816			
	HMQ7	0.803			
	HMQ8	0.739			
	HMQ9	0.781			
	HMQ10	0.718			
	HMQ11	0.561			
	HMQ12	0.652			
	HMQ14	0.550			
	HMQ15	0.634			

Impulse Buying Behaviour	IBBQ1	0.792	0.569	0.887	0.847
	IBBQ2	0.839			
	IBBQ3	0.708			
	IBBQ4	0.764			
	IBBQ5	0.710			
	IBBQ6	0.704			
Money and Time Availability	MTAQ2	0.590	0.611	0.749	0.418
	MTAQ3	0.935			
Materialism	MTRLQ1	0.703	0.520	0.896	0.867
	MTRLQ2	0.634			
	MTRLQ3	0.726			
	MTRLQ4	0.756			
	MTRLQ5	0.717			
	MTRLQ6	0.763			
	MTRLQ7	0.753			
	MTRLQ8	0.706			
Religiosity	RLGQ3	0.756	0.508	0.860	0.805
	RLGQ4	0.757			
	RLGQ5	0.712			
	RLGQ6	0.752			
	RLGQ12	0.690			
	RLGQ14	0.597			
Self-hisbah	SHQ1	0.705	0.507	0.929	0.919
	SHQ2	0.735			
	SHQ3	0.816			
	SHQ4	0.715			
	SHQ5	0.788			
	SHQ6	0.826			
	SHQ7	0.813			
	SHQ9	0.725			
	SHQ11	0.751			
	SHQ13	0.538			
	SHQ14	0.686			
	SHQ15	0.591			
	SHQ17	0.460			
Sale Promotion	SPQ1	0.738	0.648	0.902	0.863
	SPQ2	0.788			
	SPQ3	0.765			
	SPQ4	0.863			
	SPQ5	0.863			

Through estimating the outer loading for seven constructs, fourteen low indicators were deleted to increase the average variance extracted (AVE) values. The deleted indicators included indicators from the constructs of Money and Time Availability

(MTAQ1), Hedonic Motivation (HMQ13), four indicators from the Self-hisbah construct (SHQ8, SHQ10, SHQ12, SHQ16), and eight from the Religiosity construct (RLGQ1, RLGQ2, RLGQ7, RLGQ8, RLGQ9, RLGQ10, RLGQ11, RLGQ13) with values lower than 0.40. In this study, the value of the outer loading for each construct indicator met the standard rule of thumb in standardising the outer loading at 0.708 or above. However, some outer loading values were obtained between 0.40 and 0.60 and were retained according to the suggestion of scholars'.

As mentioned by Hair, Ringle, & Sarstedt (2011) and Hair et al., (2017), outer loading values between 0.40 and 0.70 should be removed only if the deleted indicator helps towards increasing the value of composite validity and the average variance extracted. Hair et al. (2017) suggested if possible to delete the indicator, but only if the outer loading value increases the measures above the threshold and considers the impact on content validity. Secondly, if the removal does not increase the measures above the threshold, the indicator is then retained. Therefore, as the AVE values are already more than 0.50, the outer loading values ranging from 0.40 to 0.60 were retained to maintain content validity. Also, the outer loading removed in this study was less than 20 % of the total number of indicators.

Next, for the average variance extracted (AVE) estimation, an AVE should be higher at the value of 0.50 or above, which thereby explains that the construct reflected more than half of the variances of its indicator (Hair et al., 2011). By contrast, the AVE reflects less of the variances of the indicators if the value is less than 0.50 (Hair et al., 2017). As indicated in Table 4.9, the values of AVE for all constructs met the threshold value which was more than 0.50, and where the AVE ranged between 0.502 and 0.648.

The AVE is assessed as one of the analyses that explain the convergent validity conducted to identify how well an indicator correlates with other indicators of the same construct.

Composite reliability and Cronbach's alpha have similar ways to analyse the reliability. Composite reliability prioritises the indicators according to their reliability during the model assessment. However, composite reliability values will differ in terms of exploratory and advanced research. In exploratory research, composite reliability is acceptable with values at 0.60 to 0.70, and values of 0.70 to 0.90 are acceptable in advanced research. In this study, Composite Reliability and Cronbach's Alpha for all constructs were found to meet the threshold value, which resides between 0.749 to 0.933 and 0.800 to 0.922 respectively, thereby indicating higher reliability among the constructs. Also, the values less than 0.60 are considered to lack reliability (Hair et al., 2017; Nunnally & Bernstein, 1994). The Cronbach's Alpha for variable money and time availability indicated the value at 0.418 which in this instance, is considered to be low. However, this study prefers to utilise Composite Reliability as an alternate assessment for reliability as the Cronbach's Alpha is regarded as a conservative measure of reliability which results in relatively small reliability values (Hair et al., 2017). According to the measurement model result, the data fulfilled the requirement of the analysis.

4.5.2.2 Discriminant Validity

The purpose of discriminant validity is to identify the extent to which a given construct is distinct from other constructs. In this assessment, there are three measurements of discriminant validity namely; Fornell- Larcker Criterion, Cross loading, and Heterotrait-Monotrait Ratio (HTMT) (Hair et al., 2017). PLS-SEM analysis has been conducted on these three measurements as stated.

Table 4.12:

Cross Loading Assessment
Sources: Developed for this study

	Credit Card Usage	Hedonic Motivation	Impulse Buying Behaviour	Money and Time Availability	Materialism	Religiosity	Self-*Hisbah*	Sale Promotion
CCU1	0.649	0.358	0.295	-0.044	0.329	-0.314	-0.316	0.352
CCU2	0.636	0.295	0.294	0.244	0.199	-0.100	-0.040	0.320
CCU3	0.836	0.492	0.382	0.166	0.305	-0.182	-0.167	0.405
CCU4	0.863	0.499	0.458	0.086	0.305	-0.224	-0.187	0.424
CCU5	0.736	0.425	0.342	0.148	0.293	-0.188	-0.154	0.463
HM1	0.434	0.656	0.434	0.104	0.314	-0.220	-0.199	0.510
HM2	0.331	0.677	0.408	0.217	0.348	-0.156	-0.096	0.449
HM3	0.396	0.772	0.438	0.150	0.398	-0.206	-0.145	0.493
HM4	0.367	0.813	0.513	0.209	0.387	-0.170	-0.142	0.501
HM5	0.365	0.679	0.337	0.136	0.442	-0.227	-0.203	0.415
HM6	0.453	0.816	0.464	0.141	0.449	-0.249	-0.221	0.501
HM7	0.431	0.803	0.417	0.183	0.443	-0.202	-0.159	0.474
HM8	0.421	0.739	0.427	0.183	0.342	-0.210	-0.183	0.438
HM9	0.432	0.781	0.445	0.190	0.385	-0.198	-0.181	0.456
HM10	0.398	0.718	0.450	0.221	0.364	-0.174	-0.111	0.465
HM11	0.258	0.561	0.349	0.188	0.228	-0.062	-0.056	0.288
HM12	0.408	0.652	0.379	0.163	0.281	-0.128	-0.116	0.431
HM14	0.293	0.550	0.277	0.147	0.313	-0.132	-0.140	0.376
HM15	0.503	0.634	0.452	0.183	0.440	-0.238	-0.217	0.499
IBB1	0.370	0.469	0.792	0.180	0.361	-0.148	-0.171	0.432
IBB2	0.411	0.475	0.839	0.147	0.389	-0.159	-0.168	0.434
IBB3	0.274	0.398	0.708	0.206	0.359	-0.105	-0.057	0.323
IBB4	0.469	0.496	0.764	0.103	0.381	-0.180	-0.178	0.449
IBB5	0.296	0.432	0.710	0.281	0.334	-0.062	-0.065	0.403
IBB6	0.320	0.391	0.704	0.149	0.335	-0.108	-0.104	0.400
MTA2	0.053	0.085	0.112	0.590	0.101	0.175	0.197	0.131
MTA3	0.163	0.252	0.227	0.935	0.213	0.072	0.098	0.233
MTRL1	0.247	0.305	0.341	0.146	0.703	-0.094	-0.060	0.271
MTRL2	0.220	0.235	0.273	0.071	0.634	-0.104	-0.084	0.253
MTRL3	0.287	0.370	0.336	0.088	0.726	-0.114	-0.092	0.330
MTRL4	0.304	0.420	0.371	0.145	0.756	-0.126	-0.129	0.362
MTRL5	0.300	0.404	0.337	0.203	0.717	-0.123	-0.115	0.326
MTRL6	0.267	0.404	0.330	0.148	0.763	-0.141	-0.087	0.329
MTRL7	0.285	0.405	0.350	0.243	0.753	-0.150	-0.110	0.335
MTRL8	0.286	0.432	0.398	0.179	0.706	-0.150	-0.103	0.397
RLG3	-0.212	-0.177	-0.131	0.117	-0.071	0.757	0.546	-0.091
RLG4	-0.211	-0.170	-0.104	0.118	-0.067	0.756	0.510	-0.109
RLG5	-0.134	-0.178	-0.118	0.039	-0.177	0.712	0.421	-0.133
RLG6	-0.211	-0.179	-0.114	0.126	-0.102	0.752	0.462	-0.121
RLG12	-0.222	-0.218	-0.115	0.086	-0.123	0.689	0.553	-0.140
RLG14	-0.157	-0.191	-0.138	0.052	-0.189	0.597	0.431	-0.192
SH1	-0.164	-0.137	-0.087	0.122	-0.044	0.505	0.705	-0.075
SH2	-0.156	-0.190	-0.137	0.130	-0.041	0.495	0.735	-0.083
SH3	-0.241	-0.245	-0.127	0.161	-0.110	0.563	0.816	-0.151
SH4	-0.200	-0.245	-0.196	0.098	-0.207	0.415	0.715	-0.201
SH5	-0.156	-0.137	-0.146	0.085	-0.087	0.524	0.788	-0.100
SH6	-0.186	-0.165	-0.115	0.140	-0.102	0.567	0.826	-0.107
SH7	-0.191	-0.137	-0.105	0.178	-0.117	0.573	0.813	-0.116
SH9	-0.135	-0.115	-0.082	0.102	-0.041	0.475	0.725	-0.089
SH11	-0.171	-0.155	-0.148	0.055	-0.118	0.535	0.751	-0.164
SH13	-0.133	-0.048	-0.029	0.100	-0.048	0.449	0.538	-0.050
SH14	-0.136	-0.144	-0.065	0.181	-0.067	0.551	0.686	-0.069

SH15	-0.143	-0.136	-0.048	0.102	-0.131	0.499	0.591	-0.122
SH17	-0.066	-0.031	-0.078	0.035	-0.034	0.348	0.460	-0.023
SP1	0.398	0.427	0.405	0.129	0.350	-0.125	-0.121	0.738
SP2	0.431	0.552	0.446	0.155	0.389	-0.210	-0.160	0.788
SP3	0.358	0.451	0.409	0.280	0.311	-0.092	-0.089	0.765
SP4	0.476	0.568	0.452	0.209	0.400	-0.169	-0.134	0.863
SP5	0.448	0.569	0.468	0.212	0.377	-0.148	-0.139	0.863

***CCU**=credit card usage, **HM**=hedonic motivation, **IBB**=impulse buying behaviour, **MTA**=money and time availability, **MTRL**=materialism, **RLG**=religiosity, **SH**=self-hisbah, **SP**=sale promotion*

To assess the discriminant validity of the indicators, the first approach is by cross-loading estimation. Discriminant validity is established if the outer loading is higher than any of its cross-loading (Hair et al., 2017). According to Table 4.12, the cross-loading analysis demonstrated that the discriminant validity has been well established in this study by obtaining a higher outer loading for all indicators. The outer loading for every indicator demonstrated a high value of outer loading ranging between 0.460 and 0.935 and the cross-loading values of the other constructs were lower than the outer loading values.

Table 4.13:
Fornell-Larcker Criterion Assessment
Sources: Developed for this study

	Credit Card Usage	Hedonic Motivation	Impulse Buying Behaviour	Money and Time Availability	Materialism	Religio sity	Self-*Hisbah*	Sale Promotion
CCU	**0.750**							
HM	0.562	**0.709**						
IBB	0.479	0.591	**0.754**					
MTA	0.156	0.243	0.232	**0.782**				
MTRL	0.383	0.522	0.478	0.216	**0.721**			
RLG	-0.269	-0.262	-0.171	0.125	-0.175	**0.713**		
SH	-0.232	-0.223	-0.169	0.155	-0.137	0.687	**0.712**	
SP	0.527	0.642	0.542	0.243	0.456	-0.187	-0.161	**0.805**

***CCU**=credit card usage, **HM**=hedonic motivation, **IBB**=impulse buying behaviour, **MTA**=money and time availability, **MTRL**=materialism, **RLG**=religiosity, **SH**=self-hisbah, **SP**=sale promotion*

As a second approach to assessing discriminant validity in this study, the Fornell-Larcker criterion was next conducted. In Fornell-Larcker criterion estimation, the square

root of the AVE values was found to be high compared with the latent variable correlations. Therefore, to establish discriminant validity on the Fornell-Larcker criterion, the square root of each construct's AVE should be higher than its correlation with other constructs (Hair et al., 2017).

According to Table 4.13, the result of using Fornell-Larcker criterion demonstrated that the discriminant validity had been established in this study by obtaining higher values of square roots of each construct AVE namely; credit card usage (0.750), hedonic motivation (0.709), impulse buying behaviour (0.754), money and time availability (0.782), materialism (0.721), religiosity (0.713), self-*hisbah* (0.712), and sale promotion (0.805).

Table 4.14:
Heterotrait- Monotrait Ration (HTMT) Assessment
Sources: Developed for this study

	Credit Card Usage	Hedonic Motivation	Impulse Buying Behaviour	Money and Time Availability	Materialism	Religiosity	Self-*Hisbah*	Sale Promotion
CCU								
HM	0.640							
IBB	0.570	0.662						
MTA	0.305	0.348	0.366					
MTRL	0.458	0.575	0.554	0.322				
RLG	0.337	0.301	0.201	0.271	0.203			
SH	0.265	0.222	0.164	0.306	0.142	0.815		
SP	0.632	0.713	0.632	0.384	0.521	0.218	0.163	

CCU=credit card usage, HM=hedonic motivation, IBB=impulse buying behaviour, MTA=money and time availability, MTRL=materialism, RLG=religiosity, SH=self-hisbah, SP=sale promotion

Finally, as a further alternative in assessing discriminant validity issues in this study, the Heterotrait-Monotrait Ratio (HTMT) was applied as suggested by (Henseler, Ringle, and Sarstedt 2015). This declares that the HTMT assessment needs to be performed in the discriminant validity assessment as the Fornell-Larcker criterion and that the examination of cross loading is not adequate to detect the lack of discriminant

validity. By using 0.85 (Henseler, Ringle, and Sarstedt, 2015; Kline, 2011; Clark and Watson, 1995) and 0.90 (Gold, Malhotra, and Segars, 2001; Henseler, Ringle, and Sarstedt, 2015) as the threshold value for HTMT, this analysis indicated that all HTMT values are obviously lower than the threshold values of HTMT, namely; 0.85 and 0.90. This suggested, therefore that adequate discriminant validity of this study was established.

4.5.3   ASSESSING PLS-SEM STRUCTURAL MODEL RESULT

The structural model functions to demonstrate the causal relationship between the constructs in the model. This includes the estimates of the path coefficient, which indicated the relationship between the exogenous variables, endogenous variable, and the R^2 value, which demonstrated the numbers of variance explained by the exogenous variables, the effect size (f^2) and the predictive relevance (Q^2) assessment.

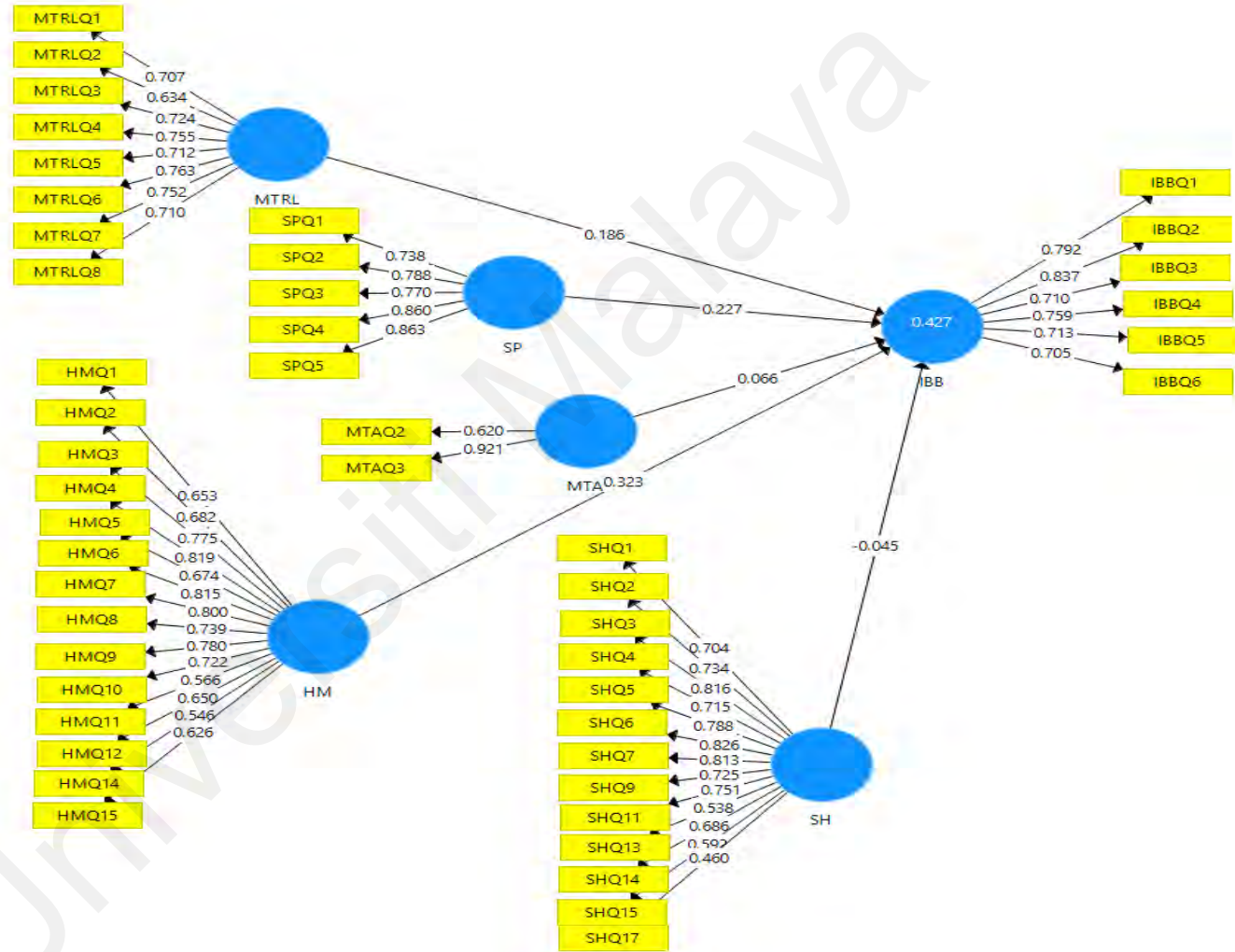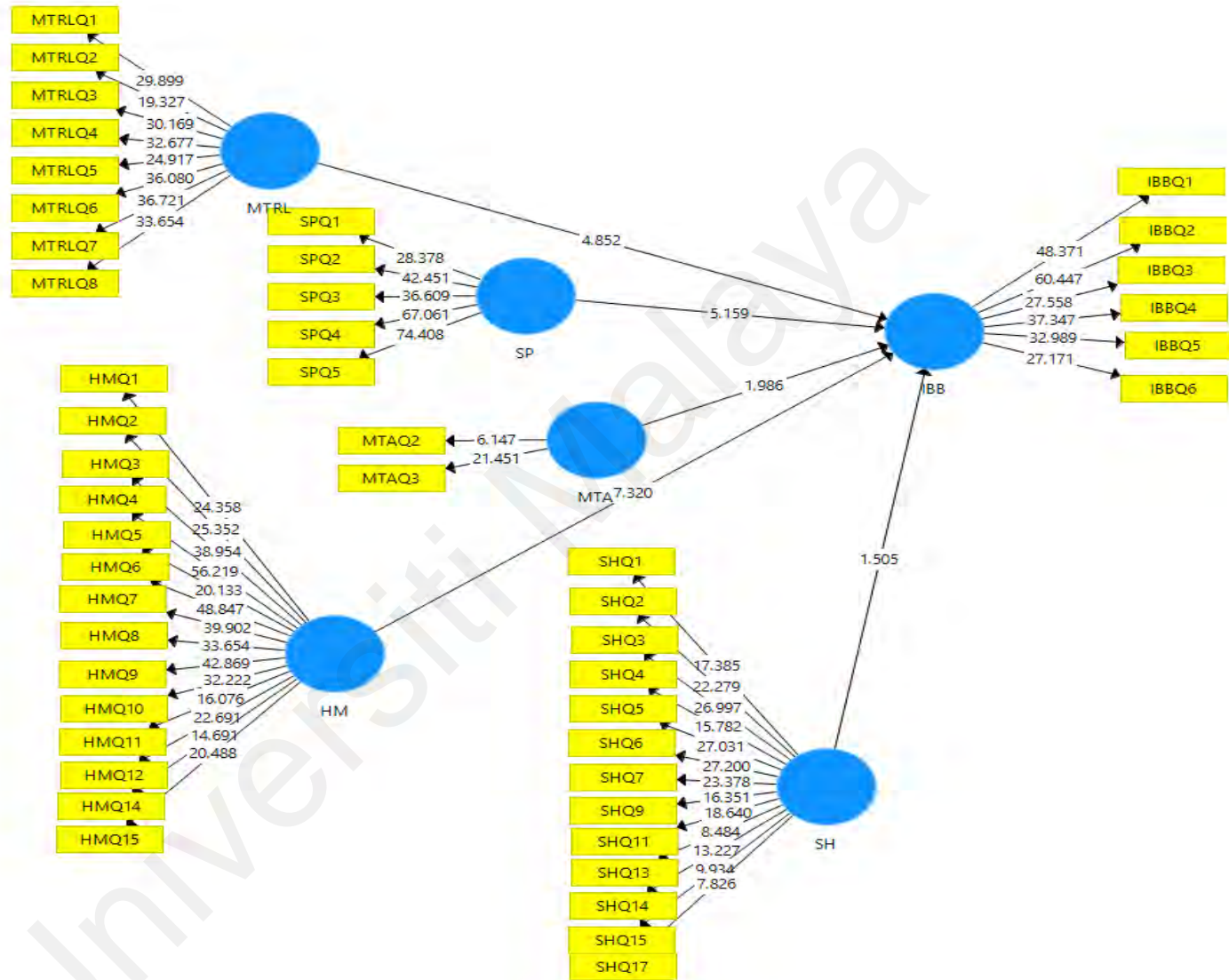**4.5.3.1   Direct Relationship between exogenous variables (IV) and endogenous variable (DV)**

Figure 4.1: *Direct Model Path Coefficient*

Figure 4.2: *Direct Model T Statistic (Bootstrapping)*
Sources: Developed for this study

Table 4.15:
Hypotheses Test (Direct Relationship)
Sources: Developed for this study

Hypothesis & Path	Beta Values	Standard Error	T Values	P Values	Significance Level
H1a:MTRL→IBB	0.186	0.038	4.852***	0.000	**Significant**
H1b:SP→IBB	0.227	0.044	5.159***	0.000	**Significant**
H1c: MTA→IBB	0.066	0.033	1.986 **	0.024	**Significant**
H1d:HM→IBB	0.323	0.044	7.320***	0.000	**Significant**
H2:SH→IBB	-0.045	0.030	1.505 *	0.066	**Significant**

Note: Significant Level: *p<0.1, **p<0.05, ***p<0.01   NS: Not Significant, S: Significant

In the structural model analysis, the researcher performs the analysis to test hypotheses 1 and 2. Figure 4.1 illustrates the path model of the structural model of a direct relationship between the independent variables (materialism, sale promotion, money and time availability, hedonic motivation, and self-*hisbah*) and the dependent variable (impulse buying behaviour). While, Table 4.15 displays the results of the structural model analysis of a direct relationship between the independent variables (materialism, sale promotion, money and time availability, hedonic motivation, and self-*hisbah*) and the dependent variable (impulse buying behaviour) in this study.

