ANALYSIS OF FINANCIAL LITERACY AND ITS DETERMINANTS: A STUDY AMONG UNIVERSITY STUDENTS IN UTAR KAMPAR

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DECLARATION

We hereby declare that:

(1) This undergraduate FYP is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this FYP has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the FYP.

(4) The word count of this research report is 16,781.

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LIST OF ABBREVIATIONS

CA	Cronbach's Alpha
FE	Financial Education
FL	Financial Literacy
IV	Independent Variable
MAA	Money Attitude (Anxiety)
MAD	Money Attitude (Distrust)
MAPP	Money Attitude (Power-Prestige)
MART	Money Attitude (Retention-Time)
MAS	Money Attitude Scales
MRA	Multiple Regression Analysis
OLS	Ordinary Least Square
PPA	Private Pension Administrator Malaysia
RPT	Retrospective Pre-test
UTAR	Universiti Tunku Abdul Rahman

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PREFACE

The title of our research project is "Analysis of Financial Literacy and Its Determinants: A Study Among University Students in UTAR Kampar" and this research is under the supervision of Puan Siti Nur Amira binti Othman.

Financial literacy is referring to the capability of an individual to be carried out to practically make decision on their own financial resources based on their skillsets and level of knowledges. As people around the globe, particularly the student group of people, has now gain easier and quicker access to financial world in terms of various feature of financial services and products. Therefore, the financial literacy is a vital role to be played because it could help an individual to make the right and effective financial decision to avoid and mitigate any involving financial risk. For such season, we have been inspired to study the determinants of financial literacy and decided to focus the research area on UTAR Kampar students. In our research, financial literacy is selected as the dependent variable, followed by financial education, money attitude (power-prestige), money attitude (retention-time), money attitude (distrust), money attitude (anxiety) as the independent variables, as well as gender as the dummy variable.

We sincerely hope that our research project can provide some insightful and actionable suggestions to the Malaysian government, policymakers, parents, and students or act as a reference during the implementation of the finance-related actions in order to improve personal financial ability in the future.

ABSTRACT

This study investigates and analyzes the determinants of financial literacy among the university students in UTAR Kampar. The explanatory variables, which is the determinants consists of financial education, money attitude (power-prestige), money attitude (retention-time), money attitude (distrust), and money attitude (anxiety). In this study, primary data is the only method and 418 respondents have filled-up the questionnaire even the requirement of the sample size is 379 respondents. All of the respondents are UTAR Kampar students and IBM SPSS Statistics 28 was used to generating the data for the analyze and interpretation. Besides, this study was explored using descriptive analyses, pilot test, reliability analyses, normality test, Multiple Regression Analysis, and Pearson's Correlation Coefficient. In this study, it found out that MAPP, MART, MAD are statistically significant impact on the financial literacy. However, financial education, MAA and gender are not statistically significant impact. On the other hand, it mentioned the implications, limitations, and recommendation of the study to provide some assistances for the future research regarding to this topic.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Research Background

The financial markets have rapidly evolved amid the reachability of financial products and services around the globe. Moreover, the availability of financial products and services is considerably widening to the worldwide people and providing the public with more relatively customizable, preferable products and services. On top of that, technological improvement in the financial services industry is continuing, with a much easier market participation threshold, more accessible access to financial services such as online payment, credit card payment, et cetera. Therefore, the role of financial literacy has been initialed as it is inherently related to the development of financial services and products. Financial literacy is practically defined as the way and action of how an individual is carrying his or her capability to manage personal money and debt with respect to planning, investing, insuring, budgeting, and saving, and can refer to the ability to apply financial concepts into actual-world use, to plan and budget the financial decision (Hogarth, 2002). Therefore, financial literacy is necessary for people in order to utilize these financial products in a proper way to achieve the maximum wealth of individuals. It also enables people to assess the financial risk to make the right decision for their financial well-being (Damayanti et al., 2018). An improving financial literacy level assists individuals in practically making informed financial decisions with confidence and determination and better understanding and enjoying financial products and services (Ali et al., 2015).

To become an individual that is capable of having financial literacy, financial education is necessary to be carried out. Financial education, which is essential that provides to the public to capture the fundamental skill and knowledge. This fundamental involves the management of money, good control of the amount of debt, saving, and investing. Hence, financial education will directly influence the personal welfare and help an individual to build up the plan on budget and emergency fund wisely (Delhi, 2020). On the other hand, all the population, including consumers or investors, not only select the return between two plans, because of the enormous number of financial products, it is necessary for them to make the financial decision smartly. Thereby, students have comprehended the importance of financial knowledge and took the financial courses to improve the financial literacy. They have infused about consequences of financial problems and started to foster positive financial behaviors (Xiao et al., 2011). According to research from Ariffin et al. in 2017, a student's perspective is influenced by their parents. In general, students are involved in handling saving and expenditure due to the fund coming from their parents. Also, the higher the financial literacy, the higher the probability of students to save or invest. Therefore, it can assist them to make a sound decision making after they graduate such as borrowing the money from the commercial bank such as buying the cars or house purpose. Hence, it is needed and essential to implement the relevant program for students to enhance their awareness and knowledge of financial education since it is the vital basis of financial literacy in decision making. In fact, there are many countries that are involved in the development of financial education in order to comprehensive the program such as providing a right and clear information to the populations including students (Lusardi, 2019).

Besides that, gender has been a topic of discussion since ancient times among the global, and the present economic and financial industries are worried that it is a key source of financial literacy influence. It showed by Malayan Banking Bhd and Bursa Malaysia Bhd, has joined the Bloomberg Gender-Equality Index (GEI) for 2021 (Aman, 2021). Previous research has found significant gender disparities in financial literacy among college students in Malaysia (Falahati & Paim, 2011; Janor et al., 2016). In terms of financial competence, attitude, and management, the results reveal that female students are less informed than male students. (Schmitz & Bova, 2013; Sabri et al., 2017). Because gender disparities have been seen in many financial sectors, it is critical to assist college students in understanding their degree of financial literacy. In addition, college students as future's pillars, it is critical to comprehend the financial demands and difficulties of both men and women in college. Besides, a greater level of financial issues among college students may be caused by absence of financial literacy, which will have a significant influence in the future. In addition, another research shows that female college students in Malaysia, whether they come to money difficulties in their families or in their academic lives are marginalized, therefore they have a poor degree of financial awareness. (Paim & Falahati, 2011).

The globalization of financial services has subsequently increased people's attention towards money attitude (Lim, 2003). An empirical study conducted by Sabri et al. (2008) that Malaysian university students were receiving the education funds then spend on other non-academic expenses such as non-necessary things and lending money to friends. Moreover, those Malaysian university students are instead skipping meals to save money for buying unnecessary stuff to fulfill their material eagerness. Youngsters nowadays, including college and university students, tend to value money more than the older generations as the elderly are most likely not materialistic. Moreover, the students' spending trend has reflected the interest in technology to pursue a better and comfortable lifestyle. They prefer buying electronic gadgets rather than spending money on stationeries. Therefore, this kind of spending behavior is deemed a wrong attitude towards money among Malaysians, particularly the young students (Kamis et al., 2021). The wrong attitude an individual has over materialism might affect financial literacy. Also, people who have an attitude of money think money is merely a tool to fulfill their immediate needs, but not necessary needs will never have a proper financial literacy, at least in the long-run horizon. A bad attitude towards money can also increase the possibility of facing bankruptcy issues at the maximum level (Albeerdy & Gharleghi, 2015). Also, money attitude has been claimed to be an element in intervening in financial literacy (Sabri et al., 2020).

1.1 Research Problem

The globalized financial market, although positively enabled the public to easily access a wide variety of financial products and services everywhere, and yet concurrently caused a negative effect to the public. As such, people found difficulty adapting the financial services and products as they were sometimes confused about the new mechanism of financial services. For that reason, the risk involvement and selection difficulty has inevitably increased. Therefore, it is necessary for people, particularly college and university students, to establish the awareness of finance-related stuff (Mahdzan & Tabiani, 2013). To most students, college and university are the first places that college and university students can independently finance and allocate their money without their parents' guardianship. Hence, this group of people has deemed a newcomer in managing personal finance since they might have less awareness of distinguishing necessarily and non-necessarily things-to-buy and tend to have less self-control power to manage their own limited resources (Sabri et al., 2008). According to Private Pension Administrator Malaysia (PPA) in 2019, there is a press release stated that a portion of UTAR Kampar students, 150 participants, only about 14% of them had keep tracking on their savings goals, whereas the remaining respondents have no clear idea on keep track their savings and unable to make a clear answer in the question-and-answer session regarding retirement planning and personal finances. In short, the paramount concern of financial literacy should be upraised among college and university students as it will ultimately affect an individual's financial wellness.

Financial education is crucial in determining financial literacy, but it is also one of the variables that is being argued that are not appropriate to explain financial literacy. Nowadays, there are enormous studies mentioning that an effective way to promote financial literacy is to prepare a great opportunity and distribute financial education among most of the population, especially from school learning. Also, many countries have been involved in implementing and supplying financial education for the people who are in school or college (Lusardi, 2019). According to Chen and Volpe (1998), the college students' lack of financial knowledge about personal finance will cause them to be unable to make a good financial decision. Hence, it proves that financial education helps them to make a better financial decision (Huston, 2010). Also, a report from US surveys and other countries showed that the individual from college who does not accept financial education is unable to understand the basic information of financial literacy (Lusardi & Mitchell, 2014). Overall, it seems like financial education is a key lesson to enhance the outcome due to the result from Uzbekistan also supporting the idea that financial education can boost financial literacy (Isomidinova et al., 2017).

However, there is an opposite on financial education that should be wide-ranging. There was an investigation done by Mandell (2009), he stated that full-time undergraduate college students could obtain higher scores without taking the courses such as Personal Money Management or Personal Finance. It had proved that the courses taken in college did not improve the college students' financial literacy. Besides, the data and assessment from Jum$tart in an US high school also revealed that the students who had taken the relevant courses such as financial and management of money have no improvement on their financial literacy compared to who did not take the particular course (Schmid & Mandell, 2007). Simultaneously, a study mentioned that people who take the financial course does not have any effects on bothering their debt, making their own income tax, and checking on the cashbook balance (Wagner, 2015). Hence, it can conclude that the existing financial education not only significantly impact on financial literacy.

Apart from financial education, gender usually has differences in personality and behavior in daily life. According to the article written by Goldsmith and Goldsmith (1997b), they found that men can score higher marks than women due to the interest of men in financial investment higher than women. By supporting this perspective, Chen and Volpe (2002) have done research that shows the high proportion of man respondents has confidence in their personal finance knowledge compared to women. Also, the results of Falahati and Paim (2011) showed that males had higher levels of knowledge than females, including credit, risk management and financial literacy. As a result, females are involved in higher levels of financial problems due to lack of appropriate financial skills and knowledge. Moreover, male respondents had an advantage in numeracy, while females had an advantage in non-numeracy (Adam, 2017). However, based on Wagland and Taylor (2009), females were somewhat more financially literate than males in studies of undergraduate business students at the University of Western Sydney in Australia. In a study of 560 business students from the School of Business, University of Cape Coast, Ghana, there was no significant difference in financial literacy between males and females in financial confidence, saving, and planning.

Money attitude is somewhat the debatable variable in driving the financial literacy level. Albeerdy and Gharleghi (2015) found that money attitude in general is carrying a strong positive influence in affecting the financial literacy among university students where they claimed that possessing a good money attitude will increase the willingness of an individual to manage their financial resources appropriately. However, few scholars argued the term, attitude, is a controversial term while determining the accuracy of independent variables to influence the dependent variable. Hayes (2006) addressed that attitude towards money could not significantly manage financial practices and financial literacy among college students. As the researcher claimed that money attitude is merely a basis of attitude research. Therefore, the significance level is awaiting to be proved further. Not only that, some researchers specifically discussed the effect of money attitude in various dimensions since gender differences in attitude also matters. Baker and Hagedorn (2008) studies that among students, males tend to have more power-prestige and distrust than females. In contrast, Hayhoe et al. (2000) claimed that males college students are obsessed with money, but female students' attitudes are instead influenced by attitude of power and retention. Falahati (2011) concluded that since male college students tend to have a higher level of power-prestige than females, indicating that the likelihood of higher debt level towards males is higher as well, males are relatively more anxious about money. Meanwhile, the researcher further claimed that females have a more conservative money attitude and have a higher secure minded towards financing matters.

Therefore, in this view of concern, our study will be focusing on the investigation of financial literacy in Malaysian among university students. Remarkably, this field of study is limited and partially considered a new field of study. Our study attempts to conduct further to achieve a relatively accurate result as the research studied by Abdullah et al. (2017) has faced limitations in proving the accuracy of determinants of financial literacy.

1.2 Research Objectives & Research Questions

1.2.1 Research Objectives

1.2.1.1 General Objective:

1. To examine the factors affecting financial literacy.

1.2.1.2 Specific Objectives:

1. To identify the significant relationship between financial education and financial literacy.

2. To investigate the significant relationship between gender and financial literacy.

3. To study the significant relationship between money attitude(power-prestige) and financial literacy.

4. To examine the significant relationship between money attitude(retention-time) and financial literacy.

5. To assess the significant relationship between money attitude(distrust) and financial literacy.

6. To research the significant relationship between money attitude(anxiety) and financial literacy.

1.2.2 Research Questions

General Question:

1. What are the aspects that affect financial literacy?

Specific Questions:

1. Does financial education have a significant relationship between the financial literacy among UTAR Kampar students?

2. Does gender have a significant relationship between the financial literacy among UTAR Kampar students?

3. Does money attitude(power-prestige) have a significant relationship between the financial literacy among UTAR Kampar students?

