

The Effects of Religiosity and Ethnicity on Money Attitudes among Malaysians

1. Introduction

1.1. Background

Financial matters are significant sources of stress and tension for human being. Individuals and families are affected by these problematic financial circumstances during their life; therefore, psychological issues are important to be studied in order to identify the true causes of people's behavior in financial decision making. In this study a sample of at least 200 of Malaysian people will be tested to identify their level of agreement on several money related beliefs which can be categorized to four different money belief patterns. These patterns are money avoidance, money status, money worship, and money vigilance. The correlation of these belief systems with income and net worth will be calculated. Also the demographic features related to these belief systems will be provided to give us a better understanding of different groups' attitudes toward Money. The relationship between Religiosity and Money Beliefs; and also between Money Beliefs and Financial Satisfaction will be analyzed. The results of this study can help the Malaysian practitioners in financial sectors to better and more quickly identify money beliefs and disorders that can affect the financial health of their clients.

1.2. Problem Statement:

Currently there are some major studies in the field of money beliefs and financial behaviors across the world, but there are few and limited studies focusing on Malaysia as their sample. The major studies in this field have been carried out in countries such as US and the respondents are from native people from those countries. Knowing the fact that a special country has its own people with different ethnicities, religion, and culture that possibly affect their attitude toward money and financial investment, there is a need to survey the relevant money beliefs and behaviors in Malaysia.

So far few studies have tried to reveal some aspects of money attitudes and financial behaviors among different social groups in Malaysia. Sabri, Hayhoe, and Goh (2006) did a survey among private and public sector workers in Malacca and focused on the gender and private/public sector comparison. Falahati and Hjpaim (2011) examined gender differences in money attitude among college students in Malaysia. Rajna, Sharifah Ezat, Al Junaid, and Moshiri (2011) assessed the degree of personal financial management attitude of the medical practitioners in Malaysia. Despite the contribution of these studies in enhancing understanding on money attitudes in Malaysia, they have used old measures of money attitudes and financial behavior and also have not surveyed the effect of different ethnicities and religions on money attitudes. In their study on medical practitioners, Rajna et al. (2011) showed that there are differences between Malay, Chinese and Indian doctors in financial management attitude but they didn't talk about money attitudes in their study. Sabri et al. (2006) also mentioned that private sector workers are mostly Chinese and government sector are mostly Malay and there are

differences in these two sectors but they didn't survey the effect of ethnicity separately.

This study aims to add understanding on the relationship between demographic characteristics and money attitudes and beliefs. There is lack of study that examines attitudes of different ethnic groups and religion communities toward money. In addition, the effects of income, net-worth, and childhood socioeconomic status are not known for the financial and psychological practitioners in Malaysia. The issue of Financial Satisfaction and its relationship with money attitudes is also not extensively discussed in previous studies.

1.3. Purpose and Significance of the Study:

As mentioned earlier, three studies have been done around money beliefs and similar fields in Malaysia. One of these studies surveys financial management attitude (not Money) in medical sector (Rajna et al. 2011), and other two studies (Falahati & Hjpaïm (2011), and Sabri et al. (2006)) examine the impact of gender and working sector on money attitudes and use the old measurement of money attitudes (Furnham, 1983). None of these studies survey ethnicity as a possible independent variable for money attitudes.

In addition, current studies available worldwide, lack a survey about the relationship of religiosity and also type of religion, with money attitudes. There are few studies which analyze the associations between intrinsic/extrinsic religiosity and consumers' ethical belief beside the functions of Money, and attitude toward business (Vitell, Singh, & Paolillo, 2006). Schneider, Krieger,

and Bayraktar (2011) compared Christian and Muslim consumers in Germany and Turkey. But neither study used money attitudes as dependent variable that may have been affected by religiosity and type of religion.

In the limitation of their study, Klontz, Britt, Mentzer, & Klontz (2011) mentioned that most of their respondents were Caucasian, and that a more diversified sample would help the Money Attitudes studies. They referred to a study done by Yao, Gutter, & Hanna (2005) in which they focused on the effect of race and ethnicity on Financial Risk Tolerance.

Therefore, based on the above mentioned facts, this study pursues two major issues. First, measuring the money attitudes among Malaysians based on a new measurement proposed by Klontz et al. (2011), and have a better understanding of relationships between demographic characteristics (including ethnicity) and money beliefs in Malaysian society. Second, it surveys the relationship between religiosity and money attitudes.

Finally, this study hopes to assist practitioners in financial sectors in Malaysia need to better understand their clients' attitudes toward money and investment and provide them with useful consultations based on their financial behavior and characteristics. It gives us a money belief assessment instrument which can be used by financial practitioners, psychologists, and government to assess potentially problematic behaviors of clients that may impede financial goals. This study also tries to identify special demographic groups of people which show more money disorders and are in priority to be provided with money and financial education by public and private institutions.

1.4. Research Questions and Objectives:

Based on the research topic and the brief introduction, in order to achieve the ultimate purpose of this research, the following questions and objectives are derived:

Research Questions:

- i. What are the common destructive money beliefs and behaviors among Malaysians?
- ii. What are the relationships between different demographic characteristics (especially ethnicity) and Money beliefs in Malaysia?
- iii. How religiosity can affect the attitudes of people toward money?

Research Objectives:

- i. Identifying the common destructive money beliefs and behaviors among Malaysians.
- ii. Identify the relationships between different demographic characteristics of individuals (especially ethnicity) and their money beliefs and attitudes.
- iii. Determining the impact of intrinsic and extrinsic religiosity on money attitudes.

1.5. Scope of the Study:

Every Malaysian could participate in this study. As the most concern in this survey is on the effects of religiosity and ethnicity, it will be tried to have a

diversified sample in these terms which means a convenience sample of graduate, and post graduate students that are diversified in terms of ethnicity and religion, will provide valuable data to analyze and get acceptable results. It seems that for the scope of the current study which is to validate an updated measurement of money attitudes based on clinical psychological and financial studies, a convenience sample of at least 300 people will be appropriate considering the time and resource limitations. As the study tries to contain all ethnicities, it can be considered somehow a stratified sampling method. In addition an electronic version of questionnaire will be designed and will be promoted by sending it through email and posting it on social networks such as Facebook. In terms of measurement, the money belief items and religiosity will be coded on a five-point Likert scale from 1- strongly disagree to 5- strongly agree. Gender, marital status, and similar items will be binary variables. The respondents' age, ethnicity, religion, income, net worth, and socioeconomic status also will be asked by introducing different categories accordingly. The data will be analyzed by SPSS for Windows.

1.6. Organization of the Study:

This study is divided into five chapters namely Introduction, Literature review, Research Methodology, Research Findings and, Conclusion and recommendation.

The outlines of these chapters are described as bellow:

Chapter One: Introduction

This chapter explains the study briefly. It comprises Background, Problem Statement, Purpose and Significance of the Study, Research Questions and Objectives, Scope of the Study.

Chapter Two: Literature Review

Chapter Two supports the study with the related literature and summarizes what former studies have concluded with relation to the Money. It has eleven subtitles; Money effects on Individuals, A Summary of Money Attitude, Money Attitude Definition, Money Scripts, Disordered Money Behavior, Theoretical Background of Attitudes towards Money, Demographic Associations, The Effect of Ethnicity on Financial Behavior, The role of Religiosity in affecting Money Attitudes, Measuring Money Beliefs, and Financial Satisfaction.

Chapter Three: Research Methodology

This chapter includes Research Framework, Selection of Measures, Development of Hypothesis, Sampling Design, Data Collection Procedure, and Data Analysis Techniques. A schematic diagram of theoretical framework is also provided which shows how demographic characteristics and religiosity may be associated with money beliefs. It also shows that there may be some connections between money beliefs and financial satisfaction.

Chapter Four: Research Findings

The chapter will discuss all findings of research in depth. It also gives pre-analysis data screening results from the reliability test and validity assessment. Furthermore, descriptive analysis will also be taken into consideration. The correlation of different variables and the strength of these correlations will also be discussed.

Chapter Five: Conclusion and Recommendation

In this final chapter, the findings will be summarized and implications of the findings are formulated accordingly. It provides an overview on the implications of the findings, accepted theoretical model or paradigm and shows the overall importance of the research items in Money Attitudes field. Moreover, practical implications for governmental managers, financial practitioners, psychologists and other associate groups will be discussed together with the final results, limitation of study and further research directions.

2. Literature Review

2.1. The Effects of Money on Individuals

Money is a major cause of stress in the lives of Americans (APA, 2009). About 73% of Americans named money as the most important cause of pressure in their lives above factors such as work, physical health, and children. Money matters are also a main reason for disagreement and divorce in relationships (Dortch, 1994; Oggins, 2003). This is often outcome of beliefs about money that impact the way people think about money in their lives. The mental health field has been developed in many areas such as personality, depression, anxiety, and other psychological symptoms; however, money issue has been somewhat ignored in this field (Trachtman, 1999). While there are some money tests on the internet or in consumer magazines to measure money personality, there are few empirically based scales to assess destructive behaviors or beliefs (Klontz et al., 2011).

According to Klontz, Bivens, Klontz, Wada, and Kahler (2008), “more money will make things better” is a shared belief among Americans. Based on this belief, individuals think that an increase in income or financial bonus would solve their problems. Klontz & Klontz (2009) mention that for many people money is a source of shame and secrecy that they call it money vigilance. Medintz (2004) did a survey on more than 1000 adults and found that more than fifty percent of them considered money a sensitive subject in their households, forty percent had lied to their partners about the cost of their purchases, and forty percent felt it was acceptable to not share financial information with one another.

Goldberg and Lewis (1978) mention that money induces many emotions such as fear, anger, greed, envy, and contentment and these behaviors often involve unconscious motivation.

Money has important effects on people's incentive in organizations and their work-related performance (Lawler, 1981). It has different meanings for different people. Lawler (1981) stated that money is a motivator, and Herzberg, Mausner & Snyderman (1959) mentioned that it is a hygiene factor.

As emphasized by Feldman (1957) in this dynamic world only one thing has been continuously important and that is money. For those who lack money, it acts as a motivator, and also has power to incite worry and unhappiness (Furnham A., 1996), and for those who have plenty of money, it acts as a tool to impress others, as a means to illustrate their supremacy and acts a symbol for prestige representation. Money has been considered an influential tool for economic growth (Furnham and Argyle, 1998). Economic development of nation depends largely on its human capital, and it has been explored that human resource can be encouraged to work hard by proposing higher monetary incentives (Lynn, 1991). Money is necessary to perform all social activities. It has an effect on our spending activities, political view and our performance at work (Roberts & Sepulveda, 1999).

2.2. Money Attitude Definition

Money is the same generally but it's the individuals' attitudes toward it that makes the dissimilarity; consequently, the study of attitudes towards money is a significant element in the study of consumer behavior (Prince, 1991). With

increasing importance of money in one's life in modern world, it is important to comprehend the attitudes toward money because attitude determines the behavior of an individual. The reason for significance of study of money attitudes is the strong cause and effect correlation between attitudes and behavior. Money attitude influences not only on activities but also on the way of thinking (Simmel, 1997).

Furnham & Argyle, (1998) explained that people's attitudes toward money seem to be learned through education, gaining expertise, skill, and financial behavior. Motivations underlying money attitudes range from struggling for status and power to increasing self-esteem (Lindgren, 1980).

Hence, money attitudes could be conceptualized as a person's opinion about money, and are developed based on experiences and situations faced in life. These attitudes consequently influence our behavior which affect our decision making process. Money attitudes vary from one person to another because of different childhood experiences, social status, and financial status. Evidence suggests that money attitudes precede money behaviors (Roberts and Jones, 2001), and money attitude helps to predict financial practices (Dowling et al., 2009; Shim, Xiao, Barber & Lyons, 2009). Eagly and Chaiken (1993) defined attitude as a propensity to act in a favorable or unfavorable way toward a purpose.