Following the structural model analysis procedure, collinearity issues were checked by examining the VIF values of all sets of predictor constructs. The results demonstrated that all VIF values are clearly below the threshold of 5 which indicated that collinearity among the predictor constructs is not a critical issue in a structural model (Hair, Ringle, & Sarstedt, 2011). Following the collinearity procedure, the researcher carried out a bootstrapping analysis to test the significant relationship between the exogenous variables and the endogenous variable.

According to Table 4.15, the bootstrapping one-tailed analysis using 5000 samples was undertaken with the result indicating that all the independent variables (materialism, sale promotion, money and time availability, hedonic motivation, and self-*hisbah*) have a significant relationship with the dependent variable (impulse buying behaviour) but with a positive and negative relationship. To identify the significant level of the one-tailed tests, the t values are required to be higher than the three levels of critical values; 1.28 (significant level = 10 %), 1.65 (significant level = 5 %), and 2.33 (significant level = 1 %) (Hair et al., 2017).

The results, therefore, indicated the following:

H1a: There is a significant positive relationship between materialism and impulse buying behaviour.

The result for hypothesis H1a shows that materialism has a significant positive relationship with impulse buying behaviour (β = 0.186, t = 4.852, p < 0.01). This result indicates that the hypothesis H1a is supported.

H1b: There is a significant positive relationship between sale promotion and impulse buying behaviour.

For this hypothesis, the result found that there is a significant positive relationship between sale promotion and impulse buying behaviour (β = 0.227, t = 5.159, p < 0.01) and therefore, this hypothesis is supported.

H1c: There is a significant positive relationship between money and time availability and impulse buying behaviour.

Regarding money and time availability, the result has a significant positive relationship between this variable with impulse buying behaviour ($\beta = 0.066$, t = 1.986, p < 0.05). Therefore, this shows that hypothesis H1c is supported.

H1d: There is a significant positive relationship between hedonic motivation and impulse buying behaviour.

For hedonic motivation, the result shows that there is a significant positive relationship between hedonic motivation and impulse buying behaviour ($\beta = 0.323$, t = 7.320, p < 0.01). Therefore, hypothesis H1d is supported.

H2: There is a significant negative relationship between self-hisbah and impulse buying behaviour.

Lastly, for the hypothesis relationship between self-*hisbah* and impulse buying behaviour, the result found there is a significant negative relationship between self-*hisbah* and impulse buying behaviour. ($\beta = -0.045$, t = 1.505, p < 0.05). As a result, hypothesis H2 is supported.

Table 4.16:
Assessment of coefficient of determination (R^2), the effect size (f^2) and the predictive relevance (Q^2) of direct relationship. Sources: Developed for this study

Construct	f square	R square	Q square
MTRL→IBB	0.042		
SP→IBB	0.051		
MTA→IBB	0.007		
HM→IBB	0.093		
SH→IBB	0.003		
IBB		**0.427**	**0.225**

Following the path coefficient assessment, the coefficient of determination (R^2), the effect size (f^2) and the predictive relevance (Q^2) was assessed. The estimation for a coefficient of determination (R^2) is to identify the amount of variance in the dependent variable constructs explained by all the independent variables. To assess the coefficient of determination (R^2), scholars have identified three levels to consider namely; R^2 values of 0.75 (substantial), 0.50 (moderate) and 0.25 (weak) (Hair et al., 2011). As depicted in Table 4.16, R^2 of this analysis is considered moderate with a coefficient value at 0.427. Meanwhile, referring to (Cohen et al. 2003), in the guideline to assess the effect size of R^2, there are three levels of effect sizes which are measured by large (0.26), medium (0.13), and small (0.02) effect size. Therefore, according to the result above, the f square (f^2) result shows that all the independent variables have an impact on the dependent variable but with notable small effect size, and with values ranging from 0.003 to 0.093. While, for the predictive relevance (Q^2), the results show the path model has the predictive relevance of the dependent variable by Q^2 value at 0.225 which is higher than zero.

4.5.3.2   Assessment of Mediating Effect of Credit Card Usage
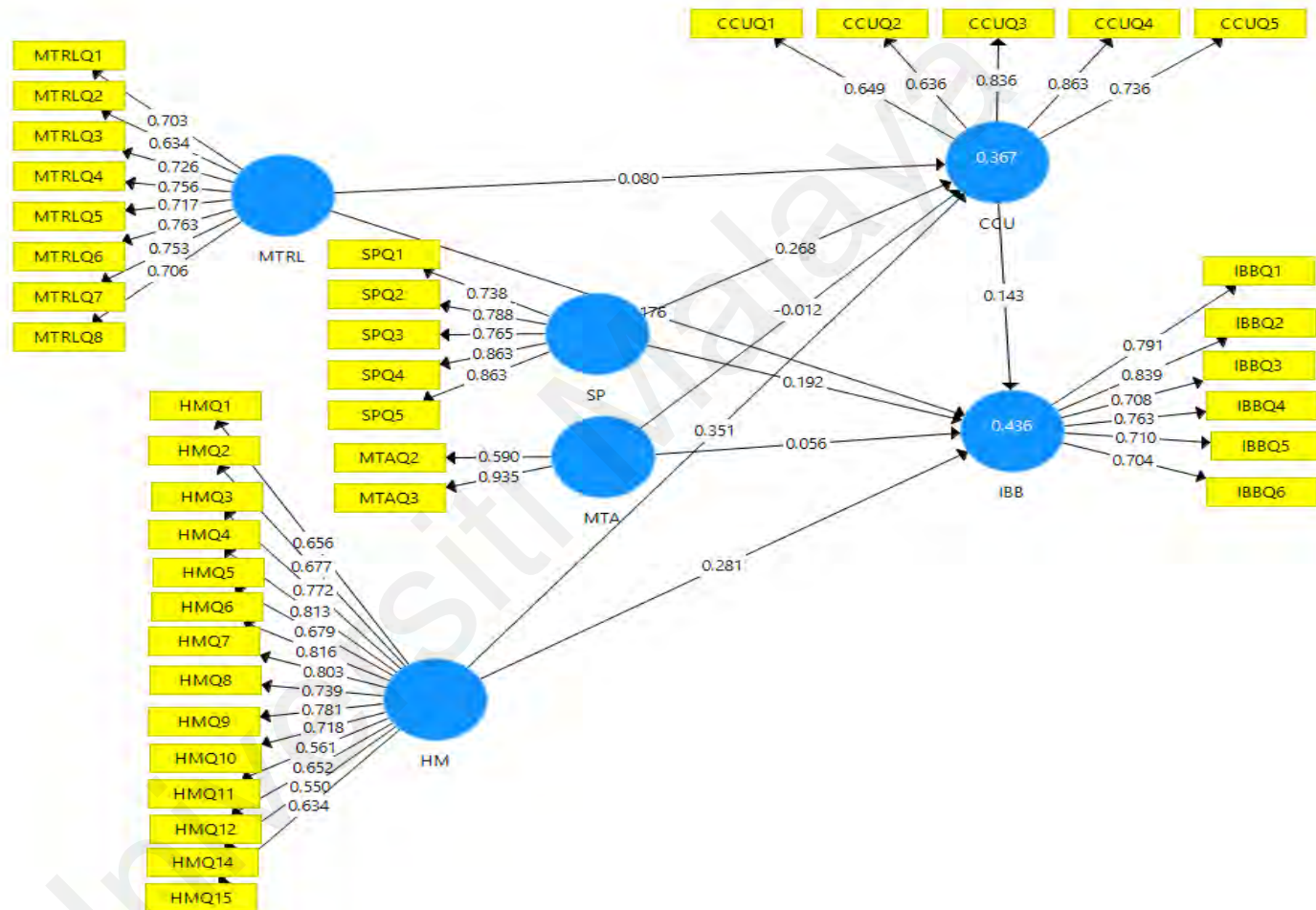
Figure 4.3: *Structural Model of Mediating Effect*
Sources: Developed for this study
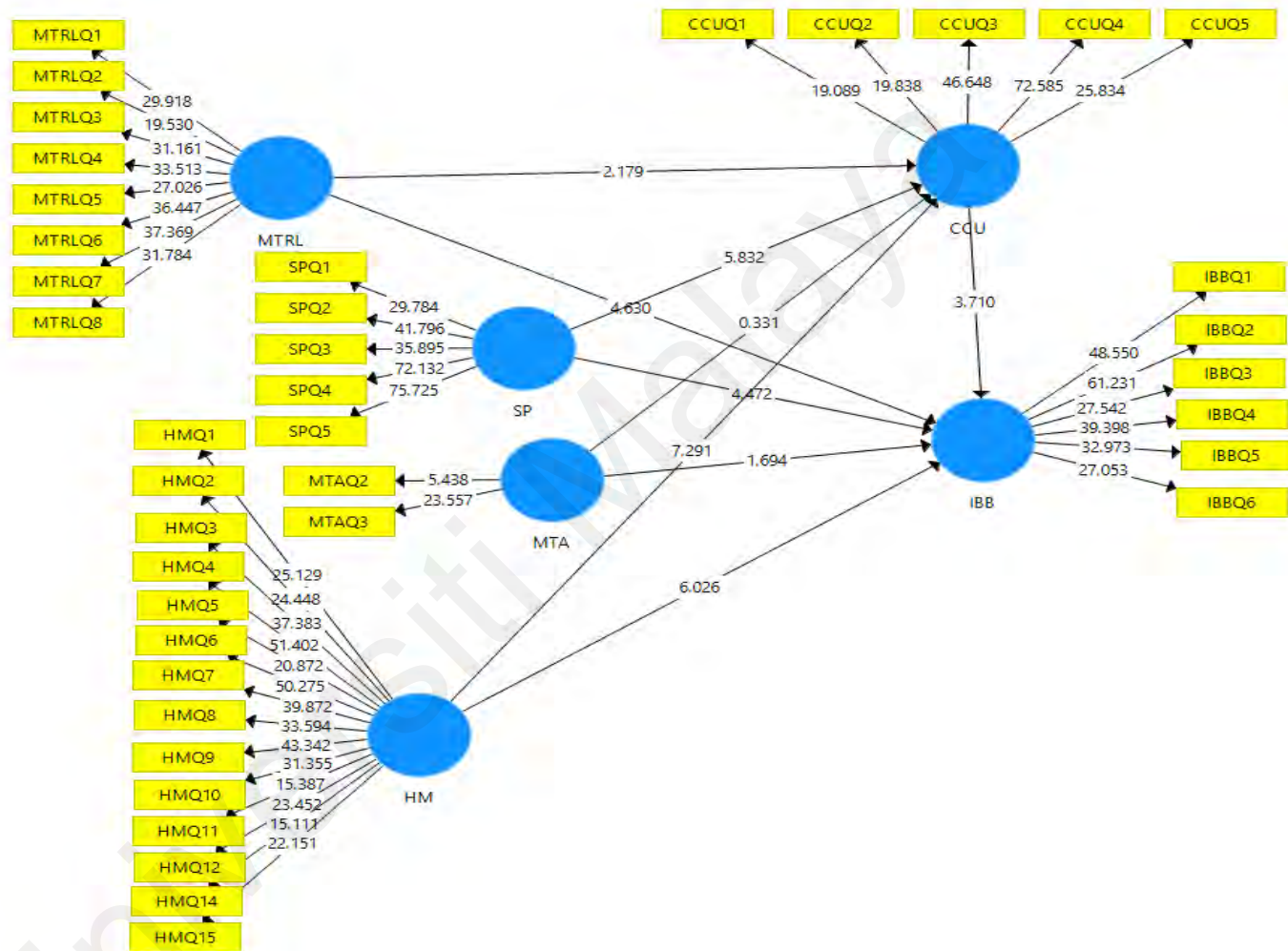
Figure 4.4*: Structural Model T Statistic (Bootstrapping)*
Sources: Developed for this study

Table 4.17:
Hypotheses Test (Mediating Effect)
Sources: Developed for this study

	Beta Values	Standard Error	T Values	P Values	Significance Level
H3: CCU→IBB	0.143	0.039	3.710***	0.000	Significant
H4A: MTRL→CCU→IBB	0.012	0.006	1.870*	0.062	**Mediating**
H4b: SP→CCU→IBB	0.038	0.012	3.108***	0.002	**Mediating**
H4c: MTA→CCU→IBB	-0.002	0.005	0.321	0.748	**Not Mediating**
H4d: HM→CCU→IBB	0.050	0.016	3.239***	0.001	**Mediating**

Note: Significant Level: *p<0.1, **p<0.05, ***p<0.01   NS: Not Significant, S: Significant

As undertaken in the structural model analysis, the mediating analysis also experiences the same procedure namely; collinearity issues were checked by examining the VIF values of all sets of predictor constructs. The result demonstrated that all VIF values are clearly below the threshold of 5 which indicated that collinearity among the predictor constructs is not a critical issue in a structural model (Hair, Ringle, & Sarstedt, 2011). Following the collinearity procedure, the researcher conducted a bootstrapping analysis to test the significant relationship between the independent variables and the mediator variable.

According to Table 4.17, the results of the bootstrapping two-tailed analysis using 5000 samples, indicated that all the independent variables (materialism, sale promotion, money and time availability, and hedonic motivation) have a significant relationship with the mediator variable (credit card usage) but with distinguishable relationship level; positive and negative relationship. To identify the significant level two-tailed tests, the t values are required to be higher than the three levels of critical value namely; 1.65 (significant level = 10 %), 1.96 (significant level = 5 %), and 2.57 (significant level = 1

%) (Hair et al., 2017). From this mediating analysis, this study answered the research question and hypotheses as described below:

H3: There is a significant positive relationship between credit card usage and impulse buying behaviour.

The finding of this study discovered that credit card usage has a significant positive relationship with impulse buying behaviour at ($\beta = 0.143$, $t = 3.710$, $p < 0.01$). It is implied that hypothesis H3 is supported.

H4a: Credit card usage mediates the relationship between materialism and impulse buying behaviour.

For mediating analysis, the credit card usage mediating the relationship between materialism and impulse buying behaviour demonstrated a significant relationship at ($\beta = 0.012$, $t = 1.870$, $p < 0.1$). The result suggests that materialist consumers use credit cards profoundly for impulsive buying. Therefore, hypothesis H4a is supported.

H4b: Credit card usage mediates the relationship between sale promotion and impulse buying behaviour.

Next, for hypothesis H4b, the result represents the mediation effect when the credit card is introduced into the relationship between sale promotion and impulse buying behaviour thereby indicating ($\beta = 0.038$, $t = 3.108$, $p < 0.01$). This finding demonstrates that the consumer would like to use a credit card and practice impulsive buying during sale promotion activities. Therefore, hypothesis H4b is supported.

H4c: Credit card usage mediates the relationship between money and time availability and impulse buying behaviour.

However, for hypothesis H4c, the results indicate that credit card usage does not mediate the relationship between money and time availability and impulse buying behaviour with (β = -0.002, t = 0.321). Therefore, this hypothesis is not supported.

H4d: Credit card usage mediates the relationship between hedonic motivation and impulse buying behaviour.

Lastly, for hypothesis H4d, this finding suggests that credit card usage mediates the relationship between hedonic motivation and impulse buying behaviour at (β = 0.050, t = 3.239, p < 0.01). This result explains the hedonic motivation of consumers with their intention to use a credit card for impulse buying. Thus, hypothesis H4d is supported.

According to the result of the mediating analysis, this study demonstrated that the variable of credit card usage mediates the relationship between three independent variables only; materialism, sale promotion, and hedonic motivation with impulse buying behaviour.

Table: 4.18:
Assessment of coefficient of determination (R²), the effect size (f²) and the predictive relevance (Q²) for mediator analysis
Sources: Developed for this study

Construct	f square	R square	Q square
CCU→IBB	0.023		
MTRL→IBB	0.038		
MTRL→CCU	0.007		
SP→IBB	0.035		
SP→CCU	0.064		
MTA→IBB	0.005		
MTA→CCU	0.000		
HM→IBB	0.066		
HM→CCU	0.101		
IBB		0.436	0.231
CCU		0.367	0.192

Following the path coefficient assessment, the coefficient of determination (R^2), the effect size (f^2) and the predictive relevance (Q^2) were assessed. It was found that R square of impulse buying behaviour (IBB) increased from 0.427 to 0.436 following the mediating effect analysis. However, according to (Cohen et al. 2003), in the guideline to assess the effect size of R^2, there are three levels of effect sizes which are measured; large (0.26), medium (0.13), and small (0.02) effect sizes. Therefore, according to the result above, the f square (f^2) result shows that all the independent variables have an impact on the dependent variable (credit card usage) but with small and medium effect size, with values ranging from 0.007 to 0.101. However, the factor of money and time availability suggested that there is no effect size on the mediator variable. While the Q square result shows that the path model has the predictive relevance of the model by the Q^2 value at 0.231 and 0.192 respectively which is higher than zero.

4.5.3.3   Assessment of Moderator Effect of Religiosity
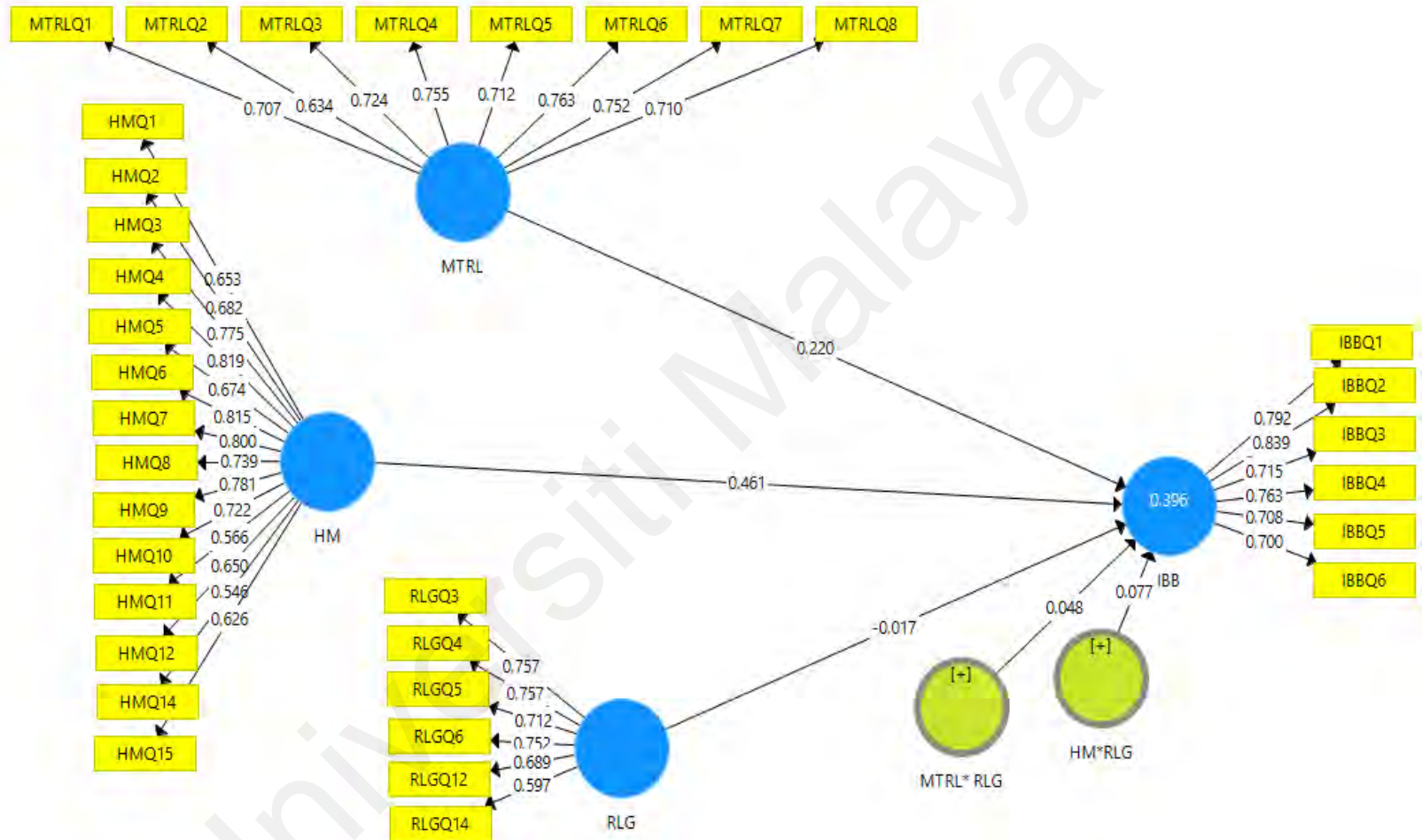
Figure 4.5: *Structural Model of Moderating Effect*
Sources: Developed for this study
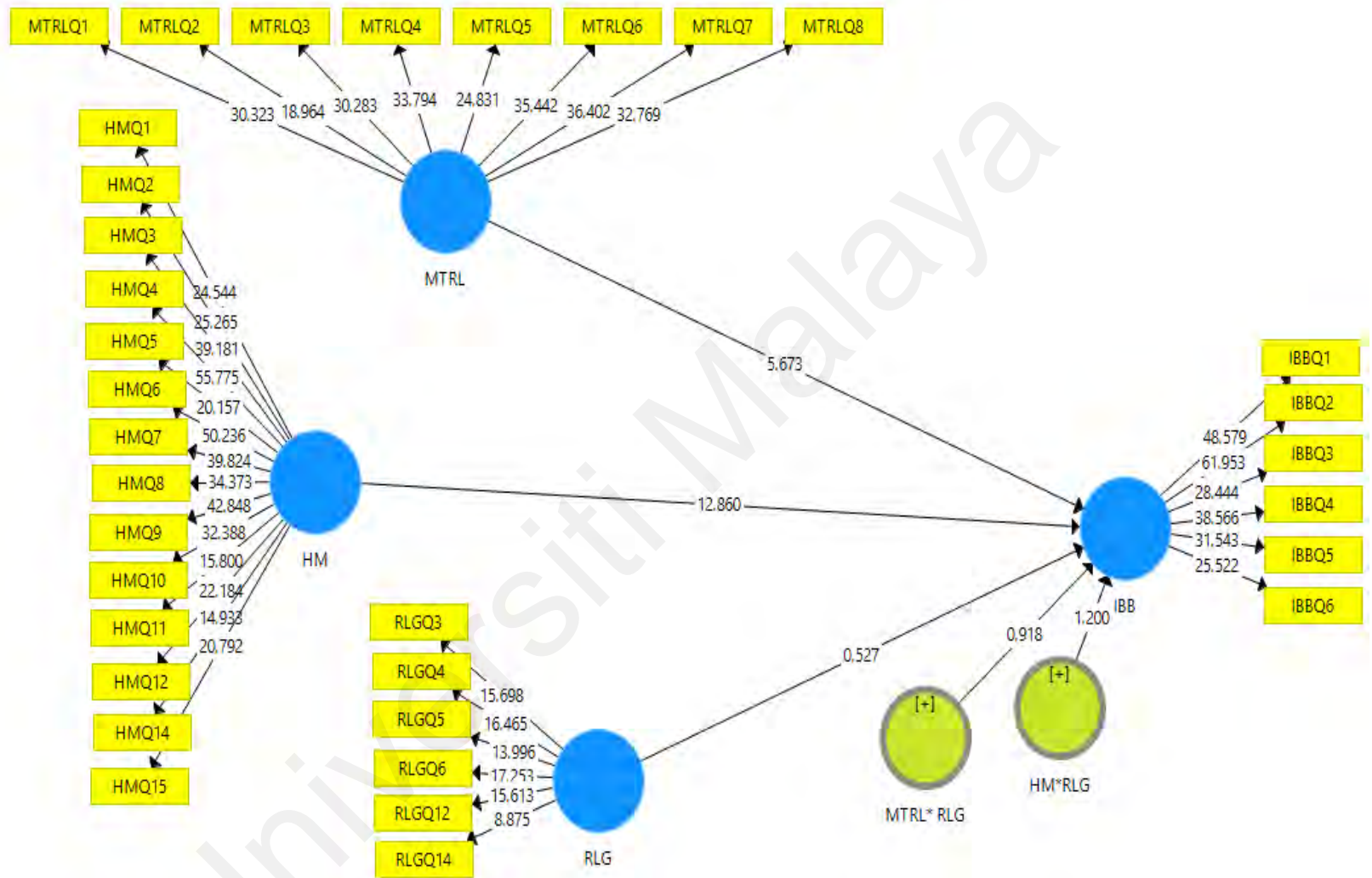
Figure 4.6: *Structural Model T Statistic (Bootstrapping)*
Sources: Developed for this study

Table 4.19:
Hypotheses Test (Moderation Effect)
Sources: Developed for this study

	Beta Values	Standard Error	T Values	P Values	Significance Level
HM→IBB	0.461	0.036	12.860***	0.000	Significant
HM*RLG→IBB	0.077	0.064	1.200	0.115	**Not Moderate**
MTRL→IBB	0.220	0.039	5.673***	0.000	Significant
MTRL*RLG→IBB	0.048	0.052	0.918	0.179	**Not Moderate**
RLG→IBB	-0.017	-0.028	0.527	0.299	Not Significant

*Note: Significant Level: *p<0.1, **p<0.05, ***p<0.01   NS: Not Significant, S: Significant*
NM: Not Moderate M: Moderate

In the moderation analysis, the researcher tested hypothesis (H5); religiosity moderates the relationship between materialism and hedonic motivation with impulse buying behaviour. Figure 4.5 and Figure 4.6 illustrate the path model of the structural model (algorithm and bootstrapping) of the moderation effect of religiosity on the relationship between materialism and hedonic motivation with impulse buying behaviour. While Table 4.19 demonstrates the result for the structural model (bootstrapping) analysis of the moderation effect of religiosity on the relationship between materialism and hedonic motivation with impulse buying behaviour.