4. Does money attitude(retention-time) have a significant relationship between the financial literacy among UTAR Kampar students?

5. Does money attitude(distrust) have a significant relationship between the financial literacy among UTAR Kampar students?

6. Does money attitude(anxiety) have a significant relationship between the financial literacy among UTAR Kampar students?

1.3 Research Significance

This research will study the factors that will affect financial literacy among university students in UTAR Kampar. Most previous studies commonly adopted an independent variable, money attitude, as a general variable. In contrast, we attempt to specifically segregate money attitude into 4 sub-factors, namely power prestige, retention time, distrust, and anxiety. These four sub-factors are proposed by Money Attitude Scales (MAS) by Yamauchi and Templer (1982). Segregating so will help this study to avoid the common research results done by numerous researchers before, and this study will be obtaining a different result throughout the whole study. As this study found that most of the past studies are done by foreign researchers and even less similar studies from Malaysia. Besides, gender issues are less studied in terms of financial literacy, so that this study will be implemented gender, as dummy variable to investigate the relationship. Throughout this study, it will assist in further understanding the analysis and determinants of financial literacy such as financial education, gender and money attitude among the university students in UTAR Kampar.

Furthermore, the outcome of this study will be tested by applying several major statistical test procedures. This research aims at providing a thorough guideline to the students, parents, teacher, and government. By referring to this study, these parties can have a clear understanding on the determinants of financial literacy, in order to avoid any unnecessary financial problem. For example, the determinant of one individual's gender is unavoidable since birth, therefore, through this study to find out whether there is an actual problem of inequality of financial literacy on gender and exploit the future efforts to enhance one's level of financial literacy. Besides, they can nurture the students by disseminating the right attitude towards money and informing the commonly wrong money attitude to the students for them to avoid it. The early-age attitude is vital as it can determine the future of an individual's behavior of spending the money. Thus, the nurturing action is advised to be taken as early as possible. On the other hand, financial education can be acquired through learning in the education institutions. With the importance of financial education outlined in this study, the government can benefit in building up strong awareness, and focus on the implementation of actions or policies to become more effective by providing better facilities for the education institutions, thereby they are able to prepare a high quality of financial education for students. Through this study, it is strived to investigate the relationship between independent variables and the dependent variable that proposed and examine the significance level of each variable.

CHAPTER 2: LITERATURE REVIEW

2.0 Underlying Theories

2.0.1 Financial Literacy

People who tend to have a financial thinking on literacy are desired to apply their skills from basic to sophisticated level and include their own short-term and long-term considerations in objectively achieving their respective financial goals (Carmel, 2018; Kahneman, 2011). Mutegi et al. (2015) revealed the theory of financial literacy which has been argued that one person's behavior with a higher degree or level of financial literacy will highly depend on the generality and popularity of two thinking styles on the basis of dual-process theories. As reviewed and adopted by Evans (2008), the idea of dual-process theories in decision-making can be determined by both intuitive and cognitive processes. More specifically, the intuition process is the process of acquiring knowledge without any specific reason and empirical inference. The concept of intuition is to mainly provide beliefs, perspectives, perceptions, or sense of judgements, and understanding. The intuition process is useful whenever people cannot study the case of verification empirically and justifiably. Meanwhile, the other process, cognition process, is a process in recognizing, elaborating, transforming, storing, and recovering any sensory input. Cognition or cognitive process is also scientifically defined as a mental process that is used for working memory, generating language, assessing reason, working out problems, and formulating decision and action.

Moreover, Stanovich and West (2000) expressed that intuition, also known as System 1, is a fast and non-conscious process to quickly suggest an intuitive answer, whereas cognition, namely System 2, is a relatively slow, conscious, and controlled process. System 2 is normally applied on matters and action that requires rational and analytical thinking, and serves as an intervention in improving decisions, such as consistently applying financial literacy while implementing investment strategy (Glaser & Walther, 2014). By simply to say that dual-process theories actually are used for deducting whether the investment and spending behavior are based on people's analytical and thinking or only instinct (Mugo, 2016).

Dual-process theories have been continually adopted in many fields such as social acceptance and cogitation (Evans, 2008). Also, the application of the dual-process system/theory on this financial literacy is apparent and straight. Some researchers supported that in order to advance in financial literacy, a development of financial knowledge and education as well as skills are needed. Others also claimed that financial decisions will most likely be influenced by personal value, attitude, and situational features (De Meza et al., 2008).

2.0.2 Financial Education

The application of social learning theory describes the connection between financial education and financial literacy. It demonstrated that an individual could learn the particular domain through behavioral, cognitive and environmental (Bandura & Walters, 1977). For example, children mirroring the behaviors of their parents through observation. In addition, the individual is able to observe which consequences of behavior are effective and reinforce it. According to Martin and Oliva (2001), personal financial skills can be received by children, adolescents, and young adults from parents by observation. In the research from Lyons et al. (2006), the children's financial literacy was affected by parents' advice and reinforcing activities. The children will create behaviors similar to their parents since parents were playing an important role to educate their children. Attendance at financial education programs has already been shown to be determined by social environment and peer involvement (Duflo & Saez, 2003). The students who engage in financial education programs will be influenced by their peers. Other students will follow their behaviors if their peers are not enthusiastic in the courses. Therefore, the students are not really enhancing their financial literacy even though they have taken the courses. Besides, this theory supports the social interaction in the learning process. Learning communities, in fact, encourage students to engage in activities and communicate with others in order to transform information into valuable knowledge (Greenagel, 2002; Yuan & Kim, 2014). It will help the students that are learning financial courses in the formation and strengthening of financial management and financial literacy. When the financial education programs emphasize social learning theory, the students are able to improve their financial literacy. In research from Thomas et al. (2016), the financial learning process would have to include three domains of cognitive, affective, and psychomotor learning, along with the development of a learning model that students' active participation in financial management. Hence, social learning theory can analyze how financial education affects financial literacy.

2.0.3 Money Attitude

The concept of money attitude has been ceaselessly studied throughout the years since it is varying among individuals. Numerous scholars have studied that one person's attitude towards money is affected by the individual differences and culture (Mitchell & Mickel, 1999), also because of the effect of personal value (Medina et al., 1996; Gbadamosi & Joubert, 2005). In order to have a clearer concept of money attitude, two terms, money and attitude should be separately discussed in-depth. Ahmad (2020) stated that money is generally defined as a medium of exchange and a store of monetary value. It is verifiable documentational data and it carries the availability of a track record that is globally being accepted as a payment, in exchange between money and goods or services (Mishkin, 2001). Money attitude is not only limited in the meaning of carrying monetary value for people, it also represents the means for the people to chase for financial well-being. Also, the meaning of money is identical for people, however, the attitude of one individual is unique, which makes the difference among others, and comes out this variable, money attitude (Taneja, 2012). Attitude is a person's feeling associated with an object, and often affected by situational factors. Everyone has a different attitude towards money, some think that money should be saved and served as a savings tool and investment source so that they can feel safe. They also think that saving money is good behavior in response to an emergency case such as facing financial difficulties. In contrast, some argued that the hard-earned money should be spent on materialistic purchases and used as traveling expenses. Therefore, the different understandings and perspectives towards money attitude occurs, hence, the perceptions of roles of money varies with each other, which subsequently influence individual's patterns and behaviors of spending the money (Sabri et al, 2006). A person's attitude will change and develop over time, mostly alter according to that person's experience, indicating money-related decisions depend entirely on money attitudes (Ahmad, 2020).

Moreover, Mulyani et al. (2018) stated that teenagers including college and university students view money as a tool of power, money also viewed as a tool of shielding from anxiety. Therefore, the researcher further focused on the four dimensions proposed from Money Attitude Scales (MAS) by Yamauchi and Templer (1982), respectively power-prestige, retention-time, distrust, and anxiety, which is a psychological aspect towards money and that is being widely and ethically adopted by diverse sample and the scale have empirically shown a stable and acceptable factor on each of its dimensions (Roberts & Sepulveda, 1999). Although there are many other development areas for money attitude, MAS is the first empirically validated scale, significantly contributed by the work of Yamauchi and Templer (Taneja, 2012).

2.0.4 Money Attitude (Power-Prestige)

Yamauchi and Templer (1982) defined that the first dimension of power and prestige attitude is a cognitive dimension that is related to social relations, power related to money to buy a car, house, food, and social prestige. The primary value of money is used to remove any obstacle that one individual is facing. Money under this dimension is also deemed as a command to control goods and services accordingly to one individual's needs and interests (Walker & Garman, 1992). As supported by Wernimont and Fitzpatrick (1972), suggested that individual with high level of this dimension will tend to hold attitude as importance of status-seeking and acquisition, and they tend to display their material wealth as they think that wealth is the best indicator to signal others regarding their social power, particularly in this modern society (Bell, 1998). Therefore, the level of goods and services consumed will subsequently increase since they tend to increase more social power as much as they can, and this status consumption is deemed as consumer value, which is an important driver in affecting one person's judgement, action, comparison across various goods and services (Richins & Dawson, 1992; Rokeach, 1973).

A study conducted by Durvasula and Lysonski (2010) found that university students tend to view money as a success symbol, a sense of materialism, a recognition of life achievement and social status, and a bloated self-ego. Kamis et al. (2021) studied that materialism can be segregated into material success, material happiness and material centrality, which identically carry positive relationship with the power-prestige throughout the study of university students. Moreover, Furnham and Murphy (2019) revealed that money can be spent to gain importance, control and dictatorship that can make one person psychologically feel more secure and eventually provide a motivational power in conducting any action or behavior. Therefore, people who tend to have a higher power-prestige level will indicate that those people use money as a tool to impress and influence others psychologically and physically (Lejoyeux et al., 2011).

2.0.5 Money Attitude (Retention-Time)

This second money specific attitude, retention dimension encourages prudent use of money, promotes saving, money management, and financial planning (Nga & Yeoh, 2015; Lejoyeux et al., 2011). The above researchers also identically claimed that students who score a higher level of retention-time, tend to be concerned about future financial situations, thereby they will carry out the activity of future financial planning and try to regularly monitor their financial situation. Naturally, obsessive or compulsive consumers will have a relatively less level of retention thinking since their buying decisions are often unplanned and emotional. In accordance with Kennedy (2013), stated that the retention attitude is an attitude that is being adopted when one person is intending not to spend money even when the money is available anytime. Also, Wernimont and Fitzpatrick (1972) viewed this retention-time dimension as a preparedness behavior and people with this specific attitude also have a clear direction on their own financial planning.

2.0.6 Money Attitude (Distrust)

The third dimension, distrust is referring to an insecure feeling when one individual is spending money in acquiring purchases (i.e., making financial decisions), and indicating people tend to have price sensitivity towards goods and services (Yamauchi & Templer, 1982). Standing from a consumer's perspective, this includes constantly doubting the price charged and hesitating spending money due to lack of confidence for oneself in making financial judgement. Particularly, consumers in university such as students who tend to lack trust in dealing money with others are considered a distrust dimension of MAS (Durvasula & Lysonski, 2010). Lejoyeux et al. (2011) also mentioned that people who possess a higher degree of this dimension will have less efficiency in making financial decisions. They often regret their choice after making a purchase, thereby significantly returning an item purchased (Lejoyeux et al., 2011).

2.0.7 Money Attitude (Anxiety)

As highlighted by Yamauchi and Templer (1982), money deemed as a source of anxiety and a source of protection against anxiety, it can be a medicine to people's feeling through relieving financial stress and depression, meaning people who have higher score of this anxiety dimension tend to view money carry ability to reduce anxiety associated with the financial circumstances. Duh (2016) revealed that people who currently have awareness of anxiety towards money will have a significant positive effect on later year's money spending pattern. The study also further proved that there is a correlation between materialism and anxiety, which means university students who are materialistic tend to get anxiety easily, and this statement is also supported by Kamis et al. (2021). Also, compulsive buying tends to be a quick and effective medicine to reduce stress and anxiety, because the concept of anxiety applied in compulsive buying model is to influence one person's action to become spontaneously and impulsively, thereby accelerate the consumer to reduce emotional strain, example of compulsive buying activity is typically shopping (Valence et al., 1988; DeSarbo & Edwards 1996).

2.1 Review of Variables

2.1.1 Financial Literacy

Financial literacy is a fundamental need for humans that they own an extra skill to avoid or compete on the financial problem in future or right now. The appearance of financial problems is not only due to the low amount of income among individuals, the main reason is to lack of basic information or knowledge on finance. Therefore, when people meet financial problems, they are unable to solve them. Besides, in order to achieve personal accomplishment in finance, having financial literacy is inevitable for better plans and financial decisions. (Susanti et al., 2019).

