

FINANCIAL AWARENESS AMONG UNIVERSITI
TUNKU ABDUL RAHMAN UNDERGRADUATE
STUDENTS IN KAMPAR CAMPUS

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UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE
DEPARTMENT OF FINANCE

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BY

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DECLARATION

We hereby declare that:

- (1) This undergraduate research project 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 research project 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 each group member in completing the research project.
- (4) The word count of this research report is 21170 words.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
FAS	Faculty of Arts and Social Science
FBF	Faculty of Business and Finance
FEGT	Faculty of Engineering and Green Technology
FICT	Faculty of Information and Communication Technology
FSC	Faculty of Science
H ₀	Null Hypothesis
H ₁	Hypothesis
ICS	Institute of Chinese Studies
NON-FBF	Non-Faculty of Business and Finance
OECD	Organisation for Economic Co-operation and Development
PTPTN	Perbadanan Tabung Pendidikan Tinggi Nasional
SPSS	Statistical Package for Social Science
UITM	Universiti Teknologi MARA
UTAR	Universiti Tunku Abdul Rahman

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PREFACE

Over the past decade, the debt level among Malaysia residents have increased tremendously. Lack of financial awareness is the key challenge for youth and the issue of decreasing savings rate also arises. Bankruptcy cases are getting serious from year to year.

Therefore, this motivates us to carry out a research on the financial awareness affected by relevant factors such as general financial products, financial knowledge, financial behavior and financial attitude. If students have good financial awareness, they will have good financial management. They will know how to use the financial products such as credit card and loan wisely. They will start planning their finances earlier and can have more savings.

This research consists of three main sections:

Section 1: Preliminary pages which are copyright pages, declaration, acknowledgements, table of contents, list of tables, list of figures, list of graphs, list of abbreviation, list of appendices, preface and abstract.

Section 2: The contents of the research

Chapter 1: Research Overview

Chapter 2: Literature Review

Chapter 3: Research Methodology

Chapter 4: Data Analysis

Chapter 5: Discussion, Conclusion and Implication

Section 3: References and Appendices

ABSTRACT

The purpose of this study is to analyse the financial awareness among UTAR undergraduate students in Kampar Campus. According to the statistics of individual bankruptcy by Nurul, Norazlina, Nor and Wan (2016), the number of individual bankruptcy in Malaysia increased from year to year. Other than that, the debt levels of college or undergraduate students have increased significantly especially for those who are fresh graduates. This is because they have to start paying their student loan (PTPTN). Fresh graduates may not have sufficient knowledge on financial management and leads to financial problems. This agonizing situation cause them to have low level of financial awareness, poor financial planning and face financial risks. Additionally, credit card bankruptcies and study loan defaults had rapidly increased in 2007 when compare to the previous year (Goi & Nee, 2008). Thus, this research is carried out to investigate the financial awareness among UTAR students. The independents variables which affect financial awareness are general financial products, financial knowledge, financial behaviour and financial attitude. This research aims to investigate the relationship between the dependent variable and independent variables through the moderating variables. The moderating variables are gender and age. A total of 380 sets of questionnaires had been distributed to UTAR undergraduate students to obtain the data. Reliability Test, Pearson's Correlation Analysis, Independents Sample T-test and One-way ANOVA had been used to analyse the result. The results show that UTAR students have moderate level of understanding towards general financial products and services. UTAR students have high level of financial knowledge. The major findings of this research are financial behaviour and financial attitude have significant relationship with financial awareness. However, there is no significant difference on gender and age. Managerial implication, limitations of this research and recommendations for future research have been provided.

CHAPTER 1 RESEARCH OVERVIEW

1.0 Introduction

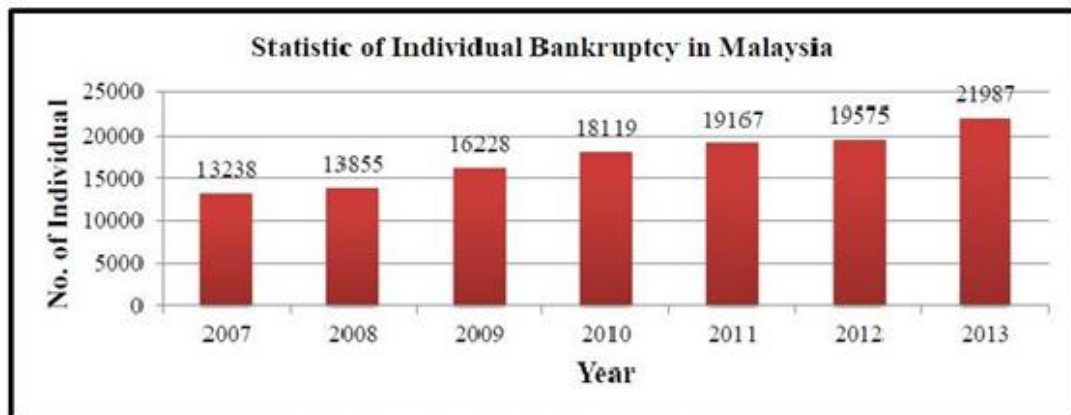
The aim of this research is to carry out the research background, problem statement, research objectives as well as research questions, hypothesis of the study and also the significance of the study in this first chapter. Lastly, this chapter will be concluded with chapter layout and conclusion.

1.1 Research Background

Nowadays, students are lack of financial planning and market surveys such as price comparison before purchasing. Students always ignore the awareness of financial for future. Financial awareness is essential and important when purchasing goods or services either by cash or cards, paying internet fees, checking saving or current account, and buying insurance or investment.

Over the past decade, the debt level among Malaysia residents have increased tremendously. According to the statistics of individual bankruptcy by Nurul, Norazlina, Nor and Wan (2016), the number of individual bankruptcy in Malaysia increased from year to year. In 2007, there are 13238 people who declared bankrupt. The number of individuals who declared bankrupt increased sharply to 16228 people in 2009. The number of people who declared bankrupt continue to increase to 21987 people in 2013. It can be seen that the level of financial awareness among Malaysian is significantly low because the number of individuals who declared bankrupt has increased rapidly.

Figure 1.1 Statistic of Individual Bankruptcy



Source: Nurul, W.A., Norazlina, R., Nor, F.B., & Wan, S.S.S. (2016). The impact of financial literacy on financial behaviour: A literature study. Proceeding of the 2nd International Conference on Economics & Banking 2016 (pp 302-309). Selangor, Malaysia.

Other than that, the debt levels of college or undergraduate students have increased significantly especially for those who are fresh graduates. This is because they have to start paying their student loan (PTPTN). Fresh graduates may not have sufficient knowledge on financial management and leads to financial problems. This agonizing situation cause them to have low level of financial awareness, poor financial planning and face financial risks. Additionally, credit card bankruptcies and study loan defaults had rapidly increased in 2007 as compared to previous years (Goi & Nee, 2008). From ‘Laporan Tahunan 2015’, the highest age group of individuals who declared bankrupt was 35-44 years old with 35.25%, followed by 45-54 years old (25.70%). There was 25.19% of individuals whose aged from 25-34 years old. The percentage of bankruptcy among this group of individuals is considered high because it had almost occupied quarter of total percentage. The least percentage of bankruptcy was 0.66% by individuals who were below 25 years old.

Table 1.1: Percentage of Bankruptcy According to Age Group in Year 2015

Age group	Total	Percentage (%)
Below 25 years old	122	0.66
25-34 years old	4,648	25.19
35-44 years old	6,507	35.25
45-54 years old	4,744	25.70
55 years old and above	2,299	12.46
Missing data	137	0.74
Total	18,457	100

Adapted from: Laporan Tahunan 2015. Bahagian Hal Ehwal Undang-undang, Jabatan Perdana Menteri.

Therefore, there are lot of researches and studies discussed on the method to examine students' knowledge about the financial awareness. This is to determine how significant they manage their finance and identify the best methods in improving their skills.

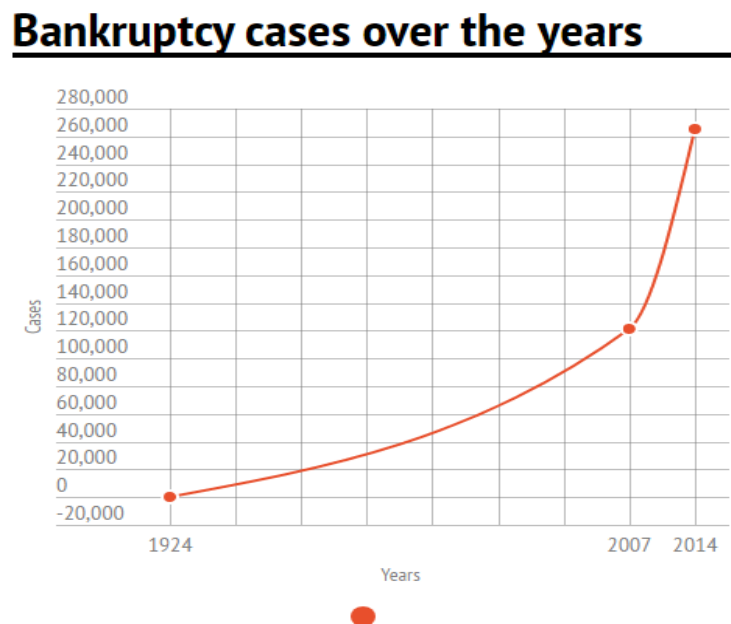
According to Mandell (2008), if young adults are lack of financial awareness, they will make a poor financial decision and sensitive to the financial distress. Therefore, many researchers concluded that students need to have basic level of financial awareness in making significant financial decisions. The level of financial awareness is different from individual to individual. Since there are variety of financial products in financial market, high level of financial awareness and knowledge about financial matters are significantly needed (Sekar & Gowri, 2015).

The purpose of this research is to determine the financial awareness among UTAR students in Kampar Campus. This research is to investigate the financial awareness among students which can be determined by numerous variables such as general financial products, financial knowledge, financial behaviour and financial attitudes.

1.2 Problem Statement

According to an article stated in New Straits Times dated on 17th November 2015, almost 23,000 Malaysians from Generation-Y, who are below 35 years old were declared bankrupt over the past five years. Lack of financial awareness is a key challenge for youths nowadays especially for those who are unable to make adequate financial decision and may cause bankruptcy. Nancy Shukri, the Minister in the Prime Minister's Department, said that the main reason for bankruptcies among youths was unable to manage their financial resources responsibly (Kaur, 2015).

Figure 1.2: Bankruptcy Cases Over the Years



Source: Bernama report quoting Minister in Prime Minister's Department Nancy Shukri.

Figure 1.2 shows the bankruptcy cased in Malaysia from 2007 to 2014 are increasing. As stated in Bankruptcy Act, an individual could be subjected to bankrupt if he or she unable to settle a minimum debt of RM30, 000 for various loans, such as hire purchasing, housing loans, personal loans or being guarantors

for other loan defaulters. There were 22,305 bankruptcy cases in 2014 which was the highest as compared to the previous years.

Figure 1.3: Main Causes of Bankruptcy 2007-2014



Source: Financial Malaysia (2011). Credit card spending in Malaysia

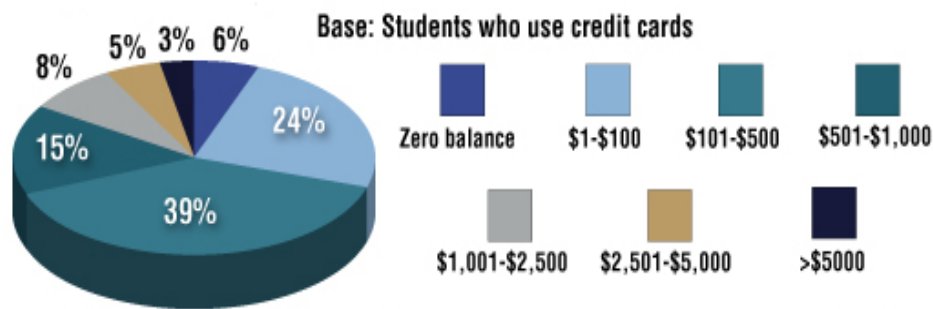
The reasons of Malaysians are declared bankrupt are hire-purchase loans, housing loans, personal loans and business loans as illustrated in Figure 1.3. The bankruptcy cases for Malaysians increases due to low financial awareness. Datuk Paul Selvaraj, the secretary-general, said that bankruptcy is a serious problem which will influence the young workers. Based on his survey in 2013, he also said that there were 370 youths (37%) out of 1000 youths were found to be lived beyond their means whereas 47% youths used more than one-third of their monthly financial resources to settle their debts. Therefore, the issues of rising living cost, low retirement savings and average salary increments are getting worse if the problem is not address as soon as possible (Carvalho & Hamdan, 2015).

According to an article stated in Malaysian Digest (2014), policymaker of Malaysia has created the awareness of the bankruptcy risk through some organizations, which are Insolvency Department, Credit Counselling and the Debt Management Agency (AKPK), by organizing financial awareness programs frequently. Those financial awareness programs hold the objective to help individuals in managing their finance.

However, it was found that most of the young individuals were unaware of the services provided. Nancy Shukri, the Minister of Prime Minister’s Department has encouraged the young individuals to seek for help in order to reduce the bankruptcy cases among young people. It would be a serious matter if young individuals are declared bankrupt below the age of 25, and their aspirations could be affected in the future (Badrul, 2014).

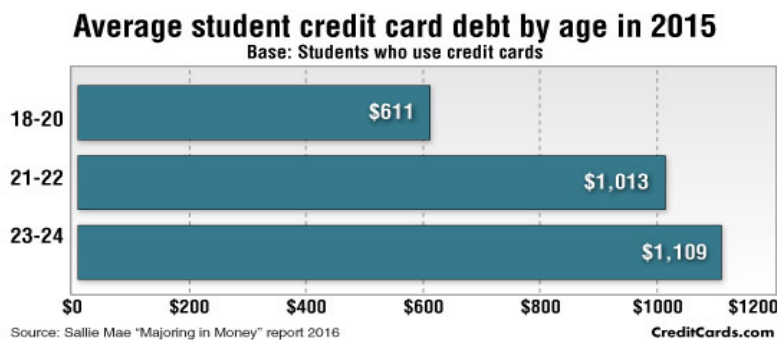
Draut, Brown, James, Keest, Robinson and Schloemer (2005) found that US families’ loans debt had rose from \$250 billion to \$800 billion. Besides, number of students who own a credit card also increased tremendously. Unfortunately, some of them were unable to repay their debts.

Figure 1.4: Average Outstanding of Students’ Credit Card Balance from December 2014 to December 2015.



Source: Sallie Mae “Majority in Money” report 2016.