Another term which has been used in the literature is "money scripts" which is very similar to money attitude. Klontz and Klontz (2009) defined money scripts as beliefs individuals hold about money. They hypothesized that these scripts are developed in childhood, normally unconscious, passed from generation to generation, and a factor that drives financial behaviors of

individuals. They discussed that emotionally charged financial experiences can leave a long-term mental imprint as children try to understand the role of money in their family, life environments, and in the world. Money scripts are often the source of money disorders, and when connected with emotionally charged or shocking events, these belief patterns can be extremely resistant to change (Klontz & Klontz, 2009). Consistent with social learning theory of Bandura (1977), people tend to carry beliefs about money learned in childhood into their adult lives (Furnham, 1996; Kirkcaldy & Furnham, 1993), and if parents did not have a healthy relationship with money, these attitudes may have bad effects on children.

2.3. Disordered money behaviors

According to Chatzky (2003) and Easterbrook (2005), lack of money is not the major reason for disordered money behaviors. They also found that problems with money and stress around money cannot be cured by having more money. They showed that there is no significant correlation between happiness and money when family incomes are above \$50,000 per year. Yamauchi & Templer (1982) found that attitudes about money are independent of a person's income. In addition, the significant economic advances experienced by Americans in recent decades have not been supplemented by a rise in life satisfaction, but accompanied with increases in mistrust and depression (Diener & Seligman, 2004). To illustrate, in some cases, winning the lottery has resulted in the development of serious depression (Nissle & Bschor, 2002). Csikszentmihalyi (1999) states that despite lack of evidence of a relationship between wealth and happiness,

most people still believe that their problems would be resolved by having more money.

Theorists hypothesize that money problems are result of early experiences with money (Orman, 1997). Cultural influences, experiences during childhood, and early learning lead to patterns of learned behaviors that meet psychological and emotional needs rather than helping coherent financial objectives (Goldberg & Lewis, 1978). Kinder (1999) theorizes that difficult feelings cause internal conflicts around money and resolution of these feelings contribute to adaptive financial behaviors. On this account, Klontz, Kahler, and Klontz (2006) proposed that the most prevalent and persistently destructive financial behaviors are rooted in painful emotions related to past events and may need psychotherapy to attain lasting healthy financial behaviors.

Another disorder relates to the way people manage and save their money. In a survey of more than twenty one thousand respondents from thirty eight countries, U.S. consumers were number one in reporting they had no money to reserve after paying for their basic living expenditures (Feig, 2005). Branigin (2004) reported that American consumers' debt has doubled since 1994 to 2004. In 2004 the number one new year's decision for Americans was getting out of debt, and seventy percent of them reported that they carry too much debt that make their lives unhappy (Warren & Tayagi, 2004). Warren and Tayagi (2004) also found that in 2004 the number of American women filed for bankruptcy was more than college graduates, and the number of children who experienced their parents' bankruptcy was more than those experienced their parents' divorce.

Price, Choi, and Vinokur, (2002) showed that financial stress increases signs

of depression and result in losing personal control. They also found that many individuals chose to ignore the impact of uneasy financial situation instead of dealing with them. Another study by Medintz (2004) showed similar results where 36% of respondents stated that they avoid thinking about their financial worries. According to Gensing-Pophal (2002), financial problems also negatively affected job performance and productivity of U.S. workers.

Research has also shown that disordered money behaviors have negative impact on and individual well-being. For example, Tatzel (2002) showed that being over concerned with financial success, being too tight or loose with money, and being materialistic is related with lower scores of well-being. Moreover, according to Kasser & Ahuvia (2002) materialistic individuals report lower happiness, vitality, and self-actualization, and higher levels of unhappiness, physical symptoms, and anxiety. Hanley & Wilhelm (1992) showed that obsessive buying is related with low self-esteem feelings.

Klontz et al. (2008) discussed that psychologists need to identify disordered money behaviors and performed an experimental therapy on 33 persons with problematic financial behaviors in a six-day experimental program. Following the treatment, individuals showed reductions in worry, distress, and anxiety about money, and signs of better financial health.

Gallen (2002) defines money disorders as emotional imbalances that cause lasting problems with money and work. Klontz et al. (2008) defined disorders as poor adaptation of financial beliefs patterns that cause distress, excessive financial tension, and inability to enjoy financial resources. Symptoms of money disordered behavior may include financial despair, anxiety, worry, undue debt, conflict around money, bankruptcy, obsessive overspending or

hoarding, unnecessary risk-taking, and financial dependency. On the contrary, So-Hyun and Grable (2003) defined financial wellness as keeping low debt, having a dynamic savings and retirement plan, having a spending plan, low levels of financial stress, and high levels of financial satisfaction.

2.4. Theoretical background of attitudes towards money

The relationship between money attitudes and various demographic variables has been tested before. For example, compulsive behavior (Hanley & Wilhelm, 1992), income (Tang, 1992), emotional stability and sensitivity, financial counseling, age (Bailey & Gustafson, 1991), education (Furnham 1984), gender and materialism (Tatzel, 2002). Tatzel (2002) has identified four types of money attitudes, big spender, non-spender, experiencer, and value-seeker.

Rubenstein (1981) found that people's differences continue when it comes to individuals' belief about money. McClure (1984) found that money behavior of shoppers ranges from miserly to spendthrift. Roberts & Sepulveda (1999) claimed that money attitude effects individual's attitude toward environment. Bailey & Lown (1993) showed that as the age increases and also as people become more educated, they are more inclined to financial planning. They also showed that money attitudes differ between two nations. Wernimont & Fitzpatrick (1972) stated that working individuals have more positive attitudes toward money while unemployed persons have negative attitudes toward it such as anxiety and distrust.

Tang (1992) showed a correlation between age and sex with one's ability to budget money. High income and younger individuals tended to consider

money as achievement and less evil. High protestant ethic individuals mentioned that they budget their money correctly and tended to see it as evil and also an instrument to maintain freedom and power. High leisure ethic persons on the other hand are more intended to see money as good and less evil, and less freedom and power. Religious values and social values were negatively correlated with achievement and power. Hence, religious values are different from political and economic values. People who saw money as achievement experienced lower level of overall satisfaction with life. Those who desired more freedom and power from money showed lower satisfaction with pay, work, co-worker, and overall life pleasure. Those who were satisfied with their work felt that money is not evil; and those who budget their money were more satisfied with their life. In addition, income showed significant correlation with satisfaction of work. These results show construct validity for MES (Money Ethic Scale). According to Furnham (1984), money attitudes are not one-dimensional. As the correlation presented are relatively low, the results should be interpreted with caution due to small and non-representative sample, and according to Anastasi (1988) more research is needed to fully establish the construct validity for MES.

2.5. Demographic Associations

According to Tang (1992), there is a slight correlation between income and money attitudes where higher income people see money as a sign of achievement and less evil comparing to lower income people. Furnham (1984) on his Money Belief and Behavior Scale (MBBS) showed that there is a positive correlation between income and obsession with money, belief that

hard work is financially rewarded, and using money as power to control others. As there is a positive relationship between income and education, Furnham also found that more educated individuals handle money in a more conservative manner, and lower educated people perceived they were poorer during their childhood than others.

Some relationships between age and gender, and money beliefs have also been found by researchers. According to Tang (1992), younger individuals are more intended to see money as a source of evil than older individuals. Tang also found that females and older individuals are more interested to keep a budget and consequently report more life satisfaction. According to Furnham (1984) older respondents had more negative views and were more worried about their financial situation. Furnham also mentioned that males show more obsess about money than females and are more conservative, and view money as a sign of security and hard effort.

Klontz and Klontz (2009) hypothesized that money avoidant attitudes may result to disordered behaviors such as excessive risk aversion, under spending, financial rejection, and financial denial. Klontz et al. (2011) showed that money avoiders have lower (or unknown) levels of income and net assets. This was consistent with the study done by Tang (1992). Younger and single individuals are also more money avoidant and it shows possibility that as people age they change their attitudes and become less money avoidant. Klontz et al. (2011) also found that those who did not know their net-worth were more money avoidant than others. This makes sense as those who are more money avoidant are less aware of their financial situation.

Klontz and Klontz (2009) hypothesized that money worshipping disorders may

be related to money disorders such as pathological gambling, unreasonable risk-taking, compulsive hoarding, workaholism, overspending, and compulsive buying. Klontz et al. (2011) found that younger, white, single, lower income, and lower net worth individuals show more money worshiping attitudes. As evidenced by white respondents, culture or ethnicity may impact one's inclination toward money worship attitudes.

Klontz et al. (2011) showed that younger, single, less educated, and less wealthy individuals are more likely to see money as a status symbol. Also those individuals who stated that they were grown up in lower socioeconomic classes, showed more money status beliefs.

Klontz et al. (2011) stated that money vigilance factor is linked to watchfulness, alertness, and concern about money, and the sense that one must be careful of imminent trouble or danger. Money vigilance attitude may encourage a person to save but it may cause excessive caution or anxiety about future financial trouble which will consequently hinder enjoying the benefits of money. Lower income individuals and non-whites showed more money vigilant attitudes in Klontz et al. (2011) study.

Klontz et al. (2011) reported that from the perspective of financial psychotherapists and financial educators, younger individuals in general hold more destructive money behaviors that may impact their ability to achieve financial goals and become financially independent. They introduced Klontz Money Script Inventory (Klontz- MSI) as a quick screening tool of money disorder that may be used by financial practitioners and also helping couples to resolve money related conflicts.

Lim and Teo (1997) studied a sample of university students in Singapore, and found that students who experienced financial difficulties were more likely to use money as a form of assessment, have higher levels of financial anxiety, and be more generous to the less fortunate.

Falahati and Hjpaïm (2011) examined gender differences in money attitude among college students in Malaysia. Their findings indicated gender differences for different dimensions of money attitude, in which males were fond of money as a power/prestige tool while experiencing anxiety and having a retaining attitude toward money, while female students were conservatively minded about money, as well as being attached to money for self-satisfaction purposes.

Gender theories propose that women and men perceive money differently due to socialization, and it is accepted that families use different approaches to financially educate boys and girls such as encouraging boys to participate in financial decision making and protecting girls from financial issues (Newcomb and Rabow, 1999).

A study was conducted among Singaporean Chinese by Lim et al. (2003) in which men showed more concern about anxiety and power dimensions, and women were more concerned about retention, budget, and evaluation scopes of money attitudes. They concluded that because in Asian context men are expected to be breadwinners they have more power/prestige attitudes but as women are expected to hold family they show more retention and budget attitudes.

Sabri, Hayhoe, and Goh (2006) focused on gender and private against public

sector workers in one of the cities in Malaysia (Malacca). They found that there are major differences between females and males in the power and obsession dimensions of money attitudes where males showed higher scores in these attitudes. Those who worked in government sector showed higher scores in retention, and effort/ability, and those who worked in private sector scored higher in power and security dimensions. Sabri et al. (2006) also found that on money values and beliefs scale, gender has an important impact. In addition, they found that if an individual is more optimistic about the future of the economy, he or she is more interested to save. In terms of gender, Bailey and Lown (1993) also found that men valued money more than women and noticed money as a sign of achievement and use it as a standard for judgment.

2.6. The Effect of Ethnicity on Financial Behavior

In a study on financial risk tolerance, Yao et al (2005) surveyed the effect that race and ethnicity may have on this parameter. In their study they found that Hispanics and Blacks are more interested to take substantial financial risk but less interested to take some financial risk than Whites. They proposed that financial teachers and government must target investor training on financial risk and investment for different ethnicities in order to support them with better choices of investing. Differences in cultures may have caused minority groups to show eagerness to take substantial risk. According to Yao et al. (2005) culture provides a background in which information is framed and preferences are shaped. They suggested that the level of exposure to media, financial information form market, and financial services, and also level of

acculturation for subgroups, may be of the reasons for different attitudes of ethnic groups. They discussed that if ethnicity represents cultural differences, then training programs are better to be adapted to those cultures. Diversity of the work force in the financial industry was another solution offered by Yao et al. (2005) to reduce the mistrust in minority ethnic groups.

Rajna, Sharifah Ezat, Al Junaid, and Moshiri (2011) measured the levels of personal financial management attitude of the medical doctors in Malaysia and identified their financial management applied trends, strengths and weaknesses. They found that overall the medical physicians in Malaysia have a positive financial attitude, but needed financial practice. They also found that ethnicity and experience of foreign countries have influence on the financial attitude. Experiencing another country causes more positive financial approach. In addition, Chinese practitioners showed more positive financial attitudes than Indians and Malays.