Following the structural model analysis procedure, collinearity issues were then checked by examining the VIF values of all sets of predictor constructs. The result demonstrated that all VIF values are clearly below the threshold of 5 which indicates that collinearity among the predictor construct is not a critical issue in a structural model (Hair, Ringle, & Sarstedt, 2011). After the collinearity procedure, the researcher undertakes a bootstrapping analysis to test the significant relationship between the independent variables and the dependent variable.

According to Table 4.19, the bootstrapping one-tailed analysis using 5000 samples indicated that the independent variable (religiosity) does not have the significant relationship with the dependent variable (impulse buying behaviour) and does not moderate the relationship between materialism and impulse buying behaviour. To identify the significant level one-tailed test, the t values are required to be higher than these three levels of critical value namely; 1.28 (significant level = 10 %), 1.65 (significant level = 5 %), and 2.33 (significant level = 1 %) (Hair et al., 2017). The results for hypothesis H5a indicated that:

H5a: Religiosity moderates the relationship between materialism and impulse buying behaviour.

The result of this study indicates the variable of religiosity does not moderate the relationship between materialism and impulse buying behaviour at ($\beta = 0.048$, $t = 0.918$, $p < 0.1$). Further, this finding explains that the level of religiosity of the consumer does not moderate or influence the materialist consumer in practising impulsive buying. Therefore, this hypothesis (H5a) is not supported.

Next, for hypothesis H5b, the result indicated that:

H5b: *Religiosity moderates the relationship between hedonic motivation and impulse buying behaviour.*

The result from Table 4.19 suggests that the factor of religiosity does not moderate the relationship between hedonic motivation and impulse buying behaviour at ($\beta = 0.077$, $t = 1.200$, $p < 0.1$). Therefore, this implied that Muslim consumers ignored their religious doctrine regarding unbeneficial consumption and preferred to make impulse buying for

their hedonic motivation and satisfaction. Therefore, hypothesis H5b is not supported in this study.

Table: 4.20:
Assessment of coefficient of determination (R²) and the effect size (f²) for moderator effect analysis.
Sources: Developed for this study

Construct	F square	R square
HM→IBB	0.244	
HM*RLG→IBB	0.004	
MTRL→IBB	0.055	
MTRL*RLG→IBB	0.002	
RLG→IBB	0.000	
IBB		0.396

After the path coefficient assessment, an assessment of coefficient of determination (R²) and the effect size (f²) for moderating effect analysis is performed. The estimation of the coefficient of determination (R²) is to identify the amount of variance in the dependent variable constructs as explained by all the independent variables. To assess the coefficient of determination (R²), scholars identify three levels that need to be considered namely; R² values of 0.75 (substantial), 0.50 (moderate) and 0.25 (weak) (Hair et al., 2011) As depicted in Table 4.18, R² of this analysis is considered to be weak at 0.390 and is increased at 0.396 after adding the moderation effect.

Meanwhile, for the effect size evaluation, according to (Cohen et al. 2003), there are three levels of effect sizes used as a guideline to assess the effect size of R², which is measured by large (0.26), medium (0.13), and small (0.02) effect size. According to the result above, the f square (f²) result shows that all the independent variables have an impact on the dependent variable but with a small effect size with values ranging from 0.000 to 0.244.

4.5.3.4 Summary of Finding

The results of all hypotheses are summarised as shown in Table 4.21 below:

Table 4.21: *Summary of Findings.*

Sources: Developed for this study

Hypotheses	Statement	Finding
H1a	*There is a significant positive relationship between materialism and impulse buying behaviour.*	Significant Positive Relationship (Supported)
H1b	*There is a significant positive relationship between sale promotion and impulse buying behaviour.*	Significant Positive Relationship (Supported)
H1c	*There is a significant positive relationship between money and time availability and impulse buying behaviour.*	Significant Positive Relationship (Supported)
H1d	*There is a significant positive relationship between hedonic motivation and impulse buying behaviour.*	Significant Positive Relationship (Supported)
H2	*There is a significant negative relationship between self-hisbah and impulse buying behaviour.*	Significant Negative Relationship (Supported)
H3	*There is a significant positive relationship between credit card usage and impulse buying behaviour.*	Significant Positive Relationship (Supported)
H4a	*Credit card usage mediates the relationship between materialism and impulse buying behaviour.*	Mediates (Supported)
H4b	*Credit card mediates the relationship between sale promotion and impulse buying behaviour.*	Mediates (Supported)
H4c	*Credit card mediates the relationship between money and time availability and impulse buying behaviour.*	Not Mediates (Not Supported)
H4d	*Credit card mediates the relationship between hedonic motivation and impulse buying behaviour.*	Mediates (Supported)
H5a	*Religiosity moderates the relationship between materialism and impulse buying behaviour.*	Not Moderate (Not Supported)
H5b	*Religiosity moderate the relationship between hedonic motivation and impulse buying behaviour.*	Not Moderate (Not Supported)

4.6   CONCLUSION

This chapter examines and discusses the results obtained from the data analysis work employing PLS-SEM on the five main hypotheses namely; H1a, H1b, H1c, H1d, H2, H3, H4a, H4b, H4c, H4d, H5a, and H5b related to the study of impulse buying behaviour among Muslim credit card holders in Malaysia. The PLS-SEM analysis result indicated significant evidence towards the relationship between the independent variables (materialism, sale promotion, money and time availability, hedonic motivation, self-*hisbah*, and credit card usage) and the dependent variable (impulse buying behaviour). Materialism, sale promotion, money and time availability, hedonic motivation, and credit card usage are all found to be positive and significantly related to impulse buying behaviour. Whereas, self-*hisbah* was suggested to have a significant adverse relationship with impulse buying behaviour. Furthermore, this finding clearly demonstrates that the hypotheses H1a, H1b, H1c, H1d, H2, and H3 are supported in this study. While, for the mediating analysis, the PLS-SEM analysis determined that credit card usage mediated the relationship between materialism, sale promotion, and hedonic motivation with impulse buying behaviour, but does not mediate the relationship between money and time availability and impulse buying behaviour. Accordingly, this demonstrates that hypotheses H4a, H4b and H4d are supported and that hypotheses H4c are not supported. Also, hypotheses H5a and H5b were not supported by this study as the result indicated that the variable of religiosity does not function to moderate the relationship between materialism and hedonic motivation towards impulse buying. Further, religiosity was found to have a significant negative relationship with impulse buying behaviour which clearly demonstrates that the level of religiosity found among Muslim credit card holders does not comprehensively influence the Muslim consumer to practice impulse buying in Malaysia.

CHAPTER 5: CONCLUSION AND RECOMMENDATION

INTRODUCTION

This chapter presents the results of this study regarding the factors that influence impulse buying behaviour among Muslim credit card holders in Malaysia. The outcomes of the hypotheses are found to be directly related to both the independent and dependent variables. The independent variables include materialism, sales promotion, money and time availability, hedonic motivation, and self-*hisbah*. The dependent variable is impulse buying behaviour and religiosity is the moderating variable, and credit card usage is the mediating variable. Further, it is anticipated that the findings of this study will contribute towards the body of knowledge about Muslim credit card holders in Malaysia and impulse buying behaviour. Notably, many of the variables in this study have rarely been studied in the context of impulse buying behaviour. The findings of this study will also demonstrate the extent of understanding by Muslims of consumption from an Islamic perspective.

5.1   OVERVIEW OF FINDINGS

Unplanned buying is a fact of life, as almost everyone at some time, has been involved in making an unplanned buying decision (Iyer 1989). Specifically, impulse buying behaviour occurs when a consumer experiences three situations which he/she feels a sudden, often compelling and persistent desire to immediately buy something (Rook, 1987; Rook and Hoch, 1985; Gardner and Rook, 1988; Rook and Fisher, 1995). On the other hand, buying something spontaneously in a shopping outlet without making a decision first before entering the store can also be considered as impulse buying. Therefore, it can be concluded that impulse buying is unplanned buying, but not all unplanned buying is based on human impulse (Rook, 1987; Rook and Hoch, 1985;

Gardner and Rook, 1988; Rook and Fisher, 1995). Accordingly, this study defines impulse buying behaviour based on the previous definition. The general objective of this study is to examine the factors that influence impulse buying behaviour among Muslim credit card holders, including the roles of religiosity and credit card usage as the moderating and mediating effects.

Research by scholars on impulse buying behaviour has been carried out over several decades mainly from the marketing perspective. Previous researchers utilised a variety of variables in their studies comprising of two groups; situational variables and individual variables. Situational variables refer to a situation concerning time and space and are classified into five distinct groups; physical surrounding, social surrounding, temporal perspective, task definition, and antecedents states (Belk, 1975). While individual variables represent the characteristics which determine the habitual patterns of behaviour notably the characters of the individuals, which are distinctive when in communication with other individuals (Engel, Kollat, and Blackwell, 1969). A variety of situational variables such as money and time availability (Beatty & Elizabeth Ferrell, 1998; Kwon, and Armstrong, 2002) and Internet website quality (Wells, Parpoteeah, and Valacich, 2011) and individual variables such as self-control (Youn and Faber, 2000), hedonic motivation (Hausman, 2000), low self-esteem, and impulsiveness have been previously studied in impulse buying behaviour research.

However, limited research has investigated the situational and individual variables such as materialism, sales promotion, money and time availability, hedonic motivation, self-hisbah, credit card usage, and religiosity in the study of impulse buying behaviour adequately. Therefore, there is a need to perform research on these variables. Overall, the

findings of this study demonstrate that most of the hypotheses of this study are supported and consistent with the findings found in previous studies.

Five main hypotheses have been created to answer the research objective and questions of this study. Hypothesis (H1a) stated that there is a significant positive relationship between materialism and impulse buying behaviour that indicates whether the element of materialism influences and stimulates Muslim credit card holders to practice impulsive buying. The results suggest a significant relationship between materialism and impulse buying behaviour does in fact exist, which is supported by the hypotheses of this study. Furthermore, it is shown that the sense of centrality, happiness, and success, which manifest in the attribute of materialism brings about and stimulates the Muslim credit card holders in the practice of impulsive buying which results towards unfavourable effects such as massive debt and bankruptcy.

Next, hypothesis (H1b) on the relationship between sales promotion and impulse buying behaviour, suggests a significant positive relationship existing. This further demonstrates that Muslim credit card holders make a decision for impulsive buying during sales promotion activities. Hypotheses (H1c) and (H1d) are also supported, by indicating a significant positive relationship between money and time availability as well as hedonic motivation with impulse buying behaviour. Lastly, the direct relationship hypothesis of this study, (H2), which analyses the relationship between self-*hisbah* and impulse buying behaviour, is also supported. However, it was found that there is a significant negative relationship between self-*hisbah* and impulse buying behaviour.

Hypotheses (H3, H4, and H5), which represent the relationship of credit card usage with impulse buying behaviour, the mediating effect of credit card usage, and the

moderating effect of religiosity respectively, demonstrate a unique result. Credit card usage appears to have a significant positive relationship with impulse buying behaviour and mediates the relationship of the independent variables, namely; materialism, sales promotion, and hedonic motivation with impulse buying behaviour. However, credit card usage does not appear to function in mediating the relationship of money and time availability with impulse buying behaviour. For hypotheses H5a and H5b, the factor of religiosity does not moderate the relationship between materialism and hedonic motivation with impulse buying behaviour. Therefore, the findings in this study contribute towards the formation of a new perspective in the discipline of impulse buying behaviour resulting from these new variables.

5.1.1 MATERIALISM AND IMPULSE BUYING BEHAVIOUR

Materialism refers to the centrality of human life that brings about and creates happiness through the feeling of contentment upon the successful attainment of one's life goals and aspirations (Richins and Dawson, 1992). Typically, one will do almost anything to achieve what he/she desires during their lifetime. On the other hand, the centrality of life, as it refers to life goals, leads towards individuals obtaining their desires and demands by any means in most cases. Materialistic consumers tend to be obsessed and addicted to spending to feel content and happy with their achievements (success) (Atulkar & Kesari, 2018; Belk, 1995). Frequently, to achieve the centrality of life, happiness, and success, consumers will purchase using any means available to them without prior deliberation (Atulkar & Kesari, 2018). Sadly, this often results in unfavourable consequences such as massive debt. Accordingly, this study found that materialism has a significant relationship with impulse buying behaviour. To gain a better understanding of this finding regarding fulfilling life's desires and objectives, the consumer will notably do almost anything as mentioned to feel happy, entertained, and satisfied. Thus, it is of no surprise when

observing the increasing amount of debt and bankruptcy in Malaysia increasing each year, as reported by Bank Negara Malaysia. Indeed, this finding is consistent with previous studies that have also suggested that materialism has a positive correlation with impulse buying behaviour (Podoshen and Andrzejewski, 2012; Watson, 2003; Atulkar & Kesari, 2018).

Materialistic consumers have a favourable attitude towards debt and frequently view themselves as spenders rather than savers (Watson 2003). Further, they strive to maintain their social standing and as a symbol of success through the conspicuous shopping of consumer products (Yeniaras, 2016; Kamal, Chu, and Pedram, 2013) and use their credit cards as part of their lifestyle and for social status (Khare and Varshneya, 2015). Although, based on these previous findings, materialism has a positive relationship with impulsive buying, as the materialistic consumers who are intensely seeking social status and lavish lifestyles have a favourable attitude towards impulsive buying while disregarding the negative consequences (Atulkar & Kesari, 2018). The findings of this study and previous studies are consistent with the situation in Malaysia where the younger generation tend to practice impulsive buying to be perceived as 'cool' and to be accepted in society. This regretfully, ultimately leads to debt (Asian Institute of Finance, 2015) via hire purchases, credit cards, mortgage loans, and personal loans (Bank Negara Malaysia, 2016).

As reported by Jabatan Insolvensi (2016), hire purchase loan debt, personal loan debt and credit card debt is the main cause of the massive debt and bankruptcy issues presently amongst Malaysians. Therefore, in consideration of the above statement, it is reasonable to state that materialism has a significant relationship with impulse buying behaviour among Muslim credit card holders in Malaysia. Furthermore, this implies that

materialistic credit card holders tend to practice impulse buying using credit card services that will inevitably result in adverse effects such as high debt, bankruptcy, and social life problems, which sadly are already occurring. Accordingly, the hypothesis of this study, (H1a): materialism has a significant positive relationship with impulse buying is supported, and the research objective and questions posed in this study are successfully achieved.

5.1.2 SALES PROMOTION AND IMPULSE BUYING BEHAVIOUR

The results of this study provide further evidence that the factor of sales promotion has a significant relationship with impulse buying behaviour among Muslim credit card holders in Malaysia. This result is in parallel with previous studies (Badgaiyan and Verma, 2015; Hulten and Vanyushyn, 2014), who also suggest that the sales promotion factor is one of the signals that trigger consumers to practice impulse buying. Especially in the context of offline and online retailing through different types of sales promotion, such as instant rewards, which is more efficient in influencing strong reminder impulsive buying rather than delayed reward promotion (Liao, Shen, and Chu, 2009). This is in addition to high low pricing strategies which positively influence impulse buying behaviour accordingly. Previous research has also confirmed this fact. For example, in a study by Neslin, Henderson, and Quelch (1985), one of the potential consequences of sales promotion is accelerated buying resulting from sales promotion techniques such as price discounts, coupons, free samples, and extra product promotion, which stimulate and create a positive response from consumers to make a purchase and feel satisfied with their buying decision (Osman, Fah, and Foon, 2011; Weng and Run, 2013). Importantly, this particular situation is related to this study's finding that sales promotion has a significant correlation in buying behaviour particularly in impulse buying among Muslim credit card holders in Malaysia. Moreover, this study result is reliable according to (Badgaiyan and

Verma, 2015), as sale promotion is one of the factors that influence consumers to engage in impulsive buying, which as mentioned previously can often result in financial difficulties such as debt and regret related to the purchase. This finding correlates with the problem and issues described in this study where consumers tend to buy impulsively when there are sale promotions. Also, it is demonstrated that sales promotional activities conducted by retailers will undoubtedly influence the consumer in Malaysia to buy impulsively, thereby contributing towards household debt and financial difficulties. Accordingly, the hypothesis of this study (H1b): sales promotion has a significant positive relationship with impulse buying is supported, and the research objective and questions posed in this study have been successfully achieved.

5.1.3   MONEY AND TIME AVAILABILITY AND IMPULSE BUYING BEHAVIOUR

The variables of money and time availability have rarely been examined in impulse buying behaviour studies. However, it is interesting to study these variables by exploring the factors that contribute towards impulsive buying among Malaysian Muslim credit card holders. It is possible to correlate the factors of money and time availability with the utilisation of credit cards and impulse buying behaviour. As mentioned by Park, Iyer, and Smith (1989), the availability of money, which means having enough or having extra money that stimulates consumers to practice unplanned buying during shopping ventures. This statement is in parallel with this study's finding, where money and time availability have a significant relationship with impulse buying behaviour. Notwithstanding, it is also similar to the findings from previous studies indicating that money and time availability trigger consumers to purchase impulsively. For instance, a study about the tendency to purchase a sporting team's licensed merchandises by Kwon and Armstrong (2002) suggested that money availability is one of the essential factors

that contribute and triggers college students to purchase a sporting team's licensed merchandises impulsively.

In a separate study by Badgaiyan and Verma (2015) found that the variables of money and time availability are factors that stimulate and encourage consumers to practice impulse buying. Accordingly, the result of this study indicates that money and time availability has a significantly positive relationship with impulse buying behaviour which is in parallel with the findings from prior studies such as by (Kwon and Armstrong, 2002; Badgaiyan and Verma, 2015). Regarding the problems and issues highlighted in this study, Malaysian consumers tend to enjoy their privileges as credit card holders through utilising credit services given that the sense of money makes them feel pleasure and secure in satisfying their heart's desires. Indeed, this is proven through the statement by Ismitz Matthew (2017) and Asian Institute of Finance (2015), stating that Malaysians tend to engage in credit card and personal loans inevitably finding themselves in a 'debt trap' and practising buy-now, pay-later mentality. Therefore, it can be concluded that the availability of money and time influences credit card holders in Malaysia. Especially towards using card credit services for impulsive buying and feeling secure, given the mentality to buy now at a reasonable price, and to fulfil their desire and satisfaction by paying later and at the right time.

Notably, limited studies have explored and examined the variables described above in impulse buying behaviour studies. This study is hopeful that researchers and others will use the knowledge presented in this study to consider these variables in future impulse buying behaviour studies.

5.1.4 HEDONIC MOTIVATION AND IMPULSE BUYING BEHAVIOUR

Retailers are continuously being buffeted by the emergence of new technology given the Internet and the plethora of mobile devices. Indeed, this has changed not only the landscape but our lives and the way we interact. The proliferation of internet-based businesses and lifestyle retailing formats has threatened the brick-and-mortar concept. Moreover, this cyber-phenomenon has prompted retailers to enhance their businesses by leveraging on the benefits associated with traditional brick-and-mortar through creating a new environment to add more attraction to their businesses. For example, offering entertainment and a pleasant shopping environment in their shopping outlets, such as animatronic farm animals, singing contests, children's fun centre, and rock climbing walls in shoe stores, which create adventurous, creative, and enjoyable experiences for consumers. However, the question is, "how amusements and entertaining shopping malls will influence hedonic and impulse consumption?" According to Kim, Kim, and Kang (2003), shopping malls can cater for the needs of young teenagers by socialising with friends, enjoying the entertainment, and merely visiting the mall as it provides five main motivational factors regarding the consumer; service motivation, economic motivation, diversion motivation, social motivation, and eating-out motivation. Due to the pleasant environment, the number of consumers spending their available time at the shopping mall and browsing the isles will undoubtedly increase, as this will likely influence hedonic consumers to visit and buy when they see something impressive and cool. Indeed, this is similar to the finding by Wang, Lu, and Malhotra (2011) and Omar et al. (2014) suggesting that impulsive consumers make unplanned and unconscious buying decisions for the hedonic purpose (i.e. fun, entertainment, and luxury).

Furthermore, hedonic motivation is often discussed in the context of marketing activities regarding consumer characteristics. Moreover, in this example, consumers can

be classified as a hedonic consumer or a utilitarian consumer. Hedonic motivation influences impulse buying behaviour. A hedonic consumer will tend to purchase according to his/her desire and tends to practice unplanned buying behaviour. Indeed, they are more concerned about the feeling of fun, prestige, entertainment, and obtaining a rewarding experience. Hedonic and utilitarian concepts also apply in the selection of goods and services. For example, a consumer will tend to spend more time for hedonic goods and spend more money for utilitarian goods (Okada, 2005), but this situation is not applicable for someone who has a hedonic personality in buying behaviour. Regarding gender difference, female consumers tend to practice hedonic consumption more than men (Tifferet and Herstein, 2012).

Therefore, this study believes that hedonic consumption can be practised by anyone regardless of their gender, as hedonic personality comes from the consumer's inner strength. Also, consumers who have precious goals in their lives will purchase according to their needs, and not by their desires as their priorities are more crucial than their demands and desires. Conversely, hedonic motivation consumers tend to seek adventure, social status, and authority, which drive them towards impulsive buying.

Furthermore, hedonic consumption functions to avoid problems and stress in our everyday life (Arnold and Reynolds, 2012). This situation is identical with the previous statement (Rook, 1987) whereby, a consumer who is feeling sad will feel relieved, happy, satisfied, and wonderful when buying impulsively, as they disregard and alleviate their boredom and stress. Therefore, this study found that hedonic motivation has a significantly positive relationship with impulse buying behaviour since hedonic consumption and impulse buying are interconnected. Furthermore, this finding implies that Muslim credit card holders in Malaysia actively practice impulsive buying due to

hedonic motivational factors such as feelings of happiness, seeking pleasure, fun, entertainment, fulfilment and satisfaction. Notably, this finding is accurate as according to previous studies (Chaudhuri, 2015; Hausman, 2000; Amos, Holmes, and Keneson, 2013; Kim 2006; Arnold and Reynolds, 2003, 2012), hedonic motivation has a significant relationship with impulse buying behaviour. As previously mentioned, financial implications are associated with impulse buying behaviour due to overspending and extravagance. This situation is in parallel with the issues highlighted in this study namely; massive debt. Further, this study has found that the problem of impulse buying behaviour and the issues of massive debt resulted from hedonic motivational factors which in turn, influenced Muslim credit card holders during their purchasing activities.

5.1.5 SELF-*HISBAH* AND IMPULSE BUYING BEHAVIOUR

In marketing studies, self-*hisbah*, which is derived from Islamic teachings and values was rarely explored by researchers. Instead, researchers tended to focus on factors associated with self-control. Fundamentally, these two variables have an equivalent role and objective which is to control human desire. However, these variables are distinguishable in terms of their measurement characteristics. Internal self-*hisbah* is defined as the restriction derived from the inner self when experiencing an evaluation process into something (Makhsin, Ilias, and Noh, 2014). Further, it is a control system engaging the internal control process to ensure that *al-amr bi al-ma'rufwa al-nahyan al-munkar* (enjoining good and forbidding wrongdoing) are appropriately implemented in a Muslim's daily life to obtain well-being of the Muslim society and community.

In this study, the self-*hisbah* concept is crucial in creating and developing the awareness of Islamic consumption among Muslim consumers to avoid engaging in unbeneficial consumption activities such as impulsive buying, which can result in

massive debt, extravagance, wastefulness, gluttony, and glorification. Therefore, to avoid adverse consumption, it is essential to explore the factor of self-*hisbah* among Muslim consumers, that is, whether self-*hisbah* has a negative or positive correlation with impulse buying behaviour. Specifically, the self-*hisbah* factor is measured applying six steps; reflection practice *(muhasabah)*, promise of the heart *(musyaratah),* behaviour observation *(muraqabah),* spiritual reinforcement *(muaqabah),* purification of the soul *(muatabah)*, and the struggle of desire *(mujahadah)* (Makhsin et al. 2012; Hawwa, 1998), which results from the capability to practice self-*hisbah*. This process will result in one of two possible outcomes; success or failure. Successful self-*hisbah* reflects that one has strong *iman* and that is he/she can refrain from his/her desires, reminding him/herself of enjoining the good and forbidding wrongdoings in Islamic values and teachings. The failure of self-*hisbah* demonstrates that one has weak faith in Islam.