According to the researchers, Loh et al. (2019), their study had stated that the factors that impact personal financial literacy between 18 to 35 years old involve the geographical locations (rural or urban) of the individual and the family members. People who stay in urban areas tend to have more financial knowledge. The main reason is they are able to obtain a high level of education and are open-minded compared to the people who are from rural areas, and this leads to higher financial literacy. On the other hand, the culture from the parents in one family are essential and consequently influence on the child's perspective, norms, and preferences during the financial decisions. It is due to the teaching role of parents that also indirectly affects their child for managing their finances when they are grown.

Moreover, Mandell and Klein (2009) had done a study between the relevant subjects that were taken by university students and personal financial literacy. They found that the students who study business and take the subjects that are offered by university such as management or planning on personal finance, are able to obtain more in financial literacy compared to those students who do not take. On the other hand, the researchers who called Meier and Sprenger (2013) had made the comparison about the financial literacy and subjects taken among the students who take the relevant subject and students who do not touch it. In the end, they have discovered the same result with taking the relevant subject can obtain better financial literacy than others.

Financial socialization is the process through which a person gains information, skills, and attitudes from his or her surroundings (Sohn et al., 2012). Nidar and Bestari (2012) stated that there were internal and external variables that would impact financial literacy, which the impact of family, friends, education, and the media, sometimes known as the socialization agency, are examples of external forces. Wagner (2015) also discovered that increasing the frequency of participating in a social learning opportunity increases financial habits. Research has been carried out that a person's spending or consuming behavior is influenced by his or her family's attitude. Because they were reared in the same society that employs the same ideas, the individual is naturally predisposed to follow their parents' approach of handling and spending money (Faulcon, 2002; Mandell & Klein, 2009; Albeerdy & Gharleghi, 2015). In addition, there was 87% of students learn how to handle money from their parents according to Calamato (2011). On the other hand, Sohn et al. (2012); Robertson-Rose (2020) claim that parental influence diminishes with time as peer influence rises as a result of the individual's exposure to a variety of socialization agents as they get older. Television, newspapers, and social media all promote and disseminate information that might impact saving habits, and the quantity of time spent watching television is positively connected to an individual's materialistic views, saving behavior, and financial attitude (Ismail et al., 2011). Last, Chan and McNeal (2006) supported above information that parents, peer groups, schools, and the media, are the most important socialization agents. Kim and Chatterjee (2013) also showed a favorable link between the media as a source of financial information and financial behaviors.

Much research on financial literacy and its causes have been done utilizing various study units, data sets, and analysis, even though no single definition can describe financial literacy. The research discovered the characteristics that influence financial literacy, and the findings have indicated that age, wealth, occupation, socialization, education level, race, money attitudes, ethnicity, and gender, all play a role in explaining financial literacy. This section examines the literature on some of the most likely determinants of financial literacy, with a focus on financial education, gender, and money attitude.

2.1.2 Relationship between Financial Education and Financial Literacy

Financial education, which is a program that has a significant effect on the evolution of financial literacy. In other words, this program may help the individual to gain some skills related to financial literacy by learning and gaining knowledge. Thus, even though the timeframe for the individual to obtain the knowledge of financial education is short, it is still able to generate positive behavior (Fox et al., 2005). Moreover, most of the previous studies had mentioned that the relationship between financial education and financial literacy is significant. After conducting the survey, the researcher, Mandell (2008) concluded that the students who without a specific financial education program are unable to pass it. Also, a study by Chung and Park (2014) showed that the relationship on both variables is positive. In contrast, there are still some studies that showed that the relationship between both variables is adverse.

Thomas et al. (2016) have conducted a study from the students who study the courses related to economics at the Semarang State University. This study involves around 4500 students, and the research method applied is proportional cluster random sampling. Besides, the researchers run the investigation and evaluate by reliability & validity analysis and multiple linear regression models. They found out that there is no relationship between both variables as a result of those university students only having a basic understanding and the information from lecturers is not practical for the student to implement in real life. Therefore, it means that financial education is not effective and leads to failure in imparting the information for the student. Overall, Thomas et al. (2016) concluded that financial education does not have a significant effect on financial literacy since financial education is unable to influence its objective.

Wagner (2015) revealed that financial education has a significant impact on the dependent variable (financial literacy). The study is conducted under the survey form and the result is handled with the retrospective pre-test (RPT) method. Wagner mentioned that people who take the course under financial education could be gained with more knowledge and answer the questions provided by the researcher correctly. Simultaneously, people who have a financial education have a high probability of answering the questions accurately.

Isomidinova et al. (2017) conducted a method, which is Pearson's bivariate correlation between financial education and financial literacy. It shows that both variables are positive, and the variable (financial education) is the highest and strongest on affecting the dependent variable among the other independent variables. Therefore, the increase in financial education, the higher in financial literacy among the students. Besides, a finding also showed that the existence of a personal finance course in college can enhance their personal decision on finance since they have gained the relevant knowledge (Peng et al., 2007).

Kaiser and Menkhoff (2017) have investigated the probability that financial education influences financial literacy. After the researchers adopted a meta-analytic approach, compared to financial behavior, the impact of the independent variable (financial education) is higher on the financial literacy.

2.1.3 Relationship between Gender and Financial Literacy

According to Bucher et al. (2017) research large gender gaps exist in Germany, U. S., and the Netherlands regardless of those married, single, divorced or widowed and in France, Arrondel et al. (2015) got comparable results. The gender gap may be explained in part by the fact that education, employment experience, financial responsibility, marital status, and income. Controlling for these variables in regression analysis frequently results in a considerable reduction in the gender gap but it has not vanished. Based on Joachim et al. (2013), female interest in financial matters is roughly 10% lower than male. They also discovered a disparity in self-reported financial literacy between male and female. Besides, Brown and Graf (2013) stated 45% of male were paying careful attention to the financial crisis, but only 23% of females did.

By looking in detail at their daily life, Lusardi and Mitchell (2014) stated that females have a lack of preparedness for retirement than males. Webster and Ellis (1996) found that women had poorer self-confidence in financial analytical topics than males on average when it comes to gender disparities in financial literacy. Lusardi and Mitchell (2014), also citing Bucher et al. (2012), emphasize the potential importance of self-confidence, which varies by gender. College students completing a personal financial management course improved their comprehension of money, financial knowledge, and self-efficacy, according to Davis et al. (2006), with males showing higher increases than females. They also stated that confidence of females remained lower than male students even after the course was completed. Besides, Lusardi et al. (2010) release that gender is still a major predictor of financial literacy, as females being less financially knowledgeable than males. Lower degree of financial literacy also shown in research of Van Rooij et al. (2011), by females involvement in stock market is significantly lower than males involvement in stock market.

In addition, Hsu (2016) stated that males prefer handling home financial problems and females are less likely to develop their financial literacy. Lusardi and Mitchell (2014) supported this statement and mentioned that when females are less involved in-home financial problems, they may gain less financial information, and their drive to learn about financial topics may be weaker because they do not perceive the value in learning this knowledge. Not only that, Agnew and Harrison (2015) also stated that on exams of financial literacy, males outperform females. Gender was the only variable in the UK and New Zealand that exhibited a significant association with financial literacy. New Zealand males outscored females on every single question in the exam; nevertheless, the performance of British men relative to British women, but only superior in their study. When it comes to basic compound interest, males fare considerably better than women in both nations. Therefore, these studies pointed out that females have inherently less financial literacy than males.

However, there are some studies that disagree with the view of gender differences in financial literacy. According to Danes and Hira (1987), which the males know less about total financial management than females. Wagland and Taylor (2009) also stated that it is worth mentioning that ladies are slightly more financially knowledgeable than males among Australian students

Worth mentioning, Lusardi and Mitchell (2008) discovered no disparities in their inflation questions, and in this study, 55% of both males and females in New Zealand correctly answered the inflation question. They also stated that a deep understanding of compounding in terms of calculational working is unnecessary in answering the inflation questions; rather, knowing the overall idea of compounding is required and enough to make an accurate decision when filling up the questionnaires. Therefore, there was no significant difference between men and women when it came to compounding questions. In addition, Belas et al. (2016) compared financial literacy between male and female secondary school pupils in the Czech Republic and Slovakia. The study's findings revealed that both male and female participants were equally capable of making smart judgments about the various bank loan options accessible to them in both nations.

In short, Bucher et al. (2012) suggest that developing financial literacy education programs that address gender disparities may be the most effective method to provide financial information to overcome these persistent inequalities. Another research using the RAND American Life Group studied gender disparities in financial literacy and discovered that female’s financial literacy was lower than males, with substantial differences (Fonseca et al., 2010). However, findings of Fonseca et al. (2012) imply that, given roughly equal educational attainment by gender, financial decision-making should be roughly equal by gender, albeit this will vary depending on the relative levels of the spouses within a family. More study is needed to figure out how the level of engagement in financial decisions affects financial knowledge and, more crucially, how that information is used. Also, according to Lusardi and Mitchell (2014), the gender issue is "far from finished" and additional study is needed to better explain observed gender variations in financial literacy.

Other issues come up from Filipiak and Walle (2015), it is vital to clarify how a person's unique understanding of financial concerns is influenced when answering the topic of whether the gender difference in financial literacy is a behavior of nature or nurture. Besides, they give example such as Fonseca et al. (2012), which also claimed that variations in financial knowledge between males and females may be explained by differences in information acquisition methods rather than differences in males and females' personal traits. And, females are less interested in financial concerns than males, according to Lusardi and Mitchel (2008), implying that this is partly determined by nature. On the other hand, Field et al. (2010) found that knowledge gaps between men and women may be due to societal standards, as well as disparities in financial understanding due to upbringing.

2.1.4 Relationship between Money Attitude (Power-prestige) and Financial Literacy

According to Pereira and Coelho (2020) a perspective of money being treated as a tool to acquire power and prestige could motivate individuals to learn how to deal with money in advantageous ways, therefore, one individual should gain more power-prestige in order to gain improvement in their financial status and financial literacy. Contrarily, Lim et al. (2003) claimed that those who viewed money as a tool of power experienced financial hardship, which resulted in a negative relationship between gaining more power and less financial literacy level. The above researchers further gave the reason that people who view money for power, indicate they tend to have higher levels of financial stress, thereby leading to a negative result in controlling financial decisions. Not only that, according to Ahmad (2018), money as a source of power-prestige will tend to be a decisive driver for borrowers to seek loan, and those borrowers are mostly experienced loan default as money leads to compulsive spending and creates financial burden. High loan usage tends to lead to high loan default rate (Bhardwaj and Bhattacharjee, 2010). Based on the findings of Phau and Woo

(2008) that only power-prestige dimension affects the compulsive tendencies of buyers among Australian's youngsters, meaning the other three dimensions, respectively distrust, anxiety, and retention are not even significantly affecting the compulsive buying tendencies. Sohn et al. (2012) conducted a study among Korean high school students that power or achievement can only be an attitude towards money, however, they have not significantly made a conclusion in supporting relationships with financial literacy. Li et al. (2009) also claimed that the power-prestige brought the greatest influence in influencing male consumers' compulsive tendencies whereas female consumers are not being influenced by this power-prestige dimension.

2.1.5 Relationship between Money Attitude (Retention-time) and Financial Literacy

Owner-managers who are conservative in spending money tend to save a surplus of money for the reason of awaiting the future financial needs, thereby these types of owner-managers have less preference for borrowing loan (Ahmad, 2020). A study conducted among Taiwanese college students that the procedure of logistic regression in the findings suggested that students with retention-planning tend to make a relatively higher-risk in financial decision, for example, high-risk investment in general (Shih & Ke, 2014). It is because the Taiwanese students would concern their current and future financial investments, then they tend to apply more part-time or full-time job with the aim of making more money to invest in high-risk investment products and ultimately accumulate their wealth quicker. In accordance with Li et al. (2009), the researchers have studied the effect of money attitudes towards Chinese young consumers' compulsive buying behavior among undergraduate students in China states, namely Ningbo and Tianjin. As the data analysis showed, the dimension of retention-time negatively affects the consumers' buying behavior in both genders. However, in an American college students sample research, the results shown that retention-time is not a determinants of credit card usage management, whereas power-prestige, distrust, and anxiety are closely influenced the compulsive buying tendencies, which causing personal credit card default and subsequently leading an increasing case of college students' bankruptcy (Robert & Jones, 2001).

2.1.6 Relationship between Money Attitude (Distrust) and Financial Literacy

Lack of trust often exists is typically because of the involvement of money, which causing money concerns of one individual, this will subsequently be changing personal motivation towards transactions made, this will result in a negative relationship between distrust and financial literacy since one person with distrust attitude often not trust financial information searched (Burgess et al., 2005). Research by Kidwell and Turrisi (2004) that students with high levels of confidence tend to better manage their budgets. Likewise, students who are less confident in making financial decisions will rely more on their emotions and feelings towards budgeting. Owner-manager who is possessing dimension of distrust will tend to lack faith in their capability to make efficient purchase decision, therefore this type of manager will tend to avoid loan borrowing as they consider themselves may not capable to repay the borrowed loan (i.e., the higher the distrust level of oneself, the lesser the probability of borrowing loans), which indicating a negative relationship between distrust and debt management (Ahmad, 2020). Interestingly, Hafez et al. (2013) tested the four dimensions of MAS, namely power-prestige, retention-time, distrust, and anxiety in determining the relationship between money specific attitudes and credit card usage, all dimensions are significantly affecting the credit card usage except the distrust dimension.