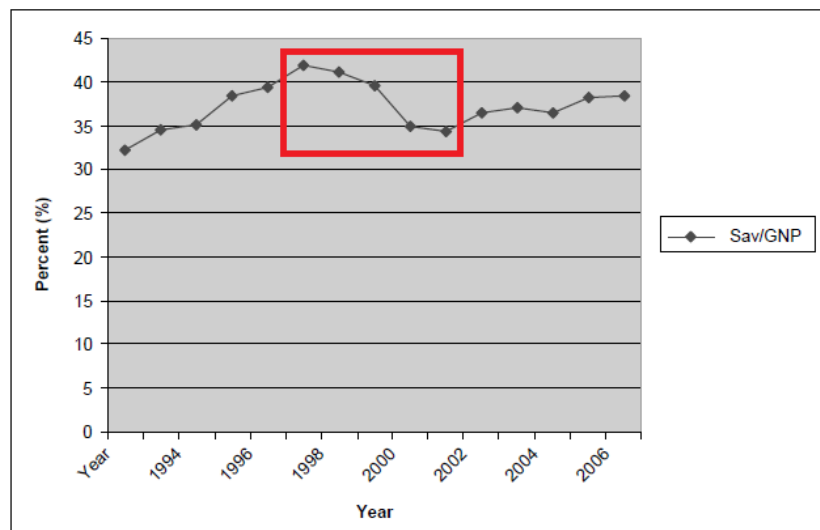
Figure 1.5: Average Student Credit Card Debt by Age in 2015



Source: Sallie Mae “Majority in Money” report 2016.

Figure 1.4 shows the average outstanding of students' credit card balance from December 2014 to December 2015. It can be seen that most of the students are unable to repay their credit card loans as much as \$101-\$500 (Gonzalez & Holmes, 2017). Figure 1.5 shows the average student credit card debt by age in 2015. The age group with highest credit card debt falls on 23-24 years old. These age group are those who are fresh graduate. They carried the highest credit card debt because they have low financial awareness and low understanding on the products.

Figure 1.6 Savings Rate in Malaysia (%)



Source: Hafizah, H.A.K., & Hussin, A. (2010). Saving determinants in Malaysia. *Journal of Economic Malaysia*, 44(2010), 23-34.

Apart from that, previous researchers found that saving rate in Malaysia had dropped in the past few years. According to Hafizah and Hussin (2010), they showed that savings rate in Malaysia had dropped from 1998 to 2002 as illustrated in Figure 1.6. The reason was due to inflation which occurred in year 1998. Another reason was unable to pay their debts. When they have high debt level, they will use their money to pay for their debts. Thus, they will not have extra money for saving. When individuals do not have enough savings, they may face financial problems. They also discovered that when the income of individuals increases, they would be more preferred to spend more on their expenses rather than save their income (Hafizah & Hussin, 2010).

In addition, a research done by Joyce et al. (2010) suggested that lack of financial awareness towards the financial planning concepts among young individuals is a worrying trend. Based on the previous research done in UK, US and Australia, lack of financial knowledge could lead to higher risk of bankruptcy, higher levels of debts and insufficient skills for retirement planning among the undergraduates. On the other hand, few studies had been done to investigate the financial awareness among young individuals towards general financial products. It is due to the complex products line which offered by the financial institutions (Joyce et al, 2010). As a result, this study is aimed to investigate whether the financial awareness will be influenced by the general financial products, financial knowledge, financial behaviour and financial attitude among UTAR undergraduate students.

1.3 Research Objectives

1.3.1 General Objective

The primary objective of this research is to analyse the financial awareness among UTAR undergraduate students in Kampar Campus can be influenced by the elements which are general financial products, financial knowledge, financial behaviour and financial attitude.

1.3.2 Specific Objectives

- i. To determine the level of general knowledge on financial products among UTAR students in Kampar Campus.
- ii. To determine the level of financial knowledge among UTAR students in Kampar Campus.
- iii. To identify the relationship between financial behaviour and financial awareness among UTAR students in Kampar Campus.
- iv. To identify the relationship between financial attitudes and financial awareness among UTAR students in Kampar Campus.
- v. To investigate the difference on gender between the independent variables (financial behaviour and financial attitude).

- vi. To investigate the difference on age between the independent variables (financial behaviour and financial attitude).

1.4 Research Questions

1. Are UTAR students understand about the general knowledge on financial products?
2. Are UTAR students have financial knowledge?
3. Is financial behaviour and financial awareness among UTAR students have a significant relationship with each other?
4. Is financial attitude and financial awareness among UTAR students have a significant relationship with each other?
5. Is there any significant difference on gender between the independent variables (financial behaviour and financial attitude) among UTAR students?
6. Is there any significant difference on age between the independent variables (financial behaviour and financial attitude) among UTAR students?

1.5 Hypothesis of the Study

The conceptual framework employed to figure out the dependent and independent variables. Financial awareness is the dependent variable whereas general financial products, financial knowledge, financial behaviour and financial attitude are the independent variables. Gender and age are being taken as the moderating variables. The financial awareness among UTAR students may be affected by these moderating variables. Based on all the dependent and independent variables, there are 4 hypotheses being proposed according to this research.

1.5.1 Financial behaviour

H_0 : There is no significant relationship between financial behaviour and financial awareness among UTAR students.

H_1 : There is a significant relationship between financial behaviour and financial awareness among UTAR students.

1.5.2 Financial Attitude

H_0 : There is no significant relationship between financial attitude and financial awareness among UTAR students.

H_1 : There is a significant relationship between financial attitude and financial awareness among UTAR students.

1.5.3 Financial behaviour and financial attitude based on gender

H_0 : There is no significant difference on gender between independent variables (financial behaviour and financial attitude) among UTAR students.

H_1 : There is a significant difference on gender between independent variables (financial behaviour and financial attitude) among UTAR students.

1.5.4 Financial behaviour and financial attitude based on age

H_0 : There is no significant difference on age between independent variables (financial behaviour and financial attitude) among UTAR students.

H_1 : There is a significant difference on age between independent variables (financial behaviour and financial attitude) among UTAR students.

1.6 Significance of Research

The contribution of this research is determining the elements that affect the level of financial awareness among UTAR undergraduate students. The aim of this research is to determine the level of financial awareness among UTAR undergraduate students and to increase their financial awareness through education. Additionally, different opinions from previous study conducted by Ng, Too, Kuan, Yong, G. and Yong, Y. C. (2013) that only targeted on the respondents from FBF, larger sample size from different programs are included in this study. According to Carvalho and Nurbaiti (2015), there are around 25,000 Malaysian Gen Y aged below 35 have undergo bankruptcy in the past five years. Thus, larger sample is included in this study so that the researchers can obtain an accurate result of the level of financial awareness among UTAR undergraduate students.

Based on this research, the researchers can find out the areas in which the students are weak and suggest some managerial implications to make improvement on students' financial awareness. Most of the individuals do not have enough knowledge on general financial products and risk of the products from the surveys conducted internationally (OECD, 2013). Therefore, individuals are not able to make appropriate decisions in order to handle their finances effectively. If students have good financial awareness, they will have good financial management. They know how to use the financial products such as credit card and loan wisely. Students are less likely to engage in extensive debts such as credit card (Noor, Nurfadhilah, Ramesh & Mior, 2013). In addition, they will start planning their finances earlier and can have more savings.

1.7 Chapter Layout

This research consists of five chapters which are research overview, literature review, research methodology, data analysis as well as discussion, conclusion and implication. Chapter 1 is research overview which are the background and introduction to the topic.

Chapter 2 is literature review. Literature review consists of relevant studies done by past researches. The relationship between dependent variable (financial awareness) and independent variables (general financial products, financial knowledge, financial behaviour and financial attitude) are discussed in chapter 2. Relevant theoretical models, conceptual framework and hypothesis development are covered in chapter 2.

Chapter 3 is research methodology. It is an overview of research methodology. Chapter 3 describe the methods used to collect information and data. Primary data is used in this research. Pilot test is carried out in this chapter to test the reliability of the questionnaire.

Chapter 4 is data analysis. Data analysis consists of results obtained from Statistical Package for Social Science (SPSS) version 22. Besides SPSS, Microsoft Excel is also been used to construct bar charts.

Chapter 5 is discussion, conclusion and implication. Chapter 5 provides summary of statistical analyses, inferential analyses, major findings and implications of this research. The results of this research are covered in this chapter. The results are supported by past research. Limitation of this research and recommendation for future research will be discovered in chapter 5.

1.8 Conclusion

In brief, first chapter explains the whole notion of the research towards financial awareness among UTAR students in Kampar, Perak Campus. Target respondents of this research are undergraduate students from Kampar Campus. The primary aim of this research is to determine if there is a significant relationship between independent variables (general financial products, financial knowledge, financial behaviour and financial attitude) and the dependent variable (financial awareness among UTAR students). These independent variables are chosen due to previous researchers have found that these variables have significant influence towards the financial awareness among university students. Argument and evidence will be further presented in chapter 2, literature review.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

Chapter 2 attempts to provide the review of relevant articles or journals that related to the research topic which is the financial awareness among UTAR students. Furthermore, conceptual framework and hypothesis will be developed to evaluate relationship between independent variables and dependent variable.

2.1 Review of the Literature

2.1.1 Financial Awareness

Financial awareness is becoming more important nowadays. It is not only for investors, but also for individuals in the economy. Financial awareness could provide individuals with knowledge, skills and confidence towards managing their financial resources effectively. Apart from that, it could develop the culture on the repayment of loan and promote a stable financial system when the individuals were aware of the significance of loan repayment and the outcome of default (Shyamba & Kevin, 2015).

After the recession during the middle of 2008, the typical need for financial awareness are important to everyone from youths to retired people. Every human being has to accomplish the basic understanding of the influences on financial world and how it is going to affect the livelihood of human being. Despite of age, there was a large number to show that understand on how the financial markets operate and whether the impacts bring towards the individuals are significant. Most of the individuals do not have high understanding level towards the financial aspects. Moreover, misunderstanding in term of financial aspect may occur due to the lack of financial awareness among society (Equity Scholar, 2015).

In order to investigate the determinants of financial awareness, Guiso and Jappelli (2004) have used the survey of Household Income and Wealth, which conducted by the Bank of Italy. All the survey questions were used

to collect the details on wealth, both financial and real, demographic characteristics and income as well. Based on the results, there were a large number of respondents are aware of the existence of some financial assets even they do not invest them. Not surprisingly, the transaction accounts like savings, short-term government bonds and the bonds issued by the national postal service are the popular financial assets (Guiso & Jappelli, 2004).

Figure 2.1: Services by Credit Counselling and Debt Management Agency (AKPK)

Services by Credit Counseling and Debt Management Agency (AKPK), a subsidiary of BNM, has benefited more than 300,000 Malaysians in the last 5 years



Recently realigned to be the lead agency to deliver adult financial education



Source: Suhaimi (2013). Financial literacy in Malaysia: *Issues and status update*. International Seminar on financial education and retirement savings.

In order to improve the financial awareness among Malaysian, government work hand-in-hand with some private organizations. Bank Negara Malaysia and Permodalan Nasional Berhad had involved in instructional course. For instance, POWER! which organized by Credit Counselling and Debt Management Agency (AKPK) (Azwardi, Mohd & Alif, 2013). Through this

program, society can join this program because it is free of charge for society.

2.1.2 General Financial Products

Previous researchers found that the diversification of financial products and fluctuation of global economy will make the financial decisions more complex and consumers have to face challenges in financial activities and economy (Harnisch, 2010). Researchers suggested that consumers should compare the similar financial products and choose the best products (Sekar & Gowri, 2015).

2.1.2.1 Savings account

Initial deposit is required when opening a saving account (Erol & El-Bdour, 1989). It generally requires individuals to maintain a specific amount to have an active account. Savings account encourage individuals to keep their money into bank in order to reduce the risk of holding large amount of cash (GoldberG, 2014). In additional, lots of individuals pay their billing, rental, tuition fees, daily expenses, and so on by using their savings in the banks.

Bank customers will receive the interest rate in a regular savings account per annum (Ashraf, Karlan & Yin, 2005). Although the interest rate of savings account is less than the fixed deposit account, most of the individuals will open savings account to restrict access to their saving. According to Ashraf, Karlan and Yin (2006), they stated that women prefer to commit in savings account because they can check their money, view their previous records and thus restrict them from spending recklessly. Karlan and Zinman (2014) also found that there is significant relationship between female and savings habits. Female who are highly educated and married will have the higher decision power relative to the high savings.

2.1.2.2 Fixed deposit account

Fixed deposit is well known by all of the depositors in Malaysia. It is because when depositors save certain amount of money for a specific duration of time and agreed interest rate offered by banks; they can earn more interests income as compare to conventional savings account on maturity date. Thus, fixed deposit is one of the ways to increase the return on one's savings.

According to Bhushan (2014), he stated that individuals which have low financial literacy will prefer on the bank deposits and post office savings. Individuals are unwilling to take higher risks and gain higher returns when they are lack of the knowledge of financial products. Fixed deposit is the traditional and safe financial products to increase one's savings (Ashraf. et al., 2003).

Return on equity (ROE) is the rate of return to shareholders in ter. The higher the ROE, the high the efficiency of company uses its equity. Shareholders can receive benefits from their investment in the bank and raise their capital. Fixed deposit is guarantee by bank as well as capital preservation. From the result of the researcher, the risk of fixed deposit is lower and its expected return also will be lower than ROE. ROE always carry higher returns to the shareholders as compare to the depositors of fixed deposit account (Saiful & Mohammad, 2008).

2.1.2.3 Credit Card

Nowadays, credit card is convenient to customers because it of replaced cash and carry forward customers' expenditure (Ramayah & Nasurdin, 2002). Credit card acts as the backup money for customers if customers have insufficient cash when purchasing at own country or oversea. Banks in Malaysia have come out with a lot of promotions to attract the customers to apply for credit cards. For example, Citibank created an AirAsia-Citi MasterCard in Malaysia

which offers credit cardholders to enjoy selected travel privileges from Air Asia and redeemed Air Asia Big points (Hussin, 2011).

However, the excess usage of credit card without control leads youngsters to declare bankrupt (Noordin & Zakaria, 2012; Zamzamin, Jaini & Zamanira, 2014). According to Warwick and Mansfield (2000), students are not aware on the usage of credit card. They did not control themselves on spending by using credit cards and ignore the applicable interest rates on their credit cards. They have insufficient knowledge on credit card terms and conditions leads them to poor have financial planning (Wagner, 2015).

2.1.2.4 Investment

Investment stated as the commitment of capital or financial resources in order to gain higher returns in the future (Levisauskait, 2010). Investment can be formed by a firm, shares, stocks, financial derivatives and others tangible or intangible property (Huan, 2011). Investment can be definitely into two categories which are short term investments and long term investments. The maturity date of short term investment is less than one year such as commercial paper and treasury bills. Long term investments provide long term goals and less management than the short term counterparts. The examples of long term investments are mutual fund, gold and investment properties (Gurkaynak, Sack & Wright, 2007). Long term investment will consider riskier than the short term investment because of it is more illiquid and longer maturity (Bismarck, Gontownik, Hobart, Lerner & Mendelssohn, 2011).