While self-control, which is derived from conventional thought, is defined as the capacity to replace an initial stage of response with another, such as in resisting temptation (Baumeister, 2002). In contrast to self-*hisbah*, the concept of self-control relies on three major factors; standards, monitoring, and the capacity to change. However, regarding the relationship between self-control and impulse buying behaviour, previous studies on self-control found that self-control diminishes the desire for impulsive buying (Sultan, Joireman, and Sprott, 2012) and has a negative relationship with impulse buying behaviour.

Accordingly, the central question that arises is, "how is self-*hisbah* connected to impulse buying behaviour?" Moreover, "how does self-*hisbah* play a role in the issue of impulsive buying?" "It is possible to claim that a person with financial knowledge has successfully managed their self-*hisbah*?" Having extensive financial knowledge, greater

awareness of the consequences of impulsive buying, and terrible life experiences do not always guarantee that the person will not engage in impulsive buying if their self-*hisbah* is low. This is proven in a study by Robb and Sharpe (2009) who found that someone with financial knowledge tends to have a higher credit card balance compared to someone with low financial knowledge. However, this factor is not sufficient to declare that having financial knowledge will prevent someone from impulsive buying. The reason here is that possessing extensive financial knowledge does not necessarily mean that someone has high self-*hisbah* or self-control. Importantly, self-*hisbah* is derived from one's inner strength and the level of religiosity. A person who adheres to religious teachings and values will tend to control his/her desires and will follow his/her religious commands. Accordingly, this is how this study elaborates the correlation and role of self-*hisbah* towards impulse buying behaviour. Self-*hisbah* plays a vital role in human decision making of which includes in this case, the decision to buy. For instance, someone who has low self-*hisbah* with extensive financial knowledge has the likelihood to be tempted and pay for a luxury product during a sales promotion, even though he/she is aware of the consequences of that buying decision. However, one with high self-*hisbah* will not fall victim to that promotion as he/she knows the right priorities in moderating their lifestyle. Accordingly, high self-*hisbah* consumers tend to practice and follow Islamic teachings and values as stated in the Al-Quran about Islamic consumption:

"Indeed, the wasteful are brothers of the devils, and ever has Satan been to his Lord ungrateful" (Translation Al-Quran, 12:27) and "Children of Adam! Wear your beautiful apparel at every time and place of prayer, and eat, and drink. However, do not be excessive. Verily, God does not love the wasteful" [20](Translation Al-Quran, 7:31).

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[20]Translation of Al-Quran retrieved July 29, 2017 from http://www.islam.gov.my/e-jakim/e-quran/terjemahan-al-quran

According to these verses, it is well understood that negative elements such as being lavish, wasteful, and excessive in consumption are prohibited and that Allah does not love the wasteful. Indeed, this is how self-*hisbah* controls human decision making. Therefore, it is possible to claim that self-*hisbah* has no significant relationship with impulse buying behaviour as revealed in this study. Further, a study investigating credit card selection also supported this study's finding by demonstrating that credit card holders with self-discipline tend to avoid overspending on their credit cards. Moreover, they control their spending on unbeneficial and unnecessary things because the behaviour is not recommended by their religion (Nazimah, 2011). Therefore, this finding implies that Muslim credit card holders who have strong self-*hisbah* can control themselves from temptation and avoid from engaging in impulsive buying which could result in financial difficulties such as debt and bankruptcy.

Notwithstanding, the result of this study demonstrated a reliable result as self-*hisbah* and self-control are similar regarding their intended role and function. Despite the difference in the characteristics of measurement between these variables, the reflection of these variables towards impulsive buying demonstrates a similar outcome. Accordingly, failure of self-control results in many problems such as addiction, overeating, the breakdown of a relationship, and aggression (Verplanken and Sato, 2011). Therefore, it is appropriate to assert that self-*hisbah* is the avoidance of acting on impulsive buying and that failure of self-*hisbah* triggers and stimulates Muslim credit card holders in Malaysia to spend beyond their financial means, thereby incurring debt and inevitably resulting in bankruptcy. Further, someone who can control their desire will not take the risk by purchasing an expensive goods and services. Thus, according to the finding Malaysians who drive themselves into debt obviously fail to control their self-*hisbah* and

have a low level of adherence to the religious rulings, teachings and values. Therefore, hypothesis H2 is supported in this study.

5.1.6   CREDIT CARD USAGE AND IMPULSE BUYING BEHAVIOUR

The attractiveness and ease to which one can attain a credit card coupled with impulse buying, correlate with each other. Impulsive buying combined with credit card services alleviates the need and stress of worrying when buying desired items. The process of buying is simple. Selecting the item to purchase, swiping the credit card at the cashier, receiving the goods and walking away. It is as simple as that! The credit card was developed to facilitate the needs of consumers, by avoiding the need to carry cash and making it easier to pay bills and other expenses and henceforth, there are both positive and negative consequences and reasons to own a credit card. In this contemporary world, people tend to adopt and utilise anything that makes them feel better and bring a sense of pleasure. The demand for and usage of credits has grown exponentially thereby influencing the pattern of consumerism and trade. However, the question remains on just how credit card usage is correlated with impulse buying behaviour.

Specifically, the credit card functions as the most prevalent alternative payment mechanism with transparent attributes that facilitate shopping transactions and stimulate a higher willingness to use the credit card to pay for goods and services (Soman 2003) as well as drive an urge and desire to buy impulsively (Awanis and Cui, 2014; Badgaiyan and Verma, 2015). Subsequently, credit card characteristics such as the ease of payment and less risk in terms of carrying money, further influences the consumer to utilise a credit card as their primary payment method. Due to its many benefits and functions, it is therefore not surprising that the credit card aids to stimulate the urge of a consumer to buy impulsively. Therefore, this demonstrates that through using the credit card,

241

consumers will tend to pay for non-essential items, thereby leading to impulsive buying. Furthermore, it is not surprising to observe from work performed in this study, that the credit card has a significant relationship with impulse buying behaviour. Accordingly, there have been only a few studies (Omar et al. 2014; Badgaiyan and Verma, 2015) that have explored and tested the relationship between credit card usage and impulse buying behaviour in that impulse buying behaviour is one of the key factors that influences and mediates credit card misuse. Indeed, this fact correlates with the finding in this study.

Therefore, in consideration of the above discussion, this study believes that the utilisation of the credit card by Muslim credit card holders will encourage them to spend beyond their financial means, thereby resulting in massive debt, and indirectly becoming bankrupt. This statement is supported in a recent report stating that one of the factors that have influenced the degree of debt and bankruptcy of Malaysians' directly results from credit card loan debt. Accordingly, failing to settle monthly credit card payments, also results in Malaysian credit card holders having significant debt (i.e. the debt trap) (Jabatan Insolvensi Malaysia, 2016).

5.1.7   CREDIT CARD USAGE MEDIATES MATERIALISM, SALES PROMOTION, MONEY AND TIME AVAILABILITY AND HEDONIC MOTIVATION.

Credit card usage has been found to mediate the relationship between materialism, sales promotion, and hedonic motivation with impulse buying behaviour in this study. Notably, this means that credit card usage stimulates the materialistic and hedonic consumer to practice impulsive buying. Specifically, that materialistic consumers' will tend to prefer something that makes them feel better, prestigious, prosperous, and

perceived highly by people around them. Moreover, they will do almost anything to achieve their centrality of life and create happiness through their accomplishments (Kamal, Chu, and Pedram, 2013) including using credit cards to maintain and capture social status attention (Cakarnis and D'Alessandro, 2015; Chahal, Sahi, and Rani, 2014). This is precisely how materialism is defined in this study. Therefore, this study believes that the presence and function of the credit card have brought about materialistic credit card holders in Malaysia to practice impulsive buying. Accordingly, this finding is in parallel with the previous study by Khare and Varshneya (2015), which revealed that both materialistic value and compulsive buying influence the use of credit cards. Indeed, being materialistic drives people to spend beyond their financial capabilities as highly materialistic consumers tend to consider themselves as spenders, and with a more positive attitude towards borrowing (Watson, 2003).

Regarding sales promotion and hedonic motivation variables, this study believes that credit card usage mediates the relationship of both of these variables with impulse buying behaviour. Previous studies also concluded that sales promotion has a positive correlation with impulse buying behaviour, (i.e. price discount and bonus packs always stimulate impulse buying) (Xu and Huang, 2014). Despite the limited number of studies on the correlation of sales promotion and hedonic motivation with credit card usage, previous findings of how consumers reflect on hedonic consumption and sales promotion activities support the statement in this study as mentioned above. As for how consumers reflect on sales promotion activities, a study by Li, Sun, and Wang (2007) concluded that consumers are easily attracted to a price promotion rather than an extra product promotion. Further, that price promotion at a coffee shop, for example, influences the consumer to repeat the buying activity during price promotional (Huang et al. 2014). This finding naturally supports the fact that sale promotions have a positive correlation with

impulse buying behaviour among Muslim credit card holders. Further, it is also implying that sale promotion activities carried out by retailers stimulate Muslim credit card holders in Malaysia to spend impulsively using credit card services. This is demonstrated by the way the usage of credit cards mediates the correlation between sale promotion and impulse buying behaviour among Muslim credit card holders.

Meanwhile, for hedonic consumption, those who are classified as hedonic consumers are less concerned about price and have a tendency towards something (i.e. a desire) that makes them feel pleasurable (Alba and Williams, 2013). Further, they are more concerned about luxury product brands due to the hedonic and symbolic elements accorded with that brand, and not for their function or economic value (Doss and Robinson, 2013). Therefore, it is of no surprise if the presence and visibility of the credit card in this instance mediates the hedonic motivation of credit card holders to engage in impulse buying behaviour and sales promotions using credit card payment services.

Regarding money and time availability, this study found that the credit card usage does not mediate the relationship between money and time availability and impulse buying behaviour. The results of this study tend to agree with the assumptions put forward in this study in that credit card holders will not use credit card payment services for impulse buying when experiencing both sufficient money and time. It is supported by previous study and this study finding, money and time availability have a significant positive relationship with impulse buying behaviour. Logically, it is possible to claim some credit card holders will not 'swipe' their credit card even with sufficient funds available and time during shopping activities. In addition, this statement is also supported by the previous study concerning the amount of debt among the younger generation in Malaysia. It was stated that people with insufficient money or experiencing financial

problems, (i.e. such as having low income to support household expenses and living in high-cost areas) tend to resolve their financial difficulties through debt (Hodari, Sarmidi, and Salleh 2014). Accordingly, it demonstrated people with sufficient money tend to avoid be engaged into debt compare to people with insufficient money. Therefore, this study concludes that credit card usage well function to mediate the relationship between materialism, sale promotion, and hedonic motivation on impulse buying behaviour, but does not mediate the relationship between money and time availability on impulse buying behaviour as being reliable and acceptable.

5.1.8 RELIGIOSITY MODERATES MATERIALISM AND HEDONIC MOTIVATION

Researchers previously hesitated to study religion given it is often construed as a taboo subject (i.e. one to be avoided). However, in this modern and democratic age, the aspect of religion has been examined and discussed in the marketing domain given that religion has a significant relationship and influences social and consumer behaviour (Hamza Khraim 2010). For instance, in consumer behaviour studies, researchers have conducted substantial studies concerning religiosity or religion in different contexts of study, such as purchase decision (Ilyas, Hussain, and Usman, 2011), taboo advertisement (Sabri, 2012), product involvement (Yousaf and Malik, 2013), halal cosmetics and halal labelling (Jamal and Sharifuddin, 2015; Rahman, Asrarhaghighi, and Rahman, 2015;), and consumer satisfaction (Eid and El-Gohary, 2015). While, substantial studies have indicated that religious or religiosity does in fact have a significant positive relationship in buying behaviour (Eid and El-Gohary, 2015; Mokhlis, 2009b; Jamal and Sharifuddin, 2015; Rahman, Asrarhaghighi, and Rahman, 2015). For instance, studies of consumer behaviour conducted in Malaysia indicated that religiosity plays a full mediating role and

that Muslim consumers consider Islam as their source of reference, further that consumers spend moderately as commanded by the Islamic doctrine (Alam, Mohd, and Hisham, 2011), that religiosity influences Muslim consumers on how and what kind of product to adopt (Rehman and Shabbir, 2010), that religiosity has a positive relationship towards Halal cosmetics (Rahman, Asrarhaghighi, and Rahman, 2015), and that religion and religiosity both influence the attitude towards Islamic banking (Youssef et al., 2015). Therefore, this demonstrates that some Muslim consumers will still follow and obey their religion's teachings and values. However, regarding impulse buying behaviour studies, the religiosity variable has rarely been explored by researchers. Thus, this study believes that it is essential to explore the nexus between religiosity and impulse buying behaviour. Accordingly, this study examines the influence of Islamic religiosity as the moderating effect in the relationship between materialism and hedonic motivation on impulse buying.

Further, a study also found that the religious variable is not a significant predictor to indicate that religious obligations are not a significant predictor of the consumers' intention to subscribe towards Islamic personal finance (Amin et al., 2011). Further, that it does not influence investment making decisions (Jamaludin, 2013), utilising Islamic and conventional credit cards (Idris and Jan, 2013) and having a minor influence on choosing a credit card or a bank (Ahmad et al., 2008). Indeed, it is confirmed in a study by Nazimah (2011) and Ismail et al. (2014) that religiosity has an influence on credit card selection among Islamic credit card holders but only a few consumers are concerned about the religious doctrines and values during credit card selection, and that most conventional credit card holders tend to ignore religious elements when selecting a credit card or in utilising a credit card. Accordingly, the studies mentioned that there are inconsistent findings regarding the influence of religion or religiosity in the study of consumer behaviour.

Meanwhile, the results of this study suggest that religiosity does not have a moderating effect, nor does it moderate the relationship between materialism and hedonic motivation with impulse buying behaviour. The results of this study are consistent with prior research findings; religiosity does not moderate the less religious consumer's intention to purchase conventional insurance (Souiden and Jabeur, 2015). Also, this contradicts with several previous studies finding that religiosity has a moderating effect on consumer behaviour and satisfaction (Eid and El-Gohary, 2015; Souiden and Jabeur, 2015), purchase halal-labelled products (Elseidi, 2017), and consumer pro-environmental behaviour intention (Bhuain and Sharma, 2017). Therefore, the findings in this study appear appropriate and reasonable according to the justification as below.

Firstly, the characteristics of the materialistic and hedonic consumer are most likely contradicted by religious values. The materialistic and hedonic consumers tend to ignore the spiritual elements and prefer to follow their demands and desires (Atulkar & Kesari, 2018). This consumer group is less devout in their religious beliefs and values. It is proven by previous studies (Yousaf and Malik, 2013; Mokhlis, 2009b) that highly religious consumers will tend to be less up-to-date with regards to fashion, less recreational in nature, and more concerned with price and quality, and practice less impulsive buying compared to the low religious consumer group who tend to practice impulse buying more readily. Also, it was found that advertising does readily influence highly religious consumers, but instead, they tend to make careful considerations when contemplating a buying decision. Further, a previous study by Ilter, Bayraktaroglu, and Ipek (2017) examines the correlation between religiosity and materialistic values determining that the elements of behavioural religiosity such as praying, fasting, and the element representing the necessities of religion which is obliged to Islamic rules have a negative relationship to materialism. Thus, it is not surprising to observe that the factor

of religiosity does not moderate the relationship between materialism and hedonic motivation on impulse buying behaviour, as the materialist and the hedonic consumer is someone who has low religiosity and is more concerned regarding worldly matters. Therefore, religiosity is unable to distract materialist and hedonic consumers from engaging in debt and bankruptcy as stated in the problem statement of this study.

Secondly, it is also not surprising to see that that the religiosity factor is considered to be weak to moderate in the relationship between materialism and hedonic motivation with impulse buying behaviour as this factor is deemed to be a minor factor necessary for consideration (Nazimah, 2011; Ismail et al., 2014). This is supported by a previous consumer buying behaviour study which concludes that the last factor that Muslim consumers consider before buying any foreign service or goods is in consideration of the religiosity factor (Haque, Rahman, and Yasmin, 2012). Moreover, the religious factor marginally influences the consumers' attitude towards credit card usage among banking consumers (Ismail et al. 2014), and the religious factor is less influential on conventional credit card holders in the selection of credit cards and utilisation among Malaysians (Nazimah, 2011). Therefore, this demonstrates that there are some Muslim consumers that will consider the element of religiosity in their consumption as the last point of reference. Moreover, this demonstrates that consumers do perceive and place the factor of religiosity in their lives. While previous studies suggested that highly religious consumers tend to avoid impulsive buying more than less religious consumers (Yousaf and Malik, 2013; Mokhlis and Sparks, 2007; Mokhlis, 2009b). Also, that religious belief moderates the purchase intention in Islamic and conventional insurance (Souiden and Jabeur, 2015) and consumer behaviour and satisfaction (Eid and El-Gohary, 2015). However, in this study, the results indicate that the factor of religiosity does not moderate the relationship between materialism and hedonic motivation with impulse buying

behaviour. Notwithstanding, this implies that the respondents of this study have high materialism and hedonic motivation feeling when relating to impulse buying behaviour.

Thirdly, the level of religiosity does not moderate the relationship between materialism, and hedonic motivation towards impulse buying behaviour as some respondents in this study are less religious Muslims that use both types of credit cards namely, Islamic and conventional credit cards or conventional credits card only. According to Amin (2012) in his study about Islamic credit card usage intention, the religious factor was determined to be a higher determinant of Islamic credit card usage intention in Malaysia. This demonstrated that Islamic credit card holders originate from high religious groups as compared to Muslims who utilise conventional products are more likely to have low Islamic faith (Ahmad, Rahman, Ali, et al. 2008; Souiden and Jabeur, 2015) and consider less the religious factors during credit card selection and utilisation (Nazimah, 2011).

Highly religious and less religious Muslims have different mannerisms and attitudes regarding other issues such as insurance selection (Souiden and Jabeur, 2015), bank selection (Usman et al. 2017) and new product adoption (Rehman and Shabbir, 2010). As mentioned in previous studies by Souiden and Jabeur (2015) and Usman et al. (2017), those who have high religious belief tend to choose Islamic products over conventional products. Hence, it is possible to conclude that the factor of religiosity will function well for highly religious respondents rather than for less religious respondents.

According to a previous study by Souiden and Jabeur (2015) examining the moderating effect of Islamic belief on the relationship between individual attitudes towards the intention to purchase general life insurance, concluded that Islamic belief

does not make a moderate individual with low Islamic beliefs, purchase general life insurance. Also, previous studies by Elseidi (2017) indicated that the element of religiosity moderates the intention to purchase halal-labelled products among highly religious consumers but not on less religious consumers. Also, that religiosity moderates by reducing ego-defensive feelings towards controversial advertising among highly religious consumers but not among less religious consumers (Ariffin et al. 2016). Therefore, it is reasonable to suggest that the element of religiosity does not function in producing a moderator effect as there are also less religious Muslim credit card holders included in this study, and the number of high and less religious consumers are similar. As demonstrated in the respondent's information of this study in Chapter Four, there were 330 highly religious individuals identified as Islamic credit card holders, and 305 individuals identified as less religious, Islamic and conventional credit card holders and conventional credit card holders in Malaysia. Notably, the number of Muslims who only use an Islamic credit card is higher than Muslims who use both types of credit cards.

Therefore, if there are questions that arise regarding the variable of religiosity in this study on moderating the relationship between materialism and hedonic motivation on impulse buying behaviour, given that the number of high religious respondents is higher than less religious respondents, this study would like to state that, there are also Muslims who use Islamic credit cards regardless of religious considerations (Idris and Jan, 2013). Accordingly, this demonstrates that not all Muslims using Islamic credit cards have a high adherence to their religion as stated by previous studies. Notwithstanding, it is not surprising to find that there may be some less religious Muslims who use Islamic credit cards and engage in impulse buying behaviour mainly relating to materialism and hedonic motivation feelings.

Finally, this study found the influence of another important factor, the sense of loyalty towards 'brand' among the respondents. Indeed, there is the possibility that a high religious Muslim will practice impulse buying and ignore their religious teachings and values regarding their favourite brands and goods. As stated by Dekhil, Jridi, and Farhat (2017) in their study about religiosity and the intention to boycott, they found that religiosity has a positive correlation with the intention to boycott Coca-Cola products. However, this positive correlation is reduced when the presence of the variable of loyalty among the respondents was considered. Some loyal Muslims to this brand decided to ignore their religious teachings and values and neglect to participate in the boycott group. Therefore, it can be demonstrated there are more factors that diminish the ability of religiosity to moderate the relationship between materialism and hedonic motivation on impulse buying behaviour.

Obviously, the presence of religiosity will not distract the correlation between materialism and hedonic motivation on impulse buying behaviour among Muslim credit card holders in Malaysia. This finding indicates that the element of religiosity does not moderate the relationship between materialism and hedonic motivation on impulse buying behaviour when the consumer is a less religious person. Therefore, it can be concluded, that there are some Muslims in Malaysia who are still hesitant and weak-minded to adopt and practice the Islamic consumption rule in their buying activities. Although this Islamic consumption concept has been taught and widely communicated among the Muslims in Malaysia. Although, when it comes to matters of desire, Muslims appear to fail to control their self-*hisbah* and instead, let their desires instead controls them.

Therefore, this study would like to conclude that the influence of the religiosity factor on Muslim credit card holders does not only rely on the level of the consumers' adherence to their religious teachings and values but also to what extent they understand Islamic consumption and the concept of moderation *(wasatiyyah)* in Islam. Also, if Muslims were able to understand what is precisely permissible and prohibited in Islam, they inevitably would not get involved in enormous debt situations which indirectly could drive them towards bankruptcy. As stated by Farrag and Hassan (2015) through their study about fashion clothing consumption, Muslims who have enough knowledge about Islamic teachings and values and abide by Islam law tend to practice moderate consumption as commanded by Islam. Also, if they have faith in Allah as the Almighty and strong self-*hisbah* to control their desire by concentrating more towards the hereafter, then they will understand how to manage the temptations brought about in this world.

5.2   IMPLICATIONS OF THE STUDY

The results of this study provide some theoretical and methodological implications for buying behaviour and impulse buying fields of study and practical implications for authority bodies and Muslim consumers in Malaysia.

5.2.1   Theoretical Implications

In the academic field, researchers and scholars continuously strive to probe the knowledge regarding consumerism and related topics within the marketing domain. In this study, impulse buying behaviour was investigated, examined, and discussed to enhance and extend the level of information and knowledge in consumerism in a different context of the study, thereby contributing tremendous benefits for the body of knowledge. Although previous studies on impulse buying behaviour were substantially conducted, but this study had advanced the knowledge of impulse buying behaviour by exploring

and examining the impulse buying behaviour from another perspective, namely; the religious perspective with different variables, respondents, and place. In this study, the variables of the study have major theoretical implications, and the respondents of the study, the place of the study, as well as the analysis of the study have methodological implications.

Firstly, regarding the variables of the study, this impulse buying behaviour study is different from previous studies which are the main implication of this study towards the present body of knowledge. As mentioned in Chapters One and Two regarding the pattern of impulse buying behaviour studies, the previous studies tended to examine the elements of situational variables and individual variables as the factors that contribute and stimulate impulse buying behaviour among consumers. For instance, (Badgaiyan and Verma, 2015; and Hulten and Vanyushyn, 2014) examined the factor of the situational variable in impulse buying behaviour. Subsequently, (Lins et al. 2015; Chang, Yan, and Eckman, 2014; Wells, Parpoteeah, and Valacich, 2011; Sharma, Sivakumaran, and Marshall, 2010; Beatty and Elizabeth Ferrell, 1998) started to incorporate situational variables; sales promotion, price, advertising, and store environment with individual variables such as shopping lifestyle, stress reaction, and lack of self-control as the cues that bring about impulsive buying.