2.7. The role of Religiosity in affecting attitudes

Vitell et al. (2006) examined the roles that a person's religiosity, money ethic, and approach to business, play in influencing consumer attitudes and opinions in different situations concerning problematic consumer practices. They studied two scopes of religiosity, namely intrinsic religiosity and extrinsic religiosity. The results of their study showed that both intrinsic and extrinsic religiosity, as well as attitude toward business, and money ethics, are significant determinants of some forms of consumer ethics.

There are many different viewpoints in the literature on money. Hunt and

Vitell (1993) proposed general theory of marketing ethics in which they declare different personality characteristics such as values and attitudinal variables. They considered money attitudes as one of the aspects. Tang (1992) developed money attitude scale (MES) which had four factors; importance, rich, motivator, and success, to measure ethical aspects of money. In 2002 Tang reported that an individual's money ethic has significant influence on unethical behavior. By using "rich" dimension, Vitell et al. (2006) reported that a person's money ethic has relationship with ethical/unethical attitudes.

Culliton (1949) stated that religion has possibly relationship with business. Magill (1992) indicated that a person's religiosity makes a background in which ethical nature of deeds is explained. According to Huffman (1988) religiosity is one of the strongest elements in determining values. Moreover Weaver and Agle (2002) mentioned that religiosity has an impact on individuals' attitudes and behaviors. Hunt and Vitell (1993) included religion as one of the causes of ethical decision and propose that strength of religious beliefs may lead to different decision making manners in people. Allport (1950) divided religiosity into two dimensions. He defined extrinsic religiosity as using religion, and intrinsic religiosity as living religion. Vitell, Paolillo & Singh (2005) found that extrinsic religiosity is not influencing ethical beliefs but intrinsic religiosity has significant impact on ethical beliefs. In 2006 they got the same results with a non-student sample. They found that intrinsic religiosity has positive relationship with belief that controversial consumer activities are wrong and unethical. According to Vitell et al. (2006) extrinsic religiosity does not have significant impact on questionable consumer

practices. They suggested that the fields of religiosity and consumer ethics, beside interpretation of money need additional investigation.

Schneider, Krieger, and Bayraktar (2011) did a survey on Christian consumers from Germany and Muslim consumers from Turkey to understand the association between intrinsic religiosity and consumer ethics with regard to religious community. The results showed that the relationship between religiosity and ethical consuming behavior in Turkish- Muslim subsample is stronger than that of German-Christian subsample. They stated that since almost one-quarter of the world population are Muslim and the amount of investment in Muslim countries is increasing, they have included Islam in their study. According to Saeed, Ahmed & Mukhtar (2001), many Muslim countries show a strong tendency toward religious values. Regarding Hofstede's cultural dimension (1997) and according to Pasa, Kabasakal & Bodur (2001), Germany can be denoted with individualistic culture where members usually suspect values and ethical norms of their own society, while Turkey can be denoted with collectivistic culture where people tend to accept regular norms and values.

According to Berger (1961), religion is a fundamental determining factor of social behavior. Hirschman (1983) states that comparing to religion; few other variables have greater explanatory power. Religiosity is defined as belief in the presence of God, and obeying the rules defined by God (McDaniel and Burnett, 1990). Schneider et al. (2011) mentioned that both religion and religiosity are important as independent variables that may affect consumers' behavior. They also found that laws have greater influence than religious values on individuals. They concluded that companies must be cautious while

doing their marketing activities in different countries with different levels of religiosity and do not use debatable ethical activities in those areas. Comparing the results of Schneider et al.'s study (2011) and Vitell et al.'s study (2006) shows that Christians from different countries (U.S. and Germany) has different ethical behaviors and this emphasizes the role of culture in determining behaviors beside religion.

2.8. Measuring Money Beliefs

Since 1970s many researchers has tried to identify factors to measure money attitudes and behaviors. Goldberg and Lewis (1978) showed their interest to discover destructive attitudes about money that are formed by naïve ideas. They stated that people are too instructed with the notion that possessing money is important, that they do not ask why. It is possible that what they actually looking for is security, or power, or self-respect, or freedom, or love. They identified four reasons for obtaining money, including power, freedom, love, and security. Although they didn't show any empirical evidence they were interested in developing money attitudes and create sound instruments.

By using a semantic differential approach, Wernimont and Fitzpatrick (1972) tried to understand different beliefs about money. Some of the factors they introduced include, shameful failure (lack of money brings the sense of embarrassment for some people), social acceptance, money is not important, money as evil, money as security, and business values.

Yamauchi and Templer (1982) developed money attitude scale (MAS), in which individuals may have status view of money or think that money is a

sign of success. They also found anxiety feelings about money among people. MAS is comprised of 29 items in four groups: (a) retention-time, (b) distrust, (c) power-prestige, and (d) anxiety. Retention-time means being ready for future financial situation, distrust is the state of not willing to expend money, power-prestige is about using money to affect others and display status, and anxiety is feeling worry around money and desire to expend money.

Furham (1984) used some items of MAS, and other sources to build money beliefs and behavior scale (MBBS) which has been widely used in different researches so far. The MBBS is consisted of sixty items in six groups of ideas, namely: (a) power, (b) security, (c) obsession, (d) retention, (e) effort/ability, and (f) inadequacy. Power is defined as using money to gain priority and advantage over others. Security is about being conservative about money, while Obsession means being thoughtful and worried about money. Retention means keeping money. Effort/ability asks how an individual achieves money, and finally inadequacy refers to those feelings that one may have not enough money.

Forman (1987) introduced five money personalities that include miser, spendthrift, gambler, bargain hunter and tycoon. Miser refers to the situation where individual tries to hoard money and has a fear of losing money. The spendthrift individuals are compulsive in their buying behavior and this happens especially when they feel depressed and worthless. Tycoon is interested in money making to gain power and status. Bargain hunter search for bargains even for unnecessary things. These individuals get angry if they cannot bring the price down. The gambler is optimistic in taking chances, and

even if they lose they hardly can stop gambling because of the power sense in times of winning.

Tang (1992) developed money ethic scale (MES) with six factors about money beliefs: (a) money is evil, (b) money is good, (c) money is a symbol of respect, (d) money represents achievement, (e) money is power, (f) budgeting is important.

Mitchell et al. (1999) introduced Money Importance Scale (MIS) with seven factors such as individual connection with money, value importance of money, knowledge of financial management, time spent thinking about financial concerns, feeling secure in taking financial risks, money as a source of power, and ability to handle money.

Klontz et al. (2011) identified four major factors in their assessment of money beliefs. They are (a) avoidance (desire to avoid money issues), (b) worship (accumulate money), (c) status (differentiate one's self from other socioeconomic classes), and (d) vigilance (keep one's money issues private). After doing a factor analysis, the total scripts they used reduced from 72 to 51 items. The Klontz-MSI (money scripts inventory) works as an update to the terms used in Yamauchi and Templer's (1982) MAS and Furnham's (1984) MBBS instruments. It also involves a different approach to item construction, as the items used in the Klontz-MSI were obtained directly from clients.

2.9. Financial Satisfaction

Wilhelm, Varcoe, & Fridrich (1993) did a survey in Arizona and California to understand the relationship between money beliefs and financial satisfaction.

They measured financial satisfaction by observing four criteria, namely income, financial resources, physical properties, and net-worth. In order to measure money beliefs, Wilhelm et al. (1993) utilized Furnham's MBBS (1984). Joo and Grable (2004) highlighted that in general, individuals that have stronger perceptions and positive financial attitudes tend to be more satisfied with their financial situation and manage their money more effectively.

Wilhelm et al. (1993) found that money beliefs help more to prediction of an individual's financial satisfaction than a person's perception of financial progress. For both genders money attitudes were significant determinants of financial satisfaction. For males "effort" factor has strongest positive, and money belief of "retention" has negative relationships with financial satisfaction. A similar relationship between these two factors and financial satisfaction exists for females. Moreover, for females, "spend" factor is also a significant determinant of financial satisfaction.

According to Wilhelm et al. (1993), financial counselors and clients need to be aware of their clients' subjective issues. Therefore understanding their money attitudes and realizing the relationships of these attitudes and financial satisfaction help counselors to provide better services.

One of the tools to measure the well-being of an individual is level of the financial satisfaction. Williams (1983) mentioned that well-being and financial satisfaction has a robust relationship and may also influence each other in a bidirectional relationship. According to Chuan, Sia Bik, and Ng Kean (2011), two methods are generally used to analyze an individual's financial satisfaction. One is based on a single question about financial satisfaction

and the other one is based on multiple measures. They noted that majority of studies up to early 1990s had used single question to analyze financial satisfaction (Morgan, 1992; Porter and Garman, 1993). Examples of these questions are: (a) how satisfied are you with your financial situation? (Morgan, 1992), and how comfortable are you with your financial situation? (Greenley, Greenberg and Brown, 1997).

2.10. Summary of Literature

In this chapter a summary of useful data from previous studies in the field of money was provided. The main topics discussed in this chapter were: (a) the effects of money on individuals, (b) money attitude definition, (c) disordered money behavior, (d) theoretical background of attitudes toward money, (e) demographic associations, (f) the effect of ethnicity on financial behavior, (g) the role of religiosity in affecting attitudes, (h) measuring money beliefs, and (i) financial satisfaction.

It was found that money is a major source of stress in people's lives and sometimes it leads to disagreement and divorce in relationships. Many people think that more money will solve all their problems while it is not the case in many circumstances.

Money attitudes were conceptualized as a person's opinion about money, which are developed based on experiences and situations faced in life. These attitudes consequently influence behaviors that affect our decision making process. Money attitudes vary from one person to another because of different childhood experiences, social status, and financial status. It was found that money attitudes precede money behaviors (Roberts and Jones,

2001), and money attitude helps to predict financial practices. Then there was a discussion around disordered money behaviors and also some theoretical background of attitudes toward money.

A summary of the results of previous studies about the relationship of different demographic factors and money attitudes was provided and especially the effect of ethnicity on financial behavior was discussed. As financial behavior is in fact the way people manage their money it is very possible to observe similar results in relationships between ethnicity and money attitudes.

The role of religiosity in affecting money attitudes was another topic that was discussed in this chapter. It was found that religiosity and money ethics affect consumer attitudes. Therefore it was hypothesized that there may be an interrelationship between religiosity and money attitudes as well.

Also some famous measurements of money attitudes were introduced in this chapter. Since 1970s many researchers has tried to identify factors to measure money attitudes and behaviors. It was found that the study done by Klontz et al. (2011) is the latest and most appropriate measurement of money attitudes, and therefore in the next chapter there will be more discussion and usage of the instrument developed by Klontz et al. (2011).

Finally there was a brief discussion on the relationship between money attitudes and financial satisfaction, as the level of financial satisfaction is one of the tools to measure the well-being of an individual.

3. Research Methodology:

3.1. Introduction

In this chapter the methodology of the study to collect and analyze data is explained. It provides a methodological base to understand the relationship between different demographic variables and different dimensions of money attitudes, as well as between religiosity and money attitudes in Malaysian context. In this study primary data has been collected using the self-administered questionnaire. This Chapter includes six sections: (1) Research Framework, (2) Selection of Measures, (3) Development of Hypothesis, (4) Sampling Design, (5) Data Collection Procedure, and (6) Data Analysis Techniques.

3.2. Research Framework:

The dependent variable which is studied in this research is Money Attitudes or what is called Money Scripts by Klontz et al. (2011). There are different independent variables including demographic characteristics and religiosity. As mentioned earlier in the literature review, there are several measurements of money beliefs and behaviors. Wernimont and Fitzpatrick (1972), Price (1968), Rubinstein (1981), Goldberg and Lewis (1978), Furnham (1984), Yamauchi and Templer (1982), Forman (1987), Kirkcaldy and Furnham (1993), Tang (1992, 1995), Prince (1993), Mitchell et al. (1998), and Klontz et al. (2011) are among those who introduced new measurements and contributed to the field with different measures.