2.1.2.5 Conventional Insurance

Conventional Insurance refers to the protection needs found by human against the problem risk occurs on themselves or on their property (Kunreuther & Pauly, 2006). In the simple terms, insurance

is one of the ways to protect policyholders from financial loss. The person who buys insurances is known as insured or policyholder. Policyholders buy insurance to hedge the financial risks and attempt to gain some benefits from the policy.

Insurance includes three characteristics which are risk reduction, risk transfer and loss sharing. Risk reduction is classified into different groups so it can be an incentive to the policyholder to predict the losses (Avraham, Logue & Schwarcz, 2013). Risk transfer means the risk from insured or policyholder will be diversified to the insurers who are willing to take the risk (Njegomir & Maksimovic, 2009). Loss sharing is the spread of losses suffered by the few unlucky policyholders in a single insurance pool (John, 1996).

Conventional insurance can be divided into two types of insurance, which are life insurance and general insurance. Life insurance is an insurance which pay a total amount to the policyholder if any unfortunate incident happens such as disability or death. The main products included are whole life policies, endowment policies, as well as medical and health policy (Khan, 2005). On the other hand, general insurance is an insurance policy that predicts the policyholder against the loss or damage that are unprotected in life insurance. The main products of general insurance includes vehicle, fire policy, owners, household personal accident policy, as well as medical and health policy (Awang Nawi, Amir W Ahmad & Aleng, 2012).

2.1.3 Financial Knowledge

According to Muhammad and Gharleghi (2015), education is affecting financial knowledge. Therefore, education is positively related to financial literacy. Feslier (2006) found that financial education acts as an essential

role in influencing financial literacy. Financial education can be used to evaluate the level of financial literacy (Zait, & Berteau, 2014).

Lusardi and Mitchell (2007) showed that working-age adults and high school students are lack of financial knowledge. From the past research, the researchers found out that students are having insufficient knowledge on bonds, stocks and other investments. Findings from Lusardi and Mitchell (2007) are confirmed that investors and savers are poor in financial literacy. A huge number of respondents have little knowledge on interest rates. This caused problems to the respondents especially who those who applied for loans. Those who are weak in financial knowledge are overconfident and not willing to seek guidance from professional. There is significant relationship between knowledge and financial behaviour. Previous authors suggested that programs regarding retirement saving should be carried out to provide financial knowledge thus enhancing financial literacy. Hence, educational program could encourage saving and boost financial literacy.

Having insufficient financial knowledge can caused bad decision making that can be improved through financial education (Mandell & Klein, 2009). From the past research, those who were taking personal financial management course are those who had stable financial lives. In contrast, those who did not take personal financial management course are those who are lack of financial experience.

Bartley (2011) suggested that experience and needs can improve financial knowledge. The author claimed that relationship between experience with knowledge and finances can promotes financial literacy among youths. Those who applied loans or credit cards will have more information about the financial products as compared to those that do not apply for any loans or credit cards. Youths can have more knowledge on financial products through their experience gained in financial markets. There is a relationship between experience and financial knowledge.

2.1.3.1 Time Value of Money

Time value of money is the difference value of money in different periods (Rao, 2016). There are two techniques to determine the value of money which are compounding technique as well as discounting technique. Time value of money is important for investor as a dollar today is worth more than a dollar in the future (Sherrick, Ellinger & Lins, 2000). This is because he can use the money to make an investment. He can earn interest from the investment which also known as capital gains. A dollar in the future is worth lesser than now due to inflation.

2.1.3.2 Interest Rates

Interest is a fee paid by the borrower to the lender when the borrower is using lender's money (Khan, & Sattar, 2014). Interest can be also known as compensation or opportunity cost when he gives up to use his money. Interest is received when someone is lending money. In contrast, interest is paid when someone is borrowing money. During the payoff of the loan, he has to pay the principle amount of money that he borrowed plus the interest amount charged. Interest is charged based on the certain percentage of the principal borrowed (Finan, 2016). According to Khan and Sattar (2014), interest rate is commonly expressed in annual basis which is known as annual percentage rate (APR).

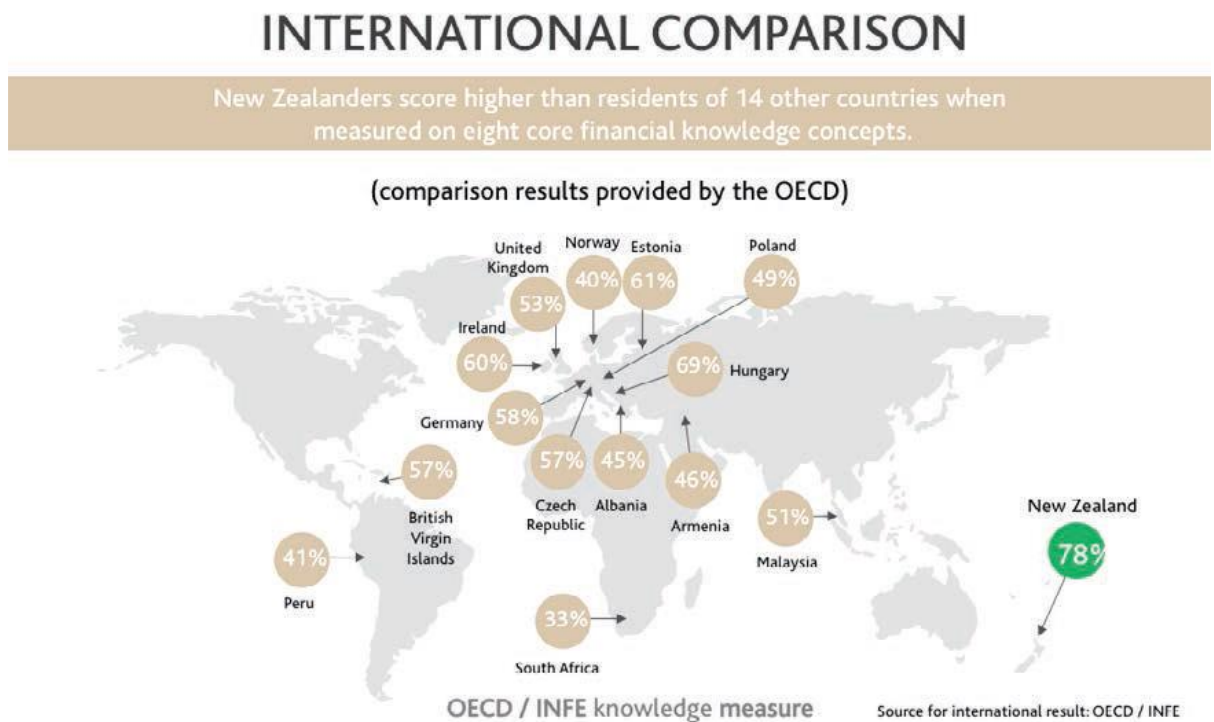
2.1.3.3 Inflation

Oner (2010) defined inflation as the rate of rising in term of prices over a specific period of time. According to Tabi and Ondo (2011), low inflation is an essential element for sustainable economic growth. Inflation will highly influencing people with low income. Cost of living for consumer are affected by the prices of goods and services. Households and firms are having difficulties in savings and investment decisions.

2.1.3.4 Diversification

Diversification is a strategy in managing risk which jumble up different types of investment within a portfolio. This is to maximize returns and minimize risk within a portfolio. Guiso and Jappelli (2009), the researchers found that financial awareness has strong correlation with portfolio diversification. The researchers analyzed that long term educations are needed to enhance the financial awareness among individuals. In addition, individuals are capable in managing and diversifying their portfolio if they are financially aware.

Figure 2.2: International Comparison of Financial Knowledge between 15 countries



Source: Commission for Financial Literacy and Retirement Income (2013). Financial Knowledge and Behaviour Survey.

Figure 1.0 shows the international comparison of financial knowledge concepts between 15 countries. From the financial knowledge study,

financial knowledge concepts in Malaysia was 51%, which indicated the level of financial knowledge among Malaysian is moderate. One of the previous researcher found that most of the employees in Malaysia are not financially knowledgeable. From the total population of 900 respondents, 70 respondents (8.2%) unable to answer questions of financial knowledge accurately, 285 respondents (33.4%) had simple financial knowledge while 499 respondents (58.4%) owned few simple and complicated knowledge (Loke, 2015).

2.1.4 Financial Behaviour

Financial behaviour can be defined as the action which adopted by individuals in handling their source of finance in order to reach financial success in term of finance and loan management, employees advantages and retirement program (Encyclo, 2014). Financial behaviour copes with human daily activities which relate to invest, borrow, spend and save (Qiao, 2012). An individual can be more financially behavioural through improving of financial knowledge. For example, they can increase their financial behaviour via financial literacy programmes to increase level of their financial literacy. They can know more about mortgage, learn how to save, budget, plan as well as learning ways to reduce expenses on debts (Commission for Financial Literacy and Retirement Income, 2013).

According to Scheresberg (2013), an individual who have financial behaviours such as having prevention on savings share, retirement program and applying techniques of borrowing which is expensive and costly is important to youngsters to have high level of financial awareness. Their review proved that respondents are more likely to have emergencies funds and retirement planning will less likely to choose borrowing which offer high interest rate. The result indicated respondents that have high level of financial awareness or financial knowledge will be more adequate in making financial decisions.

Atkinson and Messy (2012) found that gender will affect financial behaviour of an individual. From their finding, male are more financially behavioural than female in some countries such as Albania, Armenia, South Africa and British Virgin Islands (BVI). Male scored 78% in financial behaviour whereas female scored for 66% in BVI. Nevertheless, in Ireland, Czech Republic and Norway, female get high score in financial behaviour than male.

Financial behaviour in term of monetary planning, retirement and wealth regulation, saving and lesser spending on borrowing have a positive relationship with financial literacy (Lusardi & Mitchell, 2011). People with more financially behavioural are more financially literate. This causes young adults are more probably to plan their retirement planning earlier as compared to adults who are less financially literate.

An individual who involved in investment activities acts as an indicator to measure his or her good financial behaviour. Investment activities such as financing of loans or debts, budgeting or saving, customers' borrowing and also capability of customers in deciding monetary decisions (Nurul et al., 2016). Besides, life-cycle hypothesis or theory also used to explain financial behaviour especially behaviour related to budgeting or savings. This theory was the wonderful idea which established by Modigliani in Modigliani crown. Rational and coherent explanation is formulated and it is beneficial for most experiential research on savings (Ahmad et al., 2006). This theory also poses that teenagers tend to borrow more in order to fulfil their spending expenditure when savings increase with age and source of finance. As for the group with early adulthood and old age, they tend to save money (Mitchell & Utkus, 2006).

Some of the researchers found that financial behaviour and financial literacy are correlated. Financial literacy is positively related to financial behaviour. In view of this, people have less favourable financial behaviours if they have lower education standard. They also have less knowledge of monetary

practices (Ahmad et al., 2006). One of the researcher, Mian (2014) reviews that financial literacy have direct impact on financial behaviour. Behaviour such as less engaging in stock exchange, program for retirement, ineffective in expanding and managing wealth as well as facing financial problems are people who have low financial awareness. Hilgert and Hogarth (2003) found that people who involve in financial behaviours such as owing emergency fund and pay invoice according to schedule are the people who have high financial awareness. However, some of the researchers found that financial awareness and financial behaviour may cause inconstant outcome. According to Robb and Sharpe (2009), students have high debts balances although they are more financial knowledgeable. This showed that students with high financial knowledge level may own bad financial behaviour and lead to financial problems.

Nye and Hillyard (2013) review that individuals with larger property, stronger numeracy, higher source of finance and better education are significantly related to financial literacy and financial behaviour. Moreover, kids are being affected by their family especially parents via strengthening, positive education and intensive modelling. They obtained information, ideas and attitudes of role models which they can be learnt from education. Friese and Koeing (1993) found that if parents are having high level of spending behaviour, it will lead to high level of compulsive behaviour among students. This proved that financial literacy and behaviour of an individual is highly influenced by family especially parents (Albeurdy & Gharleghi, 2015). An individual who have good financial behaviour will have significant influence on budgeting, loans management, risk management and retirement programs. Robb and Woodyard (2011) proved that consumers engage in more favourable behaviours are those who are highly faith with their information of finance. Hence, an individual will be more financially satisfied if they have good financial behaviour.

2.1.5 Financial Attitude

In general, an attitude is referring to the way an individual positively or negatively responds to his or her environment (Boundless, 2016). Hence, financial attitude is generally defined as attitude towards financial management which deals with financial matters and practices. According to Mazumdar (2014), he categorized attitude towards knowledge regarding monetary planning and investing into three different categories. First of all, an individual believes that he or she aware all the things of monetary planning and investments. Whoever has this type of attitude is actually risky. This is because of there is no evidence to show that anyone else can have knowledge of all the things of investing, retirement planning, estate planning and insurance. Secondly, an individual has no knowledge regarding monetary planning and investments. It sounds unusual; however it is better than the previous attitude. The drawback of this attitude is that financial consultants could benefit from an individual. This is because of the individual will never realize how his or her financial consultant is being compensated and what payment actually he or she is made. Furthermore, individuals will never know whether the financial products such as mutual funds, unit trust and insurance that their financial advisors sold to them are for their best benefits. The last type of attitude is an individual know he or she does not have knowledge of all the things upon monetary planning and investments. These kinds of individuals actually are having the best opportunity to achieve a successful long-term investment and to manage their finances well as compared with the first attitude. If an individual is having this attitude, he or she is ready to learn regarding what it takes to be successful in financial aspects. This is because of he or she will try to look for assistance which he or she wants to make that happen. As a result, he or she could be educated themselves in financial aspects (Mazumdar, 2014).

According to the survey done by Agarwalla, Barua, Jacob and Varma (2012), they have stated that financial awareness is positively correlated with financial attitude among the married individuals in India. As compared to

the youngsters, married individuals will tend to spend more wisely and to do financial planning. This is because of most of them have discipline towards financial matters even they were low in financial knowledge. Hence, they will manage their finances properly.

Based on the study from Achuta and Mehra (2016), they investigated that an individual's financial attitude could be influenced by few factors. First of all, an individual's financial attitude towards monetary decisions could be affected by definite feelings like worry and anger. When an individual's emotion is anger, it will associate the individual to invest whereas anxiety will cause individual to stay away from investments. This is because of worry always forecast traditional monetary decisions by not investing. However, worry will always lead investors to take the interest-bearing accounts which are not highly predictable stock tendency.

Secondly, the financial attitude could be determined by the comprehension level and awareness upon the products and concepts from finance aspect. Interest in monetary matters and understanding level are positively related. If an individual has more interest in monetary matters, his or her understanding level will be higher as well. As a result, an individual will discover more upon day-to-day monetary management matters willingly. Apart from that, an individual's financial attitude could be influenced by the need for precautionary savings. The preventative saving's theory is positively correlated with the influence of unpredictability towards wealth accumulation. Hence, the future-correlated worry is relieved by savings and savings could provide human beings with a feeling of restraint over their future.