Accordingly, this study also incorporates the elements of situational variables (sales promotion, and money and time availability) and individual variables (materialism, hedonic motivation, self-*hisbah*, credit card usage, and religiosity) as the primary factors that stimulate impulse buying behaviour among Muslim credit card holders in Malaysia. As described earlier, the study's variables; sales promotion, money and time availability, materialism, hedonic motivation, self-*hisbah*, credit card usage, as well as religiosity, are

the main elements that differentiate this study from previous researchers as the variables of this study which were sparsely explored and examined by researchers. For instance, few prior studies discussed the correlation between sales promotion and impulse buying, as the factors affecting the consumers' impulse buying behaviour in France and Sweden (Hulten and Vanyushyn, 2011), the retailing factor on impulse buying behaviour (Kacen, Hess, and Walker, 2012), and the role of the situational variable that influences impulsive buying behaviour (Badgaiyan and Verma, 2015). While other variables in this study, namely; money and time availability (Badgaiyan and Verma, 2015; Chang, Yan, and Eckman, 2014; Kwon and Armstrong, 2002; Beatty and Elizabeth Ferrell, 1998), hedonic motivation (Sahni, Jain, and Jain, 2014; Ozen and Engizek, 2014; Kacen, Hess, and Walker, 2012), religiosity (Mokhlis, 2009b) and credit card usage (Badgaiyan and Verma, 2015) also have been rarely studied in impulse buying behaviour research as the factors that drive impulsive buying among the consumers. Also, the variable of self-hisbah in this study was found to have an important implication in the study of impulse buying previously mentioned. This variable was more likely to be examined in another study field such as within the education sector (Makhsin, Ilias, and Noh, 2014; Makhsin et al. 2012). Lastly, a significant theoretical contribution of this study relates to the role of the variable of religiosity. As mentioned in the previous chapter, the variable of religiosity is rarely studied in impulse buying behaviour. Further, religiosity is hardly examined as the moderating factor in the study of impulse buying behaviour or any other marketing studies for that matter. Although this study found that the variable of religiosity does not moderate the relationship between materialism and hedonic motivation with impulse buying behaviour, it still contributes towards the theoretical framework in the study of impulse buying behaviour as the indicator for future research.

Therefore, it is possible to claim that this study is one of the initial studies that explores and finds the nexus between materialisme, sale promotion, money and time availability, hedonic motivation, self-hisbah, religiosity and credit card usage and impulse buying behaviour among Muslim credit card holders in Malaysia. Accordingly, this study has significant implications towards the study of impulse buying behaviour through applying the variables that are rarely considered in previous studies. Indeed, this study has embarked on a new perspective of impulse buying behaviour for future study.

5.2.2   Methodological Implications

The type of respondents, the place of study, and the analysis of the study were identified as the main factors contributing towards the methodological implications of this study. Furthermore, Muslim credit card holders were selected as the respondents to answer the questionnaire related to the study's objective and questions. Importantly, the selection of the study's respondents according to their type have also been employed in previous studies on studying impulse buying behaviour. Previously, researchers (Beatty and Elizabeth Ferrell, 1998; Rook and Fisher, 1995; Youn and Faber, 2000; Luo, 2005; Wells, Parpoteeah, and Valacich, 2011; Sultan, Joireman, and Sprott, 2012; Duarte, Raposo, and Ferraz, 2013; Burgess, Yaoyuneyong, and Gibbs, 2014; Thompson and Prendergast, 2015; Chuang, Tian, and Lin, 2015; Lucas and Koff, 2017) tended to explore and examine impulse buying behaviour among college and university students and also from among non-specific consumers (Wu and Lee, 2015; Ozer and Gultekin, 2015; Badgaiyan and Verma, 2015; Hulten and Vanyushyn, 2011; Chang, Yan, and Eckman, 2014). Several of these researchers had also conducted impulse buying behavioural studies among credit card holders. Given that credit card usage has a significant positive relationship with impulse buying (Badgaiyan and Verma, 2015), this study believes that

by examining the impulse buying behaviour of credit card holders, it will contribute and extend the current knowledge of impulse buying behaviour from a different perspective.

Furthermore, this study was conducted among Muslim respondents only, which is noticeably different from prior studies that did not focus on any specific group of consumer religions. Therefore, the different thoughts and aspects regarding impulse buying behaviour among a different group of respondents undoubtedly will result in a different outcome and will contribute new knowledge, insights and information within the study of impulse buying behaviour.

The second methodological implication of this study concerns the place or location of the study. This study involved gathering data from Muslim credit card holders in Malaysia. Since impulse buying behaviour is not a new issue in the marketing domain, a substantial number of marketing researchers globally have conducted impulsive buying studies. For instance in the USA (Watson, 2003; Lucas and Koff, 2017), United Kingdom (Xiao and Nicholson, 2011), Turkey (Ozen and Engizek, 2014), India (Khare and Varshneya, 2015; Nirmalya Bandyopadhyy, 2016; Mittal, Chawla, and Sondhi, 2016), Ireland (Dhaundiyal and Coughlan, 2016), Taiwan (Lin and Chen, 2013; Xiang et al. 2016), and Indonesia (Pradipto et al. 2016). However, only a few types of research regarding impulse buying behaviour have been conducted in Malaysia, such as the studies by (Mokhlis, 2009b; Omar et al. 2014), which explored the correlation between religiosity and impulse buying behaviour, and impulsive buying with regards to credit card misuse. However, these studies did not comprehensively discuss impulse buying behaviour. Accordingly, from the observations made in this study, this study believes that only a few prior studies in Malaysia have examined and discussed impulse buying behaviour, mainly from an Islamic perspective. Therefore, this study is one of the initial studies to examine

and discuss impulse buying behaviour among Muslim credit card holders in Malaysia. Hence, this is one of the methodological implications of this study which can be the primary reference for future impulse buying behaviour research in Malaysia.

Further, the analytical tool employed in this study has a new implication towards research methodology. The utilisation of Partial Least Square (PLS-SEM) in this study contrasts with previous studies, which have rarely conducted impulse buying behaviour study using PLS-SEM tool analysis. Previous studies were more likely to use other analysis tools such as Statistical Package Social Science (SPSS) and Structural Equation Model-AMOS (Nayebzadeh and Jalaly, 2014; Chuang, Tian, and Lin, 2015; Roberts and Manolis, 2012; Ozen and Engizek, 2014; Badgaiyan and Verma, 2015; Lin and Lin, 2013; Dhaundiyal and Coughlan, 2016; Nirmalya Bandyopadhyy, 2016; Bellini, Cardinali, and Grandi, 2017; Chang, 2017; Parboteeah, Taylor, and Barber, 2016; Vonkeman, Verhagen, and van Dolen, 2017). Therefore, conducting a study of impulse buying behaviour employing PLS-SEM analysis, compared to the methods and tools employed in other studies will provide a further contribution towards the body of knowledge in this area.

5.2.3 Practical Implications

One of the important objectives of this study is to discover and present the outcomes from work undertaken towards consumerism discipline particularly to Muslim consumers who subscribe to credit card services. It is essential to conduct this study in this period due to the way in which individuals have progressively changed in managing their lives. Overspending, massive debt, bankruptcy, and experiencing a terrible life is not unusual in our present time. People tend to ignore what they have learnt from their religious teachings, values and experiences and tend to create their own rules in life. From an Islamic perspective, Islam teaches its believers that moderation should be applied in

every aspect of life. However, what is presently occurring demonstrates that humans are forgetful of their responsibilities as vicegerents and instead, continuously practice what is contradictory to religious rules.

From the results obtained in this study, the researcher concludes that the influence of situational and individual variables such as sales promotion, money and time availability, materialism, hedonic motivation, self-*hisbah*, religiosity, and credit card usage should be given greater attention towards educating the community from practising nonbeneficial consumption activities. For instance, sales promotion, materialism, and hedonic motivation have demonstrated in this study to have a significant positive relationship with impulse buying behaviour. Therefore, the relevant authorities should consider these matters as their primary concern and develop programs to educate the public to control their buying desires, particularly during sales promotion periods. Performing proper, if not appropriate campaigns or advertisements regarding the advantages and disadvantages of financial planning is crucial as poor financial management will cause detrimental effects toward the country's economy. The stability of the economy partially depends on how well the public manages their financials and liabilities. Moreover, substantial debts and bankruptcy will ruin the country's image and reputation. Regarding massive debts and bankruptcy resulting from credit card payment services, the policymakers should refer to the findings of this study when designing practical and effective policies and decisions related to consumption activities and credit card application requirements.

Secondly, the outcomes from this study, are useful for academia. Educators can utilise the information from this study to disseminate and to educate students and the community about what is appropriate consumption, and consumption from an Islamic

perspective. There are a vast number of Muslims who are unaware of Islamic consumption and even less, who practice it. They are only concerned about *halal, haram,* and *riba* (usury) but do not consider or are knowledgeable about the risks associated with overspending, lavish spending, wastefulness, social standing and fame. Instead, they believe that overspending or unplanned spending towards something unbeneficial is only a minor fault that should be tolerated and ignored.

Lastly, this study found that the factor of religiosity does not function as a moderator effect and in fact, it has a negative relationship with impulse buying behaviour. Further, it has been suggested that the element of religion is not able to prevent consumers from practising impulsive buying. However, this may not be entirely true as it was mentioned in a previous study that consumers who have less adherence to religion tend to practice impulsive buying and are less concerned about price and the consequences of extravagance (Yousaf and Malik, 2013). This demonstrates that the public still has insufficient knowledge concerning Islamic consumption and suggests that the relevant parties such as parents, educators, and the public need to pay particular attention towards this matter. Accordingly, parents and educators should educate their children and the public about Islamic consumption. Nowadays, Muslim consumers tend to ignore Islam's commands regarding consumption and this is the main reason why negative impulse buying is still occurring among Muslim consumers. They tend to be weak-minded in avoiding their desires and believe that it is essential to possess everything in this world. Furthermore, they are not aware of the priorities in the teachings and values of Islam and how Islam looks at the *daruriyah* (necessities), *hajiyah* (needs) and *tahsiniyyah* (luxuries) matters in consumption activities.

5.3   LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

There are inherent limitations of this study that should be considered for future research. The next subchapter will discuss some of these limitations and provide recommendations for further research.

5.3.1   Limitations

The limitations of this study are beyond the researcher's ability to resolve and hence, future research is required. There are two important limitations in this study; the restriction to access the actual list of credit card holders in Malaysia, and the use of an old version of the scale measurement as an essential variable.

The first limitation that was faced by the researcher was the restricted access to the list of credit card holders and the number of credit card holders in Malaysia. Notably, these two issues caused difficulties to the researcher during the data collection process. Indeed, these are crucial issues as appropriate procedures will result in valid and reliable findings. The Payment System Act 2003 restricts the disclosure of the actual list and the number of credit card holders in Malaysia, therefore, the researcher needed to undertake data collection through non-probability sampling that utilised the purposive and snowball sampling method. Purposive and snowball sampling is a time-consuming process as the researcher had to identify the credit card holders in every state. This situation also prolonged the research timeline and resulted in additional time required to complete the research. On the other hand, as the authorities do not allow disclosure of the number of the credit card holders in Malaysia (due to privacy and confidentiality of personal details), this study relied on newspaper articles and reports to determine the number of credit card holders in Malaysia and sample size.

Secondly, as this study's independent variables were rarely examined in previous studies, there was not a sufficient nor appropriate scale to measure the variables. For instance, the measurement scale for the variables of sales promotion, as well as money and time availability contain out-dated or obsolete questions of measurement. This study, therefore, needed to utilise this scale measurement due to the limitation of time and the inability to design a new scale measurement. However, this study made some adjustments to the scale so that it corresponded to this study's content. Nevertheless, this limitation contributes towards several inconveniences and possibly effects towards the study's results. The variable of money and time availability demonstrated less correlation with impulse buying behaviour possibly due to the limitation of the respondents to comprehend the measurement scale of the questions. As money and time availability are important variables in this study, the researcher was required to use a previous measurement scale as that scale had been appropriately validated.

To summary, the limitations of this study can still be addressed in future research as the limitations described in this study were evident only after the data collection process which was at the final stage of research. Thus, a solution for this limitation should be solved in future studies.

5.3.2 Suggestions for Future Research

It is essential to undertake future research in impulse buying behaviour as there are still factors related to impulse buying behaviour that requires further examination. After conducting this study, the researcher discovered that several important points went unnoticed in previous research.

Although substantial research in impulse buying behaviour has been conducted globally, there is less concern regarding impulse buying behaviour among researchers in Malaysia. Impulse buying behaviour can occur anywhere, at any time and this study believes that Malaysians also practice this behaviour. As this study examined impulse buying behaviour among Muslim consumers in Malaysia, it is suggested that future research explores impulse buying behaviour among multiracial consumers in Malaysia due to the variety of races, cultures and religions.

To overcome the second limitation of this study, future research should test and examine a new measurement scale for sales promotion and money and time availability in impulse buying behaviour studies. These two variables may have a strong connection with impulse buying behaviour but have rarely been studied in previous research. This study believes that these two variables require new measurement scale items that can measure the correlations of sale promotion and money and time availability with impulse buying behaviour. Prior studies tended to employ and refer to measurement scale items from (Beatty and Elizabeth Ferrell, 1998) for money and time availability measurement scale items, and (Karbasivar and Yarahmadi, 2011; Badgaiyan and Verma, 2015; Youn and Faber, 2000) for sales promotion measurement items. These measurement scale items were established to represent general items to measure buying behaviour only, that is, they were not specific for impulse buying behaviour measurement. Although these measurement items are still applicable, this study believes that new measurement items are required for more valid, precise and reliable outcomes. Therefore, this study would like to propose that future research examines the correlation of sales promotion and money and time availability with impulse buying behaviour in Malaysia by developing and establishing new measurement items for both variables. This indeed will create a new path for studying impulse buying behaviour.

Further, future research should explore online impulse buying in the context of Malaysian consumers. Previous studies (Jeffrey and Hodge, 2007; Wells, Parboteeah, and Valacich, 2011; Ozen and Engizek, 2014; Chen, Su, and Widjaja, 2016) discussed and explored online impulse buying and suggested that impulse buying has a significant relationship with online buying. Since online buying has gained tremendous attention from consumers, it is essential to examine online impulse buying from different perspectives, for instance, online impulse buying among businesswomen and professional groups as limited research has been conducted in this area.

Finally, the variables of this study namely; materialism, sales promotion, money and time availability, hedonic motivation, self-*hisbah*, credit card usage, as well as religiosity have rarely been tested in impulse buying behaviour. Accordingly, future research should examine these variables in different contexts of study such as impulse buying behaviour from a service perspective. Previous studies have tended to focus on impulse buying on goods, but few studies were concerned with impulse buying on services. According to Murray and Schlacter (1990) and Sharma, Sivakumaran, and Marshall (2013), consumers had difficulties in evaluating intangible services perceiving it as high-risk. Therefore, consumers tend to practice impulse buying behaviour more during shopping for goods and less on services. This perhaps has influenced previous researchers to study impulse buying behaviour on goods and in the context of retailing only. Despite this, future research should look forward to the opportunity and possibility to examine impulse buying behaviour in the service context. This is also supported by a previous study (Sharma, Sivakumaran, and Marshall, 2013) that claimed further research is essential to investigate the role of individual and situational variables to develop a complete impulse buying conceptual framework for both goods and services. Lastly, this

study considers the fast food restaurant service and credit card payment services as possible services to be examined in the study of impulse buying behaviour.

5.4   CONCLUSION

Impulsive buying is common and a frequent behaviour among consumers, and it is not uncommon to experience unplanned buying in a person's life, having different intentions. Some consumers engage in impulsive buying intentionally and unintentionally. Impulse buying behaviour has its own advantages and disadvantages. As mentioned by previous scholars, not all unplanned buying is impulsively decided, for example, a scenario where consumers buy the items that are listed in their shopping list, although, the brand of that product is decided impulsively (Rook, 1987). Furthermore, it has been demonstrated that the meaning of impulse buying behaviour is broad and vague. However, this study's concern is on impulse buying behaviour that results in adverse effects such as bankruptcy and credit card debt.

The general objective of this study is to examine the factors that influence impulse buying behaviour among Muslim credit card holder in Malaysia as well as how the factor of religiosity and credit card usage influence Muslim credit card holder in practising impulse buying behaviour. Based on the results of this study, it is reasonable to conclude that the factors of materialism, sale promotion, money and time availability, hedonic motivation, credit card usage, as well a low self-*hisbah* drive the consumer to engage in impulse buying behaviour. In contrast, the factor of religiosity appeared not to play an effective role as a moderator as it did not moderate the correlation between materialism and hedonic motivation on impulse buying behaviour. This demonstrated that Muslims currently tend to ignore religious teachings and values when engaging in matters of desire, such as impulse buying behaviour. It can be concluded that the ability and capacity to

control desire is the central point of this issue. If Muslims strive to fight and avoid their unnecessary and inappropriate desires and being moderate in every aspect of their lives, then they will be able to avoid extravagance and lavish spending behaviour which inevitably results in financial difficulties and a miserable life by experiencing debt, bankruptcy, social relationship problems, health and mental illness. Indeed, when it comes to materialist and hedonic motivation matters, Muslim consumers tend to have a weakness in overcoming these desires. Sadly, they are concerned with satisfying their demands and desires regardless of the unfavourable outcomes and effects of that behaviour. Moreover, Muslim consumers should be concerned with the teachings of Islam regarding consumerism as stated by the theory of maqasid syariah which five preserving elements need to concern namely; preserving of faith, soul, wealth, mind, as well as offspring. Being moderate is the primary key in a Muslim's life. The behaviour of overspending, lavish spending, wastefulness, and seeking social standing and fame can drive people to experience negative consequences, of which are obviously prohibited in Islam. Therefore, as Muslims, people need to be more concerned about what Islamic teachings and values teach and always believe that being moderate in every aspect of life will provide a peaceful and blessed life. Accordingly, the main objective of this study was answered appropriately. The findings and work performed in this study will undoubtedly contribute extending the present knowledge on the study of impulse buying behaviour.

REFERENCES

Abratt, Russell, and Stephen Donald Goodey. (1990). "Unplanned Buying and In-Stores Stimuli in Supermarkets." *Managerial and Decision Economics* 11 (2): 111–121.

Abu Zaharah, Muhammad (1997), *Usul al-Fiqh,* Cairo, Dar al-Fikr al-„Arabi

Adams, J., Khan, H. T. A., Raeside, R., & White, D. (2007). *Research Methods for Graduate Business and Social Science Students*. New Delhi:*Sage Publication*.

Adams, R. (2011). The Utility of Prestige: Chinese and American Hedonic Ratings of Prestige Goods. *Journal of Global Marketing*, *24*(4), 287–304.

Adib, H., & Bassiouny, N. El. (2012). Materialism in young consumers: An investigation of family communication patterns and parental mediation practices in Egypt. *Journal of Islamic Marketing*, *3*(3), 255–282.

Agrawal, M. L., & Schmidt, M. (2003). Listening Quality of the Point of Service Personnel (PSPS) As Impulse Trigger in Serice Purchase: A Research Framework. *Journal of Service Research*, *3*(1), 30–43.

Ahmad, F., Muhammad, M. binti, & Abdullah, A. A. (2011). Religion and Spirituality in Coping with Advanced Breast Cancer: Perspectives from Malaysian Muslim Women. *Journal of Religion and Health*, *50*(1), 36–45.

Ahmad, R., Usop, H., Ismail, A., Bujang, S., & Mansor, N. N. A. (2014). *Conducting Research In Social Science and Management Studies* (Second Edition).Malaysia: RS Publishing House.

Ahmad, W. M. W., Rahman, A. A., Ali, N. A., & Seman, A. C. (2008). Religiousity and Banking Selection Criteria Among Malays in Lembah Klang. *Journal of Shariah* 16 (2): 99–130

Ahmed, A. M., & Hammarstedt, M. (2011). The effect of subtle religious representations on cooperation. *International Journal of Social Economics*, *38*(11), 900–910.

Ahmed, Z. U., Ismail, I., Sohail, M. S., Tabsh, I., & Alias, H. (2010). Malaysian consumers' credit card usage behavior. *Asia Pacific Journal of Marketing and Logistics*, *22*(4), 528–544.

AKPK. (2014). *Media Fact Sheet*. Retrieved March 20, 2016 from Mohamad Khalil Jamaldin, Head of Corporate Communication, The Credit Counselling and Debt Management Agency (AKPK), Kuala Lumpur, Malaysia

AKPK. (2017). *121,673 Guna Khidmat AKPK Tahun Lalu. Utusan Malaysia Online*, January 5. Retrieved September 11, 2017 from www.akpk.org.my

Akram, U., Hui, P., Khan, M. K., Saduzai, S. K., Akram, Z., & Bhati, M. H. (2017). The plight of humanity: Online impulse shopping in China. *Human Systems Management*, *36*(1), 73–90.

Akram, U., Hui, P., Khan, M. K., Tanveer, Y., Mehmood, K., & Ahmad, W. (2018). How website quality affects online impulse buying: moderating effects of sales promotion and credit card use. *Asia Pacific Journal of Marketing and Logistics*, 30(1), 235–256.

Al-Bukhari. (1997a). *The Translation of the Meaning of Sahih Al-Bukhari Arabic-English Vol 2*. (M. M. Khan, Ed.) (Vol 2). Saudi Arabia: Darussalam Publishers and Distributions.

Al-Bukhari. (1997b). *The Translation of the Meanings of Sahih Al-Bukhari Arabic-English Volume 3*. (M. M. Khan, Ed.) (Vol 3). Saudi Arabia: Darussalam Publisher and Distributions.

Al-Ghazali, A.H.M.B.M., 1997. A*l-Mustasfa min 'Ilmal-Usul.* 1st edition. Vol. 1. Muassasah al-Risalah, Beirut.

Al-Hyari, K., Alnsour, M., Al-Weshah, G., & Haffar, M. (2012). Religious beliefs and consumer behaviour: from loyalty to boycotts. *Journal of Islamic Marketing*, *3*(2), 155–174.

Alam, S. S., Janor, H., Zanariah, Wel, C. A. C., & Ahsan, M. N. (2012). Is Religiosity an important factor in influencing the intention to undertake Islamic home financing in Klang Valley? *World Applied Sciences Journal*, *19*(7), 1030–1041.

Alam, S. S., Mohd, R., & Hisham, B. (2011). Is religiosity an important determinant on Muslim consumer behaviour in Malaysia? *Journal of Islamic Marketing*, *2*(1), 83–96.

Alam, S. S., Rahim, R. A., Haq, M. R., & Khan, M. A. R. (2014). What Influence Credit Card Debts in Young Consumers in Malaysia. *Journal of Public Administration, Finance and Law*, (6), 106–116.

Alam, M. M., Hassan, S., & Said, J. (2015). Performance of Islamic microcredit in perspective of Maqasid Al-Shariah: A case study on Amanah Ikhtiar Malaysia. *Humanomics*, 31(4), 374–384.

Alavi, S. A., Rezaei, S., Valaei, N., & Wan Ismail, W. K. (2015). Examining shopping mall consumer decision-making styles, satisfaction and purchase intention. *The International Review of Retail, Distribution and Consumer Research*, *3969* (November), 1–32.

Alba, J. W., & Williams, E. F. (2013). Pleasure principles : A review of research on hedonic consumption. *Journal of Consumer Psychology*, *23*(1), 2–18.

Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, *5*(4), 432–443.

Alvarez, B. A., & Casielles, R. V. (2005). Consumer evaluations of sales promotion: the effect on brand choice. *European Journal of Marketing*, *39*(1/2), 54–70.

Amin, H. (2012). Patronage factors of Malaysian local customers toward Islamic credit cards. *Management Research Review*, *35*(6), 512–530.

Amin, H. (2013). Factors influencing Malaysian bank customers to choose Islamic credit cards. Empirical Evidence from the TRA Model. *Journal of Islamic Marketing*, *4*(3), 245–263.

Amin, H., Rahim Abdul Rahman, A., Laison Sondoh, S., & Magdalene Chooi Hwa, A. (2011). Determinants of customers' intention to use Islamic personal financing. *Journal of Islamic Accounting and Business Research*, *2*(1), 22–42.

Amin, H., Abdul-Rahman, A.-R., & Abdul Razak, D. (2014). Theory of Islamic consumer behaviour: An empirical study of consumer behaviour of Islamic mortgage in Malaysia. *Journal of Islamic Marketing*, *5*(2), 273–301.

Amos, C., Holmes, G. R., & Keneson, W. C. (2013). A meta-analysis of consumer impulse buying. *Journal of Retailing and Consumer Services*, *21*(2), 86–97.

Applebaum, W. (1951). Studying Customer Behavior in Retail Stores. *The Journal of Marketing*, *16*(2), 172–179.

Ariffin, S. K., Ismail, I., & Shah, K. A. M. (2016). Religiosity moderates the relationship between ego-defensive functions and attitude towards advertising. *Journal of Islamic Marketing*, *7*(1), 15–36.

Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of Retailing*, *79*(2), 77–95.

Arnold, M. J., & Reynolds, K. E. (2012). Approach and Avoidance Motivation: Investigating Hedonic Consumption in a Retail Setting. *Journal of Retailing*, *88*(3), 399–411.

Asian Institute of Finance. (2015). *Bridging the Knowledge Gap of Malaysia's Millennials*.Asian Institute of Finance (AIF)'s Report, Kuala Lumpur, Malaysia.

Atulkar, S., & Kesari, B. (2018). Role of consumer traits and situational factors on impulse buying: does gender matter? International Journal of Retail & Distribution Management, 46(4), 386–405.

Auda, J., & Khan, S. (2008). *Maqasid Al-Shariah: A Beginner's Guide*. London, United Kingdom: International Institute of Islamic Thought.

Awan, H. M., & Bukhari, K. S. (2011). Customer's criteria for selecting an Islamic bank: Evidence from Pakistan. *Journal of Islamic Marketing*, *2*(1), 14–27.

Awanis, S., & Cui, C. C. (2014). Consumer susceptibility to credit card misuse and indebtedness. *Asia Pacific Journal of Marketing and Logistics*, *26*(3), 408–429

Babbie, E. (2007). *The Practice of Social Research* (Eleventh Edition). USA: Thomson Wadsworth.

Badgaiyan, A. J., & Verma, A. (2015). Does urge to buy impulsively differ from impulsive buying behaviour? Assessing the impact of situational variables. *Journal of Retailing and Consumer Services*, *22*, 145–157.

Badgaiyan, A. J., Dixit, S., & Verma, A. (2017). If brands are people, then people are impulsive: assessing the connection between brand personality and impulsive buying behaviour. *Journal of Brand Management*, *24*(6), 622–638.

Badgaiyan, A. J., Verma, A., & Dixit, S. (2016). Impulsive buying tendency: Measuring important relationships with a new perspective and an indigenous scale. *IIMB Management Review*, *28*(4), 186–199.

Bahrainizad, M., & Rajabi, A. (2018). Consumers' perception of usability of product packaging and impulse buying: considering consumers' mood and time pressure as moderating variable. *Journal of Islamic Marketing*, *9*(2), 262–282.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing Construct Validity in Organizational Research. *Administrative Science Quarterly*, *36*(3), 421–458.

Bakar, A., Lee, R., & Hashim, N. H. (2013). Parsing religiosity, guilt, and materialism on consumer ethics. *Journal of Islamic Marketing*, *4*(3), 232–244.

Bakewell, C., & Mitchell, V.-W. (2009). Generation y female consumer decision-making styles. *Journal of Retail & Distribution Management*, *31*(2), 95–106.

Bank Negara Malaysia. (2016). *Financial Stability and Systems Report 2016*. Retrieved September 12, 2017 from http://www.bnm.gov.my/files/publication/fsps/en/2016/fs2016_book.pdf

Barbopoulos, I., & Johansson, L.-O. (2016). A multi-dimensional approach to consumer motivation: exploring economic, hedonic, and normative consumption goals. *Journal of Consumer Marketing*, *33*(1), 75–84.

Bartlett, J. E., Kotrlik, J. W., & Higgins, C. C. (2001). Organizational Research: Determining Appropriate Sample Size in Survey Research Appropriate Sample Size in Survey Research. *Information Technology, Learning and Performance Journal*, *19*(1), 43–50.

Baron, R. M., & Kenny, D. a. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182.

Baumeister, R. F. (2002). Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior. *Journal of Consumer Research*, *28*(4), 670–676.

Bearden, W. O., & Etzel, M. J. (1982). Reference Group Influence on Product and Brand Purchase Decisons. *Journal of Consumer Research*, *2*, 183–194.

Beatty, S. E., & Elizabeth Ferrell, M. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, *74*(2), 169–191.

Beavers, A. S., Lounsbury, J. W., Richards, J. K., Huck, S. W., Skolits, G. J., & Esquivel, S. L. (2013). Practical considerations for using exploratory factor analysis in educational research. *Practical Assessment, Research & Evaluation*, *18*(6), 1–13.

Belk, R. W. (1984). Three Scales to Measure Constructs Related to Materialism: Reliability, Validity, and Relationships to Measures of Happiness. *Advances in Consumer Research*, *11*, 291–297.

Belk, R. W. (1975). Situational Variables and Consumer Behavior. *Journal of Consumer Research*, *2*(3), 157–164.

Belk, R. W. (1985). Materialism: Trait Aspects of Living in the Material World. *Journal of Consumer Research*, *12*(3), 265-280.

Belk, R. W. (1995). Collecting as Luxury Consumption: Effects on Individuals and Households. *Journal of Economic Psychology*, *16*, 73–84.

Bellini, S., Cardinali, M. G., & Grandi, B. (2017). A structural equation model of impulse buying behaviour in grocery retailing. *Journal of Retailing and Consumer Services*, *36* (July 2016), 164–171.

Bhuian, S., & Sharma, S. K. (2017). Predicting consumer pro-environmental behavioral intention. *Review of International Business and Strategy*, *27*(3), 352–368.

Blackwell, R. D., Miniard, P. W., Engel, J. F., Ching, P. Di, Yasin, N. M., & Hood, W. J. (2012). *Consumer Behavior*. (Y. Liping, Editor.). Singapore: Cengage Learning Asia Pte Ltd.

Blaikie, N. (2003). *Analyzing Quantitative Data From Description to Explanation* (First Edition). London: Sage Publication.

Blankson, C., Paswan, A., & Boakye, K. G. (2012). College students' consumption of credit cards. *International Journal of Bank Marketing*, *30*(7), 567–585.

Booms, B. & Bitner, M. J. (1981). Marketing Strategies and Organizational Structures for Service Firms. Marketing of Services, James H. Donnelly and William R. George, eds. Chicago: *American Marketing Association*, 47-51.

Bossuyt, S., Vermeir, I., Slabbinck, H., De Bock, T., & Van Kenhove, P. (2017). The compelling urge to misbehave: Do impulse purchases instigate unethical consumer behavior? *Journal of Economic Psychology*, *58*, 60–76.

Bray, J. P. (2009). *Consumer Behaviour Theory: Approaches and Models*. *Faculty of Management*. United Kingdom.

Brici, N., Hodkinson, C., & Mort, G. S. (2013). Young Consumers Conceptual differences between adolescent and adult impulse buyers. *Young Consumers*, *14*(2), 258–279.

Bryman, A., & Bell, E. (2007). *Business Research Method* (Second Edition). New York: Oxford University Press.

Bui, M., & Kemp, E. (2013). E-tail emotion regulation: examining online hedonic product purchases. *International Journal of Retail & Distribution Management*, *41*(2), 155–170.

Burgess, B., Yaoyuneyong, G., & Gibbs, S. (2014). Gender, Self-construal and Impulse Buying Behavior of Young Thai Consumers. *Asian Journal of Business Research*, *4*(1), 1–15

Burrell, G., & Morgan, G. (2016). *Sociological Paradigms and Organisational Analysis.* Routledge.

Cakarnis, J., & D'Alessandro, S. P. (2015). Does knowing overcome wanting? The impact of consumer knowledge and materialism upon credit card selection with young consumers. *Young Consumers*, *16*(1), 50–70.

Cardoso, P. R., & Pinto, S. C. (2010). Hedonic and utilitarian shopping motivations among Portuguese young adult consumers. *International Journal of Retail & Distribution Management*, *38*(7), 538–558.

Cartwright, R. F., & Opree, S. J. (2016). All that glitters is not gold: do materialistic cues in advertising yield resistance? *Young Consumers*, *17*(2), 183–196.

Cengiz, H. (2017). Effect of the need for popularity on purchase decision involvement and impulse-buying behavior concerning fashion clothing. *Journal of Global Fashion Marketing*, *8*(2), 113–124.

Central Bank of Malaysia. (2012). *Financial Stability and Payment System Report*. Retrieved from http://www.bnm.gov.my/index.php?ch=en_publication&pg=en_fspr&ac=7&lang=en

Central Bank of Malaysia. (2016). *Annual Report 2016*. Malaysia.

Central Bank of Malaysia. (2017). Annual Report 2016. Malaysia.

Chahal, H., Sahi, G. K., & Rani, A. (2014). Moderating role of perceived risk in credit card usage and experience link. *Journal of Indian Business Research*, *6*(4), 286–308

Chan, T. K. H., Cheung, C. M. K., & Lee, Z. W. Y. (2017). The state of online impulse-buying research: A literature analysis. Information and Management, 54(2), 204–217.

Chang, H. J., Eckman, M., & Yan, R. N. (2011). Application of the stimulus-organism-response model to the retail environment: The role of hedonic motivation in impulse buying behavior. *International Review of Retail, Distribution and Consumer Research*, *21*(3), 233–249.

Chang, H. J., Yan, R.-N., & Eckman, M. (2014). Moderating effects of situational characteristics on impulse buying. *International Journal of Retail & Distribution Management*, *42*(4), 298–314.

Chang, Y. (2017). The influence of media multitasking on the impulse to buy: A moderated mediation model. *Computers in Human Behavior*, *70*, 60–66.

Charseted, P. (2016). Role of religious beliefs in bloood donation behavior amog the youngester in Iran: A theory of planned behavior perspective. *Journal of Islamic Marketing*, *7*(3), 250–263.

Chaudhuri, S. (2015). A Study on the Impact of Hedonic Shopping Value on Impulse Buying Among Consumers in Kolkata. *Journal of Arts, Science, & Commerce*, *159160*(2), 159–166.

Chen, C. C., & Yao, J. Y. (2018). What drives impulse buying behaviors in a mobile auction? The perspective of the Stimulus-Organism-Response model. *Telematics and Informatics*, 35(5), 1249–1262

Chen, J. V., Su, B. C., & Widjaja, A. E. (2016). Facebook C2C social commerce: A study of online impulse buying. *Decision Support Systems*, *83*, 57–69.

273

Chen, S.F. S., Monroe, K. B., & Lou, Y. C. (1998). The effects of framing price promotion messages on consumers' perceptions and purchase intentions. *Journal of Retailing*, *74*(3), 353–372.

Chen, W. C., & Fiore, A. M. (2017). Factors affecting Taiwanese consumers' responses toward pop-up retail. *Asia Pacific Journa of Marketing and Logistics*, *29*(2), 370–392.

Chen, Y. F., & Wang, R. Y. (2015). Are human rational? Exploring factors influencing impulse buying intention and continuous buying intention. *Journal of Consumer Behaviour*, *15*, 186–197.

Chiang, H.-K., & Liao, Y.-W. (2004). An agent-based framework for impulse-induced mobile shopping. In *The Fourth International Conference on Computer and Information Technology, 2004. CIT '04.* (pp. 1–4).

Chin, W. W., Gopal, A., Salisbury, W. D., & David, W. (1997). Faithfulness of Appropriation Advancing Structuration : to Measure the The of Adaptive of a Scale Development Theory of Appropriation. *Information Systems Research*, *8*(4), 342–367.

Chuang, C.-L., Tian, H.-L., & Lin, R.-H. (2015). Integrating Certainty Effect and Noninteractive Social Influence Into Impulse Buying. *Social Behavior and Personality: An International Journal*, *43*(5), 777–793.

Chung, N., Song, H. G., & Lee, H. (2017). Consumers' impulsive buying behavior of restaurant products in social commerce. *International Journal of Contemporary Hospitality Management,* 29(2), 709–731.

Churchill, G. A. (1979). A Paradim for Developing Better Measures of for Constructs. *Journal of Marketing Research*, *16*(1), 64–73.

Churchill, G. A., & Iacobucci, D. (2010). *Marketing Research: Methodological Foundations* (Tenth Edition). USA: South Western Cengage Learning.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, *7*(3), 309–319.

Clover, V. T. (1950). Relative Importance of Impulse Buying in Retail Stores. *Journal of Marketing*, *15*(1), 66–70.

Cochran, W. G. (1977). *Sampling Techniques* (Third Edition). USA: John Wiley & Sons.

Cohen, J. (1977). *Statistical Power Analysis for the Behavioral Sciences.* (Revised Edition, Vol. 73). USA: Academic Press, Inc.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. (2003). *Applied Multiple Regression / Correlation Analysis for the Behavioral Sciences* (Third Edition). London: Lawrence Erlbaum Associates Publishers.

Cook, S. C., & Yurchisin, J. (2017). Fast fashion environments: consumer's heaven or retailer's nightmare? *International Journal of Retail & Distribution Management*, *45*(2), 143–157.

Cooper, D. R., & Schindler, P. S. (2014). Business Research Method (Twelfth Edion). United States: McGraw-Hill Irwin.

Costello, A. B., & Osbourne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment*, *Research and Evaluation, 10(7), 1–9.*

Cotton, B. C., & Babb, E. M. (1978). Response to Promotional Deals. *Journal of Marketing*, *42*(3), 109–113.

Creswell, J. W. (2003). *Research design Qualitative quantitative and mixed methods approaches* (Second Edition). USA: Sage Publication.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (Third Edition). USA: Sage Publication.

Creswell, J. W. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Forth Edition). USA: Sage Publication.

Croucher, S. (2011). Muslim and Christian conflict styles in Western Europe. *International Journal of Conflict Management*, *22*(1), 60–74.

D'Astous, A., & Landreville, V. (2003). An experimental investigation of factors affecting consumers' perceptions of sales promotions. *European Journal of Marketing*, *37*(11/12), 1746–1761.

Dali, N. R. S. M, Yousafzai, S., & Hamid, H. A. (2015). Credit cards preferences of islamic and conventional credit card. *Journal of Islamic Marketing*, *6*(1), 72–94.

Dali, N. R. S. M. (2014). *Islamic Credit Card Users' Satisfaction : A Comparative Study*. Unpublished Doctoral Theses. Cardiff University United Kingdom.

Day, N. E., & Hudson, D. (2011). US small company leaders' religious motivation and other-directed organizational values. *International Journal of Entrepreneurial Behaviour & Research*, *17*(4), 361–379.

Dekhil, F., Jridi, H., & Farhat, H. (2017). Effect of religiosity on the decision to participate in a boycott: The moderating effect of brand loyalty-the case of Coca -Cola. *Journal of Islamic Marketing*, *8*(2), 309–328.

Delener, N. (1990). The Effects of Religious Factors on Perceived Risk in Durable Goods Purchase Decisions. *Journal of Consumer Marketing*, *7*(3), 27–38.

Demangeot, C., & Broderick, A. J. (2010). Consumer Perceptions of Online Shopping Environments. *Psychology & Marketing*, *30*(6), 461–469.

Devlin, J. F., Worthington, S., & Gerrard, P. (2007). An analysis of main and subsidiary credit card holding and spending. *International Journal of Bank Marketing*, *25*(2), 89–101.

Dhaundiyal, M., & Coughlan, J. (2016). Investigating the effects of shyness and socialibility on consumer impulse buying tendencies: The moderating effect of age and gender. *International Journal of Retail*, *44*(9), 923–939.

Ding, C. G., & Tseng, T. H. (2015). On the relationships among brand experience, hedonic emotions, and brand equity. *European Journal of Marketing*, *49*(7/8), 994–1015.

Dittmar, H. (2004). Understanding and Diagnosing Compulsive Buying. In R. H. Coombs (Ed.), *Addictive disorders: a practical handbook* (p. 411). New York: Wiley.

Doss, F., & Robinson, T. (2013). Luxury perceptions: Luxury brand vs counterfeit for young US female consumers. *Journal of Fashion Marketing and Management*, *17*(4), 424–439.

Duarte, P., Raposo, M., & Ferraz, M. (2013). Drivers of snack foods impulse buying behaviour among young consumers. *British Food Journal*, *115*(9), 1233–1254.

Duh, H. (2015). Testing three materialism life-course theories in South Africa. *International Journal of Emerging Markets*, *10*(4), 747–764.

Dusuki, A. W., & Abozaid, A. (2007). A Critical Appraisal On The Challenges Of Realizing Maqaeid Al-Shar¡Cah In Islamic Banking And Finance. *Economics and Management*, *2*(2), 143–165.

Eid, R., & El-Gohary, H. (2015). The role of Islamic religiosity on the relationship between perceived value and tourist satisfaction. *Tourism Management*, *46*, 477–488.

Ek Styven, M., Foster, T., & Wallstrom, A. (2017). Impulse buying tendencies among online shoppers in Sweden. Journal of Research in Interactive Marketing, 11(4), 416–431.

Elangkovan, K., Razman, A., & Abdul, B. (2013). Bankruptcy : A Natural Phenomena Being Attacked On Malaysians '. *International Journal of Humanities and Management Sciences*, *1*(1), 74–76.

Elseidi, R. I. (2016). Determinants of halal purchasing intentions : Evidences from UK. *Journal of Islamic Marketing*, 9(1), 167-190

Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1995). *Consumer Behavior* (Eight Edition). United State of America: The Dryden Press, Harcourt Brace College Publishers.

Engel, J. F., Kollat, D. T., & Blackwell, R. D. (1969). Personality Measures and Market Segmentation: Evidence favors interaction view. *Business Horizons*, *12*(3), 61–70.

Essoo, N., & Dibb, S. (2004). Religious Influences on Shopping Behavior: An Exploratory Study. *Journal of Marketing Management*, *20*, 683–712.

Fabrigar, L., Wegener, D., MacCallum, R., & Strahan, E. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Pyschological Methods*, *4*(3), 272–290
.

Falahat, M., Migin, M. W., Chuan, C. S., & Kai, S. B. (2017). Determinants of consumer impulse buying behaviour in context of footwear industry. *Advanced Science Letters*, *23*(4), 3068–3070.

Farrag, D. A., & Hassan, M. (2015). The influence of religiosity of Egyptian Muslim youths' attitude towards fashion. *Journal of Islamic Marketing*, *6*(1), 95–108.

Floh, A., & Madlberger, M. (2013). The role of atmospheric cues in online impulse-buying behavior. *Electronic Commerce Research and Applications*, *12*(6), 425–439.

Foong, H. F., Hamid, T. A., Ibrahim, R., & Haron, S. A. (2017). Moderating effect of intrinsic religiosity on the relationship between depression and cognitive function among community-dwelling older adults. *Aging & Mental Health*, *7863*(January), 1–6.

Foroughi, A., Buang, N. A., & Sadeghi, R. H. M. (2012). Exploring the Influnce of Situational variables (Money and Time Avialable) on Impulse Buying Behaviour among Different Etthics. *International Journal of Fundamental Psychology & Soacial Science*, *2*(2), 41–44.

Freud, S. (1961). *"Beyond the Pleasure Principle."* (J. Strachey, Editor.) USA: Liveright Publishing Corporation.

Gardner, M. P., & Rook, D. W. (1988). Effects of Impulse Purchases on Consumers' Affective States. *Advances in Consumer Research*, *15*, 127–130.

Gelbrich, K., & Sattler, B. (2014). Anxiety , crowding , and time pressure in public self-service technology acceptance. *Journal of Service Marketing*, *28*(1), 82–94

Ghani, B. A., Harjin, A. A., & Ghani, S. A. (2008). Konsep Penggunaan dari Perspektif Ekonomi Islam. In *Seminar Keusahawanan Islam II Peringkat Kebangsaan* (pp. 1–36). Kuala Lumpur, Malaysia: University of Malaya.

Ghani, U., & Jan, F. A. (2011). An Exploratory Study of the Impulse Buying Behaviour of Urban Consumers in Peshawar. *Business*, *1*, 157–159.

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge Management Capabilities: An Organizational Capabilities Perspective. *Journal of Management Information Systems*, *18*(1), 185–214.

Goldsmith, R. E., Flynn, L. R., & Clark, R. A. (2012). Materialistic, brand engaged and status consuming consumers and clothing behaviors. *Journal of Fashion Marketing and Management: An International Journal*, *16*(1), 102–119.

278

Gong, Y., Hou, W., Zhang, Q., & Tian, S. (2018). Discounts or gifts? Not just to save money. *Journal of Contemporary Marketing Science*, 1–24.

Guadagnoli, E., & Velicer, W. F. (1988). Relation to sample size to the stability of component patterns. *Psychological Bulletin*, *103*(2), 265–275.

Gudergan, S. P., Ringle, C. M., Wende, S., & Will, A. (2008). Confirmatory tetrad analysis in PLS path modeling. *Journal of Business Research*, *61*(12), 1238–1249.

Haenlein, M., & Kaplan, A. M. (2004). A Beginner's Guide to Partial Least Squares Analysis. *Understanding Statistics*, *3*(4), 283–297.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis* (Seventh Edition). USA: Pearson.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *Partial least squares structural equation modeling (PLS-SEM)*. USA: SAGE Publication.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *The Journal of Marketing Theory and Practice*, *19*(2), 139–152.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). The Use of Partial Least Squares (PLS) to Address Marketing Management Topics: From the Special Issue Guest Editors . *Journal of Marketing Theory and Practice*, *18*(2), 135–138.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, *40*(3), 414–433.

Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer On Partial Least Squares Structural Equation Modeling (PLS-SEM)* (Second Edition). USA: SAGE Publication,Inc.

Hamza Khraim. (2010). Measuring Rligiosity in Consumer Research from an Islami Perspective. *Journal of Economic & Administrative Science*, *26*(1), 52–78.

Hanapi, M. S. (2014). The Wasatiyyah (Moderation) Concept in Islamic Epistemology : A Case Study of its Implementation in Malaysia School of Social Sciences, *4*(9), 51–62.

Hanks, L., & Mattila, A. S. (2012). Utilitarian Consumer Attitudes Categorization: the Case of Spas and Salons. *Managing Leisure*, *17*(1), 47–53.

Haq, M. A., Khan, N. R., & Ghouri, A. M. (2014). Measuring the Mediating Impact of Hedonic Consumption on Fashion Involvement and Impulse Buying Behavior. *Indian Journal of Commerce and Management Studies*, *V*(3), 50–58.

Haque, A., Rahman, S., & Yasmin, F. (2012). Exploring the Relationship between Religiosity , Ethnocentrism and Corporate Image : Young Muslim Consumers Perspective. *Journal of Business and Policy Research*, *7*(1), 60–71.

Hardesty, D. M., & Bearden, W. O. (2003). Consumer evaluations of different promotion types and price presentations: the moderating role of promotional benefit level. *Journal of Retailing*, *79*(1), 17–25.

Hartley, S. W., & Cross, J. (1988). How Sales Promotion Can Work for and Against You. *Journal of Consumer Marketing*, *5*(3), 35–42.

Hashim, B. S., & Syazana, I. (2018). AKPK – Advancing Prudent Financial Behaviour.Bank Negara Malaysia

Hassan, S. K., & Ahmad, S. (2005). *Ekonomi Islam: Dasar dan Amalan* (Second Edition). Kuala Lumpur, Malaysia: Dewan Bahasa & Pustaka.

Hausman, A. (2000). A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing*, *17*(5), 403–426.

Hawkins, D. I., & Mothersbaugh, D. L. (2010). *Consumer Behavior: Building Marketing Strategy* (Eleventh Edition). USA: McGraw-Hill Irwin.

Hawwa, S. (1998). *Intisari Ihya' Ulumuddin al-Ghazali Mensucikan Jiwa: Konsep Tazkiyatun -nafs Terpadu*.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135.

Hill, P. C., Pargament, K. I., Ralph W. Hood, J., Mccullough, M. E., Swyers, J. P., Larson, D. B., & Zinnbauer, B. J. (2000). Conceptualizing Religion and Spirituality :Points of Commonality , Points of Departure. *Journal for the Theory of Social Behaviour*, 51–77

Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic Consumption : Emerging Concepts , Methods and Propositions. *Journal of Marketing*, *46*(3), 92–101.

Hodari, A. B., Sarmidi, T., & Salleh, N. H. M. (2014). Hutang dan Golongan Muda di Malaysia: Satu Kajian Awal. In *PERKEM* 9, 833–844.

Hoetoro, A. (2007). *Ekonomi Islam: Pengantar Analisis Kesejarahan dan Metodologi*. Indonesia: Badan Penerbit Fakultas Ekonomi Universitas Brawijaya.

Howard, J. A. (1994). *Buyer Behavior in Marketing Strategy*. Englewood Cliffs : Prentice Hall.

Howard, J. A., & Sheth, J. N. (1969). *The Theory of Buyer Behavior*. New York.London.Sydney.Toronto: John Wiley & Sons.

Howard, J. A., & Sheth, J. N. (1970). The Theory of Buyer Behavior. *Journal of the American Statistical Association*, *65*(331), 467–487.

Huang, H. C., Chang, Y. T., Yeh, C. Y., & Liao, C. W. (2014). Promote the price promotion. *International Journal of Contemporary Hospitality Management*, *26*(7), 1065–1082.