This study chose to work with the instrument introduced by Klontz et al. (2011) as it is the newest comprehensive study in this field and has considered previous studies in item construction. Also The scale is obtained directly from people who were asking help for their disordered money beliefs. Its items are collected in over a decade of clinical observation done by Klontz and colleagues. They used exercises designed by Klontz et al. (2008) to draw out beliefs about money from financial therapy clients. They asked a group of recognized financial therapists to evaluate the face validity of these items and then a total of 72 items related to money concepts were identified which were grouped by the team into 8 hypothesized factors. It consisted of (a) money status, (b) money worship, (c) money is bad, (d) anti-rich, (e) frugality or fiscal responsibility, (f) money mistrust or openness, (g) money is unimportant, and (h) money anxiety. After doing a factor analysis, the total scripts reduced to 51 items. According the Pett, Lackey, and Sullivan (2003), the number of factors cannot be determined precisely. They have some suggestions to determine the number of factors, and one of them is using a scree plot. Klontz et al. (2011) used this method to determine four factors which are more appropriate than others. These final factors are (a) Money Avoidance, (b) Money Status, (c) Money worship, and (d) Money Vigilance. It is expected that those who believe money is bad or they do not deserve money score high on Money Avoidance dimension. Money Status beliefs refer to those who want to acquire more money than the people around them, see a clear distinction between socio-economic classes, and are more materialistic than others. Money Worship refers to those who believe that more money and income will solve their problems. Money Vigilance refer to those people who see money

as a deep source of shame and secrecy, whether they have a lot of money or a little.

In their study of money beliefs and financial behaviors, Klontz et al. (2011) focused on the demographic characteristics as their independent variables which can help to quick identification of money beliefs by financial practitioners. Few studies before that have validated demographic factors in money attitudes. Yamauchi and Templer (1982) have not been able to show a strong connection between one's income and his/her attitude toward money. However, according to Tang (1992), there is a slight correlation that shows income is related to the belief upon money, with higher income people seeing money as a sign of achievement and not viewing it as evil compared to lower income individuals. Furnham (1984) also found some relationships between education and income, with some types of money beliefs. Tang (1992) found some associations between age and gender, with money beliefs. He found that younger individuals think of money as a source of evil. According to Furnham (1984) older people are more worried about their financial situation and have negative prospects of their financial future. Tang (1992) also found that females and older individuals have more tendencies to keep budget which leads to greater life satisfaction. According to Furnham (1984) males are more obsessed and more conservative about money. Klontz et al. (2011) found that younger individuals hold more destructive money beliefs. Also they found that lower levels of income, education and net assets will cause more avoidance and worship attitudes around money.

This study considers all these four factors (Money Avoidance, Money Status, Money worship, and Money Vigilance) as Money Scripts (attitudes and beliefs

toward money) and treats them as dependent variables. Also based on the literature the demographic variables are set as independent variables.

In their study, Klontz et al. (2011) did not focus on ethnicity as one of the most important demographic variables which includes the effects of different cultures on Money Beliefs and financial behaviors. Also in previous studies there was not a comprehensive study that surveys the associations between ethnicity and money beliefs directly. However, Yao et al. (2005) compared the financial risk tolerance of Blacks, Hispanics, and Whites in United States. According to that study all the three different ethnicities displayed different attitude toward financial risk and behavior. As the issue of financial risk and behavior is in many ways similar to the issue of money attitudes and beliefs, there is possibility that different ethnicities and cultures have different attitudes toward money. Malaysia is a multi-cultural country which three different major ethnicities live here together. Although after living together for many years, people have adapted themselves to live with different cultures, and the attitudes of Chinese and Indians are different from the attitudes of those living in main lands, still one can observe different behaviors among these groups of people. In a study done by Rajna et al. (2011), about financial attitude among medical practitioners in Malaysia, they found that ethnicity and also exposure to overseas have impact on doctors' financial attitude in Malaysia. Those that studied overseas had more positive attitude in managing money. Also the Chinese doctors showed more positive financial attitude than Malay and Indian doctors. Therefore we consider ethnicity as one of the major independent variables that has some effect on the money scripts of people.

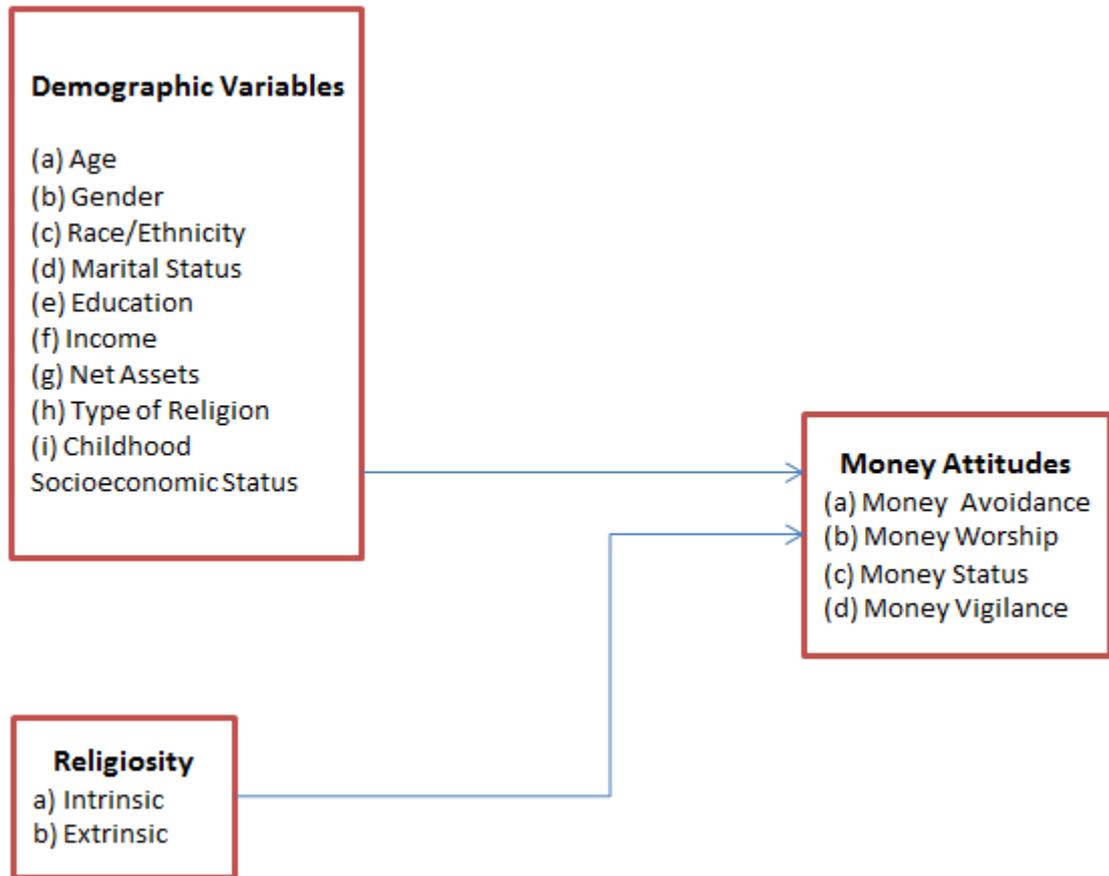
Another important determinant of humans' attitude is religiosity which in the case of money attitudes seems to be somehow neglected. However, we can deduce from some similar studies that religiosity whether in intrinsic and extrinsic aspects or as a special religion itself, have some effect on the attitudes people may have around money. Almost all religions have ethical advices regarding money and how to deal with it. Therefore, it is possible that religion has an effect on money scripts. According to Vitell et al. (2006), both types of religiosity (intrinsic and extrinsic) as well as money ethic and also attitude toward business are significant determinants of consumer ethical beliefs and behaviors. In another study in the field of consumers' ethical beliefs, Schneider et al. (2011) compared Christian consumers from Germany and Moslem consumers from Turkey, and found that consumers in the Turkish Moslem population showed stronger connection between religiosity and ethical consumer behavior than those Christians from Germany. Therefore in this study we consider religion as independent variable that may have effect on money scripts of individuals.

In order to open the way to have a better understanding of the importance of Money Beliefs and Attitudes, this study also discusses "Financial Satisfaction" as results of how one looks at money, by asking one single question about level of financial satisfaction of individuals. Financial satisfaction is one of the closest tools to measure an individual's well-being, and income is a major input in measures of financial satisfaction (Campbell, 1981; Plagnol, 2010). According to Chuan et al. (2011), there are two types of methods to measure one's financial satisfaction level. One is based on a single question and the other tends to ask multiple questions. In this study we use the measure

proposed by Morgan (1992), which uses a single question of how a person is satisfied with his/her current situation. The reason for using this method is that this study wants to analyze the psychological aspect of satisfaction with financial situation, as an individual's money beliefs are mostly referring to psychological aspects of money.

Based on the above discussion this study proposes a theoretical framework that considers the demographic variables and Religiosity as independent variables, and money beliefs and attitudes as dependent variable. Analyzing the level of financial satisfaction is not the main goal of this study and therefore it is not included in the framework, and the results regarding the financial satisfaction would show whether there is any relationship between this factor and money attitudes and religiosity to be discussed in future studies or not.

Figure 3.1: Schematic diagram for theoretical framework



3.3. Hypothesis Development:

Based on the above discussion, the conceptual framework, and the literature review, the following hypotheses are proposed:

H1: There is a relationship between different **Demographic Variables** and different dimensions of **Money Attitudes**.

H1- a: There is a relationship between **Age** and different dimensions of **Money Attitudes**.

H1- b: There is a relationship between **Gender** and different dimensions of **Money Attitudes**.

H1- c: There is a relationship between **Race/Ethnicity** and different dimensions of **Money Attitudes**.

H1- d: There is a relationship between **Marital Status** and different dimensions of **Money Attitudes**.

H1- e: There is a relationship between level of **Education** and different dimensions of **Money Attitudes**.

H1- f: There is a relationship between **Income** and different dimensions of **Money Attitudes**.

H1- g: There is a relationship between **Net-Worth** and different dimensions of **Money Attitudes**.

H1- h: There is a relationship between **Childhood Socioeconomic Status** and different dimensions of **Money Attitudes**.

H1- i: There is a relationship between **Type of Religion** and different dimensions of **Money Attitudes**.

H2: There is a relationship between **Religiosity** and different dimensions of **Money Attitudes**.

H2- a: There is a relationship between **Intrinsic Religiosity** and different dimensions of **Money Attitudes**.

H2- b: There is a relationship between **Extrinsic Religiosity** and different dimensions of **Money Attitudes**.

3.4. Selection of Measures:

In order to evaluate and test the proposed hypotheses in the Malaysian context, this study uses three different sources to form a reliable questionnaire which can also be a good instrument to be used by financial practitioners working in Malaysia to assess the beliefs and attitudes of their clients and find the best solutions for their money disordered behavior and financial difficulties. The main Questionnaire to be used is the one proposed by Klontz et al. (2011) which integrates the previous instruments in the field of money attitudes and beliefs and is based on a decade of clinical survey on financial clients. It is a 51-item scale except demographic questions. The second source for constructing the questionnaire is the questions asked by Vitell et al. (2006) about Intrinsic and Extrinsic Religiosity. There is totally 14 questions related to religiosity, 8 of which are about intrinsic aspect and 6 are about extrinsic traits. The third source for compiling the questionnaire is the

single question asked by Morgan (1992) about the Financial Satisfaction. Therefore, the new questionnaire would have 66 items, except the demographic part.

3.5. Sampling Design and Data Collection

As mentioned in first chapter, every Malaysian in every demographic group could participate in this study, but as the focus in this study is on ethnicity and religiosity, it will be tried to have a diversified sample from different ethnicities and different religions in Malaysia. On this account, a convenience sample of graduate and postgraduate students that are diversified in terms of ethnicity and religion will provide valuable data to analyze and get acceptable results. Therefore for the questionnaires were distributed in University Malaya main campus and city campus, and Open University.

This sample was consisted of enough number of individuals in different demographic groups from the statistical point of view. It was well diversified in terms of ethnicity, religion, gender, marital status, and childhood socioeconomic status. As many of postgraduate respondents were from Graduate School of Business in city campus and many of MBA students are working and elderly individuals, this sample also provided well diversified respondents regarding educational level, income, and net assets.