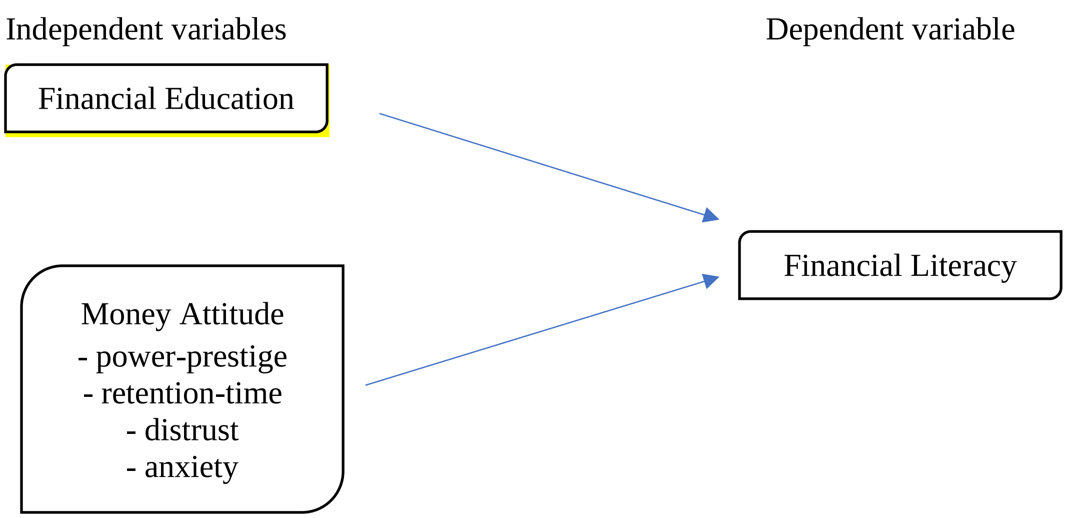
2.1.7 Relationship between Money Attitude (Anxiety) and Financial Literacy

In accordance with Bailey et al. (1998), financial stress is a major stress among the overall stress of one individual, thereby affecting a human's life enormously. Not only that, but the above researchers also investigated that financial stress from many students was mainly influenced by the high personal debt obligation. Several studies on financial stress found out that there is a significantly reverse impact of financial stress on measures of well-being (Bojuwoye, 2002; Dickinson, 1996). In other words, the higher the financial stress level will subsequently lead to a lower level of financial literacy ability and eventually lower financial well-being in one person. Moreover, people who keep on revealing anxiety will tend to have the intention to borrow more loans (Desarbo & Edwards, 1996). Doing so will help the borrowers hold more money on hand and make them less anxious and have more secure feelings. Also, Bhardwaj and Bhattacharjee (2010) revealed that anxiety and debt default rate have positive connection, where a person with higher score of anxiety will most likely lead to default loan more.

2.2 Proposed Theoretical/ Conceptual Framework

2.2.1 Conceptual Framework

Figure 2.1: Conceptual Framework



Function: $FL_t = f\ (FE_t, G_t, PP_t, RT_t, D_t, A_t)$

$FL_t = \beta_0 + D\ \text{Male}\ \beta_1 FE_t + \beta_3 PP_{t,} + \beta_4 RT_{t,} + \beta_5 D_{t,} + \beta_6 A_t + \mu_t$

Where,

D = Dummy Variable

0 = Female

1 = Male

FL_t = Financial Literacy

FE_t = Financial Education

PP_t = Power-Prestige

RT_t = Retention-Time

D_t = Distrust

A_t = Anxiety

This framework revealed the relationship between the variables of the research. The conceptual framework is established to investigate the relationship among financial literacy, financial education, gender, and fours of the sub-factors of money attitude. Compared to those five variables, gender have a different nature as this variable only can be the categorical data. It means that gender must be considered as a dummy variable and many journals often apply it in the same way. As gender usually will be interpreted into two outcomes, which are the benchmark 0-female and 1-male instead of correlation measurement. Based on the research of Campbell and Mínguez-Vera (2008), they found that women as a dummy variable have no effect on firm performance in Spain. Not only that, the research of Joyce Jacobsen and Andrew Newman (1995) identified an increasing usage of dummy variables into gender to find out the gender differences, thereby they also used the same way of measurement on gender to gauge the impact of gender on wages (Figart, 1997). In short, if there is at least one male, the dummy variable will be 1, otherwise it will be 0.

2.3 Hypothesis

The null hypothesis, H0, indicates the exogenous variables possess no significant relationship with endogenous variables. In contrast, H1 expresses that the independent variables have a significant relationship with the dependent variables. If H0 is false upon investigating, we will reject H0, concluding that it is a significant relationship between the independent and dependent variables.

2.3.1 Financial Education

- There is a significant relationship between financial education and financial literacy.

2.3.2 Gender

- There is a significant relationship between gender and financial literacy.

2.3.3 Money Attitude (Power-Prestige)

- There is a significant relationship between money attitude (power-prestige) and financial literacy.

2.3.4 Money Attitude (Retention-Time)

- There is a significant relationship between money attitude (retention-time) and financial literacy.

2.3.5 Money Attitude (Distrust)

- There is a significant relationship between money attitude (distrust) and financial literacy.

2.3.6 Money Attitude (Anxiety)

- There is a significant relationship between money attitude (anxiety) and financial literacy.

CHAPTER 3: METHODOLOGY

3.1 Research Design

The research design of this study adopted a quantitative method in measuring the independent variables. Hence, through the online survey, it can assist this study to obtain and gather the data. The data obtained from the survey is collected in a numerical form, which is convenient for statistical analysis and brings on precise and dependent conclusions. It also connected the relationships between variables by hypothesis (Sibanda, 2009).

Under the quantitative method, it consists of 4 types of investigation, such as experimental, quasi experimental, descriptive, and correlational. In this study, the descriptive design will be appropriately adopted as it focuses on describing the demographic of the respondents or phenomena under investigation. Thus, it emphasizes the what, when, where, and how of the study topic rather than the why of the research topic. Furthermore, descriptive research is mainly in investigating and measuring variables instead of manipulating variables and it is able to generate precise outcomes from enormous sample size (Dulock, 1993).

3.2 Sampling Design

3.2.1 Target Population

During the study, the population of target falls under those individuals who are currently studying in UTAR in Malaysia. The total student population presently in UTAR is around 26000 students. (“A diverse community”, 2018). Thus, to generate a reliable study, our participants should require some basic information that is related to financial information or knowledge. Moreover, this research will be investigating the connection between explanatory variables and explained variable using multiple regression analysis (MRA). After that, this study will proceed to the extension of MRA, which is the Ordinary Least Square (OLS) method. OLS forms it into a multiple linear regression model. The main function of this method is to help us reducing the value of error terms and acquiring unbiased and efficient results in this study. (Hayes & Cai, 2007).

3.2.2 Sampling Frame and Sampling Location

The sampling unit in this study must be an individual who is currently studying in University Tunku Abdul Rahman Kampar (UTAR) in Kampar Campus. One of the reasons for choosing UTAR is that it is one of the well-known universities, also it is under Malaysia's top 99 Universities worldwide. Thus, UTAR was gaining a 2-years streak of 2nd ranking universities only after the University of Malaya (“*Asia University Rankings*”, 2017, 2018). In addition, UTAR Kampar has incentives in improving students’ financial literacy. For instance, UTAR Kampar has some corporations with Private Pension Administration Malaysia (PPA) in providing financial literacy education over the past two years. Thus, in 2019, Amanah Saham Nasional Berhad (ASNB) and UTAR Kampar organized an event that was relevant to financial literacy (“ASNB talks about financial literacy”, n.d.). On the other hand, the most significant reason for selecting UTAR Kampar is the Covid-19 pandemic. Due to the Covid-19 pandemic, all the universities are online classes therefore we are unable to face to face to get sources for other universities. Hence, this study is constrained to the movement restriction and unable to get the data and information from other state's universities and colleges by face-to-face approach. It caused this study only focusing on UTAR Kampar.

3.2.3 Sampling Elements

In order to make the study become trustworthy and accurate in explaining the independent variables impact on financial literacy, it is necessary to involve some elements. Firstly, our sampling unit must be an individual who is currently studying in UTAR Kampar Campus within any courses. However, they must have the basic knowledge on financial literacy, otherwise, they are not eligible to participate in our study because they are unable to answer the questionnaire. Additionally, the respondents must have the internet and device support to answer the questionnaire.

3.2.4 Sampling Technique

The approach under the sampling technique consists of probability sampling and non-probability sampling. Each method has its own categorizations. Since convenience sampling is one of the non-probability sampling methods, thereby will be chosen throughout this research because it is the easiest and economical way to obtain the initial data from the respondents. Convenience sampling refers to the sampling that most reachable of the researchers (Sedgwick, 2013).

3.2.5 Sampling Size

In statistics, the sample size is a term often used. When conducting a survey of a big group of people and hearing the replies from everyone, it is not practical.

Therefore, it needs to pick a random sample of people who reflect the entire population. Nevertheless, the accuracy of sample size is very important. As the sample size is too small, it may be a biased result; the sample size is too big, it may be difficult, expensive, and time-consuming to conduct (Singh & Masuku, 2014). Hence, an appropriate sample size is extremely important and selected based on the standard set by Krejcie and Morgan. According to research done by Krejcie and Morgan in 1970, the sample size will be 379 respondents as the UTAR population is 26000 students. This result is calculated under a formula, which is “Small Sample Techniques”. Thus, the confidence interval is 95% followed by 5% of margin of error.

3.3 Data Collection Methods

The technique for obtaining the sources of the data can be separated into 2 ways, which are primary data and secondary data. In this study, primary data also called as firsthand data, will be applied to conduct questionnaires as well as surveys. On the other hand, once the primary data has been collected, new sources of data will be generated to add on the existing data (Hox & Boeije, 2005). Besides, primarily data has not been manipulated by humans, so it is more dependable, genuine, and validity (Kabir, 2016). Online survey is one of data collection methods, and it is the most time-saving and money-saving method. In addition, online data collection can prevent data loss and simplify data transfer to a database for analysis (Lefever et al., 2007). At the same time, the reason for selecting online surveys as the collection method is due to the Covid-19 pandemic and it is difficult to obtain the response through face-to-face conversation. In contrast, there is no perfection in this world. Online data collection also has its potential weaknesses. Ray and Tabor (2003) mentioned that the participants will not finish the questionnaire due to the frustration of unclear instructions. Besides, Andrade (2020) also stated that the participants who conducted the survey online when they have the interest, and it will cause bias for the result. Therefore, people who design the questionnaire should have a clear instrument and the group of individuals. The online questionnaire used as main sources of data collection methods in this research with the participants who are students of UTAR Kampar.

Table 3.1:

Table of questionnaire on variables

Construct (Variables)	Item (Question)	Source
Financial Literacy (FL)	FL1. When I need to form an opinion about a financial issue, I completely rely on my intuition. FL2. For most financial decisions, it is reasonable to rely on my intuition. FL3. The first idea of my thinking about making an investment is often the straight and best one. FL4. When it comes to buying decisions, I often follow my gut feelings. FL5. Financial thinking is not my idea of fun. FL6. I have difficulty thinking in new and unfamiliar situations when it comes to financial decision-making.	(Glaser & Walther, 2014)
Financial Education (FE)	FE1. Financial education can attract me to learn/know more about financial management in the best possible way. FE2. I think that children will learn the way to manage finances from their parents. FE3. I think that students should have the ability to manage their finances by teaching from school.	(Chen & Volpe, 2002); Kyiv (2019)

	FE4. I can solve financial issues through communication with my friends and family members. FE5. If my school offers personal finance classes, I will participate as an elective. FE6. I am enabled to obtain personal finance knowledge from others' mistakes.	
Money Attitude - Power-Prestige	MAPP1. I own materialistic things just to impress others. MAPP2. I believe money is the ultimate symbol of success. MAPP3. I judge people's success based on the amount of money they have. MAPP4. I use the money to influence others to do things for me. MAPP5. I am happy to let others know how much money I own. MAPP6. I am proud to share my financial victories with others.	(Roberts & Jones, 2001); (Lay & Furnham, 2019); (Devlina et al., 2017); (Hayes, 2006)
Money Attitude - Retention-Time	MART1. I settle my bills as soon as possible to avoid unnecessary interest charges. MART2. I am saving now to prepare for my elderly age. MART3. I have enough money to tackle any financial problem at any moment. MART4. I have my consistent way of doing financial budgeting.	(Roberts & Jones, 2001); (Lay & Furnham, 2019);

	MART5. I think prudently about every single item I spend on. MART6. I considered myself as a saver rather than a spender.	(Devlina et al., 2017); (Hayes, 2006)
Money Attitude - Distrust	MAD1. I automatically say "I can't afford" when dealing with aggressive approaches from sellers, even if I can afford. MAD2. I complain and regret about the price of goods after making a purchase. MAD3. I insist on returning goods if I regret buying. MAD4. I try to bargain for the price on whichever occasion. MAD5. I hesitate in spending money, even though it is necessary. MAD6. After buying something, I wonder if I can get the same thing for a lesser price elsewhere.	(Roberts & Jones, 2001); (Lay & Furnham, 2019); (Devlina et al., 2017); (Hayes, 2006)
Money Attitude - Anxiety	MAA1.I show fearfulness when I don't have enough money. MAA2. I worry when dealing with whichever money decision. MAA3. I feel concerned that I am not financially secure. MAA4. I spend money to relieve my stress, and I feel much better.	(Roberts & Jones, 2001); (Lay & Furnham, 2019); (Devlina et

	MAA5. I feel nervous when having a conservation related to my personal finance. MAA6. I feel anxious when my progress of reaching financial goals is not on-tracking.	al., 2017); (Hayes, 2006)

3.4 Proposed Data Analysis Tools

3.4.1 Descriptive Analysis

Descriptive analysis, also called descriptive statistics, which is one of the most popular tools and commonly used for analyzing purposes. The process is going to summarize enormous amounts of the data and enable it to generate the result that is easier to understand for researcher and public from uninterpreted data. Hence, descriptive analysis is able to provide and report the fundamental characteristic in the study (Trochim, 2006). Also, it is a usual tool since it can assist in filtering out the data that is meaningless (Garcia et al., 2015). Furthermore, according to a study from Sloman in 2010, it mentioned that descriptive analysis could collect the data on related environments by involving and observing target behavior in real-life.