Next, the tendency to plan for money could affect the financial attitude of an individual as well. The tendency to arrange finance could happen in long run or short run and each of them will indicate contrast in the regularity of objective setting. Last but not least, the financial attitude of an individual could be affected by the decision making. If an individual decides intuitively,

he or she is prefers to believe on afflatus and figure, and to be common (Achuta & Mehra, 2016).

According to Atkinson and Messy (2012), financial attitude and preference are determined as a significant component of financial literacy. They have studied that if an individual's attitude is more likely positive upon savings for future spending, he or she will be more willing to deal with that particular behaviour. Likewise, if an individual prefers to emphasize long-term desires than short-term desires, he or she will be more likely to make greater term of planning upon finance or to give himself or herself with urgent funds (Atkinson & Messy, 2012). According to the study of Kidwell, Brinberg and Turrisi (2003), personality, cognition and situational factors are used to determine the money-related attitudes. Nevertheless, impact is moderated by the normative effects on attitude, while the financial attitudes consist of both money investments and loans. Based on the research done by Ekore and Omisore (2013), they have concluded that attitude towards investment is not a significant circumstance in psychological well-being. However, it might be an indication for future expected income.

As stated in the research done by Madern and Schors (2012), the key element for financial attitude is willingness to save. An individual will have higher unpredictability to face the monetary difficulties if they think savings is not needed or feel little regarding savings. Individuals could be categorized into two types. If an individual is defined as 'short-term thinker', he or she is most likely live for today and does not need to bother upon future. In contrast, if an individual is defined as 'easily tempted', he or she is most likely difficult to choose and purchase stuffs which are not regularly needed. Attitude could only be changed in the long-term as such attitudes are extremely rooted in an individual's character. The most important for positive financial attitude are away from easily tempted and short-term thinkers, and get ready to save.

2.1.6 Financial Behaviour and Financial Attitude based on Gender

According to Yoong and Brown (2012), family status would affect the financial behavior of women. The savings of women were low and their debt level was high means they were difficult to cover their liability (Westaway & McKay, 2007). One of the research report found that there had no difference based on gender with financial planning and investment behaviour (Theodos, Kalish, McKernan, & Ratcliffe, 2014). They stated that women and men were conscious that the important of retirement planning. In other words, they had the same financial behaviour for future planning.

There is weak relationship between the females and financial behaviour and financial attitude (Gerrans, Speelman & Campitelli, 2013). Ford and Kent (2010) posted that female college student commonly had lower levels of financial market attitude and awareness than the male college student in USA. They agreed that women with low financial awareness because of their perceptions of threat, confidence and enthusiasm towards financial market. Most of the male were more risk taker than women in financial situation (Bajtelsmit, Bernasek, & Jianakoplos, 1999). However, Sapienza¹, Zingales and Maestriperi (2009) concluded there was no difference on gender to avoid the financial risk.

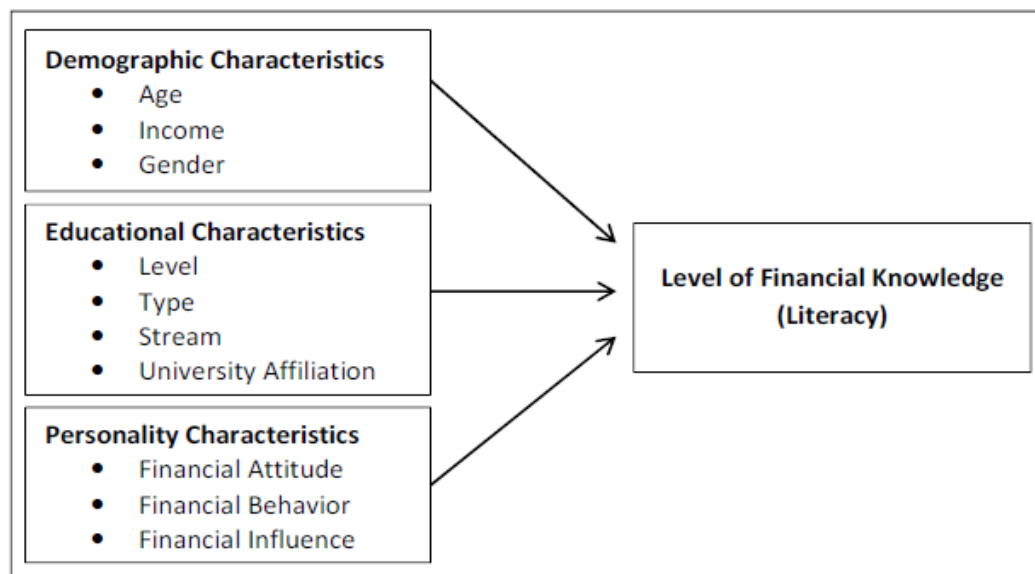
2.1.7 Financial Behaviour and Financial Attitude based on Age

According to Atkinson and Messy (2012), it is believed that an individual's financial behaviour and financial attitude could be influenced by age. This is because of there is a significant positive correlation between financial behaviour and financial attitude and age. When individuals grow up, they will more behave towards their actions and have positive attitude upon monetary aspect since they have higher level of education. They have mentioned that individuals who with higher level of education will tend to show positive behaviours and attitudes toward the finance (Atkinson & Messy, 2012).

As stated in Marsh (2006), the age is importantly affected the financial behaviour and financial attitude. There is a positive relationship between age, financial behaviour and financial attitude. The result has shown between the fresh-enrolled students and the non-fresh-enrolled students in a university. As compared to fresh-enrolled students, non-fresh-enrolled students will tend to have more positive financial behaviour and financial attitude. This is due to non-fresh-enrolled students have advanced level of finance as they have further studied in university for at least one year (Marsh, 2006).

2.2 Review of Relevant Theoretical Model

Figure 2.3: Conceptual Framework of Thapa, B. S., & Nepal, S. R. (2015).
Financial Literacy in Nepal: A Survey Analysis from College Students.



Source: Thapa, B. S., & Nepal, S. R. (2015). Financial Literacy in Nepal: A Survey Analysis from College Students.

There are three types of characteristics affecting the literacy (Thapa & Nepal, 2015). The three types of independent variables included were demographic characteristics, educational characteristics as well as personality characteristics. The elements under demographic characteristics were age, income and gender. Educational

characteristics' elements were level, type, and stream as well as university affiliation. Characteristics that influence dependent variable were financial attitude, financial behaviour and financial influence.

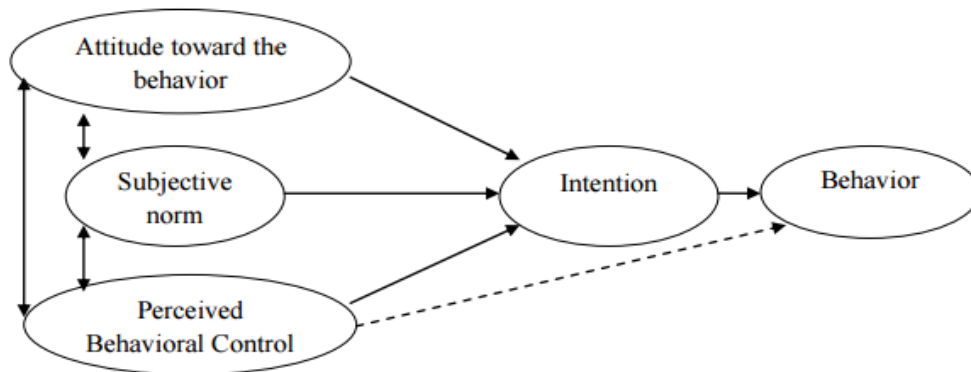
For this research, there are also three characteristics affecting financial awareness. The elements under demographic characteristics were gender, age, faculty, monthly spending, ranking for spending and sources of information that influence financial products decision. General financial products and financial knowledge were under knowledge characteristics. Lastly, financial behaviour and financial attitude are classified under personality characteristics. This study is different from previous study due to the different independent variables.

Financial literacy means a possessing knowledge and skills on financial issues to possess effective action that best fulfils personal, family as well as global community goals with confidence (National Financial Educators Council, 2013).

According to Shults (2012), social learning theories play an important role in financial literacy. Experiential learning theory was used in the research of Shults (2012); Mainemelis, Boyatzis and Kolb (2002) stated that experiential learning theory is a process whereby knowledge is generated through the revolution of experience.

Contextual teaching and learning is a lesson when students gain new knowledge based on the memory, experience and response (Texas Collaborative for Teaching Excellence, 2007). Based on Curry, Wilson, Flowers and Farin (2012), contextual teaching and learning teaches students to think contextually and learn scientific concepts at the same time. Shults (2012) found that students can create budgets, manage expenses for household as well as plan for future needs and career to gain experience in financial learning.

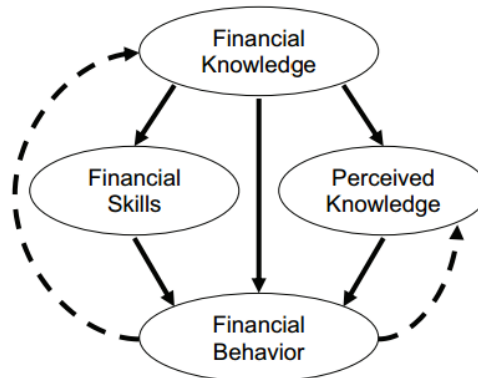
Figure 2.4: Theory of Planned Behavior



Source: Ajzen (1991). The theory of planned behavior.

According to Shults (2012), financial behaviour can be linked to theory of planned behaviour (TPB). Attitude towards the behaviour, subjective norm, as well as perceived behavioural control have impacts on one another. Thus, these will then affect the intention and also behaviour.

Figure 2.5: Conceptual Model of Financial Literacy



Source: Hung, Parker, Young (2009). Defining and measuring financial literacy

Hung, Parker, and Yoong (2009) argued that conceptual model of financial literacy focuses on the financial knowledge, behaviour, and skills together with their mutual relationships. Without sufficient knowledge, individuals are not able to know the importance of financial behaviour (Shults, 2012).

2.2.1 Financial Awareness

In the research done by Jackson and Gast (2015) the researchers have defined the financial awareness perceptions and knowledge of college cost, affordability, guidance accessible to parents and students, and information-based financing options. Apart from that, financial awareness is generally rely on accuracy, access to timely and in-depth information on saving options, college costs and financial aid. Thus, the researchers have summarized the research that relevant to acquire the details on college costs and payment alternatives to acknowledge on how to improve students' and parents' awareness and knowledge gaps on the road to college. Lastly, the researchers have pointed out that there were three main elements are significant towards financial attitude of students. The main elements are parents, secondary school teachers and counsellors, higher education institution' website and other internet resources. The most significant element towards support and information for students was parents. This is because of parental involvement is significant in helping students for college application and financial aid. In contrast, high school teachers and counsellors only play a large role for students by helping them to apply financial aid and to aware financing alternatives. Unfortunately, high school teachers and counsellors may vary across schools, states, districts and so forth (Jackson & Gast, 2015).

Students' debt burdens could be reduced if they hold sufficient financial awareness, able to do financial planning carefully and have responsible attitude. Hence, Mbekomize and Mapharing (2015) have done a research to study the personal financial awareness, financial planning capabilities and attitude towards debt of business school undergraduates. Debt is played a significant part in the decision to go university since participation in higher education institution could be affected by students' concerns and fear over debts. For those students who come from less well-off backgrounds, they will normally drop out of university when the debt burdens were too large. Hence, the researchers have summarized that student debts were the

expected consequence for participation in university. On the other hand, the researchers have suggested that youths are probably lack of financial awareness, financial literacy, capability, understanding or any other matters regarding financial knowledge in past available research. Therefore, the researchers were going to undertake the study which focuses on personal financial awareness, financial planning capability and working pattern towards business school undergraduates (Mbekomize & Mapharing, 2015).

2.2.2 General Financial Products

The first variable to determine the financial awareness of students is financial products. Students need to have strong financial awareness because there are complicated financial products in the financial markets. The financial products such as fixed deposits, credit or debit cards, unit trust, insurance and so on will bring the benefits to the students' savings.

From the findings of Abdeldayem (2016), a strong relationship between decisions and financial literacy was proven by the researcher. The results from Bhushan (2014) showed that the respondents with high financial literacy are more aware on all the financial products excluding the post office savings. Atkinson and Messy (2013) proved that a connection is linked between product awareness and financial literacy. Some of the researchers reviewed the relationship between financial literacy and savings are endogenously determined but they are positively correlated.

Lusardi and Mitchell (2011) found that consumers with poor knowledge on financial products and services would lead them having difficulties in saving and investing. The Organization for Economic Cooperation and Development (OECD, 2005) stated that consumers were lack of understanding on financial products would increase their financial risk and loss on financial opportunities. In order to be more aware of financial risks and opportunities, consumers must do the financial market survey, listen to the professional advice of financial information, follow the instructions

from dealers or brokers, or develop skills and confidence to take effective actions.

According to Rooij, Lusardi and Alessie (2011), financial literacy is positive related to the savings plan, wealth accumulation, investment decisions and also retirement plan. To improve the level of financial awareness among students, university can develop financial awareness campaigns and encourage students to attend classes on financial education to prevent the future financial risks and financial plan (Sharon, 2013).

2.2.3 Financial Knowledge

Muhammad and Gharleghi (2015) prove that financial knowledge was strongly influenced by education. Education has positive relationship with financial literacy. Grable and Joo (1999) found that financial education is affecting financial knowledge, financial behaviours as well as financial attitudes.

Chen and Volpe (1998) examined that financial knowledge can affects personal finance matters. There is no previous studies that investigate the impacts of one's knowledge on the opinion of personal financial matters and decisions making. Insufficient financial education leads to low level of financial knowledge. Background of students' education are significantly affecting their knowledge.

Study had been carried out that college students have basic knowledge in finance (Thapa & Nepal, 2015). Unfortunately, they are unfamiliar with insurance, financial statements, taxes, bank credits and share markets.

According to Nidar and Bestari (2012), knowledge of parents, education level, pocket money or income, faculty, property insurance and parent income are affecting the students' personal financial literacy in University of Padjadjaran. Thus, improvement is needed to improve the students' financial education in personal finance. The improvement can be made by university or family. For instance, university can implement training or

seminars related to personal finance for students in different faculties. Besides that, parents can provide financial knowledge on financial products and services.

Jorgensen (2007) found that students need to possess personal financial knowledge so that they are financially secured. Students need to own basic skills and knowledge in order to make good decisions in personal finance. Financial attitude and behaviour scores increases as financial knowledge increases.

2.2.4 Financial Behaviour

The third variable to determine the financial awareness is financial behaviour. Previous researches showed that students require to have high level of financial awareness in managing their source of finance. Xiao, Tang and Shim (2009) found that developing a positive financial behaviour will improve the chances of getting a better living standard among students. This is because when they have good financial behaviour, they feel satisfied with their university life. However, some of the students spend their money without the guidance of parents. This leads them to have credit cards which registered with their name. Consequently, students may involve in credit behaviour which is risky to them. As a result, this causes them to have financial problems when they are unable to repay the debts (Lyons, 2008).