In addition to paper format of questionnaire, an electronic version of the survey was also designed and posted to both UM students email, and UM-MBA yahoo group email, which helped to get access to more respondents.

After eliminating those responses that were not fully filled (in paper format), and after eliminating outliers with SPSS, a total number of 337 responses were taken into account for final analysis. The information regarding the demographics of respondents is provided in the next chapter.

3.6. Data Analysis Techniques

For this study the reliability analysis has been performed for the internal scale variables and the results are provided in the next chapter. The result of the test and the amount of Cronbach's Alphas showed that all the variables are accepted. There are two main hypothesis, one is about the relationship of demographic variables and money attitudes, and the other is about the relationship of religiosity with money attitudes.

The dependent variable in this study is Money Attitudes and the independent variables include demographic variables and religiosity. For analyzing the relationship between demographic variables that have two categories such as gender and marital status, independent samples t-test is used. For other variables such as ethnicity or religion that have more than 2 categories, one-way between groups ANOVA with post-hoc comparisons is used. In order to analyze the relationship between religiosity and money attitudes, bivariate correlation method is used. While analyzing the relationship between demographic variables and money attitudes, religiosity variables are also analyzed to see the relationship between these scales and different demographic variables. Also for analyzing the relationship between financial satisfaction and money attitudes, one-way ANOVA is used.

A summary of the different tests used in the research beside the relevant research question and objective for each hypothesis is provided in table 3.1.

Table 3.1: Summary of the tests

No.	Hypothesis	Research Question	Test used
1-a	There is a relationship between Age and different dimensions of Money Attitudes.	RQ 1 & 2	one-way ANOVA
1-b	There is a relationship between Gender and different dimensions of Money Attitudes.	RQ 1 & 2	T-test
1-c	There is a relationship between Race/Ethnicity and different dimensions of Money Attitudes.	RQ 1 & 2	one-way ANOVA
1-d	There is a relationship between Marital Status and different dimensions of Money Attitudes.	RQ 1 & 2	T-test
1-e	There is a relationship between level of Education and different dimensions of Money Attitudes.	RQ 1 & 2	T-test
1-f	There is a relationship between Income and different dimensions of Money Attitudes.	RQ 1 & 2	one-way ANOVA
1-g	There is a relationship between Net-Worth and different dimensions of Money Attitudes.	RQ 1 & 2	one-way ANOVA, and T-test
1-h	There is a relationship between Childhood Socioeconomic Status and different dimensions of Money Attitudes.	RQ 1 & 2	one-way ANOVA
1-i	There is a relationship between Type of Religion and different dimensions of Money Attitudes.	RQ 1 & 2	one-way ANOVA
2	There is a relationship between Religiosity and different dimensions of Money Attitudes.	RQ 3	Bivariate Correlation

4. Research Results

4.1. Introduction

This chapter consists of four main sections. In the first section the demographic statistics of different groups that participated in the study is presented. Then reliability analysis that was used is discussed. In the third part the results of the different statistical tests on different hypotheses is provided, but the implication of each result is discussed in the next chapter and this chapter just mentions the results obtained by the SPSS. Also at the end of the chapter a summary of the research results is presented.

4.2. Descriptive Statistics

A total number of 364 questionnaires were gathered from which 27 were omitted due to incomplete answers and also after standardizing the data and eliminating outliers. Therefore 337 responses were counted for the analysis of this research project. The data was gathered through paper and on-line surveys. Younger respondents were mostly chosen from the University Malaya main campus and older respondents were mostly chosen from University Malaya city campus GSB, and also Open University. On-line questionnaires were sent to UM MBA yahoo group and UM student emails.

Information regarding the demographic characteristics (Age, Gender, Ethnicity, Religion, Marital Status, Education, Monthly Income, Net-worth, Childhood Socioeconomic status, and Nationality) is provided in the tables 4.1 to 4.10 as follow:

Table 4.1: Age

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-24	119	35.3	35.3	35.3
25-30	121	35.9	35.9	71.2
31-35	52	15.4	15.4	86.6
36-40	24	7.1	7.1	93.8
41 and above	21	6.2	6.2	100.0
Total	337	100.0	100.0	

Table 4.2: Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Female	204	60.5	60.5	60.5
Male	133	39.5	39.5	100.0
Total	337	100.0	100.0	

Table 4.3: Ethnicity

Ethnicity	Frequency	Percent	Valid Percent	Cumulative Percent
Malay	122	36.2	36.2	36.2
Chinese	114	33.8	33.8	70.0
Indian	44	13.1	13.1	83.1
Other	57	16.9	16.9	100.0
Total	337	100.0	100.0	

Table 4.4: Religion

Religion	Frequency	Percent	Valid Percent	Cumulative Percent
Muslim	169	50.1	50.1	50.1
Buddhist	72	21.4	21.4	71.5
Hindu	35	10.4	10.4	81.9
Christian	42	12.5	12.5	94.4
Other	4	1.2	1.2	95.5
Non-believer	15	4.5	4.5	100.0
Total	337	100.0	100.0	

Table 4.5: Marital Status

Marital Status	Frequency	Percent	Valid Percent	Cumulative Percent
Single	248	73.6	73.6	73.6
Married	89	26.4	26.4	100.0
Total	337	100.0	100.0	

Table 4.6: Education

Education	Frequency	Percent	Valid Percent	Cumulative Percent
SPM	12	3.6	3.6	3.6
Diploma	12	3.6	3.6	7.1
Bachelor	131	38.9	38.9	46.0
Master/PHD	182	54.0	54.0	100.0
Total	337	100.0	100.0	

Table 4.7: Monthly Income

Monthly Income	Frequency	Percent	Valid Percent	Cumulative Percent
Below 2000	148	43.9	43.9	43.9
2,001-3,000	39	11.6	11.6	55.5
3,001-5,000	85	25.2	25.2	80.7
5,001-8,000	36	10.7	10.7	91.4
Above 8,000	29	8.6	8.6	100.0
Total	337	100.0	100.0	

Table 4.8: Net Worth

Net Worth	Frequency	Percent	Valid Percent	Cumulative Percent
0 or less	19	5.6	5.6	5.6
1-10,000	43	12.8	12.8	18.4
10,001-30,000	12	3.6	3.6	22.0
30,001-80,000	14	4.2	4.2	26.1
80,001-200,000	38	11.3	11.3	37.4
200,001-400,000	16	4.7	4.7	42.1
Above 400,000	24	7.1	7.1	49.3
Don't know	171	50.7	50.7	100.0
Total	337	100.0	100.0	

Table 4.9: Childhood Socioeconomic Status

Childhood Socioeconomic Status	Frequency	Percent	Valid Percent	Cumulative Percent
Poor	20	5.9	5.9	5.9
Lower middle class	78	23.1	23.1	29.1
Middle class	203	60.2	60.2	89.3
Upper middle class	34	10.1	10.1	99.4
Wealthy	2	.6	.6	100.0
Total	337	100.0	100.0	

Table 4.10: Nationality

Nationality	Frequency	Percent
Malaysian	271	80.4
Others	66	19.6
Total	337	100.0

4.3. Reliability Analysis:

The reliability analysis was performed for the interval scale variables by doing a pilot test with 43 respondents. The results are shown in table 4.11.

Table 4.11: Cronbach's Alpha

Variables	Cronbach's Alpha	items
Money Avoidance	0.874	15
Money Worship	0.832	11
Money Status	0.852	13
Money Vigilance	0.753	12
Extrinsic Religiosity	0.851	6
Intrinsic Religiosity	0.806	8

According to Hair et al. (1998) the accepted level of Cronbach's alpha coefficient is 0.6 and if each variable has the value of 0.6 or greater it shows that those items are understood by most respondents. Therefore as a result all variables are accepted because they exceed the 0.6 value.

4.4. Testing of Hypothesis

As mentioned in hypothesis development part (Previous chapter, and table 3.1), there are two main hypotheses, one is about the relationship of demographic variables and money attitudes with nine sub-hypothesis, and the other is about the relationship of religiosity and money attitudes with two sub-hypothesis.

The dependent variable in this study is Money Attitudes which has 4 dimensions, Money Avoidance, Money Worship, Money Status, and Money Vigilance. Independent variables include demographic variables and religiosity. For analyzing the relationship between demographic variables that have two categories such as gender and marital status, independent samples t-test is used. For other variables such as ethnicity or religion that have more than 2 categories, one-way between groups ANOVA with post-hoc comparisons is used.

In order to analyze the relationship between religiosity and money attitudes, bivariate correlation method is used.

While analyzing the relationship between demographic variables and money attitudes, religiosity variables are also analyzed to see the relationship between these scales and different demographic variables.

Also for analyzing the relationship between financial satisfaction and money attitudes, one-way ANOVA is used.

All the data regarding these tests such as descriptive, Levene statistic, ANOVA, Tukey HSD, independent samples t-test, histograms, and correlations are provided in appendix, but some part of data which are relevant to explanations in each part are also provided in the text.

For some variables some labels are used. Table 4.12 shows the meaning of each label:

Table 4.12: Abbreviations for variables

Label	explanation
DV1	Dependent Variable 1, Money Avoidance
DV2	Dependent Variable 2, Money Worship
DV3	Dependent Variable 3, Money status
DV4	Dependent Variable 4, Money Vigilance
DV5	Mean of all Dependent Variables 1 to 4
EXR	Extrinsic Religiosity
INR	Intrinsic Religiosity

4.3.1. Analyzing the effect of Ethnicity

There are three major ethnicities in Malaysia: Malay, Chinese, and Indian. There are totally 280 respondents from these three categories. There are 122 Malays, 114 Chinese, and 44 Indians. In order to compare the means between these three groups one-way ANOVA method was used.

In order to use one-way ANOVA, the scores in each group should have homogenous variances. Levene's test determines whether variances are equal or unequal. As shown in table 4.13 for ethnicities only Levene statistic of variables DV3 (money status), DV4 (money vigilance), and INR (Intrinsic Religiosity) are not significant ($p > 0.05$) and this means that they have homogenous variances and can be compared for different ethnicities.

Table 4.13: Test of Homogeneity of Variances for ethnicity

	Levene Statistic	df1	df2	Sig.
DV3	.321	2	277	.726
DV4	2.288	2	277	.103
INR	.623	2	277	.537

From these three variables DV4 and INR are significant according to ANOVA table. The information is provided in table 4.14:

Table 4.14: ANOVA for ethnicity

		Sum of Squares	df	Mean Square	F	Sig.
DV4	Between Groups	2.920	2	1.460	8.013	.000
	Within Groups	50.478	277	.182		
	Total	53.399	279			
INR	Between Groups	38.270	2	19.135	50.002	.000
	Within Groups	106.003	277	.383		
	Total	144.273	279			

Given that for DV4 and INR, $P < 0.05$, we can reject the null hypothesis and accept the alternative hypothesis that states the Money Vigilance attitude and Intrinsic Religiosity are different across ethnicities.

Having obtained a significant result for these two variables, we can go further and by using Tukey's HSD test determine where the significance lies; that is, between which ethnicities is there a significant difference in Money Vigilance and Intrinsic Religiosity. Multiple comparisons are displayed in table 4.15:

Table 4.15: Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
DV4	Malay	Chinese	.21133 [*]	.05561	.001	.0803	.3424
		Indian	.19026 [*]	.07507	.032	.0134	.3672
	Chinese	Malay	-.21133 [*]	.05561	.001	-.3424	-.0803
		Indian	-.02107	.07576	.958	-.1996	.1575
	Indian	Malay	-.19026 [*]	.07507	.032	-.3672	-.0134
		Chinese	.02107	.07576	.958	-.1575	.1996
INR	Malay	Chinese	.80522 [*]	.08058	.000	.6153	.9951
		Indian	.42902 [*]	.10878	.000	.1727	.6854
	Chinese	Malay	-.80522 [*]	.08058	.000	-.9951	-.6153
		Indian	-.37620 [*]	.10979	.002	-.6349	-.1175
	Indian	Malay	-.42902 [*]	.10878	.000	-.6854	-.1727
		Chinese	.37620 [*]	.10979	.002	.1175	.6349

*. The mean difference is significant at the 0.05 level.

According to the results it can be said that Malay are more Money Vigilant than Chinese and Indians. Also Malay are more Intrinsic Religious than Chinese and Indians, and Indians are more intrinsic religious than Chinese.