On the other hand, there are few steps to the process, collect data, clean data, and follow by applying methods. Survey is appropriate for collecting the data from participants. Besides, applying suitable methods can assist us in obtaining the expected result, however, it is needed to clean the unwanted data before implementing the methods. In short, the adoption of descriptive analysis is able to obtain some significant vital data, such as mean, mode, median, standard deviation, range, and etc. Those figures can help the reader easily accept and perceive the data from vast information (Trochim, 2006).

3.4.2 Scale Measurement

3.4.2.1 Pilot Test

Pilot test is used as a rehearsal of research and it is a small-scale preparatory study used to assess feasibility, sample size, cost, and adverse events, as well as to enhance the study design before launching a full-scale research project (Hassan et al., 2006; In J, 2017). Also, pilot study can identify design flaws, refining data collection and analysis plans, and gaining experience before embarking on the larger study (Fraser et al., 2018).

3.4.2.2 Alpha Cronbach Value

Reliability analysis is a step for researchers to evaluate and determine the dependability of the questions among the variables (Holgate et al., 2000) and this study is going to use Cronbach's alpha for reliability test. In addition, the data is needed to code numerically (Zhang et al., 2011). Cronbach's alpha, also known as coefficient alpha, which is a test under the internal consistency reliability. In other words, Cronbach's alpha is an essential signal for the research to test the consistency (Gliem & Gliem, 2003). Thus, it is a good measurement especially the data from Likert scale and agreed by an enormous number of researchers. Besides, under the Likert scale, the questionnaire will provide 7 scale options to ensure the reliability of the result. By supporting this statement, Symonds (1924) mentioned that the 7 scale options are able to perfect inter-rater reliability. In addition, the 7 scale options also can provide the accurate options which are nearer to the answer of the respondent, instead of other lesser scale options (Joshi, 2015). The main reason is Cronbach's alpha is able to generate an indicator that is called reliability coefficient (Tan, 2009). Furthermore, based on the formula below, the increase in k can lead to the result in consistency (Gliem & Gliem, 2003).

Formula: rk/ [1+(k-1) r]

Tables 3.2:

Table 3.2: Rules of thumb for

Cronbach's alpha (CA) reliability coefficient

Alpha's value	Level of Reliability Coefficient
$\alpha<0.5$	Unacceptable
$\alpha>0.5$	Poor
$\alpha>0.6$	Questionable
$\alpha>0.7$	Acceptable
$\alpha>0.8$	Good
$\alpha>0.9$	Excellent

Source: Gliem & Gliem (2003)

Moreover, the value of Cronbach's alpha will fall between 0 and 1.0 (Tavakol & Dennick, 2011). Result of Table 3.2 was done by George and Mallery stated in the journal of Gliem and Gliem (2003), the alpha's value is considered unacceptable if the CA less than 0.5. Besides, if it is more than 0.5, the level is considered poor; questionable if the value is more than 0.6; acceptable when the value is more than 0.7. Starting from 0.8 and 0.9, the level of reliability coefficient is viewed as good and excellent. Thus, they mentioned that the alpha value should be 0.8 and considered a reasonable goal. However, the previous study from Hulin et al. (2001) stated that the alpha level between 0.6 and 0.7 is noted as satisfactory and it is good when the alpha is larger than 0.8. Hence, it can be observed that the sufficient level for the study is around 0.6 and above. According to Tavakol and Dennick (2011), if the value is low, the researcher can reduce the unnecessary question/ variable for enhancing the Cronbach's alpha value.

3.4.2.3 Normality Test

The assumption and procedure of normally distribution is extremely important for the measurement of statistical data. It expects the error term in this study is minimum and enable to proceed to T or F statistical test for regression models. This is the main requirement for T and F statistical test and assist this study obtains meaningful outcomes. In this study, the method for normality test is using the skewness and kurtosis. For skewness, it measures the symmetry and kurtosis explains how high the curve is. (Mishra et al., 2019). According to Kartini et al. (2020), skewness and kurtosis is one of the methods to test the normality of all variables to ensure that our assigned model is regularly distributed. The standard of normal distribution is that both skewness and kurtosis must within the range of +2 and -2 respectively.

3.4.3 Inferential Analysis

3.4.3.1 Pearson's Correlation Coefficient

Pearson correlation also called as Pearson product-moment correlation coefficient, is a type of test statistics that measures the association or relationship between two continuous variables (Weissetein, 2006). Due to the method of covariance as the base used in Pearson correlation, it has been considered as the best way to give the information about the magnitude, strength and even the direction of linear relationship between both different variables (Schober, Boer & Schwarte, 2018; Sedgwick, 2012).

Under Pearson's correlation coefficient, there are special properties in three types of area which includes limit, pure number and symmetric. Firstly, the coefficient value of Pearson's correlation only can range from +1 until -1, where the value is higher than 0 or close to +1 represents a positive relationship, 0 value represents no relationship and the value lower than 0 or close to -1 represents a negative relationship between two variables. Not only that, if the correlation value is almost near or definitely +1 will be considered as a perfect positive relationship and it can also be applied to -1, indicating a perfect negative relationship. Besides, the result of Pearson's correlation coefficient would not be affected by the difference unit of measurement in the sample and also the correlation coefficient is symmetric (Sedgwick, 2012).

Table 3.3:

Strength level of correlation coefficient

Range of correlation level	Relationship
0.80 to 1.00 or -0.80 to -1.00	Very strong positive or negative relationship
0.60 to 0.79 or -0.60 to -0.79	Strong positive or negative relationship
0.40 to 0.59 or -0.40 to -0.59	Moderate positive or negative relationship
0.20 to 0.39 or -0.20 to -0.39	Weak positive or negative relationship
0.00 to 0.19 or 0.00 to -0.19	Very weak positive or negative relationship

Sources: Kowang et al. (2015)

3.4.3.2 Multiple Regression Analysis

MRA is a tool to use for seeking the linear relationship between the various predictor variables toward one explained variable (Uyanik & Guler, 2013). The outcomes of the analysis are the sign of the regression coefficients (β), p-value, F-statistic, and T-statistic with the significant level (Solutions, 2015). In this study, the total independent variables are 5 variables.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

The usefulness of data analysis lies to analyze and interpret the data and graph by using SPSS 28. In this study, the total respondent that being collected for the survey is 418 students from UTAR Malaysia in Kampar. Inside this chapter, it is going to show and clarify a series of analysis with numbers or tables such as descriptive analysis and the result on significant relationship among the endogenous variable and exogenous variables.

4.1 Reliability Analysis

4.1.1 Pilot Test (Reliability Test)

The measurement of reliability analysis, which is pilot test shows that the result on the dependability of the questionnaire among the variables. In this study, reliability and soundness are essential and thereby 70 students of UTAR in Kampar were chosen in this particular test in order to proceed with other analysis.

Table 4.1:

Result for pilot test

Result for Pilot Test

Cronbach's Alpha	No. of items
0.784	36

Source: Developed for study.

Based on Table 4.1, the outcome of CA is 0.784 with 36 of number of items. According to Hulin et al. (2001) from Chapter 3 that mentioned, if the value is more than 0.7, which is considered as acceptable. Therefore, the questionnaire in this study is acceptable.

4.2 Descriptive Analysis

4.2.1 Respondent Demographic Profile

Details of respondent will be provided in this section as well as their gender, age, level of education, and the frequencies on each item will be reviewed by table and chart. On the other hand, there is a total of 418 respondents and all of them are UTAR students in Kampar.

4.2.1.1 Gender

Table 4.2:

Gender’s frequency table

Gender's Frequency Table					
Gender					
		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Female = 0	251	60	60	60
	Male = 1	167	40	40	100
	Total	418	100	100	

Source: Developed for study

The Table 4.2 shows above demonstrates that the frequency of gender. Among 418 participants, it can observe that the number of females is more than the male. The total number of females is 251 around 60%; male is 167 and contributed with 40%.

4.2.1.2 Age

Table 4.3:

Age's frequency table

Age's Frequency Table					
Age					
		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	19 - 20 years old	41	9.8	9.8	9.8
	21 - 22 years old	334	79.9	79.9	89.7
	23 - 24 years old	40	9.6	9.6	99.3
	> 25 years old	3	0.7	0.7	100
	Total	418	100	100	

Source: Developed for study

As demonstrated from Table 4.3, it shows that the frequency of age. Among 418 participants, it can observe that the research mainly contribute by respondents are between 21 – 22 years old is the highest with 79.9% and 25 or above is the lowest with 0.7%. Moreover, the variance between 19 – 20 years old and 23 – 24 years old are not big, which is 41 participants and 40 participants respectively.

4.2.1.3 Level of Education

Table 4.4:

Level of education’s frequency table

Level of Education’s frequency table						
Level of Education						
		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Foundation	16	3.8	3.8	3.8
	Degree	399	95.5	95.5	99.3
	Master	2	0.5	0.5	99.8
	PHD	1	0.2	0.2	100
	Total	418	100	100	

Source: Developed for study

As illustrated from Table 4.4, it shows that the frequency of level of education. Among 418 participants, student who currently at degree level is the highest with 399 participants (95.5%) among these 4 levels. Besides, there are only 16 participants in foundation holders, 2 participants in master holders, and 1 participant in PHD holders.

4.2.1.4 Race

Table 4.5:

Race's frequency table

Race's frequency table					
Race					
		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Malay	1	0.2	0.2	0.2
	Chinese	409	97.8	97.8	98.0
	Indian	8	1.9	1.9	100
	Total	418	100	100	

Source: Developed for study

Table 4.5 indicates that the frequency of race. Among 418 participants, most of them are Chinese. It contributed 409 respondent and account for 97.8%. Besides, participants who are Indian is 8 and only 1 respondent is Malay.

4.2.2 Central Tendencies Measurement of Constructs

In this section, it will provide the information on the mean, median, mode, and standard deviation for all the items in each variable as well as overall result with the respective measurement.

Table 4.6:

Mean, median, mode, and standard deviation of variables

Items	Mean	Median	Mode	Standard Deviation
Financial Literacy (Dependent Variable – FL)				
1. When I need to form an opinion about a financial issue, I completely rely on my intuition.	**4.0024**	**4.0000**	**4.0000**	**1.42351**
2. For most financial decisions, it is reasonable to rely on my intuition	**4.0215**	**4.0000**	**5.0000**	**1.52108**
3. The first idea of my thinking about making an investment is often the straight and best one.	**4.1603**	**4.0000**	**4.0000**	**1.44297**
4. When it comes to buying decisions, I often follow my gut feelings.	**4.1388**	**4.0000**	**4.0000**	**1.49976**
5. Financial thinking is not my idea of fun.	**4.1842**	**4.0000**	**4.0000**	**1.58138**
6. I have difficulty thinking in new and unfamiliar situations when it comes to financial decision-making.	**4.5789**	**5.0000**	**5.0000**	**1.37631**
Financial Education (Independent Variable 1 – FE)				
1. Financial education can attract me to learn/know more about				

financial management in the best possible way.	**5.6675**	**6.0000**	**6.0000**	**1.04202**
2. I think that children will learn the way to manage finances from their parents.	**5.5670**	**6.0000**	**6.0000**	**1.15535**
3. I think that students should have the ability to manage their finances by teaching from school.	**5.3541**	**6.0000**	**6.0000**	**1.30080**
4. I can solve financial issues through communication with my friends and family members.	**5.1100**	**5.0000**	**5.0000**	**1.20046**
5. If my school offers personal finance classes, I will participate as an elective.	**5.3014**	**5.0000**	**5.0000**	**1.27324**
6. I am enabled to obtain personal finance knowledge from others' mistakes.	**5.3852**	**5.0000**	**5.0000**	**1.09609**
Money Attitude – Power Prestige (Independent Variable 2 – MAPP)				
1. I own materialistic things just to impress others.	**3.2775**	**3.0000**	**3.0000**	**1.58213**
2. I believe money is the ultimate symbol of success.	**4.3589**	**5.0000**	**5.0000**	**1.62576**
3. I judge people's success based on the amount of money they have.	**3.3971**	**3.0000**	**4.0000**	**1.67079**