One of the researchers, Britt et al. (2004) had determined the financial behaviour of college and university students. They reviewed that 90% out of 1500 students were intended to understand budgeting, financing and savings, how to improve their monetary management and source of finance. Result also found that female students are more likely to enjoy shopping and purchased goods during sale or promotion than male. This show that university and college students are having a good financial behaviour in managing their finance as they are interested to learn how to do budgeting and also choose to buy goods when there is promotion.

Lusardi and Mitchell (2011) showed that financial behaviour in term of monetary program, retirement and wealth expansion, budgeting and less expenses on borrowing have a significant relationship with financial awareness. With good financial behaviour, students will start to plan for their financial program, retirement and wealth expansion at early stage. They will also start to save and choose to borrow at a lower rate which offer low interest rate in order to reduce debts level.

2.2.5 Financial Attitude

As stated in the research done by Sautter J. A., Brown, Littvay, Sautter A. C. and Bearnnes (2008), non-business-major students were relatively less likely knew 'more than most' than business-major students. Apart from that, those students were asked towards the confident level of decision making which deals with money. Most of the business-major students were significantly more likely have higher confidence level as compared to non-business-major students. This is because of business-major students were experienced more in their academic with finance and accounting, and knowledge obtained via courses and student clubs. In conclusion, business-major students were tend to be more confident in the aspects of financial management with their abilities (Sautter J. A., Brown, Littvay, Sautter A. C. & Bearnnes, 2008).

It is convinced that financial attitude could influence the behaviour towards borrowings, savings, risk-taking and so forth. According to this belief, there was a scale to measure the financial attitude was developed by the OECD. There was a survey done by OECD and it was used to seek for the understanding of attitude from respondents in regard to two relevant aspects, which are consumption and financial planning. These two aspects were reflected in the statements, which are propensity to consume, propensity to save and extent of belief in planning. Based on the research from Agarwalla, Barua, Jacob and Varma (2012), they have explained that youths were more negatively willing to do financial planning and consume more cautiously as

compared to those married individuals. In addition, the education level was found to influence more towards the financial knowledge and financial behaviour as compared to financial attitude. In contrast, financial attitude was having the positive relationship with income level. In other words, there were a significantly large number of respondents who have higher income, they were actually having positive financial attitude regarding financial planning and consumption to achieve their future financial goals. Furthermore, both financial attitude and financial behaviour could be affected by the high financial knowledge. On the other hand, less desirable behaviour could be led by the poor financial attitude (Agarwalla, Barua, Jacob & Varma, 2012).

According to Chowa, Despard and Akoto (2012), they have studied that parents were an important role of money management towards youths. This is because of parent were the primary sources in regard to their children for learning about the money and could influence children financial attitude and financial behaviour. Based on this statement, they have asked those parents what were their feelings regarding their children's financial knowledge, financial attitude and financial behaviour by stating agreement or disagreement for few questions. It is important to know how they support their children in financial learning. Hence, parents were asked how important it is for children to learn decision making in careful spending, learn how to save children's money, how it is for children to learn regarding financial institutions and banking. Lastly, parents were asked how important it is for children in helping to pay for household needs (Chowa, Despard & Akoto, 2012).

Based on the research done by Albeerdy and Gharleghi (2015), they have suggested that financial attitude and financial awareness are positively correlated. In other words, financial attitude is a significant component to influence the financial awareness among the university students. Besides, they stated that if a student may perceive finance differently. If the student

perceives money negatively, he or she will not have the willingness to control their money appropriately.

2.2.6 Financial Behavior and Financial Attitude based on Gender

There are a lot of studies found that financial behavior and financial attitude among university students will be influenced by gender. Based on the research done by Selcuk (2015), he proved that gender has a significance difference with financial behaviour. From their result, it can be seen that female students are better in controlling their finances than male students. The researchers use odd ratio to analyse their result. The odd ratio of gender obtained from the result was 0.82. This means that male students are 0.82 times lesser than female students in planning their budget.

Moreover, the research done by Dahlia, Rabitah and Zuraidah (2009) found that financial attitude among gender have a significance different among each other. There is a study done in UITM Kedah and result proved that financial attitude of male students is better than female students because male students able to get high score in the research. Male students have a better understanding on knowledge of finance and strong in financial management. Hence, male students own a good financial attitude as compared to female students.

In contrast, some results of the previous research are inconsistent with the study of Dahlia, Rabitah and Zuraidah (2009) and Selcuk (2015). There are some previous researchers found that financial behaviour has no significant difference on gender. Erskines, Kier, Leung and Sproule (2006) found that financial behaviour and gender do not have any difference in their financial management. The inconsistent result can also be proved by Sam, Geetha and Rosle (2010), that gender is not the important indicator that may affect the financial behaviour of an individual. Additionally, Prince (1991) proved that financial attitude is insignificantly difference on gender. From his studies, he showed that gender was not the important predictor in influencing a person's financial attitude.

2.2.7 Financial Behaviour and Financial Attitude based on Age

Students aged 24 and below are significantly posting higher financial behaviour scores than students aged 25 and above (Marsh, 2006). There is a significant relationship between age and financial behaviour. 24% of the college students do budget or planned their spending while 6% of them do not budget or planned their spending. 70% of the college students will sometimes budget or planned their spending. Besides that, 36% of the college students track their spending while 15% of them do not track their spending. 49% of college students will sometimes track their spending. Furthermore, 21% of the college students save their money on weekly basis whereas 30% of them save their money on monthly basis. Only 7% of them save their money annually. The remaining 42% of the college students save money as needed (Royer, Jorden & Harrison, 2005).

Students aged 24 and below are significantly posting higher financial attitude scores than students aged 25 and above (Marsh, 2006). There is a significant difference between age and financial attitude. The study found that college students are using credit cards of parents. Two out of every three of them are not paying their expenses. It is also found that college students have their own credit cards. One out of every three of them do not pay their own expenses or depends on their parents to pay for them (Royer, Jorden & Harrison, 2005). 47% of the students aged 21 and above have savings account as their planning in the future. 29% of students aged 20 and 28% of students aged 19 are having saving account as their planning. The students who aged 17 and aged 18 are having 9% and 7% respectively in their preparation. Only 5% of the students aged 16 have savings account for their future (Dulin, 2016).

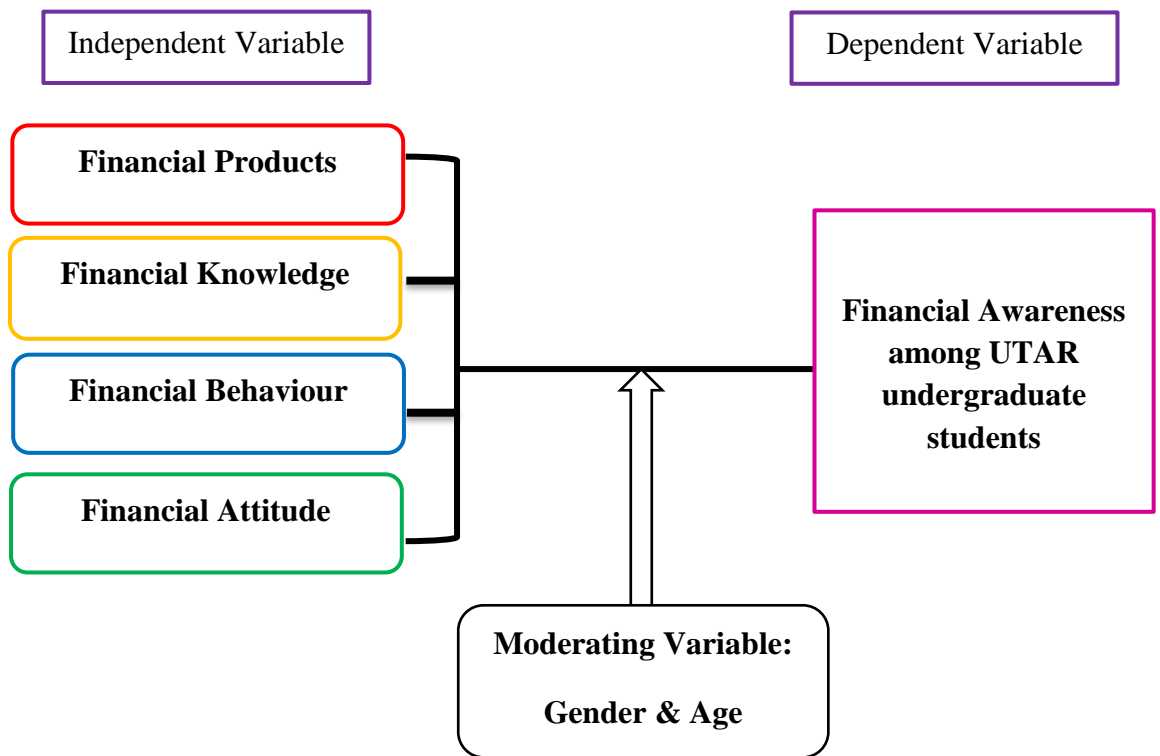
2.3 Proposed Conceptual Framework

A conceptual framework is the map of a particular research, which it will guide the readers to understand the objectives of the study. The literature composition of researchers on how to give an explanation of a circumstance is represented by the

conceptual framework. This is because of it can lay out the researchers' point of view of other researchers and observations on the research subject. In simple terms, a conceptual framework is the opinion of researchers on how the particular variables link with each other in their studies. In consequence, the variables which are required in the research investigation are identified by the conceptual framework. The conceptual framework could set a stage for the research questions' presentation which drives the investigation based on the problem statement. A thesis's problem statement presents the circumstances and the issues which trigger researchers to conduct the study. A theoretical framework is a much broader framework which the conceptual framework lies within (Regoniel, 2015).

Our research consists of four independent variables, which are general financial products, financial knowledge, financial behaviour and financial attitude. Apart from that, the dependent variable is the financial awareness among UTAR students. Hence, the relationship between dependent variable and independent variables is shown in Figure 2.6.

Figure 2.6: Dependent and Independents Variables in This Research



Adapted from: Thapa, B. S., & Nepal, S. R. (2015). Financial Literacy in Nepal: A Survey Analysis from College Students

2.4 Hypothesis Development

2.4.1 Financial Behaviour

As cited by the previous researchers, Lusardi and Mitchell (2011), their research show financial behaviour in term of financial planning, retirement and wealth accumulation, saving and lower cost of borrowing have positive relationship with financial literacy. Therefore, this research proposes that there is a significant relationship between financial behaviour and financial awareness.

H₀: There is no significant relationship between financial behaviour and financial awareness among UTAR students.

H₁: There is a significant relationship between financial behaviour and financial awareness among UTAR students.

2.4.2 Financial Attitude

An individual who has good financial attitude will make someone to have better cognition about financial literacy while someone who have negative financial attitude will cause poor management of finance and consequently lead to financial problem. According to Edwards et. Al (2007), the researchers point out that students will concern for their current financial situation and will have a better understanding on how to manage their finance stable and successfully. They also found out that financial attitude of students is indirectly related to their parents in view of their financial situation. Muhammad and Gharleghi (2015) also found out that financial attitude has strong influence on financial awareness among youngsters. Therefore, this research proposes that there is a significant relationship between financial attitude and financial awareness.

H₀: There is no significant relationship between financial attitude and financial awareness among UTAR students.

H₁: There is a significant relationship between financial attitude and financial awareness among UTAR students.

2.4.3 Financial Behaviour and Financial Attitude based on Gender

Based on the research done by Selcuk (2015), the researcher sought that financial behaviour have a significance difference on gender. From their result, it can be seen that female students are better in controlling their finances than male students. Additionally, Dahlia, Rabitah and Zuraidah (2009) found that financial attitude among gender have a significance different among each other. There is a study done in UITM Kedah and result proved that financial attitude of male students is better than female students. Hence, it can be proposed that there is a gender difference between financial behavior and financial attitude.

H₀: There is no significant difference between independent variables (financial behaviour and financial attitude) and gender among UTAR students.

H₁: There is a significant difference between independent variables (financial behaviour and financial attitude) and gender among UTAR students.

2.4.4 Financial Behaviour and Financial Attitude based on Age

Based on Marsh (2006), there is a significant relationship between age and financial behaviour. Students who are 24 years old and below have better financial behaviour than students who are 25 years old and above. Besides that, there is also a significant relationship between financial attitude and age. Students who are 24 years old and below have better financial attitude as compared to students who are 25 years old.

H₀: There is no significant difference between independent variables (financial behaviour and financial attitude) and age among UTAR students.

H₁: There is a significant difference between independent variables (financial behaviour and financial attitude) and age among UTAR students.

2.5 Conclusion

In conclusion, this chapter has reviewed relevant studies done by previous researchers and discussed about the dependent and independent variables that will be used in this study. This provides a better cognition of idea in which the variables that have been discussed in this research. The next chapter will conduct the methodology of the study. Lastly, hypothesis developed in this chapter will be used in chapter 4.

CHAPTER 3 RESEARCH METHODOLOGY

3.0 Introduction

This chapter will clearly discuss on the overview of the research methodology. All the procedures in this study will be carried out in detail manner. It gives the concept about how the research is carried out in research design, data collection methods, sampling design, research instrument, construct measurement, data processing as well as data analysis.

3.1 Research Design

Research design consists of the analysis of data, the blueprint for collection and the measurement. It supports the researchers to allocate their limited resources by posing key choices (Hafeezrm, 2011). Basically, research design has three investigations. There are descriptive, correlational and causal research. In order to investigate the financial awareness among UTAR students in Kampar Campus, we would like to apply descriptive research. Descriptive research is not only quantitative research or qualitative research but it can be a combination of both quantitative and qualitative research (Association for Educational Communications and Technology, 2001).

Quantitative research is going to be used in the research problem. Generating numerical data or transforming data into useable statistics can quantified the problems. In order to generate results from larger population, behaviour, attitude, opinions and any other defined variables are quantified by the quantitative research. Data collected from quantitative research is more structured as it uses measurable data to uncover the research pattern and formulate facts as well. Normally, survey is the form that used in quantitative data collection method. It consists of telephone interview, paper survey, online survey, online polls, face-to-face interview and so forth (Wyse, 2011).

3.2 Data Collection Method – Primary Data

Primary data will be used to gather information for the intention in the research. Primary data is new data in obtaining specific research purpose and used appropriate procedures to fit the research problem best. Social survey is one of the collection methods of primary data. When researchers are interested in data collection on the behaviours, attitudes, feelings, observations, opinions or experiences on a targeted population, surveys will be carried out. However, surveys only can be done through asking respondents when collecting information. Researchers could obtain data about objective and subjective characteristics of a targeted population via survey research. All of the survey questions have to be carefully constructed, evaluated and tested in order to accumulate the validity of survey responses (Hox & Boeije, 2005).

3.3 Sampling Design

Sampling design is a procedure in selecting suitable unit from a targeted population for the intention to accumulate information (Statistics Canada, 2015).