4.3.2. Analyzing the effect of Religion

There are four major religions in Malaysia: Islam, Buddhism, Hinduism, and Christianity. There are totally 318 respondents belonging to these three categories. There are 169 Muslims, 72 Buddhist, 35 Hindu, and 42 Christians. In order to compare the means between these four groups one-way ANOVA method was used.

As shown in table 4.16 for religion Levene statistic of variables DV1 (avoidance), DV2 (worship), DV3 (status), DV4 (vigilance), and DV5 (mean of all money attitudes) are not significant ($p > 0.05$):

Table 4.16: Test of Homogeneity of Variances for religion

	Levene Statistic	df1	df2	Sig.
DV1	1.629	3	314	.183
DV2	1.528	3	314	.207
DV3	.317	3	314	.813
DV4	1.489	3	314	.217
DV5	1.890	3	314	.131

From these five variables DV2 and DV4 are significant according to ANOVA table. The information is provided in table 4.17:

Table 4.17: ANOVA for religions

		Sum of Squares	df	Mean Square	F	Sig.
DV2	Between Groups	2.815	3	.938	2.998	.031
	Within Groups	98.281	314	.313		
	Total	101.095	317			
DV4	Between Groups	2.824	3	.941	5.050	.002
	Within Groups	58.536	314	.186		
	Total	61.360	317			

Given that for DV2 and DV4, $P < 0.05$, we can accept the alternative hypothesis that the Money Worship and Money Vigilant attitudes are different across ethnicities.

Multiple comparisons are displayed in table 4.18:

Table 4.18: Multiple Comparisons for DV4 with religions

Tukey HSD

Dependent Variable	(I) Religion	(J) Religion	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
DV4	Muslim	Buddhist	.16627 [*]	.06076	.033	.0093	.3232
		Hindu	.16991	.08018	.149	-.0372	.3770
		Christian	.22943 [*]	.07444	.012	.0372	.4217

*. The mean difference is significant at the 0.05 level.

According to the results it can be said that Muslims are more Money Vigilant than Buddhist and Christians.

4.3.3. Analyzing the effect of Gender:

There are 204 females and 133 males in the sample. An independent samples t-test is appropriate to compare these two groups. As shown in table 4.19 there are significant differences between two genders in DV2 (worship) and EXR (extrinsic religiosity) where the Leven statistic for these two are not significant.

Table 4.19: Independent Samples Test for DV2 and EXR with gender

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
DV2	Equal variances assumed	2.416	.121	-2.878	335	.004	-.17776	.06176
	Equal variances not assumed			-2.817	261.605	.005	-.17776	.06310
EXR	Equal variances assumed	1.781	.183	2.790	335	.006	.21405	.07673
	Equal variances not assumed			2.837	297.781	.005	.21405	.07545

According to the results it can be said that females have less Money Worship attitudes and more Extrinsic religiosity than males.

4.3.4. Analyzing the effect of Age:

There were five categories for age. 119 respondents between 18-24, 121 between 25-30, 52 between 31-35, 24 between 36-40, and 21 were above 41 years old. In order to get reliable statistical results, last two groups were merged together. Therefore 45 respondents are above 36 years old and are placed in fourth category. One-way ANOVA method is used to compare the means of these groups.

As shown in table 4.20, the Levene statistic of all variables are not significant ($p > 0.05$):

Table 4.20: Test of Homogeneity of Variances for Age

	Levene Statistic	df1	df2	Sig.
DV1	.813	3	333	.488
DV2	.578	3	333	.630
DV3	.444	3	333	.722
DV4	.354	3	333	.787
DV5	.470	3	333	.703
EXR	1.179	3	333	.318
INR	1.818	3	333	.144

From these variables only DV4 (vigilance) is significant according to ANOVA table. The information is provided in table 4.21:

Table 4.21: ANOVA for DV4 with Age

		Sum of Squares	df	Mean Square	F	Sig.
DV4	Between Groups	1.887	3	.629	3.391	.018
	Within Groups	61.774	333	.186		
	Total	63.662	336			

Given that for DV4, $P < 0.05$, we can accept the alternative hypothesis that the Money Vigilant attitudes are different across different age groups. Multiple comparisons are displayed in table 4.22:

Table 4.22: Multiple comparisons of age groups for DV4

Dependent Variable	(I) Age4	(J) Age4	Mean Difference (I-J)	Std. Error	Sig.
DV4	36 and above	18-24	-.20643 [*]	.07537	.033
		25-30	-.21113 [*]	.07520	.027
		31-35	-.24875 [*]	.08769	.025

According to the results it can be said that older individuals are less Money Vigilant than younger groups.

4.3.5. Analyzing the effect of Marital Status

There are 248 single respondents and 89 married respondents in the sample. An independent samples t-test is appropriate to compare these two groups. As shown in table 4.23 there are significant differences between two genders in DV2 (worship) and DV5 (mean of all money attitudes).

Table 4.23: Independent Samples Test for DV2 and DV5 with Marital Status

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
DV2	Equal variances assumed	1.759	.186	1.997	335	.047	.13759	.06891
	Equal variances not assumed			1.913	143.963	.058	.13759	.07193
DV5	Equal variances assumed	.060	.806	3.009	335	.003	.12036	.04000
	Equal variances not assumed			2.995	154.051	.003	.12036	.04018

According to the results it can be said that married individuals have less Money Worship attitudes and less disordered money behavior overall.

4.3.6. Analyzing the effect of Education

There are 12 individuals with SPM level, 12 with diploma, 131 with bachelor degree, and 182 with master/PHD degree in the sample. In order to have more reliable statistical results the first two groups that have less than 30 respondents are merged with bachelor group, and therefore an independent samples t-test is appropriate to compare the remained two groups. As shown in table 4.24 there are significant differences between two genders in DV1 (avoidance) and DV5 (mean of all money attitudes).

Table 4.24: Independent Samples Test for DV1 and DV5 with Education

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
DV1	Equal variances assumed	.291	.590	4.791	335	.000	.28766	.06004
	Equal variances not assumed			4.815	331.808	.000	.28766	.05974
DV5	Equal variances assumed	.267	.606	3.333	335	.001	.11759	.03528
	Equal variances not assumed			3.343	329.677	.001	.11759	.03518

According to the results it can be said that more educated individuals have less Money Avoidance attitudes and less disordered money behavior overall.

4.3.7. Analyzing the effect of Income

There are 148 respondents in “below RM 2000” category, 39 respondents in “2,001-3,000”, 85 respondents in “3,000-5,000”, 36 respondents in “5,001-8,000”, and 29 in “above 8,000” categories. In order to get reliable statistical results, the last two groups was merged together and then one-way ANOVA was used for these groups. As shown in table 4.25, the Levene statistic of variables DV2, DV3, DV4, DV5, EXR, and INR are not significant ($p > 0.05$):

Table 4.25: Test of Homogeneity of Variances for Income

	Levene Statistic	df1	df2	Sig.
DV1	4.168	3	333	.006
DV2	.110	3	333	.954
DV3	1.130	3	333	.337
DV4	.979	3	333	.403
DV5	.455	3	333	.714
EXR	.697	3	333	.555
INR	1.069	3	333	.362

From these variables DV5 (mean of all money attitudes) and EXR (extrinsic religiosity) are significant according to ANOVA table. The information is provided in table 4.26:

Table 4.26: ANOVA for Income

		Sum of Squares	df	Mean Square	F	Sig.
DV5	Between Groups	1.479	3	.493	4.750	.003
	Within Groups	34.574	333	.104		
	Total	36.053	336			
EXR	Between Groups	4.067	3	1.356	2.850	.038
	Within Groups	158.404	333	.476		
	Total	162.470	336			

Given that for DV5 and EXR, $P < 0.05$, we can accept the alternative hypothesis that the overall Money attitude and extrinsic religiosity are different across different income groups. Multiple comparisons are displayed in table 4.27:

Table 4.27: Multiple comparisons of income groups for DV5 and EXR

Dependent Variable	(I) monthly4	(J) monthly4	Mean Difference (I-J)	Std. Error	Sig.
DV5	below 2000	2,001-3,000	.18975 [*]	.05800	.006
		3,001-5,000	.06610	.04385	.434
		Above 5,000	.12681 [*]	.04795	.042
EXR	below 2000	2,001-3,000	.36131 [*]	.12414	.020
		3,001-5,000	.09585	.09386	.737
		Above 5,000	.09721	.10263	.779

According to the results it can be said that those who are in “2,000-3,000” category have less overall money attitude disorders than those in “below 2,000” category. But those who are in “below 2000” category are more extrinsic religious than those in “2,000-3,000” category.

4.3.8. Analyzing the effect of Net-Worth

There are 8 categories to measure net-worth of individuals. 171 people mentioned that they don't know about their net-assets by ticking the box for

“Don’t know” choice. 19 individuals are in “0 or less” category, 43 in “1-10,000”, 12 in “10,000-30,000”, 14 in “30,000-80,000”, 38 in “80,000-200,000”, 16 in “200,000-400,000” and 24 in “Above 400,000” categories. In order to analyze the effect of net-worth (net assets), two different methods are used, independent samples t-test and one-way ANOVA. First the individuals who mentioned they don’t know how much assets they have, and those who mentioned a figure as their asset are compared. In this case there are two groups, “Know” and “Don’t know”. 166 people know the amount of their assets and 171 don’t know. These two groups are compared using independent samples t-test. As shown in table 4.28, DV1 (avoidance) and DV2 (worship) are significantly different in these two groups.

Table 4.28: Independent Samples Test for DV1 and DV2 with net-worth

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
DV1	Equal variances assumed	.696	.405	2.192	335	.029	.13467	.06144
	Equal variances not assumed			2.189	330.034	.029	.13467	.06152
DV2	Equal variances assumed	.125	.723	-2.433	335	.015	-.14742	.06059
	Equal variances not assumed			-2.431	332.048	.016	-.14742	.06065

According to the results it can be said that those who don’t know about the level of their net-assets are more Money Avoidant and less Money Worship than those who know about their assets.

In order to compare different groups in net-worth, some groups that had less than 30 respondents were merged with other groups and finally four groups obtained. There are 171 in “Don’t know”, 74 in “0-30,000”, 52 in “30,000-200,000”, and 40 in “Above 200,000” categories. One-way ANOVA was used

to compare these groups. As shown in table 4.29, the Levene statistic of variables DV1, DV2, DV4, DV5, EXR, and INR are not significant ($p > 0.05$):

Table 4.29: Test of Homogeneity of Variances for net-worth

	Levene Statistic	df1	df2	Sig.
DV1	.622	3	333	.601
DV2	.328	3	333	.805
DV3	2.301	3	333	.077
DV4	.975	3	333	.405
DV5	.710	3	333	.547
EXR	.094	3	333	.963
INR	1.862	3	333	.136

From these variables only DV1 is significant according to ANOVA table. The information is provided in table 4.30:

Table 4.30: ANOVA for DV1 with net-worth

	Sum of Squares	df	Mean Square	F	Sig.
DV1 Between Groups	6.002	3	2.001	6.529	.000
Within Groups	102.029	333	.306		
Total	108.030	336			

Given that for DV1, $P < 0.05$, we can accept the alternative hypothesis that the Money Avoidance attitude is different across different net-worth groups. Multiple comparisons are displayed in table 4.31:

Table 4.31: Multiple comparisons of net-worth groups for DV1

Dependent Variable	(I) Assets4	(J) Assets4	Mean Difference (I-J)	Std. Error	Sig.
DV1	Above 200,000	Don't know	-.41404*	.09722	.000
		0-30,000	-.41293*	.10863	.001
		30,001-200,000	-.30423*	.11641	.046

According to the results it can be said that those who are in “Above 200,000” category have less Money Avoidance attitudes than those in other categories.