Huang, L. T. (2016). Flow and social capital theory in online impulse buying. Journal of Business Research, 69(6), 2277–2283.

Hulland, J. (1999). Use of Partial Least Squares (Pls) in Strategic Management Research : a Review of Four Recent Studies. *Strategic Management Journal*, *204*(November 1996), 195–204.

Hulten, P., & Vanyushyn, V. (2014). Promotion and shoppers' impulse purchases: the example of clothes. *Journal of Consumer Marketing*, *31*(2), 94–102.

Hultén, P., & Vanyushyn, V. (2011). Impulse purchases of groceries in France and Sweden. *Journal of Consumer Marketing*, *28*(5), 376–384.

Hussin, S. R., Kassim, S., & Jamal, N. (2013). Credit card holders in Malaysia: Customer characteristics and credit card usage. *International Journal of Economics and Management*, *7*(1), 108–122.

Hussin, W. J. W. (2017). *Maqasid Syariah: Mencari Bibit Manusiawi* (First Edition). Perak, Malaysia: Ultimate Revenue Resources

.

Idris, U. M., & Jan, M. T. (2013). Effect of Credit Cards on Customers ' Spending Behavior : A Comparative Analysis of Islamic and Conventional Credit Cards. In *Third International Conferance on Management Proceeding* (pp. 500–510). Penang Malaysia.

Ilter, B., Bayraktaroglu, G., & Ipek, I. (2017). Impact of Islamic religiosity on materialistic values in Turkey. *Journal of Islamic Marketing*, *8*(4), 533–557.

Ilyas, S., Hussain, M. F., & Usman, M. (2011). An Integrative Framework for Consumer Behavior: Evidence from Pakistan. *International Journal of Business and Management*, *6*(4), 120–128.

Islam, T., & Chandrasekaran, U. (2016). Effect of religiosity on ecologically conscious consumption behavior. *Journal of Islamic Marketing*, *7*(4), 495–507.

Ismail, S., Amin, H., Shayeri, S. F., & Hashim, N. (2014). Determinants of attitude towards credit card usage. *Jurnal Pengurusan*, *41*, 145–154.

Ismitz Matthew. (2017, July). Impulse Buying:Gen-Y face online shopping debt trap. *News Straits Times Online*. Retrieved Oktober 10,fromhttps://www.nst.com.my/news/exclusive/2017/07/255745/impulse-buying-gen-y-face-online-shopping-debt-trap

Israel, G. (1992). Determining Sample Size. *University of Florida Cooperative Extension Services, Instititute of Food and Agriculture Sciences*, *85*(3), 108–113.

Iyer, E. S. (1989). Unplanned Purchasing: Knowledge of Shopping Environment and Time Pressure. *Journal of Retailing*, *65*(1), 40–57.

Jabatan Insolvensi Malaysia. (2014). *Laporan Tahunan Bahagian Hal Ehwal Undang-Undang, Jabatan Perdana Menteri*. Kuala Lumpur, Malaysia

Jabatan Insolvensi Malaysia. (2015). *Laporan Tahunan Bahagian Hal Ehwal undang-Undang*. Kuala Lumpur.Malaysia

Jabatan Insolvensi Malaysia. (2016). *Laporan Tahunan Bahagian Hal Ehwal Undang-Undang*. Kuala Lumpur, Malaysia.

Jackson, S. L. (2009). *Research Methods and Statistics: A Critical Thinking Approach* (Third Edition). USA: Wadsworth Publishing.

Jamal, A., & Sharifuddin, J. (2015). Perceived value and perceived usefulness of halal labeling: The role of religion and culture. *Journal of Business Research*, *68*(5), 933–941.

Jamaludin, N. (2013). Religion and Individual Investment Choice Decision : The Case of Malaysia. *International Journal of Social Science*, *4*(1), 104–113.

Jeffrey, S. A., & Hodge, R. (2007). Factors influencing impulse buying during an online purchase. *Electronic Commerce Research*, *7*(3–4), 367–379.

Jennifer Frighetto. (2012). More Than Half of Global Consumer Use Plastic as A Common Payment Method, While Nearly Three-Quarters of Global Consumers Who Invest Use Online Banking For Investment Transaction. Retrieved September 1, 2017, from http://www.nielsen.com/us/en/press-room/2012/nielsen-identifies-investment-strategies-and-financial-habits-of.html

Jin, B., Yong Park, J., & Sang Ryu, J. (2010). Comparison of Chinese and Indian consumers' evaluative criteria when selecting denim jeans. *Journal of Fashion Marketing and Management: An International Journal*, *14*(1), 180–194.

Joung, H.-M. (2013). Materialism and clothing post-purchase behaviors. *Journal of Consumer Marketing*, *30*(6), 530–537.

Kacen, J. J., Hess, J. D., & Walker, D. (2012). Spontaneous selection: The influence of product and retailing factors on consumer impulse purchases. *Journal of Retailing and Consumer Services*, *19*(6), 578–588.

Kalla, S. M., & Arora, A. P. (2011). Impulse Buying: A Literature Review. *Global Business Review*, *12*(1), 145–157.

Kamal, S., Chu, S.-C., & Pedram, M. (2013). Materialism, Attitudes, and Social Media Usage and Their Impact on Purchase Intention of Luxury Fashion Goods Among American and Arab Young Generations. *Journal of Interactive Advertising*, *13*(1), 27–40.

Kamaruddin, A. R., & Kamaruddin, K. (2009). Malay culture and consumer decision-making styles : An investigation on religious and ethnic dimensions. *Jurnal Kemanusiaan*, *14*, 37–50.

Kamri, N. 'Azzah. (2008). *Kepenggunaan dalam Islam: Tinjauan dari Sudut Etika. Seminar Keusahawanan Islam II Peringkat Kebangsaan Oktober 2008*. Kuala Lumpur, Malaysia.

Kang, J., & Poaps, H. P. (2010). Hedonic and utilitarian shopping motivations of fashion leadership. *Journal of Fashion Marketing and Management: An International Journal*, *14*(2), 312–328.

Kang, M., & Johnson, K. (2009). Identifying characteristics of consumers who frequently return apparel. *Journal of Fashion Marketing and Management: An International Journal*, *13*(1), 37–48.

Karbasivar, A., & Yarahmadi, H. (2011). Evaluating Effective Factors on Consumer Impulse Buying Behavior. *Asian Journal of Business Management Studies*, *2*(4), 174–181.

Kashif, M., Zarkada, A., Thurasamy, R., Kashif, M., Zarkada, A., & Thurasamy, R. (2017). The moderating effect of religiosity on ethical behavior intention: An application of the extended theory of planned behavior to Pakistani bank employees. *Personnel Review*, *46*(2), 429–448.

Kaynak, E., & Harcar, T. (2001). Consumers' attitudes and intentions towards credit card usage in an advanced developing country. *Journal of Financial Services Marketing*, *6*(1), 24–39.

Khan, N., Hui Hui, L., Booi Chen, T., & Yong Hoe, H. (2015). Impulse Buying Behaviour of Generation Y in Fashion Retail. *International Journal of Business and Management*, *11*(1), 144-151

Khare, A., & Varshneya, G. (2015). Understanding Credit Card Use Among Indian Consumers: Role of Materialistic Values and Compulsivity. *Journal of Asia-Pacific Business*, *16*(4), 247–273.

Khasawneh, S. (2011). Cutting-edge panacea of the twenty-first century: Workplace spirituality for higher education human resources. *International Journal of Educational Management*, *25*(7), 687–700.

Kim, H. (2006). Using Hedonic and Utilitarian Shopping Motivations to Profile Inner City Consumers. *Journal of Shopping Center Research*, *13*(1), 57–79.

Kim, Y. K., Kim, E. Y., & Kang, J. (2003). Teens ' Mall Shopping Motivations : Functions of Loneliness and Media Usage. *Family and Consumer Science Research Journal*, *32*(2), 140–167.

Kline, R. B. (2011). *Principles and practice of structural equation modeling. Structural Equation Modeling* (Third, Vol. 156). New York: The Guilford Press.

Kollat, D. T., & Willett, R. P. (1969). Is Impulse Purchasing Really a Useful Concept for Marketing Decisions? *Journal of Marketing*, *33*(1), 79–83.

Kotler, P. (2000). *Marketing Management*. USA: Pearson

Kotler, P., Armstrong, G., & Opresnik, M. O. (2018). *Principles of Marketing* (Seventeent). United Kingdom: Pearson.

Krejcie, R. V, & Morgan, D. W. (1970). Determining Sample Size for Research Activities Robert. *Educational and Psychological Measurement*, *38*(1), 607–610.

Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology*, *22*(3), 332–351.

Kuikka, A., & Laukkanen, T. (2012). Brand loyalty and the role of hedonic value. *Journal of Product & Brand Management*, *21*(7), 529–537.

Kwak, H., Zinkhan, G. M., Delorme, D. E., & Larsen, T. (2006). Revisiting Normative Influences on Impulsive Buying Behavior and an Extension to Compulsive Buying Behavior. *Journal of International Consumer Marketing*, *18*(3), 57–80.

Kwon, H. H., & Armstrong, K. L. (2002). Factors Influencing Impulse Buying of Sport Term Licensed Merchandise. *Sport Marketing Quarterly*, *11*(3), 151–163.

Lahsasna, A. (2009). Maqasid Al Shariah in Islamic Economics and Finance. *Second Islamic Seminar on Islamic thought (ISoIT2 2009). Islam & Muslims: Issues & Challenges,* 6 & 7 October, Faculty of Islamic Studies. National University of Malaysia

Lake, L. A. (2009). *Consumer Behavior for Dummies*. USA: Wiley Publishing,Inc.

Laldin, M. A., & Furqani, H. (2013). Developing Islamic Finance in the Framework of Maqasid al-Shariah: Understanding the end (maqasid) and the means (wasa'il). *International Journal of Islamic and Middle Eastern Finance and Management*, *6*(4), 278–289.

Lammers, H. B. (1991). The effect of free samples on immediate consumer purchase. *Journal of Consumer Marketing*, *8*(2), 31–37.

Lee, C.-H., & Wu, J. J. (2017). Consumer online flow experience: The relationship between utilitarian and hedonic value, satisfaction and unplanned purchase. *Industrial Management & Data Systems*, 117(10), 2452–2467.

Leong, L. Y., Jaafar, N. I., & Sulaiman, A. (2017). Understanding impulse purchase in Facebook commerce: does Big Five matter? *Internet Research*, 27(4), 786–818.

Li, S., Sun, Y., & Wang, Y. (2007). 50 % Off or Buy One Get One Free ? Frame Preference as a Function of Consumable Nature in Dairy Product. *Journal of Social Psychology*, *147*(4), 413–421.

Liang, Y.-P. (2012). The Relationship between Consumer Product Involvement, Product Knowledge and Impulsive Buying Behavior. *Procedia - Social and Behavioral Sciences*, *57*(3), 325–330.

Liao, S.-L., Shen, Y.-C., & Chu, C.-H. (2009). The effects of sales promotion strategy, product appeal and consumer traits on reminder impulse buying behaviour. *International Journal of Consumer Studies*, *33*(3), 274–284.

Lichtenstein, D. R., Ridgway, N. M., & Netemeyer, R. G. (1993). Price Perceptions and Consumer Shopping Behavior: A Field Study. *Journal of Marketing Research*, *30*(2), 234–245.

Lin, P. C., & Lin, Z. H. (2013). Buying impulse triggered by digital media. *The Service Industries Journal*, *33*(9–10), 892–908.

Lin, Y. H., & Chen, C. F. (2013). Passengers' shopping motivations and commercial activities at airports:The moderating effects of time pressure and impulse buying tendency. *Tourism Management*, *36*, 426–434.

Lins, S., Doka, Á., Bottequin, E., Odabasic, A., Pavlovic, S., Merchan, A., Hylander, F. (2015). The Effects of Having, Feeling, and Thinking on Impulse Buying in European Adolescents. *Journal of International Consumer Marketing*, *27*(5), 414–428.

Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions. *Decision Support Systems*, 55(3), 829–837.

Lo, L. Y. S., Lin, S. W., & Hsu, L. Y. (2016). Motivation for online impulse buying: A two-factor theory perspective. *International Journal of Information Management*, *36*(5), 759–772.

Lovelock, C. H., & Wright, L. (1999). *Principles of service marketing and management*. USA: Prentice Hall

Lucas, M., & Koff, E. (2017). Body image , impulse buying , and the mediating role of negative affect. *Personality and Individual Differences*, *105*, 330–334.

Luo, X. (2005). How Does Shopping With Others Influence Impulsive Purchasing? *Journal of Consumer Psychology*, *15*(4), 288–294.

Madden, R. (2015, October 16). Malaysia's Gen Y face financial stress, live beyond their means. *The Star Online*. Retrieved December 2016 from http://www.thestar.com.my/business/business-news/2015/10/16/study-malaysias-gen-y-living-on-financial-edge/?style=biz

Maehle, N., Iversen, N., Hem, L., & Otnes, C. (2015). Exploring consumer preferences for hedonic and utilitarian food attributes. *British Food Journal*, *117*(12), 3039–3063.

Makhsin, M., Ilias, M. F., & Noh, M. A. C. (2014). Amalan Hisbah Kendiri Dalam Pendidikan Islam : Kajian Terhadap Murid-Murid Sekolah Menengah. *The Online Journal of Islamic Education*, *2*(1), 25–37.

Makhsin, M., Tamuri, A. H., Noh, M. A. C., & Ilias, M. F. (2012). Hisbah Pembelajaran Kendiri dalam Pendidikan Islam. *Journal of Islamic and Arabic Education 4(1), 45-60,*

Mannan, M. A. (1986). *Islamic Economics: Theory and Practice*. United Kingdom: Kazi Publication Inc.

Mansori, S., Sambasivan, M., & Md-Sidin, S. (2015). Acceptance of novel products: the role of religiosity, ethnicity and values. *Marketing Intelligence & Planning*, *33*(1), 39–66.

Martinez, B., & Kim, S. (2012). Predicting purchase intention for private sale sites. *Journal of Fashion Marketing and Management*, *16*(3), 342–365.

Martinez, E., & Montaner, T. (2006). The effect of consumer's psychographic variables upon deal-proneness. *Journal of Retailing and Consumer Services*, *13*, 157–168.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370–396

McCarthy, E. J. (1960). *Basic Marketing: A Global Managerial Approach*. United State: R.D Irwin.

McLellan, A. (2012). *Financial Advisor Series Foundations of Financial Planning : An Overview*. United State of America: The American College Press.

Mellahi, K., & Budhwar, P. S. (2010). Introduction: Islam and human resource management. *Personnel Review*, *39*(6), 685–691.

Meng, F., & Xu, Y. (2012). Tourism shopping behavior: planned, impulsive, or experiential? *International Journal of Culture, Tourism and Hospitality Research*, *6*(3), 250–265.

Merzer, M. (2014). Survey: 3 in 4 Americans make impulse purchase. *CreditCard.com*. Retrieved November 2016 from http://www.creditcards.com/credit-card-news/impulse-purchase-survey.php

Miller, K. (2013). Hedonic customer responses to fast fashion and replicas. *Journal of Fashion Marketing and Management: An International Journal*, *17*(2), 160–174.

Mishra, A., & Mishra, H. (2011). The Influence of Price Discount Versus Bonus Pack on the Preference for Virtue and Vice Foods. *Journal of Marketing Research*, *48*(1), 196–206.

Mitchell, T. R., & Mickel, A. E. (1999). The Meaning of Money : Difference Perspective Perspective Difference. *Academy of Management Review*, *24*(3), 568–578.

Mittal, S., Chawla, D., & Sondhi, N. (2016a). Impulse buying tendencies among Indian consumers: scale development and validation. *Journal of Indian Business Research*, *8*(3), 205–226.

Mittal, S., Chawla, D., & Sondhi, N. (2016b). Segmentation of impulse buyers in an emerging market – An exploratory study. *Journal of Retailing and Consumer Services*, *33*, 53–61.

Mohan, G., Sivakumaran, B., & Sharma, P. (2013). Impact of store environment on impulse buying behavior. *European Journal of Marketing*, *47*(10), 1711–1732.

Mohd Dali, N. R. S., Abdul Hamid, H., Shahimi, S., & Wahid, H. (2008). Factors Influencing the Islamic Credit Cards Holders Satisfaction. *The Business Review, Cambridge*, *11*, 298–305.

Mokhlis, S. (2006). The Effect of Religiosity on Shopping Orientation : An Exploratory Study in Malaysia. *The Journal American Academy of Business*, *9*(1), 64–74.

Mokhlis, S. (2008). Consumer Religiosity and the Importance of Store Attributes. *The Journal of Human Resource and Adult Learning*, *4*(2), 122–133.

Mokhlis, S. (2009a). An Investigation of Consumer Decision-Making Styles of Young-Adults in Malaysia. *International Journal of Business and Management*, *4*(4), 140–148.

Mokhlis, S. (2009b). Relevancy and Measurement of Religiosity in Consumer Behavior Research. *International Business Research*, *2*, 75–84.

Mokhlis, S., & Sparks, L. (2007). Consumer Religiosity and Shopping Behavior in Malaysia. *Malaysian Management Journal*, *11*(1 & 2), 87–1101.

Mokhlis, & Salleh. (2009). Consumer Decision Making Styles In Malaysia: An Exploratory Study Of Gender Differences. *European Journal of Social Sciences*, *10*(4), 574–584.

Mokhtar, I., Osman, I., Setapa, F., & Zambahari, S. R. (2015). A Qualitative Study on the Determinants of Islamic Credit Card Ownership and Usage. In *Proceeding of the Colloqium on Administrative Science and Technology*. Singapore: Springer.

Moschis, G., Ong, F. S., Mathur, A., Yamashita, T., & Benmoyal-Bouzaglo, S. (2011). Family and television influences on materialism: a cross-cultural life-course approach. *Journal of Asia Business Studies*, *5*(2), 124–144.

Mueller, T., Bensyl, D., Vasely, S. K., Oman, R. F., & Aspy, C. B. (2010). The Association of attendance at religious services and involvement in church/religious activities and youth assets by gender with youth's engagement in sexual intercourse. *Health Education*, *110*(2), 125–134.

Muhamad, N. (2008). *Muslim consumers ' Motivation towards Islam and Their Cognitive Processing of Performing Taboo Behaviors*. The University of Western Australia.

Muhamad, N., & Mizerski, D. (2010). The constructs mediating religions' influence on buyers and consumers. *Journal of Islamic Marketing*, *1*(2), 124–135.

Muratore, I. (2016). Teen's impulsive buyers: what is the role of price. *International Journal of Retail & Distribution Management*, *44*(11), 1166–1180.

Murray, K. B., & Schlacter, J. L. (1990). The impact of services versus goods on consumers' assessment of perceived risk and variability. *Journal of the Academy of Marketing Science*, *18*(1), 51–65.

Nayebzadeh, S., & Jalaly, M. (2014). Investigating Iranian female Muslim consumer impulse buying behaviour used as a form of retail therapy. *Journal of Islamic Marketing*, *5*(2), 302–320.

Nayeem, T., & Casidy, R. (2013). The role of external influences in high involvement purchase behaviour. *Marketing Intelligence & Planning*, *31*(7), 732–745.

Nazimah, H. (2011). An Analysis of Attitudes to Islamic and Conventional Credit Cards in Malaysia : Persectives on Selection Criteria and Impact Analysis. *Durham Theses, Durham University*, 1–297.

Neslin, S. A., Henderson, C., & Quelch, J. (1985). Consumer Promotions and the Acceleration of Product Purchases. *Marketing Science*, *4*(2), 147–165.

Ngai, J., & Cho, E. (2012). The young luxury consumers in China. *Young Consumers*, *13*(3), 255–266.

Nitzl, C., & Cepeda, J. L. R. G. (2016). Mediation Analysis in Partial Least Squares Path Modeling: Helping Researchers Discuss More Sophisticated Models. *Industrial Management &*, *116*(9), 1–31.

Noordin, N., Zakaria, Z., Sawal, M. Z. H. M., Ngah, K., & Hussain, Z. (2012). Bankruptcy among Young Executives in Malaysia. *Asia Pacific Journal of Marketing and Logistics*, *28*, 132–136.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory Third Edition*. *Psychometric Theory* (Third Edition). McGraw-Hill, Inc.

Nusair, K., Yoon, H. J., Naipaul, S., & Parsa, H. G. (2010). Effect of price discount frames and level on consumers' perception in low-end service industries. *International Journal of Contemporary Hospitality Management*, *22*(6), 814–834.

O'Guinn, T. C., & Faber, R. J. (1989). Compulsive Buying: A Phenomenological Exploration. *Journal of Consumer Research*, *16*(2), 147-157

Ogle, J., H. Hyllegard, K., Yan, R.-N., & A. Littrell, M. (2014). Segmenting the teen girl apparel market: differences in fashion involvement, materialism and social responsibility. *Young Consumers*, *15*(2), 153–166

Okada, E. M. (2005). Justification Effects Choice of Hedonic and Utilitarian Goods. *Journal of Marketing Research*, *42*(1), 43–53.

Oladapo, I. A., & Rahman, A. A. (2016). Maqasid Sharī'Ah: The Drive for an Inclusive Human Development Policy. *Jurnal Syariah*, 24(2), 287–302.

Oliveira, T. M. V., Falciano, M. A., & Perito, R. V. B. (2014). Effects of credit card usage on young Brazilians' compulsive buying. *Young Consumers*, *15*(2), 111–124.

Omar, O., & Kent, A. (2001). International airport influences on impulsive shopping: trait and normative approach. International Journal of Retail & Distribution Management, 29(5), 226–235.

Omar, N. A., Rahim, R. A., Wel, C. A. C., & Alam, S. S. (2014). Compulsive buying and credit card misuse among credit card holders: The roles of self-esteem, materialism, impulsive buying and budget constraint. *Intangible Capital*, *10*(1), 52–74.

Osman, S., Fah, B. C. Y., & Foon, Y. S. (2011). Simulation of Sales Promotions towards Buying Behavior among University Students. *International Journal of Marketing Studies*, *3*(3), 78–88.

Ozen, H., & Engizek, N. (2014). Shopping online without thinking: being emotional or rational? *Journal of Marketing and Logistics*, *26*(1).

Ozer, L., & Gultekin, B. (2015). Pre- and post-purchase stage in impulse buying: The role of mood and satisfaction. *Journal of Retailing and Consumer Services*, *22*, 71–76.

Palazon, M., & Ballester, E. D. (2013). Hedonic or utilitarian premiums: does it matter? *European Journal of Marketing*, *47*(8), 1256–1275.

Parahoo, S. K. (2012). Credit where it is due: drivers of loyalty to credit cards. *International Journal of Bank Marketing*, *30*(1), 4–19.

Parboteeah, D. V., Taylor, D. C., & Barber, N. A. (2016). Exploring impulse purchasing of wine in the online environment. *Journal of Wine Research*, *27*(4), 322–339.

Park, C. W., Iyer, E. S., & Smith, D. C. (1989). The Effects of Situational variables on In-Store Grocery Shopping Behavior: The Role of Store Environment and Time Available for Shopping. *Journal of Consumer Research*, *15*(1967), 422-433.

Park, E. J., Kim, E. Y., Funches, V. M., & Foxx, W. (2012). Apparel product attributes, web browsing, and e-impulse buying on shopping websites. *Journal of Business Research*, *65*(11), 1583–1589.

Parker, C. J., & Wang, H. (2016). Examining hedonic and utilitarian motivations for m-commerce fashion retail app engagement. *Journal of Fashion Marketing and Management: An International Journal*, *20*(4), 487–506.

Peattie, K., & Peattie, S. (1995). Sales promotion – a missed opportunity for services marketers? *Journal of Service Industry Management*, *6*(1), 22–39.

Pelet, J. E., Lecat, B., Khan, J., Thiele, S. R., Lee, L. W., Ellis, D., … Wegmann, A. L. (2018). Winery website loyalty: the role of sales promotion and service attributes. International *Journal of Wine Business Research,* 30(2), 138–152.

Phau, I., & Meng Poon, S. (2000). Factors influencing the types of products and services purchased over the Internet. *Internet Research*, *10*(2), 102–113.

Piron, F. (1991). Defining impulse purchasing. *Advances in Consumer Research*, *18*(1951), 509–514.

Podoshen, J. S., & Andrzejewski, S. A. (2012). An Examination of the Relationships Between Materialism, Conspicuous Consumption, Impulse Buying, and Brand Loyalty. *The Journal of Marketing Theory and Practice*, *20*(3), 319–334.