3.3.1 Target Population

Target population refers to a batch of individual who targeted by researchers to involve in an investigation (McLeod, 2014). 12,090 undergraduate students are selected from UTAR Kampar.

3.3.2 Sampling Frame and Sampling Location

Sampling frame is a source from which sampling units are selected in a research that includes a list or set of directions to identify the targeted population (Malhotra & Peterson, 2006). Hence, to find out the financial awareness among students, this research targeted the undergraduate students in UTAR Kampar as the respondents for this research. The sampling location of this research would be UTAR Kampar. The population of university students was more than 12000 which is in the category of 10,000 to 15,000 populations.

3.3.3 Sampling Element

The purpose of this research is to determine the financial awareness among undergraduate students in UTAR Kampar. In order to obtain more accurate results, the financial awareness among undergraduate students in campus. Therefore, the selected sample are students who are taking undergraduate programs in UTAR Kampar and from Faculty of Business and Finance, Faculty of Arts and Social Science, Faculty of Science, Faculty of Information and Communication Technology, Faculty of Engineering and Green Technology and Institute of Chinese Studies.

3.3.4 Sampling Technique

There are two types of sampling techniques which are probability sampling and non-probability sampling. In this research, the researcher are going to use non-probability sampling. The type of non-probability sampling used is convenience sampling as it is high accessibility and low cost because targeted sample are students from UTAR Kampar. When the sample size is huge, time and cost is limited and therefore this method is suitable for this research. Besides, it is a good technique to be used when pilot study is conducted because respondents may not want to answer the questions sincerely and questions being asked are too sensitive for them (Latham, 2007). Researcher depends on subjective judgment such as personal interpretations, opinions and experience to choose the elements in the sample. As a result, the likelihood that the elements of the chosen population is biased (Saunders et al., 2009).

3.3.5 Sampling Size

Table 3.1: Krejcie and Morgan's Sample Size Determination Table

Population	Sample
50	44
100	80
1000	278
2400	331
3500	346
5000	357
10000	370
15000	375
20000	377

Source: Krejcie and Morgan (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(1970), 607-610.

According to Evans et al. 2000, sampling size is the total observations in a sample. Therefore, 380 sample sizes are collected from a total population of 12,090 undergraduate students in UTAR Kampar which was supported by Krejcie and Morgan (1970) under “Small Sample Techniques”. This “Small Sample Techniques” is a formula to determine the sample size. This formula was done by National Education Association.

3.4 Research Instrument

This research used self-administered questionnaire which obtained from few previous research paper to collect the primary data. The questionnaire are made up of few sections which are section A, section B, section C, section D, section E and section F. Targeted respondents were undergraduate students who were from UTAR Kampar. The time required to fill up the questionnaire is approximately 15 minutes.

3.4.1 Questionnaire Survey

Questionnaire survey is the most common and traditional way to conduct a research. Before the researchers obtaining, analysing and interpreting data from a targeted population, questionnaire is the instrument to be comprised a set of questions that need to be asked the targeted participants. It is usually asking the questions regarding the attitude, behaviour, facts, preferences and ideas. Questionnaire can be administered in a variety of modes, such as telephone, paper-and-pencil, face-to-face and computerized. Hence, questionnaire survey is an effective technique to obtain necessary information (Sincero, 2012).

In this research, paper-and-pencil questionnaire survey is conducted. A total of 50 sets of questionnaire are used to carry out the Pilot Test before testing the relationship between dependent variable and independent variables. The questionnaires were drafted and amended to make some improvement on the questionnaire. Questionnaire are summarized within a short period. Data were run with SPSS version 22 and the Cronbach's Alpha value obtained was 0.825. The relationship between dependent variable and independent variables will be tested after obtaining the reliability and accuracy of the questions.

3.4.2 Questionnaire Design

This questionnaire are made up of a cover page with six sections. The cover page consists of a research topic, brief purpose of this research and details of the group members participated in this research. The questionnaires were designed as open-ended and closed-ended questions and the respondents were required to answer all the questions. The sections are Section A (demographic profile), Section B (financial awareness), Section C (financial products), Section D (financial knowledge), Section E (financial behaviour) and Section F (financial attitude). Questions such as gender, age, faculty, monthly spending, ranking for spending and sources of information that influence financial products decision will be tested in the in Section A. The

aim of Section B is to examine the financial awareness among UTAR students. Next, questions of financial products are tested to examine the level of financial awareness. Some theories and calculation questions in Section D are assessed the level of financial knowledge among UTAR students. Section E is to analyse the financial behaviour whereas Section F is to determine the financial attitude among the students.

3.4.3 Pilot Study

To obtain data, the method used in this research is self-administered questionnaire. Pilot study is the initial step to conduct after the questionnaire has been set up in order to pre-testing the result of this research (Teijlingen & Hundley, 2005). Pre-testing is an essential step as it helps to reduce all type of errors may appear in the research as well as enhancing the quality of data remarkably (Grimm, 2010). Purpose of pilot study is to determine the reliability and feasibility of a research that involves large scale of study (Leon, Davis & Kraemer, 2011).

3.5 Construct Measurement

Scale is an equipment or tool used by a group of individual to differentiate how respondents' perception differ on the variables in a research from one another (Sekaran, 2003). There are three types of scales are used in this questionnaires which are nominal scale, ordinal scale and likert scale.

3.5.1 Nominal Scale

Nominal scale is appropriate for qualitative variables that the observations can be differentiated by a simple naming system (Malhotra, 2010). Gender, course of study, marital status, religion as well as race are measured in nominal scale. Based on the questionnaire, question 1, 2, 3, 5 and 6 in section A which is demographic profile about the target respondents are designed according to nominal scale. The nominal scale also called as

categorical variable because data are separated into different categories (Jackson, 2015).

3.5.2 Ordinal Scale

The ordinal scale ranks all the data from highest to lowest or from lowest to highest. Ordinal scale enables the researchers to have an idea where the data are connected with each other rather than simply categorize the data (Garger, 2010). Ordinal scale question (question 4) is used in this questionnaire where the respondents have to answer their monthly spending, which range from RM1-RM200, RM201-RM400, RM401-RM600, RM601-RM800, and RM801-RM1000. The ordinal scale rank the subject's order by how much respondents will spend in one month. In short, ordinal scale only shows researchers the rankings but not the distance between rankings.

3.5.3 Likert Scale

As stated by Likert, developing a principle to measure the attitudes through questioning respondents with statements about a research topic with 1-5 scale. Likert scale quantify the level of agreement or disagreement of respondents (McLeod, 2008). Respondents are given five choices of 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree) and 5 (strongly agree).

3.6 Data Processing

380 sets of questionnaire were distributed to respondents and all the data were edited and entered into Statistical Package for the Social Science (SPSS) version 22 for analysing. There are four procedures in data processing which are questionnaire checking, data editing, data coding and transcribing.

3.6.1 Questionnaire checking

Initially, researchers go through the questions to make sure that there is no grammar mistakes, misunderstanding and incomplete information. This is because the questionnaire checking will significant affected the overall

research objective. When the researchers detect problems and amend the questionnaire before distributing to the respondents, the quality of research will be guaranteed.

3.6.2 Data Editing

Data editing is a process to detect and correct the errors in data within a questionnaire. Before being used to present as useful information, all collected data should be edited in order to make sure that information provided is consistent, accurate and complete. This is because inaccurate answer will lead to misleading answer. Hence, data editing will be an effective way to avoid the repeating of survey as the problems occurred are modified (Statistics Canada, 2013).

3.6.3 Data Coding

Data coding is a process of combining the data through themes, ideas as well as categories (Gibbs, Clarke, Taylor, Silver & Lewins, 2015). Later, the same text are labelled with code in order to retrieve the data easily at following stage for further comparison in conjunction with analysis (Gibbs et al, 2015). Based on ReadingCraze, (2014), the data is evaluated in values, percentage or numerical quantities to make a conclusion.

3.6.4 Transcribing

Transcribing is an integral process for qualitative data analysis which applied in some research (Lapadat & Lindsay, 1998). Data of qualitative research are converted into text and matched to the methodological and analytic objectives of our research. Data transcribing also helps to make sure the transcription errors are being corrected and transcribe accurately. This involves data cleaning process where it is a procedure of removing or correcting improper or duplicate data in database. Data cleaning is also used to check the treatment and consistency of missing responses (Rouse, 2010).

3.7 Data Analysis

In this research, statistical tools of Microsoft Excel and Statistical Package for Science Social (SPSS) are used to analyze the data collection. SPSS software can use to run the results on descriptive analysis, reliability test and analysis of variance (ANOVA). 380 questionnaires were distributed to undergraduate students from UTAR Kampar to test for the hypothesis by using the SPSS version 22.

3.7.1 Descriptive Analysis

Descriptive analysis is used to provide simple summary of data in a research. It describes the basic features of data collected through simple graphic analysis. With descriptive analysis, researchers can describe the data shown easily. Since researchers have to manage a lot of measurements; thus, descriptive analysis is used to help researchers to simplify the large amount of data into a manageable and meaningful form (Trochim, 2006).

By using the SPSS, all data obtained from gathered questionnaires will be summarized into a manageable and meaningful form. Hence, this research can be made use of the data from Section A, B, C, D, E and F to carry out the descriptive analysis. The results will be discussed further in Chapter 4 with the illustrations of graph and table.

3.7.2 Reliability Test

Reliability defined as an indicator to explain the degree of elements with justice (Sekaran, 2003). Reliability test is to make sure that the measurement is accurate and uniform across the periods and over a variety of elements.

Reliability test discloses the outcome of measurement error on the observed score of a student. In contrast, standard error of measurement (SEM) is used to calculate the measurement error of observed score of an individual student.

According to Lund (2013) and UC Regents (2016), the most common measurement of reliability test is Cronbach's alpha. Tavakol and Dennick (2011) cited that Lee Cronbach developed Alpha to provide a measure for the internal consistency of a scale or test. Alpha is ranged between 0.0 and 1.0. Additionally, Likert scale with numerous five-point is suggested when using Cronbach's Alpha to measure the questions in the survey (Lund, 2013).

Internal consistency illustrates the extent in which all of the elements in a test evaluate the similar construct or concept and therefore connected to the inter-relatedness of the elements within the test. When the reliability estimate increases, the fraction of a test score that is credit to error decreases (Tavakol & Dennick, 2011).

Alpha value increases when the elements in a test are correlated to each other. Nevertheless, high coefficient alpha does not represent high degree of internal consistency (Tavakol & Dennick, 2011). Therefore, more related elements testing the similar concept need to be included in the test to increase the value of alpha. According to previous researchers, the acceptable and appropriate range of the Cronbach's Alpha value is 0.7 (Tavakol & Dennick, 2011; George & Mallery, 2005). However, some researchers found different opinion. As cited by Devilles (1991), the researcher found that Cronbach's Alpha value of 0.65 is minimum acceptable value whereas the other researcher, Hair et al. (2003) proved that value with 0.60 can be accepted in a study.

Table 3.2: Rule of Thumb for Interpreting the Reliability Test

Coefficient of Cronbach's Alpha	Level of Reliability Test
$\alpha \geq 0.9$	Excellent
$0.7 \leq \alpha < 0.9$	Good
$0.6 \leq \alpha < 0.7$	Acceptable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Source: Hair et al. (2013). Essential of business research methods. New York: Llyn Publishing.

The table above illustrates the rule of thumb for reliability test that done by Hair et al. (2013). The results of this research is interpreted based on the table above. The size of the coefficient was ranged between 0.6 and 0.9. The value which is 0.9 and above is considered as excellent; value fall between 0.7 and 0.9 is marked as good. The acceptable level is ranged from 0.6 to 0.7. The value from 0.5 to 0.6 is considered as poor whereas the value below 0.5 is unacceptable.

3.7.3 Pearson's Correlation

Purpose of Pearson's correlation analysis is to determine the strength of interrelation between two variables (Saunders et al., 2009). Goodwin and Leech (2006) indicated that Person's Correlation is the best methods to investigate the relationship between dependent variable and independent variables.

In view of this, Pearson's correlation coefficient can range from -1 (perfect negative correlation) to +1 (perfect positive correlation). The value of correlation coefficient between two variables must be in the range of -1 to +1. The closer the correlation coefficient to ± 1 marked that the relationship between the two variables are stronger. However, if the value of correlation

coefficient falls on 0, this means that there is no linear relationship occurs between two variables. The variables are directly related to each other if the coefficient is a positive number and vice versa (Mukaka, 2012). The rule of thumb indicated that if the value of correlation coefficient is more than 0.9, multicollinearity problem may occur (Hair et al, 2006).

Table 3.3: Rule of Thumb for the Size of Correlation Coefficient

Value of Correlation Coefficient	Explanation
± 0.90 to ± 1.00	Perfect positive (negative) correlation
± 0.70 to ± 0.89	Strong positive (negative) correlation
± 0.50 to ± 0.69	Medium positive (negative) correlation
± 0.30 to ± 0.49	Weak positive (negative) correlation
0.01 to ± 0.29	Little if any correlation
0.00	No relation

Adapted from: Mukaka, M.M. (2012). Statistics corner: A guide to appropriate use of correlation coefficient in medical research. *Malawi Medical Journal*, 24(3), 69-71.

3.7.4 Independent Sample T-test

One of the most general method to be used in hypothesis testing is t-test. T-test is adopted to analyze the differences between two variables in term of mean value. In this research, independent sample t-test is used to compare the mean values between two independent variables.

According to Nachar (2008), there are few assumptions of the test. This means that certain circumstances must be matched by the sample in order to prove the hypotheses. The assumptions are as followed:

1. The data obtained are independent to each other. This means that the data of one variable is consistently unrelated to data of other variables.
2. The dependent variable and independent variables are normally distributed.
3. The variances obtained from the dependent variable in two populations must be the same.

Under T-test analysis, the null hypothesis is set as independent variable(s) which has no relationship with dependent variable. In contrast, the alternative hypothesis is set as independent variable(s) which has a relationship with dependent variable. Besides, the researchers are required to set the level of significance either at 1%, 5%, or 10%. Null hypothesis are always been rejected if the significance level is more than the p-value. In other words, researchers reject null hypothesis and accept alternative hypothesis. This reveals that independent variable(s) has relationship with dependent variable, *ceteris paribus*.

3.7.5 One Way ANOVA

The one way ANOVA is known as one way analysis of variance. It is a general method to study the significant differences between the means of two or more independent groups. The analysis of difference between two or more independent groups and the achievement of total sum of squares by subdividing, are enabled by one way ANOVA. One way ANOVA is simple, but with the objective of testing for the significant differences among class means, which done by the analysis of variances. It is useful for researchers as it is not analysed individually, instead, it enables all class means to be compared with others simultaneously. This is because of the assumption of samples are normally distributed. One way ANOVA is significant because researchers may have more than two groups in the study design, and to determine which of these groups are differed from each other is important (Shutler, 2002).

3.8 Conclusion

Research methodologies such as research design, data collection methods, sampling design, research instrument, construct measurement, data processing and data analysis, were clearly presented, discussed and justified in this chapter. Interpretation of data analysis results will be covered in the next chapter.