4.3.9. Analyzing the effect of Childhood Socioeconomic Status

There are 20 respondents in “poor”, 78 in “lower middle-class”, 203 in “middle-class”, 34 in “upper middle-class”, and 2 in “wealthy” categories. In order to get reliable statistical results, the first two and the last two groups was merged together and then one-way ANOVA was used for remained groups. Therefore there are now only three groups, “lower middle-class”, “middle-class”, and “upper middle-class”. As shown in table 4.32, the Levene statistic of all variables are not significant ($p > 0.05$):

Table 4.32: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
DV1	2.006	2	334	.136
DV2	.559	2	334	.572
DV3	.330	2	334	.719
DV4	.105	2	334	.900
DV5	1.502	2	334	.224
EXR	.317	2	334	.729
INR	1.113	2	334	.330

From these variables only DV1 (money avoidance) is significant according to ANOVA table. The information is provided in table 4.33:

Table 4.33: ANOVA for DV1 with Childhood status

	Sum of Squares	df	Mean Square	F	Sig.
DV1 Between Groups	4.863	2	2.432	7.872	.000
Within Groups	103.167	334	.309		
Total	108.030	336			

Given that for DV1, $P < 0.05$, we can accept the alternative hypothesis that the Money Avoidance attitude is different across different socioeconomic groups.

Multiple comparisons are displayed in table 4.34:

Table 4.34: Multiple comparisons between different socioeconomic groups with DV1

Dependent Variable	(I) childhood3	(J) childhood3	Mean Difference (I-J)	Std. Error	Sig.
DV1	Lower middle class	Middle class	.18853*	.06836	.017
		Upper middle class	.40676*	.10831	.001
	Middle class	Lower middle class	-.18853*	.06836	.017
		Upper middle class	.21824	.10051	.078
	Upper middle class	Lower middle class	-.40676*	.10831	.001
		Middle class	-.21824	.10051	.078

According to the results it can be said that those who have been in lower middle-class group during their childhood have more Money Avoidance attitudes comparing to those who have been in middle-class and upper middle-class groups.

4.3.10. Analyzing the effect of Religiosity

In order to analyze the relationship between two sets of continuous variables (Money Attitudes and Religiosity), a Pearson bivariate correlation was used.

Before doing the correlation test a normality test was done on the variables and the results are displayed in table 4.35:

Table 4.35: Descriptives of normality test

		Statistic	Std. Error
DV1	Mean	2.5294	.03089
	Skewness	.044	.133
	Kurtosis	-.294	.265
DV2	Mean	3.2034	.03051
	Skewness	.074	.133
	Kurtosis	-.234	.265
DV3	Mean	2.4775	.02731
	Skewness	.055	.133
	Kurtosis	-.044	.265
DV4	Mean	3.2797	.02371
	Skewness	.181	.133
	Kurtosis	-.080	.265
DV5	Mean	2.8381	.01784
	Skewness	.037	.133
	Kurtosis	.023	.265
EXR	Mean	3.3150	.03788
	Skewness	.113	.133
	Kurtosis	-.091	.265
INR	Mean	3.5278	.03870
	Skewness	-.012	.133
	Kurtosis	-.713	.265

According to above table the Skewness and Kurtosis values for these variables are in accepted range and the normality can be assumed. The histogram and normal curve of each variable is also provided in the appendix.

The correlation results are shown in table 4.36:

Table 4.36: Correlation between Money Attitudes and Religiosity

		Correlations						
		DV1	DV2	DV3	DV4	DV5	EXR	INR
DV1	Pearson Correlation	1	.126*	.290**	.056	.686**	.084	.086
	Sig. (1-tailed)		.010	.000	.151	.000	.062	.058
	N	337	337	337	337	337	337	337
DV2	Pearson Correlation	.126*	1	.359**	.201**	.636**	.044	-.135**
	Sig. (1-tailed)	.010		.000	.000	.000	.212	.007
	N	337	337	337	337	337	337	337
DV3	Pearson Correlation	.290**	.359**	1	.101*	.702**	.172**	-.093*
	Sig. (1-tailed)	.000	.000		.032	.000	.001	.045
	N	337	337	337	337	337	337	337
DV4	Pearson Correlation	.056	.201**	.101*	1	.455**	.194**	.199**
	Sig. (1-tailed)	.151	.000	.032		.000	.000	.000
	N	337	337	337	337	337	337	337
DV5	Pearson Correlation	.686**	.636**	.702**	.455**	1	.187**	.020
	Sig. (1-tailed)	.000	.000	.000	.000		.000	.357
	N	337	337	337	337	337	337	337
EXR	Pearson Correlation	.084	.044	.172**	.194**	.187**	1	.372**
	Sig. (1-tailed)	.062	.212	.001	.000	.000		.000
	N	337	337	337	337	337	337	337
INR	Pearson Correlation	.086	-.135**	-.093*	.199**	.020	.372**	1
	Sig. (1-tailed)	.058	.007	.045	.000	.357	.000	
	N	337	337	337	337	337	337	337

*. Correlation is significant at the 0.05 level (1-tailed).
 **. Correlation is significant at the 0.01 level (1-tailed).

As it is observable in the table, there are significant positive relationships between Extrinsic Religiosity and DV3 (Money Status), DV4 (Money Vigilance), and DV5 (Overall Money Attitudes score). It means that individuals who are more Extrinsic Religious have more Money Status and Money Vigilance behaviors and their overall money attitude score is also higher than others.

The relationship between Intrinsic Religiosity and Money Attitudes is different from that of Extrinsic Religiosity. According to table 4.36, there are significant negative correlations between Intrinsic Religiosity and DV2 (Money Worship), and DV3 (Money Status). There is Positive relationship between Intrinsic

Religiosity and DV4 (Money Vigilance). It means that the Individuals who are more Intrinsic Religious have lower Money Worship and Money Status behaviors, but have more Money Vigilant behaviors than others.

4.3.11. Analyzing Financial Satisfaction

The descriptive statistics of respondents about the question asking their level of financial satisfaction is as below:

Table 4.37: Descriptive of Financial Satisfaction categories

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	15	4.5	4.5	4.5
	Dissatisfied	66	19.6	19.6	24.0
	Neutral	130	38.6	38.6	62.6
	Satisfied	118	35.0	35.0	97.6
	Very Satisfied	8	2.4	2.4	100.0
	Total	337	100.0	100.0	

In order to have reliable statistical results, the first two, and the last two groups are merged together, and therefore three groups is formed; “Dissatisfied” with 81 respondents, “Neutral” with 130 respondents, and “Satisfied” with 126 respondents. To analyze the difference between these groups in Money Attitudes, one-way ANOVA method is used. Table 4.38 displays the result of homogeneity of variances test:

Table 4.38: Test of Homogeneity of Variances for financial satisfaction

	Levene Statistic	df1	df2	Sig.
DV1	3.523	2	334	.031
DV2	3.800	2	334	.023
DV3	2.539	2	334	.080
DV4	1.998	2	334	.137
DV5	5.108	2	334	.007
EXR	.952	2	334	.387
INR	1.068	2	334	.345

As shown in this table, the Levene statistic of variables DV3 (status), DV4 (vigilance), EXR (extrinsic religiosity), and INR (intrinsic religiosity) are not significant ($p > 0.05$). From these variables only INR is significant according to ANOVA table. The information is provided in table 4.39:

Table 4.39: ANOVA for INR with Financial Satisfaction

	Sum of Squares	df	Mean Square	F	Sig.
INR Between Groups	5.345	2	2.672	5.433	.005
Within Groups	164.285	334	.492		
Total	169.630	336			

Given that for INR, $P < 0.05$, we can accept the alternative hypothesis that the Intrinsic Religiosity is different across different financial satisfaction groups. Multiple comparisons are displayed in table 4.40:

Table 4.40: Multiple comparisons between different satisfaction groups with INR

Dependent Variable	(I) Satisfaction3	(J) Satisfaction3	Mean Difference (I-J)	Std. Error	Sig.
INR	Dissatisfied	Neutral	-.05474	.09928	.846
		Satisfied	-.29034*	.09988	.011
	Neutral	Dissatisfied	.05474	.09928	.846
		Satisfied	-.23561*	.08768	.021
	Satisfied	Dissatisfied	.29034*	.09988	.011
		Neutral	.23561*	.08768	.021

According to the results it can be said that those who are more financially satisfied are also more Intrinsic Religious persons than those who are less satisfied with their current financial situation.

4.5. Summary of Research Results:

According to the results of the tests we can now talk about their effect on accepting or rejecting the hypotheses.

H1-a mentions that there is a relationship between age and different dimensions of money attitudes. Based on the results of the one-way ANOVA test, it can be said that those who are in “36-above” years old category are less money vigilant than those in younger groups. Therefore **H1-a is accepted** for Money Vigilant attitudes.

H1-b mentions that there is a relationship between gender and different dimensions of money attitudes. Based on the results of the independent samples t-test, it can be said that females have less Money Worship attitudes and more extrinsic religiosity than males. Therefore **H1-b is accepted** for Money Worship attitudes.

H1-c mentions that there is a relationship between race/ethnicity and different dimensions of money attitudes. Based on the results of the one-way ANOVA test, it can be said that Malays are more Money Vigilant than Chinese and Indians. Also Malays are more Intrinsic Religious than Chinese and Indians, and Indians are more intrinsic religious than Chinese. Therefore **H1-c is accepted** for Money Vigilant attitudes.

H1-d mentions that there is a relationship between marital status and different dimensions of money attitudes. Based on the results of the independent samples t-test, it can be said that married individuals have less money worship attitudes and less overall disordered money behavior than single individuals. Therefore **H1-d is accepted** for Money Worship and overall Money Attitude score.

H1-e mentions that there is a relationship between level of education and different dimensions of money attitudes. Based on the results of the independent samples t-test, it can be said that more educated individuals have less Money Avoidance attitudes and less overall disordered money behavior than less educated individuals. Therefore **H1-e is accepted** for Money Avoidance and overall Money Attitude score.

H1-f mentions that there is a relationship between level of income and different dimensions of money attitudes. Based on the results of the one-way ANOVA test, it can be said that those who are in “2,000-3,000” category have less overall money attitude disorders than those in “below 2,000” category. But those who are in “below 2000” category are more extrinsic religious than

those in “2,000-3,000” category. Therefore **H1-f is accepted** for overall Money Attitudes score.

H1-g mentions that there is a relationship between net-worth and different dimensions of money attitudes. Based on the results of the independent samples t-test, it can be said that those who don't know about the level of their net-assets are more Money Avoidant and less Money Worship than those who know about their assets. Also based on the results of the one-way ANOVA test it can be said that those who are in “Above 200,000” category have less Money Avoidance attitudes than those in other categories. Therefore **H1-g is accepted** for Money Avoidance and Money Worship attitudes.

H1-h mentions that there is a relationship between childhood socioeconomic status and different dimensions of money attitudes. Based on the results of the one-way ANOVA test, it can be said that those who have been in lower middle-class group during their childhood have more Money Avoidance attitudes comparing to those who have been in middle-class and upper middle-class groups. Therefore **H1-h is accepted** for Money Avoidance attitudes.

H1-i mentions that there is a relationship between religion and different dimensions of money attitudes. Based on the results of the one-way ANOVA test, it can be said that Muslims are more Money Vigilant than Buddhist and Christians. Therefore **H1-i is accepted** for Money Vigilant attitudes.

H2 mentions that there is a relationship between religiosity and different dimensions of money attitudes. Based on the results of the correlation test,

there are significant positive relationships between Extrinsic Religiosity and DV3 (Money Status), DV4 (Money Vigilance), and DV5 (Overall Money Attitudes score). It means that individuals who are more Extrinsic Religious have more Money Status and Money Vigilance behaviors and their overall money attitude score is also higher than others. The relationship between Intrinsic Religiosity and Money Attitudes is different from that of Extrinsic Religiosity. According to table 4.35, there are significant negative correlations between Intrinsic Religiosity and DV2 (Money Worship), and DV3 (Money Status). There is Positive relationship between Intrinsic Religiosity and DV4 (Money Vigilance). It means that the Individuals who are more Intrinsic Religious have lower Money Worship and Money Status behaviors, but have more Money Vigilant behaviors than others. Therefore **H2 is accepted** for Money Status, Money Vigilant, Money Worship, and overall money attitudes score.

Although not mentioned in the hypothesis, according to the results it can be said that those who are more financially satisfied are also more Intrinsic Religious persons than those who are less satisfied with their current financial situation.