Polivy, J., Herman, C. P., Hackett, R., & Kuleshnyk, I. (1986). The effects of self-attention and public attention on eating in restrained and unrestrained subjects. *Journal of Personality and Social Psychology*, *50*(6), 1253–1260.

Pollay, R. W. (1968). Customer Impulse Purchasing Behavior: A Reexamination. *Journal of Marketing Research*, *5*(3), 323–325.

Pornpitakpan, C., & Han, J. H. (2013). The effect of culture and salespersons' retail service quality on impulse buying. *Australasian Marketing Journal*, *21*(2), 85–93.

Pornpitakpan, C., Yuan, Y., & Han, J. H. (2016). The effect of salespersons' retail service quality and consumers' mood on impulse buying. *Australasian Marketing Journal*, *25*(1), 2–11.

Pradipto, Y. D., Winata, C., Murti, K., & Azizah, A. (2016). Think Again Before You Buy : The relationship between self- regulation and impulsive buying behaviors among Jakarta young adults. *Procedia - Social and Behavioral Sciences*, *222*, 177–185.

Prashar, S., Parsad, C., & Vijay, T. S. (2016). Segmenting Young Indian Impulsive Shoppers. *Journal of International Consumer Marketing*, *29*(1), 35–47.

Punj, G. (2011). Impulse buying and variety seeking: Similarities and differences. *Journal of Business Research*, *64*(7), 745–748.

Putit, L., & Johan, Z. J. (2015). Consumers' Acceptance of "Halal" Credit Card Services : An Empirical Analysis. *Journal of Emerging Economies and Islamic Research*, *3*(1), 1–9.

Quoquab, F., & Ahmad, M. (2015). Epicureanism and Global Consumerism in Shaping Muslim Buyers ' Consumption Pattern : An Islamic Perspective. *International Journal of Innovation and Business Strategy*, *3*(July), 1–13.

Qutb, S. (1979). *In The Shade of The Quran*. (A. Salahi, Editor.). Petaling Jaya : ABIM.

Rahman, A. A., Asrarhaghighi, E., & Rahman, S. A. (2015). Consumers and Halal cosmetic products: knowledge, religiosity, attitude and intention. *Journal of Islamic Marketing*, *6*(1), 148–163.

Rahman, A. ur. (1975). Economic Doctrines of Islam : Volume II. Lahore, Pakistan: Islamic Publication Limited.

Razaei, S., Ali, F., Amin, M., & Jayashree, S. (2016). Online impulse buying of tourism products: The role of web site personality, utilitarian and hedonic web browsing. *Journal of Hospitality & Tourism Technology*, *7*(1), 60–83.

Razali, H., & Amin, H. (2017). Perceived Ihsan, Islamic egalitarianism, and Islamic religiosity towards charitable giving of cash waqf. *Journal of Islamic Marketing*, *8*(4), 669–685.

Razzaque, M. A., & Chaundry, S. N. (2013). Religiosity and Muslim consumers' decision-making process in a non-Muslim society. *Journal of Islamic Marketing*, *4*(2), 198–217.

Razzaq, A., Ansari, N. Y., Razzaq, Z., & Awan, H. M. (2018). The Impact of Fashion Involvement and Pro-Environmental Attitude on Sustainable Clothing Consumption: The Moderating Role of Islamic Religiosity. *SAGE Open*, 8(2).

Read, J., Fitton, D., Cowan, B., Beale, R., Guo, Y., & Horton, M. (2011). *Understanding and designing cool technologies for teenagers*. *Proceeding CHI EA '11 CHI '11 Extended Abstracts on Human Factors in Computing Systems May 07 - 12, 2011.* Vancouver, BC, Canada.

Rehman, A., & Shabbir, M. S. (2010). The relationship between religiosity and new product adoption. *Journal of Islamic Marketing*, *1*(1), 63–69.

Rehman, F. ur, Md Yusoff, R., Mohamed Zabri, S., & Ismail, F. (2017). Determinants of personal factors in influencing the buying behavior of consumers in sales promotion: a case of fashion industry. *Young Consumers*, 18(4), 408–424.

Reid, M., Thompson, P., Mavondo, F., & Brunso, K. (2015). Economic and utilitarian benefits of monetary versus non-monetary in-store sales promotions. *Journal of Marketing Management*, *31*(3–4), 247–268.

Rezaei, S. (2015). Segmenting consumer decision-making styles (CDMS) toward marketing practice: A partial least squares (PLS) path modeling approach. *Journal of Retailing and Consumer Services*, *22*, 1–15.

Richins, M. L. (1994). Special Possessions and the Expression of Material Values. *Journal of Consumer Research*, *21*(3), 522–533.

Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research*, *31*(1), 209–219.

Richins, M. L., & Dawson, S. (1992). A consumer calues orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, *19*(3), 303–316.

Robb, C. A., & Sharpe, D. L. (2009). Effect of Personal Financial Knowledge on College Students' Credit Card Behavior. *Journal of Financial Counseling and Planning*, *20*(1), 25–43.

Roberts, J. A., & Jones, E. (2001). Money attitudes, credit card use, and compulsive buying among American college students. *Journal of Consumer Affairs*, *35*(2), 213–240.

Roberts, J. A., & Manolis, C. (2012). Cooking Up a Recipe for Self-Control: The Three Ingredients of Self-Control and its Impact on Impulse Buying. *The Journal of Marketing Theory and Practice*, *20*(2), 173–188.

Rook, D. W. (1985). The Ritual Dimension of Consumer Behavior. *Journal of Consumer Research*, *12*(3), 251–264
.

Rook, D. W. (1987). The Buying Impulse. *Journal of Consumer Research*, *14*(2), 189–199.

Rook, D. W., & Fisher, R. J. (1995). Normative Behavior Influences on Impulsive Buying Trait Aspects of Buying Impulsiveness. *Journal of Consumer Research*, *22*(3), 305–313.

Rook, D. W., & Hoch, S. J. (1985). Consuming impulses. *Advances in Consumer Research*, 23–28.

Roscoe, J. T. (1975). *Fundamental Research Statistic For The Behavioral Science*. USA: Holt, Rinehart and Winston.

Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review*, *37*(3), 308–330.

Rungtusanatham, M., Miller, J. W., & Boyer, K. K. (2014). Theorizing, testing, and concluding for mediation in SCM research: Tutorial and procedural recommendations. *Journal of Operations Management*, *32*(3), 99–113.

Runyon, K. E. (1977). *Consumer Behavior and The Practice of Marketing*. USA: Merrill.Pub.Co

Ryan, L., & Dziurawiec, S. (2011). Materialism and Its Relationship to Life Satisfaction, *55*(2), 185–197.

Sabri, O. (2012). Preliminary investigation of the communication effects of "taboo" themes in advertising. *European Journal of Marketing*, *46*(1/2), 215–236.

Saged, A. A. G., Alhaj, T. A. A., & Bi, M. Y. Z. (2017). The role of the Maqās.id al-Sharīʿah in preserving the environment. *Humanomics*, 33(2), 125–132.

Sahni, D., Jain, V., & Jain, A. (2014). The Impact of Visual Merchandising on Impulsive Buying Behavior of Young Consumers. *Asian Journal of Business and Economics*, *4*(4), 1–25.

Salimon, M. G., Yusoff, R. Z., & Mokhtar, S. S. M. (2017). The mediating role of hedonic motivation on the relationship between adoption of e-banking and its determinants. *International Journal of Bank Marketing*, *35*(4), 558–582.

Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students* (Fourth Edition). Spain: Pearson Education.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students* (Sixth Edition). Italy: Pearson Education.

Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods For Business Students* (Seventh Edition). Italy: Pearson Education.

Sayani, H., & Miniaoui, H. (2013). Determinants of bank selection in the United Arab Emirates. *International Journal of Bank Marketing*, *31*(3), 206–228.

Schulz, H. M., Dority, B. L., & Schulz, S. A. (2015). Individual Differences in Online Consumer Behaviors in Relation to Brand Prominence. *Journal of Interactive Advertising*, *15*(1), 67–80.

Schumacker, R. E., & Lomax, R. G. (2010). *A Beginner's Guide to Structural Equation Modeling* (Third Edition). USA: Routledge.

Seinauskiene, B., Mascinskiene, J., & Jucaityte, I. (2015). The Relationship of Happiness, Impulse Buying and Brand Loyalty. *Procedia - Social and Behavioral Sciences*, 213, 687–693.

Sekaran, U. (2003). *Research Methods For Business: A Skill-Building Approach* (Fourth Edition). USA: John Wiley & Sons.

Sekaran, U., & Bougie, R. (2013). *Research Methods for Business* (Sixth Edition). Italy: Wiley Publishing,Inc.

Serhan, B. A. Al, Bataineh, M. K., Halkias, D., & Komodromos, M. (2014). Measuring Luxury Brand Consumption and Female Consumers' Religiosity in the UAE. *Journal of Developmental Entrepreneurship*, *19*(2), 1–16.

Sharabi, M. (2012). The work and its meaning among Jews and Muslims according to religiosity degree. *International Journal of Social Economics*, *39*(11), 824–843.

Sharma, P., Sivakumaran, B., & Marshall, R. (2006). Investigating impulse buying and variety seeking: Towards a general theory of hedonic purchase behaviors. *Advances in Consumer Research*, *33*, 388–389.

Sharma, P., Sivakumaran, B., & Marshall, R. (2010a). Exploring impulse buying and variety seeking by retail shoppers: towards a common conceptual framework. *Journal of Marketing Management*, *26*(5–6), 473–494.

Sharma, P., Sivakumaran, B., & Marshall, R. (2010b). Impulse buying and variety seeking: A trait-correlates perspective. *Journal of Business Research*, *63*(3), 276–283.

Sharma, P., Sivakumaran, B., & Marshall, R. (2013). Exploring impulse buying in services: Toward an integrative framework. *Journal of the Academy of Marketing Science*, *42*(2), 154–170.

Shi, B., Zhang, D., Xie, H., & Zhou, Y. (2016). Antecedents of Chinese adolescents' purchase intention for local brands: the moderating influence of materialistic values. *Journal of Consumer Marketing*, *33*(4), 292–301

Shinkafi, A. A., & Ali, N. A. (2017). Contemporary Islamic economic studies on Maqasid Shari'ah: a systematic literature. *Humanomics*, 33(3), 315–334.

Shim, S. (1996). Adolescent Consumer Decision-Making Styles: The Consumer Socialization Perspective. *Psychology & Marketing*, *13*(September 1996), 547–

569.

Sinha, I., & Smith, M. F. (2000). Consumers ' Perceptions of Price. *Psychology and Marketing*, *17*(March 2000), 257–275.

Sirakaya, E., & Woodside, A. G. (2005). Building and testing theories of decision making by travellers. *Tourism Management*, *26*(6), 815–832.

Smith, M. F., & Sinha, I. (2000). The impact of price and extra product promotions on store preference. *International Journal of Retail & Distribution Management*, *28*(2), 83–92.

Sofi, S. A., & Nika, F. A. (2017). Role of intrinsic factors in impulsive buying decision: An empirical study of young consumers. *Arab Economic and Business Journal*, 12(1), 29–43.

Sohn, H. K., & Lee, T. J. (2016). Tourists' impulse buying behavior at duty-free shops: the moderating effects of time pressure and shopping involvement. Journal of Travel and Tourism Marketing, 34(3), 341–356.

Solomon, M. R., Bamossy, G., Askegaard, S., & Hogg, M. K. (2007). *Consumer Behaviour: A European Perspective* (Third Edition). Spain: Prentice Hall.

Soman, D. (2003). The Effect of Payment Transparency on Consumption : Quasi-Experiments from the Field. *Marketing Letters*, *14*(3), 173–183.

Souiden, N., & Jabeur, Y. (2015). The Impact of Islamic beliefs on consumers' attitudes and purchase intentions of life insurance. *Interntional Journal of Bank Marketing*, *33*(4), 423–441.

Souiden, N., & Rani, M. (2015). Consumer attitudes and purchase intention towards islamic bank: the influence of religiosity. *International Journal of Bank Marketing*, *33*(2), 143–161.

Sproles, E. K., & Sproles, G. B. (1990). Consumer decision-making styles as a function of individual learning styles. *Journal of Consumer Affairs*, *24*(1), 134–147.

Sproles, G., & Kendall, E. (1986). A Methodology for Profiling Consumers' Decision-Making Styles. *The Journal of Consumer Affairs*, *20*(2), 267–279.

Sriyana, J. (2012). Deriving Demand Curve in Islamic Economics. In *Third International Workshop in Islamic Economics (IWIET 2012) June 19-20* (pp. 1–16). Jogjakarta.

Stern, H. (1962). The Signficance of Buying Impulse Today. *Journal of Maketing*, *26*(2), 59–62.

Stone, M. A., & Desmond, J. (2007). *Fundamentals of Marketing*. USA: Routledge.

Strombeck, S. D., & Wakefield, K. L. (2008). Situational influences on service quality evaluations. *Journal of Service Marketing*, *22*(5), 409–419.

Sultan, A. J., Joireman, J., & Sprott, D. E. (2012). Building consumer self-control: The effect of self-control exercises on impulse buying urges. *Marketing Letters*, *23*(1), 61–72.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics* (Fifth Edition). USA: Pearson

Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics* (Sixth Edition). USA: Pearson.

Tariq Khan, M., Afzal Humayun, A., & Sajjad, M. (2015). FactorsAffecting Impulse Buying and Percentage of Impulse Buying in Total Purchasing. *International Journal of Information, Business and Management*, 16-1.

Tarkiainen, A., & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, *107*(11), 808–822 .

Tascioglu, M., Eastman, J. K., & Iyer, R. (2017). The impact of the motivation for status on consumers ' perceptions of retailer sustainability : the moderating impact of collectivism and materialism. *Journal of Consumer Marketing*, *34*(4), 292–305

Tauber, M. (1972). Why Do People Shop ? *Journal of Marketing*, *36*(4), 46–49.

Teah, M., Lwin, M., & Cheah, I. (2014). Moderating role of religious beliefs on attitudes towards charities and motivation to donate. *Asia Pacific Journa of Marketing and Logistics*, *26*(5), 738–760

Teddlie, C., & Yu, F. (2007). Mixed Methods Sampling: A Typology With Examples. *Journal of Mixed Methods Research*, *1*(1), 77–100.

Teimourpour, B., & Hanzaee, K. H. (2011). The impact of culture on luxury consumption behaviour among Iranian consumers. *Journal of Islamic Marketing*, *2*(3), 309–328.

Tendai, M., & Crispen, C. (2009). In-store shopping environment and impulsive buying. *African Journal of Marketing Management*, *1*(4), 102–108.

Teoh, W. M.-Y., Chong, S.-C., & Yong, S. M. (2013). Exploring the factors influencing credit card spending behavior among Malaysians. *International Journal of Bank Marketing*, *31*(6), 481–500.

The Nielsen Global Retail Format Preferences Survey. (2015). *More Than Half of Global Consumers are Willing to but Groceries Online*. Retrieved Oktober 10 2016 from http://www.nielsen.com/hu/hu/press-room/2015/more-than-half-of-global-consumers-are-willing-to-buy-groceries-online.html

The Nielsen Global Survey of E-commerce. (2014). *Malaysians Rank Among the World's Most Avid Online Shoppers*. Retrieved December 2017 from http://www.nielsen.com/my/en/press-room/2014/e-commerce.html

The Nilson Report. (2017). *Top 150 Credit Card Issuers Worldwide by Country: Market Share of Outstanding 2016*. Retrieved December 24, 2017 from https://www.nilsonreport.com/publication_newsletter_archive_issue.php?issue=1120

Thompson, E. R., & Prendergast, G. P. (2015). The influence of trait affect and the five-factor personality model on impulse buying. *Personality and Individual Differences*, *76*, 216–221

.

Tifferet, S., & Herstein, R. (2012). Gender differences in brand commitment, impulse buying, and hedonic consumption. *Journal of Product & Brand Management*, *21*(3), 176–182.

Tinne, W. (2011). Factors Affecting Impulse Buying Behavior of Consumers at Superstores in Bangladesh. *ASA University Review*, *5*(1), 209–220.

Tjiptodjojo, K. I., & Setyawan, S. (2016). Free product samples and its impact on impulse buying. *International Journal of Applied Business and Economic Research*, *14*(14), 477–483.

Turkyilmaz, C. A., Erdem, S., & Uslu, A. (2015). The Effects of Personality Traits and Website Quality on Online Impulse Buying. *Procedia - Social and Behavioral Sciences*, *175*, 98–105.

Tuyet Mai, N. T., Jung, K., Lantz, G., & Loeb, S. G. (2003). An Exploratory Investigation into Impulse Buying Behavior in a Transitional Economy: A Study of Urban Consumers in Vietnam. *Journal of International Marketing*, *11*(2), 13–35.

Usman, H., Tjiptoherijanto, P., Balqiah, T. E., & Agung, I. G. N. (2017). The role of religious norms, trust, importance of attributes and information sources in the relationship between religiosity and selection of the Islamic bank. *Journal of Islamic Marketing*, *8*(2), 158–186.

Verhagen, T., & Van Dolen, W. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information and Management*, *48*(8), 320–327.

Verplanken, B., Herabadi, A. G., Perry, J. A., & Silvera, D. H. (2005). Consumer style and health: The role of impulsive buying in unhealthy eating. *Psychology & Health*, *20*(4), 429–441.

Verplanken, B., & Sato, A. (2011). The Psychology of Impulse Buying: An Integrative Self-Regulation Approach. *Journal of Consumer Policy*, *34*(2), 197–210.

Vijaindren, A. (2017, July). Impulse Buying:Gen-Y face online shopping debt trap. *News Straits Times*. Retrieved Oktober 15 from https://www.nst.com.my/news/exclusive/2017/07/255745/impulse-buying-gen-y-face-online-shopping-debt-trap

Vinatagamoorthy, A., & Kannan, P. (2015). The Impulse Buying Behavior of Consumes for the FMCG products in Salem. *International Journal of Management Research and Social Science*, *2*(2), 1704–1710.

Vohs, K., & Baumeister, R. F. (2011). *Handbook of Self-Regulation* (Second Edition). New York London: The Guilford Press.

Vonkeman, C., Verhagen, T., & van Dolen, W. (2017). Role of local presence in online impulse buying. *Information & Management*.

Wang, J., & Wallendorf, M. (2006). Materialism, Status Signaling, and Product Satisfaction. *Journal of the Academy of Marketing Science*, *34*(4), 494–505.

Wang, L., Lu, W., & Malhotra, N. K. (2011). Demographics, attitude, personality and credit card features correlate with credit card debt: A view from China. *Journal of Economic Psychology*, *32*(1), 179–193.

Wang, L., Lv, W., & Jiang, L. (2011). The impact of attitude variables on the credit debt behavior. *Nankai Business Review International*, *2*(2), 120–139.

Watson, J. J. (2003). The relationship of materialism to spending tendencies, saving, and debt. *Journal of Economic Psychology*, *24*(6), 723–739.

Watson, M. Z., & Yan, R.-N. (2013). An exploratory study of the decision processes of fast versus slow fashion consumers. *Journal of Fashion Marketing and Management: An International Journal*, *17*(2), 141–159.

Wells, J., Parboteeah, V., & Valacich, J. (2011). Online Impulse Buying: Understanding the Interplay between Consumer Impulsiveness and Website Quality. *Journal of the Association for Information Systems*, *12*(1), 32–56.

Weng, J. T., & Run, E. C. de. (2013). Consumers' personal values and sales promotion preferences effect on behavioural intention and purchase satisfaction for consumer product. *Asia Pacific Journal of Marketing and Logistics*, *25*(1), 70–101.

West, C. J. (1951). Result of Two Years of Study Into Impulse Buying. *The Journal of Marketing*, 362–364.

Worthington, E. L. . J., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W. J. T., O'Connor, L. (2003). The Religious Commitment Inventory--10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology*, *50*(1), 84–96.

Wu, P.T., & Lee, C.J. (2015). Impulse buying behaviour in cosmetics marketing activities. *Total Quality Management & Business Excellence*, (July), 1–21.

Xia, L., & Bechwati, N. N. (2017). The impact of price promotions on checkout donations. *Journal of Product and Brand Management*, 26(7), 734–749.

Xiang, L., Zheng, X., Lee, M. K. O., & Zhao, D. (2016). Exploring consumers ' impulse buying behavior on social commerce platform : The role of parasocial interaction. *International Journal of Information Management*, *36*(3), 333–347.

Xiao, S. H., & Nicholson, M. (2011). Mapping impulse buying: a behaviour analysis framework for services marketing and consumer research. *The Service Industries Journal*, *31*(15), 2515–2528.

Xie, T., Shi, Y. N., & Zhou, J. (2016). The adverse effect of materialism on employee engagement in China. *Journal of Chinese Human Resource Management*, *7*(2), 100–114.

Xu, Y., & Huang, J. S. (2014). Effects of Price Discounts and Bonus Packs on Online Impulse Buying. *Social Behavior and Personality*, *42*(8), 1293–1302

Yamauchi, K. T., & Templer, D. I. (1982). The Development of Money Attitude Scale. *Journal of Personality Assessment*, *46*(5), 522–528.

Yeniaras, V. (2016). Unpacking the relationship between materialism, status consumption and attitude to debt: the role of Islamic religiosity. *Journal of Islamic Marketing*, *7*(2), 2013–2014.

Yi, S., & Baumgartner, H. (2011). Coping with guilt and shame in the impulse buying context. *Journal of Economic Psychology*, *32*(3), 458–467.

Yim, M. Y.-C., Yoo, S.-C., Sauer, P. L., & Seo, J. H. (2014). Hedonic shopping motivation and co-shopper influence on utilitarian grocery shopping in superstores. *Journal of the Academy of Marketing Science*, *42*(5), 528–544.

Yong, H. N. A., & Tan, K. L. (2017). The Influence of Financial Literacy Towards Risk Tolerance. *International Journal of Business and Society*, *18*(3), 469–484.

Youn, S., & Faber, R. J. (2000). Impulse buying: Its relation to personality traits and cues. *Advances in Consumer Research*, *27*(1), 179–185.

Yousaf, S., & Malik, M. S. (2013). Evaluating the influences of religiosity and product involvement level on the consumers. *Journal of Islamic Marketing*, *4*(2), 163–186.

Youssef, M. M. H. A.-, Kortam, W., Aish, E. A.-, & Bassiouny, N. E.-. (2015). Effects of Religiosity on Consumer Attitudes Towards Islamic Banking in Egypt. *International Journal of Bank Marketing*, *33*(6), 786–807.

Yu, C., & Bastin, M. (2010). Hedonic shopping value and impulse buying behavior in transitional economies: A symbiosis in the Mainland China marketplace. *Journal of Brand Management*, *18*(2), 105–114.

Zainuddin, A. (2011). *A Handbook on Structual Equation Modelling* (Second Edition). Malaysia: University Technology of MARA.

Zhang, Y., & Shrum, L. J. (2009). The Influence of Self-Construal on Impulsive Consumption. *Journal of Consumer Research*, *35*(5), 838–850.

Zhang, Y., Winterich, K. P., & Mittal, V. (2010). Power Distance Belief and Impulsive Buying. *Journal of Marketing Research*, *47*(5), 945–954.

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, *37*(2), 197–206.

Zhuang, G., Tsang, A. S. ., Zhou, N., Li, F., & Nicholls, J. A. F. (2006). Impacts of situational variables on buying decisions in shopping malls: An empirical study with multinational data. *European Journal of Marketing*, *40*(1/2), 17–43.

Zuhaili, W. A. (2013). *Tafsir Al-Munir: Akidah, Syariah, Manhaj*. Malaysia: Gema Insani.

LIST OF PUBLICATION

1) Musadik, S. H. S. A., & Azmi, I. A. G. (2017). A Conceptual Paper: The Effect of Islamic Religiosity on Impulse Buying Behavior. *Journal of Global Business and Social Enterpreneurship*, *1*(2), 137–147.

2) Musadik, S. H. S. A., & Azmi, I. A. G. (2017). The Nexus of " Cool " Motivation and Credit Card on Impulse Buying Behavior. A Conceptual Study. *International Journal of Islamic Business,* 2(2), 1–17.

3) Musadik, S. H. S. A., & Azmi, I. A. G. (2018). Impulse Buying Behaviour from Islamic Perspective: A Conceptual Paper. In N. Z. M. Sidek, R. Said, & W. N. W. Hassan (Editors.), Islamic Development Management-Recent Developments and Issues. Malaysia: Springer.

4) Musadik, S. H. S. A., & Azmi, I. A. G. (2018). Impulse Buying Behaviour from Islamic Perspective: A Conceptual Paper. The 2nd Islamic Management Development Conference 2018. Kedah. Malaysia