CHAPTER 4 DATA ANALYSIS

4.0 Introduction

The purpose of this chapter is to analyse and explain the collected information, and to investigate the hypothesis stated in chapter one previously. Therefore, there are 380 sets of questionnaire were distributed to UTAR students. Unfortunately, 5 sets of the questionnaire had incomplete information and 375 sets of questionnaire were used in this research. Test will be conducted to analyse the data by determining the relationship between financial awareness and financial products, financial knowledge, financial behaviour and financial attitude.

4.1 Descriptive Analysis

All the respondents' demographic data will be analysed in this section. The results will be explained in the tables and figures. The demographic profile section consists of six questions in total. They are gender, age, faculty, monthly spending, spending ranking and source of information.

4.1.1 Respondent Demographic Profile

4.1.1.1 Gender

Table 4.1: Gender of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	173	46.1	46.1	46.1
	Female	202	53.9	53.9	100.0
	Total	375	100.0	100.0	

Source: Developed for the research

The frequency and percentage of respondents' gender of this research are shown in the table 4.1. There were 173 male respondents in the survey while the female respondents were 202 out of 375 respondents. In other words, the result represents there were

46.1% male respondents as well as 53.9% female respondents who have participated in this survey.

4.1.1.2 Age

Table 4.2 Age of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 19 years old	74	19.7	19.7	19.7
20 years old	81	21.6	21.6	41.3
21 years old	76	20.3	20.3	61.6
22 years old	85	22.7	22.7	84.3
23 years old	21	5.6	5.6	89.9
Above 23 years old	38	10.1	10.1	100.0
Total	375	100.0	100.0	

Source: Developed for the research

Table 4.2 shows the frequency and percentage of different group of respondents' age in this questionnaire. The major age group was 22 years old as there were 85 respondents out of 375 respondents. In contrast, the least age group were 23 years old as there were only 21 respondents in this survey. On the hand, the second largest age group consists of 81 respondents, which is 20 years old. The following age groups were 21 years old, 19 years old and above 23 years old. The frequencies of age group were 76, 74 and 38 respectively.

Alternatively, the results interpreted that the major age group was 22.7%, second largest age group was 21.6%, followed by 20.3%, 19.7% and 10.1%. Lastly, the least age group was only 5.6%.

4.1.1.3 Faculty

Table 4.3: Faculty of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid FBF	232	61.9	61.9	61.9
Non-FBF	143	38.1	38.1	100.0
Total	375	100.0	100.0	

Source: Developed for the research

Table 4.3 shows the frequency and percentage of faculty which respondents taken. Most of the respondents are come from Faculty of Business Finance (FBF), as there were 232 respondents out of 375 respondents in total. In other words, there were 61.9% of respondents are come from FBF. Apart from that, there were only 143 respondents are non-FBF students, and it represented there were 38.1% of respondents in this survey.

4.1.1.4 Monthly Spending

Table 4.4: Monthly Spending of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid RM1-RM200	19	5.1	5.1	5.1
RM201-RM400	82	21.9	21.9	26.9
RM401-RM600	118	31.5	31.5	58.4
RM601-RM800	75	20.0	20.0	78.4
RM801 and above	81	21.6	21.6	100.0
Total	375	100.0	100.0	

Source: Developed for the research

The frequency and percentage of respondents' monthly spending are shown in table 4.4. Most of the respondents spent from RM401 to RM600 in a month, and there were 118 respondents in the survey. On the other hand, there were only 19 respondents spent from RM1 to RM200 in a month. There was only 1 respondent in different

between the monthly spending of RM201 to RM400 and RM801 and above, and they were 82 respondents and 81 respondents respectively. Apart from that, there were 75 respondents spent from RM601 to RM800.

Alternatively, the results explained that there were 31.5% of respondents spent from RM401 to RM600 while only 5.1% of respondents spent from RM1 to RM200. The following monthly spending were 21.9%, 21.6% and 20.0%, they were RM201-RM400, RM801 and above, and RM601-RM800 respectively.

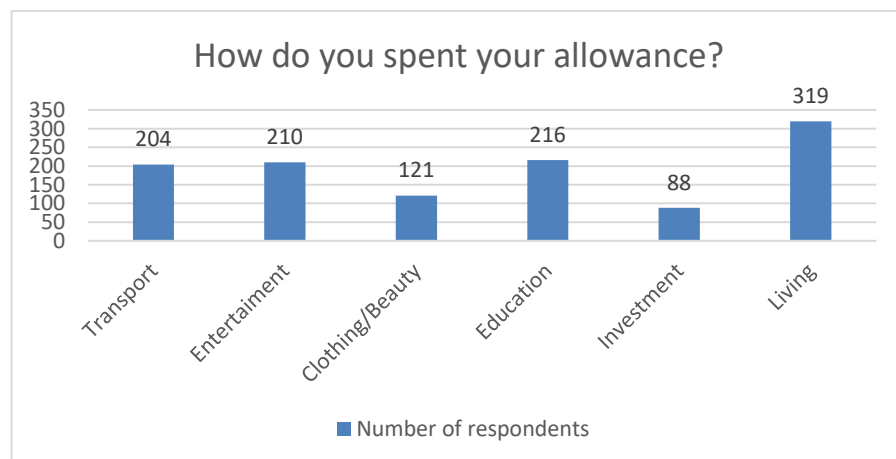
4.1.1.5 Spending Ranking

Table 4.5: Spending Ranking

	Frequency	Percent
Transport	204	54.40
Entertainment	210	56.00
Clothing/Beauty	121	32.27
Education	216	57.60
Investment	88	23.47
Living(rental)	319	85.07

Source: Developed for the research

Graph 4.1: Spending Ranking



Source: Developed for the research

The table 4.5 and graph 4.1 above show the results for question 5. Question 5 is “how do you spend your allowance?” The highest ranking is living. 319 respondents (85.07%) spent their allowance on living. The examples of living are food and beverages as well as rental. The second ranking falls on education. 216 respondents (57.60%) spent their allowance on education. There are 210 respondents (56.00%) and 204 respondents (54.40%) for entertainment and transport respectively. 121 respondents (32.27%) spent their allowance on clothing/beauty. The lowest ranking falls on the category of investment. 88 respondents out of 375 respondents (23.47%) spent their allowance on investment.

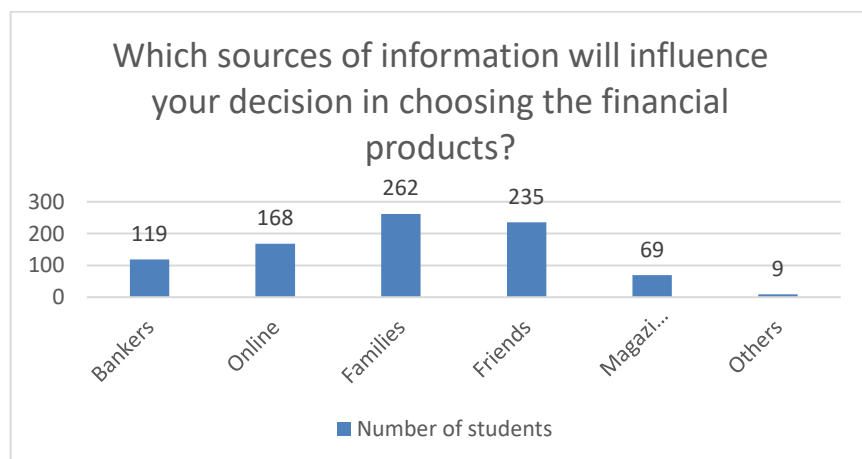
4.1.1.6 Source of Information

Table 4.6: Source of Information

	Frequency	Percent
Bankers	119	31.73
Online	168	44.80
Families	262	69.87
Friends	235	62.67
Magazine/Newspaper	69	18.40
Others	9	2.4

Source: Developed for the research

Graph 4.2: Source of Information



Source: Developed for the research

The table 4.6 and graph 4.2 above show the results for question 6. Question 6 is “which sources of information will influence your decision in choosing the financial decision”. Students are allowed to choose more than one answer. Out of 6 choices, most of the respondents feel that families are influencing their decision in choosing the financial products. There were a total of 262 respondents (69.87%) feel that families will influence their decision making. The second ranking fell on the category of friends. 235 respondents (62.67%) feel that friends will influence their decision. There were 168 respondents (44.80%) and 119 respondents (31.73%) for online and banker respectively. 69 respondents (18.40%) believe that magazine/newspaper will influence their decision in financial product. The lowest ranking was others source of information. Only 9 respondents (2.40%) felt that other sources will influence their decisions. The other sources stated by the respondents are financial advisors and prices.

4.1.2 Central Tendencies Measurement of Construct

Table 4.7: Mean of Variables

Variables	N	Mean
Section B: Financial Awareness		
1. Financial awareness prevents you from being victimized by financial scams.	375	3.9520
2. Financial awareness helps you to learn the right approach to invest for your future needs.	375	3.9787
3. Financial awareness helps you to form healthy spending habits that lead you to have financially secure life.	375	3.8453

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4. Financial awareness helps you buy the right kind of insurance to protect you from catastrophic risk.	375	3.6667
5. I am aware that a bank is an institution which offering various financial services to its customers.	375	3.7680
Section E: Financial Behaviour		
1. I plan and implement a regular savings/investment program.	375	3.3013
2. I read to increase my financial knowledge.	375	3.3173
3. I maintain adequate financial records.	375	3.2933
4. I compare prices when shopping for purchases.	375	3.9520
5. I budget and track my spending.	375	3.7307
Section F: Financial Attitude		
1. I feel that I have the ability to use my future revenue in achieving my financial goals.	375	3.4240
2. I fell that I am capable in controlling my financial situation.	375	3.5280
3. I feel that I have the ability to handle my financial future (e.g. investments, buying insurance, etc.).	375	3.3680
4. I feel having life insurance is a significant way to protect my loved ones.	375	3.7627
5. I enjoy talking to my friends regarding money management issues (e.g. credit cards, taxes, investing, etc.).	375	3.0747

Source: Developed for the research

Table 4.8: Financial Awareness

Variables	Mean	Standard Deviation
1. Financial awareness prevents you from being victimized by financial scams.	3.9520	0.79963
2. Financial awareness helps you to learn the right approach to invest for your future needs.	3.9787	0.72729
3. Financial awareness helps you to form healthy spending habits that lead you to have financially secured life.	3.8453	0.77568
4. Financial awareness helps you buy the right kind of insurance to protect you from catastrophic risk.	3.6667	0.82302
5. I am aware that a bank is an institution which offering various financial services to its customers.	3.7680	0.80907

Source: Developed for the research

Table 4.8 shows the central tendencies measurement of financial awareness. Based on the table, question 2 has the highest mean value of 3.9787 whereas the lowest mean value is question 4 with the mean value of 3.6667. The second highest mean is question 1 with the mean value of 3.9520, followed by question 3 and question 5, with the mean value of 3.8453 and 3.7680 respectively.

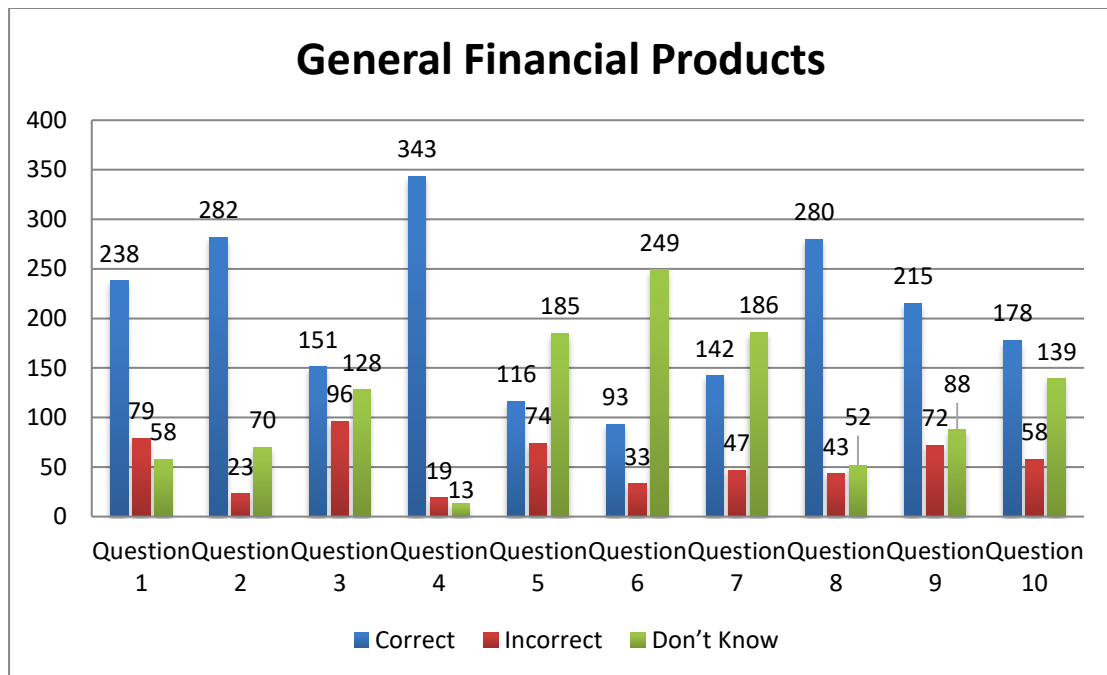
Apart from that, question 4 has the highest standard deviation with the value of 0.82302. In contrast, the lowest standard deviation is question 2 with the value of 0.72729. The second highest standard deviation is question 5 with the value of 0.80907, followed by question 1 and question 3, with the value of 0.79963 and 0.77568 respectively.

Table 4.9 General Financial Products

Variables	Correct	Incorrect	Don't Know
1. Interest of saving account will be given yearly.	238 (63.5%)	79 (21.1%)	58 (15.5%)
2. Fixed deposits rate is higher than savings account rate.	282 (75.2%)	23 (6.1%)	70 (18.7%)
3. Fixed deposits with commercial banks are risk free.	151 (40.3%)	96 (25.6%)	128 (34.1%)
4. Extra fees will be charged when you withdraw money from ATM which is different from your existing bank. (For e.g.: Using Public Bank card to withdraw money at Maybank's ATM).	343 (91.5%)	19 (5.1%)	13 (3.5%)
5. If cardholders waved their card more than once, would they be charged twice?	116 (30.9%)	74 (19.7%)	185 (49.3%)
6. Visa payWave cards work when the card is within 4cm from the card reader.	93 (24.8%)	33 (8.8%)	249 (66.4%)
7. Finance charges for credit cards are calculated as a percentage of the balance outstanding every month.	142 (37.9%)	47 (12.5%)	186 (49.6%)
8. In general, investments that offer quick returns carry high risks.	280 (74.7%)	43 (11.5%)	52 (13.9%)
9. Buying insurance is cheaper at younger ages.	215 (57.3%)	72 (19.2%)	88 (23.5%)
10. The longer I pay the insurance premiums, the higher the cash surrender value.	178 (47.5%)	58 (15.5%)	139 (37.1%)

Source: Developed for the research

Graph 4.3: Frequency for Each Questions regarding General Financial Products



Source: Developed for the research

Table 4.9 and graph 4.3 show the frequency for each questions regarding general financial products. The products included in this section include savings account, fixed deposits account, credit card, investment and insurance.