5. Conclusion and Recommendation

5.1. Introduction

This chapter is a summary of all the results of the study beside more explanation and clarification on the results. Firstly the summary and conclusion is discussed and then the limitations of the study are mentioned. After that some suggestions for future research are offered, and finally the implications of the research are provided to show that what groups or sectors might be able to benefit from the research.

5.2. Summary and Conclusion

This research has examined the relationship between different demographic characteristics and religiosity with money attitudes in Malaysian context. According to the research results all hypotheses are accepted for at least one dimension of money attitudes in each hypothesis. A conclusion and discussion of each dimension of money attitudes is provided below. As the main focus in this research is the effect of ethnicity and religiosity on money attitudes, first a summary of the results for ethnicity and religiosity will be mentioned and then each aspect of money attitudes and the relevant hypotheses are provided.

Ethnicity: The result of the study shows that Malays are more money vigilant than Chinese and Indians. Malays are also more intrinsic religious than Chinese and Indians. Also it is found that Indians are more intrinsic religious than Chinese. According to the results, there is no significant difference in other dimensions of money attitudes between these three groups, which means that in money avoidance, money worship, and money status factors,

there is no significant difference between Malays, Chinese, and Indians. Explanation of each dimension of money attitudes is discussed later in this section.

Religiosity: Based on the results, there are significant positive relationships between extrinsic religiosity with money status, and extrinsic religiosity with money vigilance. It means that individuals who are more extrinsic religious have more money status and money Vigilance behaviors and their overall money attitude score is also higher than others (which is a bad sign).

On the other hand, the relationship between intrinsic religiosity and money attitudes is different from that of extrinsic religiosity. According to the results, there are significant negative correlations between intrinsic religiosity with money worship, and between intrinsic religiosity and money status (which is a good sign), but there is positive relationship between intrinsic religiosity and money vigilance. It means that the Individuals who are more intrinsic religious have lower money worship and lower money status behaviors, but have more money vigilant behaviors than others.

The difference in the results for intrinsic and extrinsic religious persons relies on the fact that intrinsic religious individuals live their religion whereas extrinsic individuals just tend to use religion as a social activity. The results show that if we just use religion as a way to communicate and not really practicing it in our lives it has not good effects on our money attitudes as the results for extrinsic religiosity proves this fact. But if we try to live according to our religion and commit ourselves to the principles of the religion, it will have positive effects on our money attitudes and will help us to have healthier money attitudes as the results for intrinsic religiosity proves this. The only

exception is money vigilant factor. Below is more explanation for each dimension of money attitudes with regard to different hypotheses.

Money Avoidance: money avoider individuals believe that money is not good and they do not deserve to have money. These people see a relationship between having money and disgust, fear, or anxiety. They may avoid spending money on necessary and reasonable objects. It is possible that they spend money unconsciously in order to have little money in their control. According to Klontz & Klontz (2009) money avoidance attitudes leads to financial rejection, under spending, financial denial, and excessive risk aversion behaviors.

In this study more educated individuals show less money avoidance behaviors than less educated people. Also those who have more net-worth (above RM 200,000) are less money avoidant than others. Therefore it seems that education has a positive effect in money avoidance factor and helps individuals to think better about money and don't get into financial trouble in future. Also it shows that having more financial resources helps individuals to have less money avoidant behaviors. In addition, based on the results, those who mentioned "Don't know" while been asked about their net-worth are more money avoidant than others. This result is interesting and makes sense as individuals who avoid money are more likely to be unaware of their financial situation and the amount of resources they have. Besides those who have been in lower middle-class groups during their childhood are more money avoidant than others. This confirms the idea mentioned by Klontz & Klontz (2009) that money scripts are developed in childhood, and that being in

financial hardship during childhood may lead to money avoidant behaviors in adulthood.

Money Worship: money worshipers believe that more money will make things better. They think that having higher income and financial bonus would solve all their problems. However, empirical research and literature doesn't approve this, and there is no significant relationship between having money and happiness (Kahneman & Deaton, 2010). Klontz & Klontz (2009) mentioned that money worshipping behavior may be associated with money disorders such as unreasonable risk taking, gambling, compulsive hoarding, compulsive buying, workaholism, and overspending.

This study shows that females and married individuals have less money worship attitudes than males, and single individuals. Klontz et al. (2011) also found that single individuals have more money worship attitudes but they did not find any differences in genders. Therefore we can conclude that in Malaysia men and women have more different attitudes toward money than in US. It is not possible to determine if money worship attitudes lead a mature person to remain more years single or being single causes a person to have more money worship attitudes than a married individual. Moreover those who mentioned "Don't know" about their net-worth have less money worship attitudes. This seems natural and shows that while these respondents show more disordered behaviors in money avoidance than others, they have a better situation in money worship aspect.

One of the most important results of this study is that individuals who are more intrinsic religious have less money worship attitudes than other

individuals, and it reveals the effect that religious teachings have on the people's attitude toward money.

Money Status: These kinds of attitudes encourage people to acquire money more than those around them and see a clear distinction between different socioeconomic classes. According to Tatzel (2002) being materialistic and over concerned with financial success causes lower ratings of well-being. Also it causes lower levels of self-actualization, vitality, and happiness, and higher level of unhappiness, physical symptoms and anxiety (Kasser & Ahuvia, 2002).

In this study those who are more extrinsic religious have more money status beliefs, but those who are more intrinsic religious are have less money status attitudes. According to Allport & Ross (1967), extrinsically motivated individuals use their religion while intrinsically oriented individuals live their religion. This concept seems to be consistent with the results of this research, as the people who see religion as a way to communicate and get higher self-esteem also try to use money to build status, and therefore has more money status attitudes. However those who have intrinsically oriented religious beliefs try to act in the way that their religion advises to, and as all religions recommend to not differentiate people based on the amount of money they have and share our financial success with the poor and those in need, the results that intrinsic religious people have lower money status attitudes is consistent with what was expected before doing the research.

Money Vigilance: according to Klontz et al. (2011) money vigilant factor comprises "money mistrust/ openness", "frugality/fiscal responsibility", and "money anxiety" factors. Individuals who score high on this dimension look at

money as deep source of shame and secrecy, whether they have a lot of money or a little. According to Medintz (2004) many individuals consider money as a sensitive topic in their households. People who have more money vigilant attitudes may develop financial behaviors that are not healthy for their financial future. Money vigilance factor seems to be related to watchfulness, alertness, and concern about money. These attitudes may encourage saving, but excessive anxiety may also keep someone from enjoying the benefits that money can provide.

The results of current study show that older individuals are less money vigilant than younger individuals. In terms of ethnicity, Malays have higher scores in money vigilance factor than Chinese and Indians. In terms of religion, Muslims have higher scores than Buddhist and Christians. Also the result shows that both extrinsic and intrinsic religiosity have positive correlation with money vigilance factor. The differences maybe arise from the point that religions and specially Islam have clear advices and commands in how to do business and how to deal with money. Maybe the notion of frugality, and contentment along with the instructions which advices not to survey other individual's life lead Muslims and religious individuals to have higher scores on this dimension of money attitudes. It is therefore a place of discussion whether there is a misunderstanding for some people in their money attitudes and their religious values or whether some sort of ideas about money in western context should be amended and surveyed again. What is clear from the results shows that more religious people feel more shame and secrecy about money and are less interested to talk about their money issues publically.

Overall Money Attitude Score: this variable is in fact the mean of all four previous mentioned money attitudes and it includes all the questions asked about money attitudes. In this study married and more educated individuals have less overall disordered money behaviors than singles and less educated people. Those people who have an income less than RM 2000 show more overall money attitude score which is a sign of more disordered behaviors in them than others.

Financial Satisfaction: Although not mentioned in the hypothesis, according to the results it can be said that those who are more financially satisfied are also more Intrinsic Religious persons than those who are less satisfied with their current financial situation.

A summary of the results for the hypotheses mentioned in the research is provided in table 5.1 below.

Table 5.1: Summary of the results

No.	Hypothesis	Result	Area of difference	More vulnerable
1-a	There is a relationship between Age and different dimensions of Money Attitudes.	Accepted	Money Vigilance	Younger groups
1-b	There is a relationship between Gender and different dimensions of Money Attitudes.	Accepted	Money Worship	Males
1-c	There is a relationship between Race/Ethnicity and different dimensions of Money Attitudes.	Accepted	Money Vigilance	Malays
1-d	There is a relationship between Marital Status and different dimensions of Money Attitudes.	Accepted	Money Worship, Overall Money Attitude score	Singles
1-e	There is a relationship between level of Education and different dimensions of Money Attitudes.	Accepted	Money Avoidance, Overall Money Attitude score	Less Educated
1-f	There is a relationship between Income and different dimensions of Money Attitudes.	Accepted	Overall Money Attitude score	Lower income
1-g	There is a relationship between Net-Worth and different dimensions of Money Attitudes.	Accepted	Money Avoidance	Lower net-assets
1-h	There is a relationship between Childhood Socioeconomic Status and different dimensions of Money Attitudes.	Accepted	Money Avoidance	Lower middle-class
1-i	There is a relationship between Type of Religion and different dimensions of Money Attitudes.	Accepted	Money Vigilance	Muslims
2	There is a relationship between Religiosity and different dimensions of Money Attitudes.	Accepted	Money Worship, Money Status	Less religious

5.3. Limitations of the Study

A very common limitation for these kinds of studies is that those who participated in this study may have different characteristics from those who didn't take part and were reluctant to answer the questions. It is not possible to control the respondents who took part in on-line survey and get the accurate response rate. The current sample comprises mostly from the students and educated peoples who were willing to help and cooperate in the study by filling the questionnaire. Although most of the respondents are educated and have mostly bachelor and above degrees or are going to take their degrees soon, we can observe significant differences between master students and bachelor students in their attitude toward money. It was tried to gather enough respondents in all demographic groups in order to get more reliable statistical results. However it seems that by gathering more respondents more significant results would be revealed. As the data shows there are many other differences in the scores of different groups but these data lack the significance criteria which may be resolved by having more respondents from different groups. It was also tried to gather information from those individuals out of the university place to have more diverse respondents, but the response rate was very low and led the researcher to focus on a student population who are much more tending to cooperate.

The language of the survey was English and this may have caused problems for some to comprehend the questions correctly, and also will result in a sample of more educated individuals.

5.4. Suggestion for Future Research

It is suggested that the questionnaire could be translated to Malay, Chinese, and Indian languages and invite more respondents from different ethnic groups to take part in the survey. This survey could also be sponsored by governmental institutions or financial institutions in order to motivate more people to answer the questions and get more reliable results.

Cultural differences as well as religions differences and the effects they have on money attitudes of individuals could be scrutinized further. The reason why a specific culture or religion has especial effects on individuals' attitudes could also be surveyed.

Financial satisfaction (as one of the main causes of happiness) and its relationship with money attitudes and religiosity is a subject that can be a separate topic for future studies in this area.

5.5. Implications of the Study

The results of the study shows that education and also religious values have positive effects on individuals' money attitudes and help people to have healthier behaviors which will have positive effect on their financial future. As the results indicate, older individuals have healthier money attitudes than younger respondents and it demonstrates the effect of experience on one's behavior. However a person could be directed toward healthier attitudes by obtaining more knowledge and education specially related financial knowledge.

The results of this study can help financial practitioners and counselors, financial therapists, financial coaches, and educators. This research also

provides them with a money attitude measurement as a quick screening tool to identify potential problems of their clients with money. It also may be useful in work with couples where identifying divergent money beliefs can be useful in helping them to resolve money related conflicts. Knowing a client's demographic status therefore gives the practitioner validation to assess the money attitudes and provides normalization to clients with certain characteristics.

The results could also help religious organizations to explain the positive effect of religion and religiosity on having healthier money attitudes. It also shows the importance of religious beliefs on these kinds of attitudes.

Governmental managers and NGOs are other parties that could benefit of the results of this study to hold programs and campaigns to assess and improve the financial attitudes of the community. As mentioned in the literature, Klontz et al. (2008) held a six day experimental therapy program and it resulted in significant and lasting reductions in psychological distress, anxiety, and worry about money and also financial situations, and showed measurable signs of better overall financial health. Therefore similar procedures could be done in Malaysia to improve the overall financial health of the society.