4. I use the money to influence others to do things for me.	**3.1531**	**3.0000**	**1.0000**	**1.66801**
5. I am happy to let others know how much money I own.	**2.6196**	**2.0000**	**1.0000**	**1.61269**
6. I am proud to share my financial victories with others.	**3.4545**	**4.0000**	**4.0000**	**1.68904**
Money Attitude – Retention Time (Independent Variable 3 - MART)				
1. I settle my bills as soon as possible to avoid unnecessary interest charges.	**5.7967**	**6.0000**	**7.0000**	**1.19924**
2. I am saving now to prepare for my elderly age.	**5.2368**	**5.0000**	**5.0000**	**1.36024**
3. I have enough money to tackle any financial problem at any moment.	**4.2775**	**4.0000**	**4.0000**	**1.50603**
4. I have my consistent way of doing financial budgeting.	**4.6746**	**5.0000**	**4.0000**	**1.31561**
5. I think prudently about every single item I spend on.	**5.0072**	**5.0000**	**5.0000**	**1.40313**
6. I considered myself as a saver rather than a spender.	**4.7656**	**5.0000**	**4.0000**	**1.43025**
Money Attitude – Distrust (Independent Variable 4 – MAD)				
1. I automatically say "I can't afford" when dealing with aggressive approaches from sellers, even if I can afford.	**4.6986**	**5.0000**	**5.0000**	**1.39201**

2. I complain and regret about the price of goods after making a purchase.	**3.9689**	**4.0000**	**4.0000**	**1.49226**
3. I insist on returning goods if I regret buying.	**3.4043**	**3.0000**	**3.0000**	**1.56296**
4. I try to bargain for the price on whichever occasion.	**3.8301**	**4.0000**	**4.0000**	**1.44021**
5. I hesitate in spending money, even though it is necessary.	**4.2440**	**4.0000**	**5.0000**	**1.57705**
6. After buying something, I wonder if I can get the same thing for a lesser price elsewhere.	**4.8206**	**5.0000**	**5.0000**	**1.50900**
Money Attitude – Anxiety (Independent Variable 5 – MAA)				
1. I show fearfulness when I don't have enough money.	**5.0526**	**5.0000**	**5.0000**	**1.43846**
2. I worry when dealing with whichever money decision.	**4.6722**	**5.0000**	**5.0000**	**1.32681**
3. I feel concerned that I am not financially secure.	**5.0981**	**5.0000**	**5.0000**	**1.32761**
4. I spend money to relieve my stress, and I feel much better.	**3.8373**	**4.0000**	**3.0000**	**1.62337**
5. I feel nervous when having a conservation related to my personal finance.	**4.1842**	**4.0000**	**4.0000**	**1.41491**
6. I feel anxious when my progress of reaching financial goals is not on-tracking.	**4.8158**	**5.0000**	**5.0000**	**1.25312**
Overall				

DV – FL	**4.1810**	**4.1667**	**4.0000**	**0.96835**
IV1 – FE	**5.3975**	**5.3333**	**6.0000**	**0.78475**
IV2 – MAPP	**3.3768**	**3.3333**	**4.0000**	**1.25368**
IV3 – MART	**4.9597**	**5.0000**	**5.0000**	**0.91791**
IV4 – MAD	**4.1611**	**4.1667**	**4.0000**	**0.95291**
IV5 – MAA	**4.6667**	**4.6667**	**5.0000**	**0.97346**

Source: Developed for study

Overall, across all the variables with the mean in this study, it can observe that IV1 (FE) is the highest and IV2 (MAPP) is the lowest. Besides, other variables are around 4 except for the IV3 (MART) is near to 5. On the other hand, there have the same median value (4.1667) among 2 variables, which is DV (FL) and IV4 (MAD). The highest median value is 5.3333 from IV1 (FE) and the lowest is IV2 (MAPP).

Moreover, the mode for FL, FE, MAPP, MART, MAD, and MAA are 4.0000, 6.0000, 4.0000, 5.0000, 4.0000, and 5.0000 respectively while the particular highest and lowest standard deviation are IV2 (MAPP) – 1.25368 and IV1 (FE) – 0.78475. The rest of the variables are near to 1.0000. The higher the standard deviation, which means that the higher the spread of the particular variable to the mean value.

4.3 Scale Measurement

4.3.1 Reliability Test

For the reliability analysis, Cronbach's alpha value is the indicator or value to examine the variables in this study are dependent (Holgate et al., 2000). Besides, according to Gliem and Gliem in 2003, it is extremely important as a signal to know the consistency among the variables. On the other side, most of the researchers such as Hulin et al. (2001) also stated that Cronbach's alpha value is satisfied and accepted when it is more than 0.7 and fulfill the rule simultaneously.

Table 4.7:

Reliability test

Reliability Test	
Cronbach's alpha value	No. of items
0.878	36

Source: Developed for study

Table 4.7 demonstrated that the Cronbach's alpha value is 0.878 among the dependent variable and independent variable in this research. In short, this result is considered excellent and valid in this study since it is between 0.8 and 0.9 and satisfy the theory of George and Mallery that mentioned in the journal of Gliem and Gliem (2003) that mentioned in Chapter 3. At the same time, it also satisfied the study from Hulin et al. (2001). Hence, the questionnaire in this study and the outcome are reliable and valid since the value (0.878) had proved it and at the same time fulfilled the theory from the previous research.

4.3.2 Normality Test

Table 4.8:

Result of the Normality Test

Variables	Skewness	Kurtosis
Financial Literacy	0.162	0.172
Financial Education	-0.379	1.606
Money attitude (distrust)	-0.162	0.567
Money attitude (anxiety)	-0.292	1.083
Money attitude (power-prestige)	0.292	-0.304
Money attitude (retention time)	-0.185	0.667

Source: Developed for study

Looking at the skewness, all the variable such as money attitude for distrust (-0.162), money attitude anxiety (-0.292), money attitude for power-prestige (0.292), money attitude for retention time (-0.185), financial literacy (0.162), and financial education (-0.379) are within the range of ±2. In other hand, these variables are also fell within the range of kurtosis, which is ± 2. Based on the table, these variables including money attitude for distrust, money attitude anxiety, money attitude for power-prestige, money attitude for retention time, financial literacy, and financial education recorded 0.567, 1.083, -0.304, 0.667, 0.172, and 1.606 respectively. It indicates that all these variables are normal distributed as both requirements have been fulfilled.

4.4 Inferential Analysis

4.4.1 Pearson's Correlation Coefficient

Table 4.9:

Pearson's correlation coefficient

Variable	***Correlation***	***Significant (p-value)***
Financial Literacy	1	
Financial Education	0.105**	0.032
Money Attitude (Distrust)	0.311***	0.000
Money Attitude (Anxiety)	0.291***	0.000
Money Attitude (Power-Prestige)	0.443***	0.000
Money Attitude (Retention-Time)	0.029	0.561

** Correlation is significant at the 0.10 level (2-tailed)*
***Correlation is significant at the 0.05 level (2-tailed)*
****Correlation is significant at the 0.01 level (2-tailed)*

Source: Developed for study

The outcome from Table 4.11 shows positive correlation relationship between financial literacy and all the independent variables including financial education, money attitude for distrust, money attitude for anxiety, money attitude for power prestige, and money attitude for retention time. However, the degree of relationship between the financial literacy and other independent variables was not strong. Based on Table 4.11, Money Attitude Distrust (0.311) and Anxiety (0.291) are shown as weak positive relationship, under 0.2 to 0.39. Furthermore, Financial Education (0.105) and Money Attitude Retention Time (0.029) are indicated very weak positive relationship. Only money attitude power prestige (0.443) represents moderate positive relationship, under 0.4 to 0.59. In summary, a rise or fall of each independent variable will impact financial literacy move in the same direction, but the differences of these impacts are the degree of movement.

4.4.2 Multiple Regression Analysis

4.4.2.1 Model Summary (Gender as dummy variable)

Table 4.10:

Model Summary

R Square	Adjusted R Square	F-test	Probability of F-test
0.231	0.220	20.623	<.001

Source: Developed for study

The R Square in Table 4.9 is 0.231, indicating that Financial Education, Money Attitude (Power-Prestige), Money Attitude (Retention-Time), Money Attitude (Distrust), Money Attitude (Anxiety) and Gender account for 23.1% of the changes in financial literacy. Furthermore, the F-test result is 20.623, and the P-Value is less than 0.05. $F_{(6,411)}$ = 20.623, P<0.001. As a result, it was a significant regression model overall and used in this study is appropriate. Besides, the 5 variables explained 22% of the variance of the variance of financial literacy. $F_{(6,411)}$

4.4.2.2 Coefficients

Table 4.11:

Coefficient

Variable	**Parameter Estimate**	**t-test**	**Significant of t-test**
(Constant)	2.401	7.240	<.001
Financial Education	0.084	1.321	0.187
MAPP	0.279***	7.026	<.001
MART	-0.109**	-2.026	0.043
MAD	0.142***	2.694	0.007

MAA	0.084	1.621	0.106
Dummy (Male)	-0.130	-1.480	0.140

Dependent Variable: Financial Literacy
Null rejection at 1%, 5%, and 10% level of significance (α) is represented by ***, **, and *.

Source: Developed for study

Based on Table 4.10, MAPP, MART, MAD are statistically significant impact on the financial literacy, as the likelihood of t-test is less than 0.05. However, financial education, MAA and gender are not statistically significant impact on the financial literacy where the likelihood of t-test more than 0.05 and 0.10.

The following is the equation for the Linear Equation:
FL = 2.401 + 0.084 FE + 0.279 MAPP – 0.109 MART + 0.142 MAD + 0.084 MAA – 0.130 Male

Based on the equation, the relationship between the independent variables and the dependent variable is shown which the Financial Education, MAPP, MAD and MAA were positive relationship between financial literacy despite of MART was negative relationship.

Interpretation:
For every additional rank increase in the education level, MAPP, MAD and MAA the Y will increase by 0.084, 0.279, 0.142 and 0.084.

As every additional rank increase in the MART, the Y will decrease by 0.109. On average, males are less likely to have the financial literacy compared to females, ceteris paribus.

4.5 Concluding Remarks

Overall, the data collection from the questionnaire has been explained in this chapter. The number of total respondents is 418 participants and all of them are UTAR Kampar students. This chapter involves reliability analysis, descriptive analysis, scale measurement, and inferential analysis. All of our test results were presented in tabular form. Normality test was applied to test all the variables whether normally distributed. Besides, reliability test will be applied to clarify the questionnaire validity and enable us to collect the quality result from Cronbach's alpha value. Moreover, for the descriptive analysis, our assigned variables and demographic profile are interpreted with frequency table, mean, median, mode, and standard deviation. Upon testing among the variables that the relationship is either significant or nonsignificant, multiple regression analysis will provide the accurate result.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATION

5.0 Introduction

This chapter includes the overall research project. The result of making decision is based on the data from Chapter 4 and have a further analyst by statistical analysis summary and discussion. It provides a comprehensive explanation and clear understanding in each of the variables. Besides, this chapter involves the implication, limitation, recommendation, and conclusion.

5.1 Statistical Analysis Summary

In order to perform the research, we had collected 418 responses from UTAR Kampar, although our requirement amount is only 379 people, as we need more sampling to keep the data more accurate.

Table 5.1:

Summary of MLR (Multiple Linear Regression)

Subtopic Hypothesis	Hypothesis (Endogenous variable and exogenous variables)	Significant p-value	Significance of correlation	Decision
5.1.1 **Hypothesis 1**	H_0: There is insignificant relationship between	0.187(>0.05)	Insignificant	Do Not Reject H_0

	Financial Education and Financial Literacy			
5.1.2 **Hypothesis 2**	H_0: There is insignificant relationship between MAPP and Financial Literacy	0.000(<0.05)	Significant	Reject H_0
5.1.3 **Hypothesis 3**	H_0 : There is insignificant relationship between MART and Financial Literacy	0.043(<0.05)	Significant	Reject H_0
5.1.4 **Hypothesis 4**	H_0 : There is insignificant relationship between MAD and Financial Literacy	0.007(<0.05)	Significant	Reject H_0
5.1.5 **Hypothesis 5**	H_0 : There is insignificant relationship between MAA and Financial Literacy	0.106(>0.05)	Insignificant	Do Not Reject H_0
5.1.6 **Hypothesis 6**	H_0 : There is insignificant relationship between Gender and Financial Literacy	0.140(>0.05)	Insignificant	Do Not Reject H_0

Source: Developed for study

Table 5.1 represents the independent variables MAPP, MART and MAD have significant relationship with Financial Literacy, as the p-value < 0.05. However, for Financial Education, MAA and Gender have insignificant relationship with Financial Education since the p-value > 0.05. As a result, this research accepts alternate hypotheses of 2,3,4 only.

5.2 Discussion of findings

5.2.1 Financial Education

Hypothesis 1

H_0: There is insignificant relationship between Financial Education and Financial Literacy

Since the MLR's p-value for Financial Education is more than 0.05, which is 0.187. As a result, we do not reject the null hypothesis (H_0). This means that no matter how much Financial Education UTAR Kampar students earn, their financial literacy will not be altered. The previous research of Thomas et al. (2016) also supports and consists with our result. Even though the respondents' Financial Education varied, the majority of them indicated that their Financial Education had no impact on their Financial Literacy.

5.2.2 Money Attitude (Power-Prestige) - MAPP

Hypothesis 2

H_1: There is significant relationship between MAPP and Financial Literacy

The result provided by SPSS suggest that the relationship between MAPP and Financial Literacy is significant, since p-value (0.000) was less than 0.05. Therefore, the null hypothesis (H_0) is rejected in this study.

Furthermore, the Parameter Estimate of 0.084 reveals that MAPP is positively related to Financial Literacy. According to the findings, UTAR Kampar students who firmly see money as a powerful instrument have a favourable outcome when making financial decisions and have a high degree of financial literacy. In addition, described in literature review of prior research findings with the same conclusion. (Pereira & Coelho, 2020; Bhardwaj & Bhattacharjee, 2010)

5.2.3 Money Attitude (Retention-Time) - MART

Hypothesis 3

H_1: There is significant relationship between MART and Financial Literacy

Based on the result of SPSS provide, the p-value (0.043) was less than 0.05, so reject the null hypothesis (H_0). Similarly, the -0.109 parameter estimate indicates a negative association, with same with the previous study of Hafez et al. (2013). In short, those with a greater retention rate are less likely to be concerned about their financial future.

5.2.4 Money Attitude (Distrust) - MAD

Hypothesis 4

H_1: There is significant relationship between MAD and Financial Literacy

According to the SPSS results, the p-value (0.007) was less than 0.05, hence reject the null hypothesis (H_0). Likewise, the parameter estimates of 0.142 implies a positive relationship, which the prior studies of Sohn et al. (2012), Ahmad (2020) also found that MAD is positive correlated with Financial Literacy. Which suggests that individuals who have a high level of distrustful and thrifty mindset will have a high level of financial literacy.

5.2.5 Money Attitude (Anxiety) - MAA

Hypothesis 5

H_0: There is insignificant relationship between MAA and Financial Literacy

Since the p-value (0.106) of MAA was more than 0.05, thereby do not reject null hypothesis (H_0). This implies that high level of stress and anxiety would not affect financial literacy. However, the findings of this study differ from that previous research of Dickinson (1996), who claimed that perceptions of MAA playing an essential impact in Financial Literacy. Thus, the participants already have a self-fixed perspective on financial literacy, so a rise in anxiety will not change that, as evidenced by this study's findings.

5.2.6 Gender

Hypothesis 6

H_0: There is insignificant relationship between Gender and Financial Literacy

From the outcome of SPSS showed that the MLR’s p-value for Gender is 0.140, which more than 0.05. Therefore, do not reject the null hypothesis (H_0). This is in line with Lusardi and Mitchell (2008), Belas et al. (2016), Danes and Hira (1987), Fonseca et al. (2012) and Lusardi and Mitchell (2014) findings, which showed that no variance among the gender Financial Literacy. In research of Lusardi and Mitchell (2014) also stated that the gender issue is "far from over," and more research is needed to properly understand observed gender differences in financial literacy.

5.3 Implication of the study

This study demonstrates the importance of financial literacy among the young generations and how this study can be a guideline or reference to each party like Malaysia's government, UTAR, parents, and the student. According to the news from Murugiah in 2020, only 31% of Malaysians understood the basic financial idea. Also, the economy in these few years has been quite challenging and caused many Malaysian youths to declare bankruptcy ("Financial literacy a vital asset", 2021). Hence, this study will further improve the financial literacy level of students in Malaysia by emphasizing the crucial factors based on UTAR Kampar students' data.

First of all, this study can be directly beneficial to the government and education institutions, especially UTAR can get a better understanding of the factor of financial literacy. It found out that 3 out of 4 money attitude variables are essential in affecting financial literacy, which indicated that the influence on financial literacy level will depend on personal behavior or mindset rather than traditional education. Therefore, enhancing the money attitude of the students can be a practical education guideline for the Malaysian government. Meanwhile, the government can raise awareness of building a correct financial mindset and values as well as for the future investigation. For example, the government manage to promote counseling programs to cultivate the proper attitude towards money for the students and know that education is not the only way to increase their financial literacy. On the other hand, the educational institution will also realize that traditional financial education seminars are lacking effectiveness, thereby they may consider utilizing the capital on promoting the psychological events and seminars rather than consuming all their money and resources in the traditional yet ineffective education. For instance, UTAR can invite the expertise to provide the experiences of achieving financial freedom and how to manage their mentality.

Besides, parents also will know which way is more effective to educate their children, especially in financial literacy. Compared to those parents who usually encourage their children to save money, it is much more effective for their children to obtain financial literacy if the parent could lead by example in self-managing a healthy financial mind. By giving an example, parents should instill in their children spending on necessities as well as prevent the children from buying unnecessary items or confusing consumption. Meanwhile, a prudent consideration before spending also will not cause a similar aforementioned situation, in which children should fully understand whether or not it maximizes the usage of money before purchasing. On the other hand, money comparison is bad behavior, thus, parents should act in a good role and not compare or look down on others since their children will follow their behavior. Hence, parents play an extremely important role in their children on financial literacy.

Lastly, this study can help students improve their financial literacy based on money attitude. They could learn to save money instead of spending it all when it is excessive. Therefore, they may allocate cash according to their needs through planning to prevent the situation excessively. Hence, the students also will increase their awareness and understand the importance of money and they are able to keep emergency savings. Furthermore, the students should control themselves on chasing luxuries when the surrounding friends own the items. As it may cause the students to get into a bad cycle on keep putting money on luxuries to compare. In short, students should list down the necessary items instead of the desired ones.

5.4 Limitation of the study

Upon analyzing our sampling model, we adopted convenience sampling, which inherently became another limitation of our studies. Convenience sampling is commonly known as the sampling method that provides convenience to the researcher (Dörnyei, 2007). Convenience sampling tends to jeopardize the validity of the experimental research since it is a non-randomly focused sampling method (Fife, 2013). Researchers who deploy this sampling method can simply collect respondents' data through distributing questionnaires to friends, family, relatives, siblings, colleagues and so on. Reflecting on our research, most of our respondents are our surrounding people and most of them carry the same academic background as us (i.e. Bachelor of Finance). As a result of interpreting the data and information, we discovered biases in our research, and this could be high-possibly explained by the centered specific group of people when distributing our questionnaires, thereby causing some existence of groups to be over-existed, and some others are under-existed.

Apart from the limitation of distribution survey form, we realized that our research result was facing a random respondence bias. Random respondence bias is one of the significantly threat to the validity of research because it refers to those unmotivated respondents may simply fill up or answer the survey questionnaire without thinking, which can cause a construe result and biasing result toward our hypothesis (Osborne & Blanchard, 2011). Due to the covid-19 outbreak and University Tunku Abdul Rahman conducted online study mode, we were forced to distribute all the survey forms online such as Microsoft team, WhatsApp, Facebook and so on. Therefore, without our supervision, some of the respondents might have skipped reading and only fill out the survey to get their work done. For example, we found that some respondents only select the same answer in all the questions. It indicates that our result will not be fully derived from their true.

The third limitation is related to the number of independent variables in this study. As the result shows in Multiple Regression Analysis is that the r square and adjusted r square recorded an extremely low value, which is 0.231 and 0.220 respectively.

Compared to the standard value of 0.5, it can clearly show that our regression model will not be a best fit model. In other words, those independent variables selected in this study are not explaining detail in the variation of the dependent variable, financial literacy (Wooldridge, 2015). Therefore, these variables may less accounting for the means of dependent variable.

The last limitation of our research is that we only study on a particular group. Due to the covid-19 pandemic restricted our movements, our research has been forced to study the financial literacy of UTAR Kampar students. Although UTAR Kampar students are also part of the Malaysia undergraduate group and relevant to this topic, this research result cannot be used to represent other university students. If our research collects extra data from other universities, our result might be affected and slightly different because they will have a disparity in their mindset or behavior. Therefore, our finding is only reflecting the financial literacy of UTAR Kampar student, instead of whole Malaysia undergraduate students.

5.5 Recommendation of the study

To prevent future studies experiencing the issue of deploying convenience sampling, it is prominent for the researchers to recruit respondents randomly and broadly, even if the respondents are utterly strangers, rather than only target respondents that researchers are familiar with. It is because focusing on a variety of backgrounds and groups of people could provide different perspectives and understanding, thereby enabling the research results to be more valid, more reliable, more convincing. For example, researchers are recommended not to select a group of respondents who are from a similar academic background but consider diverse background as much as possible such as collecting data from the respondents with Science or Engineering studies. Diversifying so could help enabling the randomly distributed data to perform scalable information.

To mitigate the problem of random respondence bias, researchers should add a new section, feedback into the survey form. Once they face any unclear phrases or sentences, respondents can directly give some recommendation or feedback to researchers, so that researchers can make some adjustments or explanation to the next respondents, which can reduce the possibility of bias. Besides, researchers strongly recommended having a virtual meeting to monitor the respondent in filling out the survey form. Except of monitoring, a virtual meeting also can give researchers a chance to assist respondents such as translating the unclear word or further explaining the sentences. If the situation is allowed face to face, the result will be more accurate because researchers will be easier to monitor and assist them.

To address the problem of low R-squares, the future researchers are highly recommended to include more independent variables into the model. Independent variables such as work experience and parent's income could be the most considerable variables as empirical studies shows that there is a correlation with the financial literacy. According to Priyadarshani and Kumari (2021), concluded the study on the undergraduate students, where there is a strong correlation between work experience and financial literacy. Not to mention, based on their Pearson correlation analysis, they revealed that if one individual's work experience is high, the financial literacy level tends to increase as well. Furthermore, parent's income could be an additional variable to explain financial literacy. Keskin & Korkutata (2018) mentioned that there is a correlation between the parents' monthly income from salary and financial knowledge. Parents who earn high income tend to have high financial literacy as they utilise the application of financial services and products often in a wiser way. Therefore, high household income tends to influence their children (i.e., students) to obtain more opportunities in developing their financial management skills with the aim to enhance one's financial literacy level. With that, they concluded a positive relationship between parents' income and financial literacy (Susanti et al., 2019). Based on the previous studies, the study on the factors that affect financial literacy is suitable to be included these aforementioned variables as an appropriate number of independent variables include could enable the R-square results to fit more into the model.

To address the last limitation mentioned above, researchers are advised to include more local private and public university samples into the research area in Malaysia. It could provide different results upon analyzing different selections of universities. It is because, with more universities being included geographically, researchers could understand the perspectives and behaviors based on every university respondent from a different state. As a result, the research will be more likely to be able to deliver quality research results.

5.6 Conclusion

This research project aims to analyze the financial literacy and its determinants among the university students in UTAR Kampar. There are 5 determinants being adopted, which are financial education, money attitude (power-prestige), money attitude (retention-time), money attitude (distrust), and money attitude (anxiety).

As the result that stated above, it found out that 3 out of 4 of the money attitudes, which are power-prestige, retention-time, and distrust are statistically significant influence on the dependent variable (financial literacy). However, financial education, money attitude (anxiety), and gender are not statistically significant affect the financial literacy. The most surprising finding in this study is that even though previous studies proposed one student who has a finance background is intrinsically supposed to possess higher self-awareness and knowledge level in managing personal finances, however, our research shows that the majority of our respondents who are finance background did not view financial education as a thing because the traditional-based of learning of finance subjects did not practically help them in gaining a perception to showcase a financial management skill in the real-life use case. On the contrary, those who are nonfinance background view financial education as very important as they know themselves to lack financial knowledge and gain less access to finance-related stuff, causing them to have a vague understanding of the finance area, which has subsequently established them a misconception in financial education. Therefore, the perspective toward the traditional ways to affect financial literacy is supposed to be ditched and people need to realize the importance of roles of money attitude towards financial literacy since 3 out of 4 specific factors of money attitudes have been found in this study to have a significant relationship.

In conclusion, financial literacy plays an essential role to everyone especially students when they are young. It can assist them to avoid the financial burden in the future and have better life with the proper financial literacy. Furthermore, this study can deliver to Malaysian’s government, school, parents, and students as a reference and increase the awareness. Simultaneously, it also provides a guideline to the national education system, intending to assist its operation more efficiently. Besides, after accomplishing this study, some issues had been discovered and recommendations also been provided in order to provide a hand to the future researchers that interesting on this topic.

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APPENDICES

Appendix 3.1: Permission to Conduct Survey

UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)
Wholly owned by UTAR Education Foundation (200201010564(578227-M))
Faculty of Business and Finance
Jalan Universiti, Bandar Barat, 31900 Kampar, Perak
Phone: 05-468-8888 Fax: 05-466-7407
https://fbf.utar.edu.my/

12th August 2021

To Whom It May Concern

Dear Sir/Madam,

Permission to Conduct Survey

This is to confirm that the following students are currently pursuing their *Bachelor of Finance (Honours)* program at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) Perak Campus.

I would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

The students are as follows:

Name of Student	Student ID
Chan Hao Chuan	18ABB02218
Chong Ka Chun	19ABB01497
Heng Boon Seng	19ABB04567
Teh Ke-Vin	18ABB04691
Tey Zhin Yong	19ABB04282

If you need further verification, please do not hesitate to contact me.

Thank you.

Yours sincerely,

Suki

Dr Kuah Yoke Chin
Head of Department
Faculty of Business and Finance
Email: kuahyc@utar.edu.my

Puan Siti Nur Amira Binti Othman
Supervisor
Faculty of Business and Finance
Email: amira@utar.edu.my

Administrative Address: Jalan Sg. Long, Bandar Sg. Long, Cheras, 43000 Kajang, Selangor D.E.
Tel: (603) 9086 0288 Fax: (603) 9019 8868 Homepage: https://utar.edu.my/

Appendix 3.2: Survey Questionnaire

Survey Questionnaire

Analysis of Financial Literacy and Its Determinants: A Study among University Students in UTAR Kampar

Good day everyone. We are students from Bachelor of Finance UTAR. We are currently conducting a survey on "Analysis of Financial Literacy and Its Determinants: A Study among University Students in UTAR Kampar" at tertiary education level. This survey helps to understand about the differences of financial literacy level on Malaysia among University students and College students. The objective of this survey is to examine the outcome of responses and conclude the proportions result to testify financial literacy level from the perspective of genders, financial education, and money attitudes among University students.

We are pleasure to welcome you to answer the following questions throughout the survey participation.

If there is any enquiry, please do not hesitate to contact our group members as shown below:

1.Chan Hao Chuan: travischan4546@1utar.my

2.Chong Ka Chun: kidkeith420@1utar.my

3.Heng Boon Seng: boonseng@1utar.my

4.Tey Zhin Yong: zhinyong@1utar.my

5.Teh Ke-Vin: tehkevin6618@1utar.my

This survey may take approximately 10 minutes. All information will be kept private solely for survey purposes.

Your response and contribution are highly appreciated.

Thank you.

* Required

PERSONAL DATA PROTECTION STATEMENT

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to:-
   - For assessment of any application to UTAR
   - For processing any benefits and services
   - For communication purposes
   - For advertorial and news
   - For general administration and record purposes
   - For enhancing the value of education
   - For educational and related purposes consequential to UTAR
   - For the purpose of our corporate governance
   - For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

3. You may access and update your personal data by writing to us at ____________________.

Acknowledgment of Notice

[ ] I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.
[ ] I disagree, my personal data will not be processed.

…………………………
Name:
Date:

Part 1: Demographic Profile:

1. Email Address:

____

2. Are you a UTAR or TAR UC student?
- ○ UTAR
- ○ TAR UC

3. Gender
- ○ Male
- ○ Female

4. Age
- ○ 19 - 20 years old
- ○ 21 - 22 years old
- ○ 23 - 24 years old
- ○ Above 25 years old

5. Level of education
- ○ Diploma
- ○ Foundation
- ○ Degree
- ○ Master
- ○ Phd

6. Race
- ○ Malay
- ○ Chinese
- ○ Indian
- ○ Others

Part 2

Section A: Financial Literacy

You may choose the most appropriate or best choice for you based on your personal experience gaining knowledge/information through financial education, indicating your agreement with the claims below.
Please indicate the level of agreement: 1-strongly disagree; 2-disagree; 3-slightly disagree; 4-neutral; 5-slightly agree; 6-agree; 7-strongly agree.

Financial Literacy	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. When I need to form an opinion about a financial issue, I completely rely on my intuition.	1	2	3	4	5	6	7
2. For most financial decisions, it is reasonable to rely on my intuition	1	2	3	4	5	6	7
3. The first idea of my thinking about making an investment is often the straight and best one.	1	2	3	4	5	6	7
4. When it comes to buying decisions, I often follow my gut feelings.	1	2	3	4	5	6	7
5. Financial thinking is not my idea of fun.	1	2	3	4	5	6	7
6. I have difficulty thinking in new and unfamiliar situations when it comes to financial decision-making.	1	2	3	4	5	6	7

Section B: Financial Education

Based on your personal experience on getting knowledge/information from financial education, you're able to select the most suitable or the best option for you that indicates your agreement from the below statements.

Please indicate the level of agreement: 1-strongly disagree; 2-disagree; 3-slightly disagree; 4-neutral; 5-slightly agree; 6-agree; 7-strongly agree.

Financial Education	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. Financial education can attract me to learn/know more about financial management in the best possible way.	1	2	3	4	5	6	7
2. I think that children will learn the way to manage finances from their parents.	1	2	3	4	5	6	7
3. I think that students should have the ability to manage their finances by teaching from school.	1	2	3	4	5	6	7
4. I can solve financial issues through communication with my friends and family	1	2	3	4	5	6	7

members.							
5. If my school offers personal finance classes, I will participate as an elective.	1	2	3	4	5	6	7
6. I am enabled to obtain personal finance knowledge from others' mistakes.	1	2	3	4	5	6	7

Section C: Money Attitude

Based on your attitude and personality, please select the most suitable or the best option accordingly when answering the below statements.

Please indicate the level of agreement: 1-strongly disagree; 2-disagree; 3-slightly disagree; 4-neutral; 5-slightly agree; 6-agree; 7-strongly agree.

MAS Scale factors								
		Strongly Disagree	Disagree	Slightly Disagree	Neither agree nor disagree	Slightly Agree	Agree	Strongly Agree

Power-prestige	1. I own materialistic things just to impress others.	1	2	3	4	5	6	7
	2. I believe money is the ultimate symbol of success.	1	2	3	4	5	6	7
	3. I judge people's success based on the amount of money they have.	1	2	3	4	5	6	7
	4. I use the money to influence others to do things for me.	1	2	3	4	5	6	7

	5. I am happy to let others know how much money I own.	1	2	3	4	5	6	7
	6. I am proud to share my financial victories with others.	1	2	3	4	5	6	7
Retention -time	1. I settle my bills as soon as possible to avoid unnecessary interest charges.	1	2	3	4	5	6	7
	2. I am saving now to prepare for my elderly age.	1	2	3	4	5	6	7

	3. I have enough money to tackle any financial problem at any moment.	1	2	3	4	5	6	7
	4. I have my consistent way of doing financial budgeting.	1	2	3	4	5	6	7
	5. I think prudently about every single item I spend on.	1	2	3	4	5	6	7
	6. I considered myself as a saver rather than a spender.	1	2	3	4	5	6	7

Distrust	1. I automatically say “I can’t afford” when dealing with aggressive approaches from sellers, even if I can afford.	1	2	3	4	5	6	7
	2. I complain and regret about the price of goods after making a purchase.	1	2	3	4	5	6	7
	3. I insist on returning goods if I regret buying.	1	2	3	4	5	6	7
	4. I try to bargain for the price on	1	2	3	4	5	6	7

	whichever occasion.							
	5. I hesitate in spending money, even though it is necessary.	1	2	3	4	5	6	7
	6. After buying something, I wonder if I can get the same thing for a lesser price elsewhere.	1	2	3	4	5	6	7
Anxiety	1. I show fearfulness when I don’t have enough money.	1	2	3	4	5	6	7

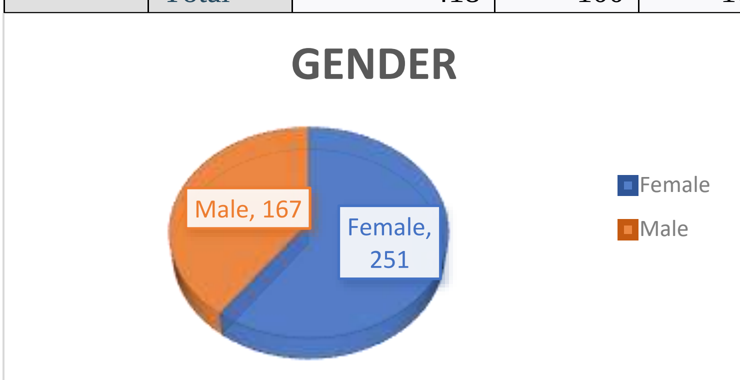
	2. I worry when dealing with whichever money decision.	1	2	3	4	5	6	7
	3. I feel concerned that I am not financially secure.	1	2	3	4	5	6	7
	4. I spend money to relieve my stress, and I feel much better.	1	2	3	4	5	6	7
	5. I feel nervous when having a conservation related to my personal finance.	1	2	3	4	5	6	7

	6. I feel anxious when my progress of reaching financial goals is not on-tracking	1	2	3	4	5	6	7

Appendix 4.1: The frequencies of demographic

1. Gender

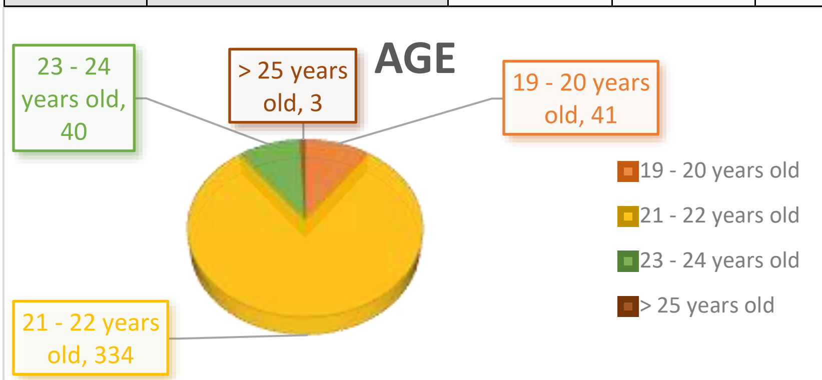
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	251	60	60	60
	Female	167	40	40	100
	Total	418	100	100	



2. Age

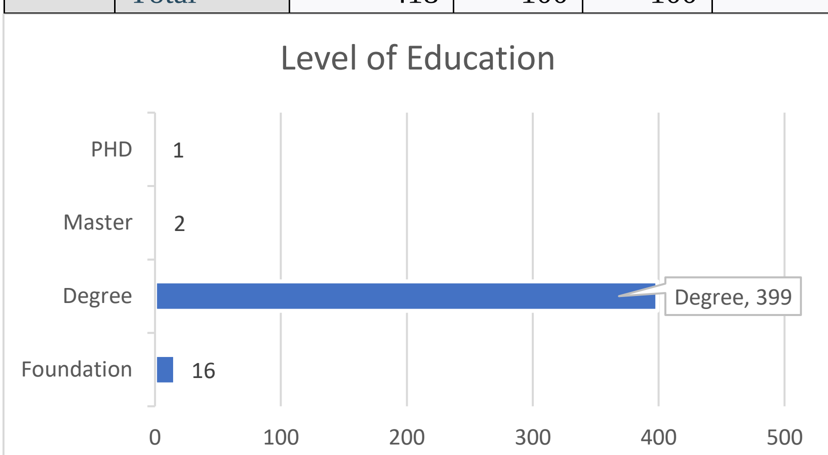
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19-20 years old	41	9.8	9.8	9.8

	21-22 years old	334	79.9	79.9	89.7
	23-24 years old	40	9.6	9.6	99.3
	Above 25 years old	3	0.7	0.7	100
	Total	418	100	100	



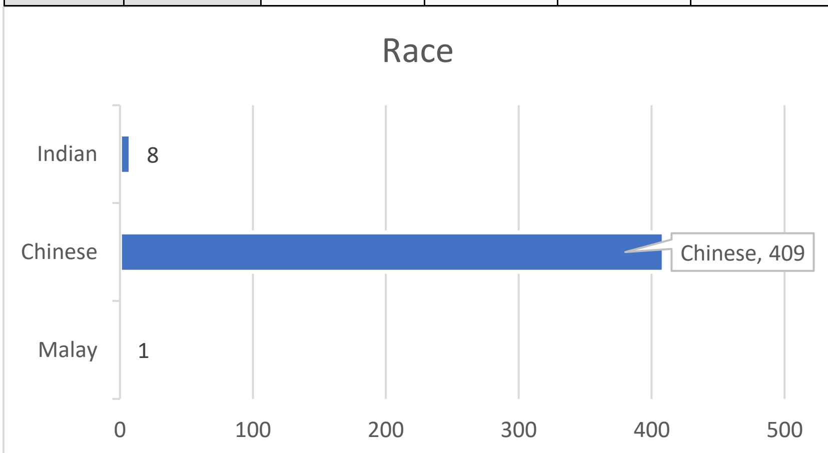
3. Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Foundation	415	99.3	99.3	99.3
	Degree	2	0.5	0.5	99.8
	Master	1	0.2	0.2	100
	Total	418	100	100	



4. Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	409	97.8	97.8	97.8
	Malay	1	0.2	0.2	98.1
	Indian	8	1.9	1.9	100
	Total	418	100	100	



Appendix 4.2: Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
0.878	36

Appendix 4.3: Coefficient of Multiple Linear Regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.401	0.332		7.24	<.001
	Mean_FE	0.084	0.063	0.068	1.321	0.187
	Mean_MAPP	0.279	0.04	0.362	7.026	<.001
	Mean_MART	-0.109	0.054	-0.104	-2.026	0.043
	Mean_MAD	0.142	0.053	0.139	2.694	0.007
	Mean_MAA	0.084	0.052	0.085	1.621	0.106
	Dummy	-0.13	0.088	-0.066	-1.48	0.14
a. Dependent Variable: Mean_FL						