Question 1 is “Interest of saving account will be given yearly”. 238 respondents (63.5%) get the correct answer whereas 79 respondents (21.1%) get the wrong answer. 58 respondents (15.5%) do not know the answer for question 1.

Question 2 is “Fixed deposits rate is higher than savings account rate”. The number of respondents who have the correct answer are 282 respondents (75.2%). The number of respondents who have incorrect answer are 23 respondents (6.1%). 70 respondents (18.7%) do not answer question 4 as they do not know the answer.

Question 3 has the highest number of respondents with wrong answer. Question 3 is “Fixed deposits with commercial banks are risk free”. There

are 151 respondents (40.3%) answer the question correctly. Out of 175 respondents, 96 respondents (25.6%) answer the question incorrectly. They are too overconfident as they are not sure of the answer but they take the risk to answer the question. 128 respondents (34.1%) do not know the answer.

Question 4 has the highest number of respondents with correct answer. The question is “Extra fees will be charged when you withdraw money from ATM which is different from your existing bank”. 343 respondents (91.5%) able to get the correct answer. Only 19 respondents (5.1%) unable to get the correct answer. There are 13 respondents (3.5%) do not know the answer for question 4. These 13 respondents are belongs to risk adverse people.

Question 5 is “If cardholders waved their card more than once, would they be charged twice”. 116 respondents (30.9%) get the correct answer whereas 74 respondents (19.7%) get the wrong answer. There are approximately 50% of respondents do not know the answer. Therefore, 185 respondents out of 375 respondents (49.3%) do not answer this question.

Question 6 has the lowest number of respondents with correct answer. At the same time, question 6 has the highest number of respondents who do not know the answer. The question is “Visa payWave cards work when the card is within 4cm of the card reader. 93 respondents (24.8%) able to answer the question correctly. 33 respondents (8.8%) unable to answer the question correctly. There are a huge number of respondents are not sure with the answer. So, they do not write out the answer.

Question 7 is “Finance charges for credit cards are calculated as a percentage of the balance outstanding every month”. The number of respondents with correct answer are 142 respondents (37.9%). In contrast, 47 respondents (12.5%) has the wrong answer. There are 186 respondents (49.6%) do not know the answer. They are those who are not willing take risk in their decision.

Question 8 is “In general, investments that offer quick returns carry high risks”. There are 280 respondents (74.7%) answered question 8 correctly. In

contrast, 43 respondents (19.2%) answered question 8 wrongly. The remaining 52 respondents (13.9%) do not know the answer for question 8. They are not overconfident people as they avoid to take the risk to answer the question.

Question 9 is “Buying insurance is cheaper at younger ages”. There are 215 respondents (57.3%) and 72 respondents (19.2%) respondents for correct and incorrect answer respectively. The remaining 88 respondents (23.5%) did not answer the question as they are not sure with their answer.

Question 10 is “The longer you pay the insurance premiums, the higher the cash surrender value”. 178 respondents (47.5%) able to answer the question correctly while 58 respondents (15.5%) unable to answer the question correctly. 139 respondents (37.1%) do not know the answer.

Table 4.10 Financial Knowledge

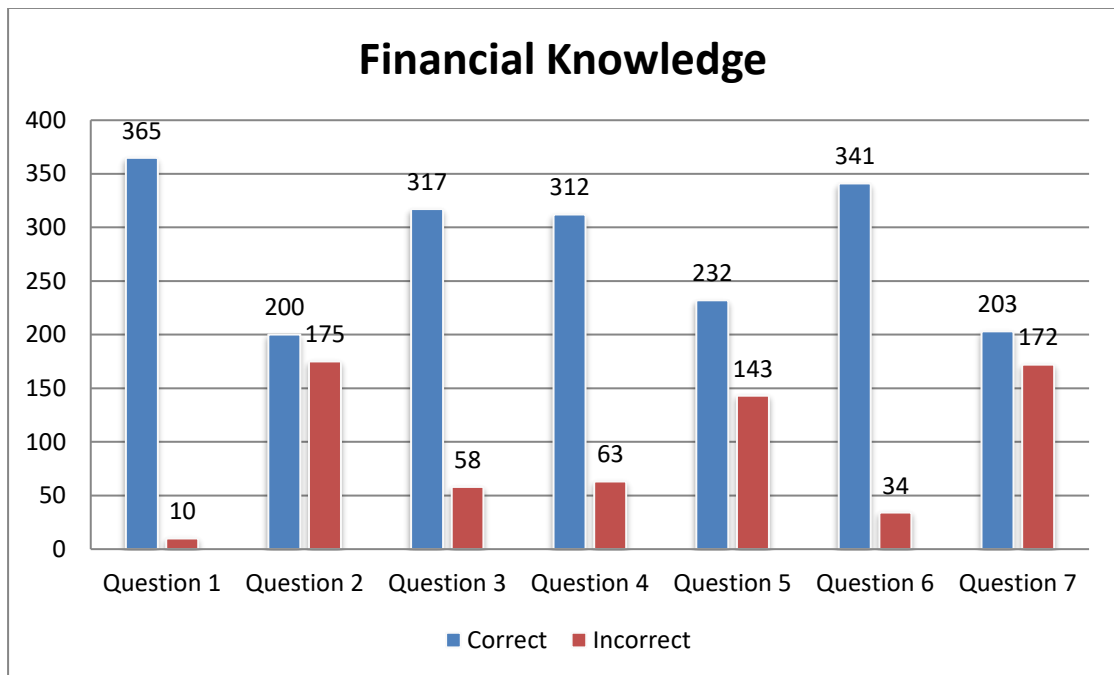
Variables	Correct	Incorrect
1. Imagine that five brothers are given a gift of RM1000. If the brothers have to share the money equally, how much does each one get?	365 (97.3%)	10 (2.7%)
2. Now imagine that the brothers have to wait for one year to get their share of the RMX. In one year’s time will they be able to buy.	200 (53.3%)	175 (46.7%)
3. You lend RM X to a friend one evening and he gives you RMX back the next day. How much interest has he paid on this loan?	317 (84.5%)	58 (15.5%)
4. Suppose you put RM100 into a savings account with a guaranteed interest rate of 2% per year. You don’t make any further payments into this account and	312 (83.2%)	63 (16.8%)

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you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made?		
5. Suppose you put RM100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of five years?	232 (61.9%)	143 (38.1%)
6. High inflation means that the cost of living is increasing rapidly?	341 (90.9%)	34 (9.1%)
7. It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares.	203 (54.1%)	172 (45.9%)

Source: Developed for the research

Graph 4.4: Frequency for Each Questions regarding Financial Knowledge



Source: Developed for the research

Table 4.10 and graph 4.4 show the frequency for each questions regarding financial knowledge. The types of question included in this section are division, time-value of money, interest paid on a loan, interest plus principle, compound interest, risk and return, inflation as well as diversification.

Question 1 has the highest number of respondents with correct answer. At the same time, question 1 has the lowest number of respondents with wrong answer. The question is “Imagine that five brothers are given a gift of RM1000. If the brothers have to share the money equally, how much does each one get?” Almost all of the respondents get the correct answer for question 1. Out of 375 respondents, 365 respondents (97.3%) get the correct answer. Only 10 respondents (2.7%) get the wrong answer. It can be concluded that UTAR students have knowledge on division question.

The lowest number of respondents with correct answer is question 2. At the same time, question 2 has the highest number of respondents with wrong answer. The question is “Now imagine that the brothers have to wait for one

year to get their shares of the RM X. In one year's time will they be able to buy?" The answer for this question is less than they could buy today. There are 200 respondents (53.3%) get the correct answer. 175 out of 375 respondents (46.7%) get the wrong answer. These figures means that not much of the respondents understand the time-value of money.

Question 3 is "You lend RM X to a friend one evening and he gives you RM X back the next day. How much interest has he paid on this loan?" The number of respondents with the correct answer are 317 respondents (84.5%) whereas the number of respondents with the wrong answer are 58 respondents (15.5%). In conclusion, UTAR students have knowledge on the interest paid on a loan.

Question 4 is "Suppose you put RM100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made?" There are 312 respondents (83.2%) and 63 respondents (16.8%) for correct and incorrect answer respectively. These figures indicate that UTAR students know how to calculate the interest plus principle question.

Question 5 is "Suppose you put RM100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of five years?" The answer is more than RM110. The number of respondents who are able to get the correct answer are 232 respondents (61.9%). In contrast, the number of students who are unable to get the correct answer are 143 respondents (38.1%). These means that the respondents understand compound interest.

Question 6 is "High inflation means that the cost of living is increasing rapidly". There are 341 respondents (90.9%) able to answer the question correctly. In contrast, there are 34 respondents (9.1%) unable to answer the

question correctly. These indicate that the respondents understand the definition on inflation.

Question 7 is “It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares”. 203 respondents (54.1%) answered question 7 correctly while 172 respondents (45.9%) answer question 7 wrongly. It can be concluded that UTAR students know the definition of diversification.

Table 4.11 Financial Behaviour

Variables	Mean	Standard Deviation
1. I plan and implement a regular savings/ investment program.	3.3013	0.90298
2. I read to increase my financial knowledge.	3.3173	0.87636
3. I maintain adequate financial records.	3.2933	0.85864
4. I compare prices when shopping for purchases.	3.9520	0.83879
5. I budget and track my spending.	3.7307	0.87722

Source: Developed for the research

The central tendencies measurement of financial behaviour is shown in table 4.11. According to the table, question 4 has the highest mean value which is 3.9520 while the question 3 has the lowest mean value of 3.2933. Besides, question 5 has the second highest mean value of 3.7307, followed by question 2 and question 1, with the mean value of 3.3173 and 3.3013 respectively.

On the other hand, question 1 has the highest standard deviation of 0.90298 among the five questions. In contrast, question 4 has the lowest standard deviation with the value 0.83879. The second lowest standard deviation is question 3 with the value of 0.85864, followed by question 2 and question 5, with the value of 0.87636 and 0.87722 respectively.

Table 4.12 Financial Attitude

Variables	Mean	Standard Deviation
1. I feel I have the ability of using my future revenue to achieve my financial goals.	3.4240	0.84585
2. I feel I am capable to control my financial situation.	3.5280	0.80350
3. I feel I am able to handle my financial future (e.g. investments, buying insurance, etc.).	3.3680	0.82930
4. I feel having life insurance is a significant way to protect my loved ones.	3.7627	0.88341
5. I enjoy talking to my friends regarding money management issues (e.g. credit cards, taxes, investing, etc.).	3.0747	1.02366

Source: Developed for the research

Table 4.12 shows the central tendencies measurement of financial awareness. As stated in the table, the question 4 has the highest mean value of 3.7627 whereas the lowest mean value is question 5, which is with the value of 3.0747. Apart from that, the second lowest mean value is question 3 with the value of 3.3680, followed by question 1 and question 2, with the mean value of 3.4240 and 3.5280.

Apart from that, question 5 has the highest standard deviation with the value of 1.02366. However, question 2 has the lowest highest standard deviation with only 0.80350. The second highest standard deviation is question 4 with the value of 0.88341, followed by the question 1 and question 3, with the value of 0.84585 and 0.82930 respectively.

4.2 Scale Measurement

4.2.1 Reliability Test

Table 4.13: Reliability Test (Cronbach's Alpha)

Variables	Cronbach's Alpha Actual Test
<p><u>Section B: Financial Awareness</u></p> <ol style="list-style-type: none"> 1. Financial awareness prevents you from being victimized by financial scams. 2. Financial awareness helps you to learn the right approach to invest for your future needs. 3. Financial awareness helps you to form healthy spending habits that lead you to have financially secured life. 4. Financial awareness helps you buy the right kind of insurance to protect you from catastrophic risk. 5. I am aware that a bank is an institution which offering various financial services to its customers. 	0.758
<p><u>Section E: Financial Behaviour</u></p> <ol style="list-style-type: none"> 1. I plan and implement a regular savings/investment program. 2. I read to increase my financial knowledge. 3. I maintain adequate financial records. 4. I compare prices when shopping for purchases. 5. I budget and track my spending. 	0.729
<p><u>Section F: Financial Attitude</u></p> <ol style="list-style-type: none"> 1. I feel that I have the ability to use my future revenue in achieving my financial goals. 2. I feel that I am capable in controlling my financial situation. 3. I feel that I have the ability to handle my financial future (e.g. investments, buying insurance, etc.). 4. I feel having life insurance is a significant way to protect my loved ones. 5. I enjoy talking to my friends regarding money management issues (e.g. credit cards, taxes, investing, etc.). 	0.626

Source: Developed for the research

As stated by Tavakol and Dennick (2011), Cronbach's alpha is a test to measure the accuracy of the elements. The value range from zero to one. As

stated previously in chapter 3, there is a range of value to determine the level of reliability test (Hair et al, 2003). The value less than 0.5 is considered as an unacceptable level whereas the value ranges from 0.5 to 0.6 is a poor result. The acceptable level falls between 0.6 and 0.7. Value starts from 0.7 to 0.9 is good while the value of 0.9 and above is known as excellent.

The Cronbach's Alpha Actual Test of this study is shown in the table above. The results obtained are 0.758 (financial awareness); 0.729 (financial behaviour) and 0.626 (financial attitude). The actual test result for financial awareness (0.758) and financial behaviour (0.729) are considered as good result. The result for financial attitude (0.626) falls on the acceptable level.

4.3 Inferential Analyses

4.3.1 Pearson's Correlation Analysis

Table 4.14: Matrix of Pearson's Correlation among Independent Variables
(Financial Behaviour and Financial Attitude)

Dependent Variable	Independent Variable	N	Pearson's Correlation	
			t	Sig (2-tailed)
Financial Awareness	Financial Behaviour	375	0.208	0.000
	Financial Attitude	375	0.308	0.000

Source: Developed for the research

From table 4.14, the value of Pearson's correlation for financial behaviour and financial attitude are 0.208 and 0.308 respectively. According to the previous researcher, Mukaka (2012) proved that value of correlation coefficient which fall in the range of +0.90 to +1.00 indicated that the relationship between independent variable and dependent variable is perfectly positive correlated to each other. In contrast, the correlation value in between -0.90 to -1.00 are belonged to perfect negative correlation.

4.3.1.1 Financial Behaviour

The correlation coefficient of financial behaviour is 0.208, which indicated positive relationship with financial awareness. It means that the correlation between financial behaviour and financial awareness is little.

H_0 : There is no significant relationship between financial behaviour and financial awareness among UTAR students.

H_1 : There is a significant relationship between financial behaviour and financial awareness among UTAR students.

Level of significance, α : 0.05

Decision rule: Reject H_0 if p-value less than level of significance. Otherwise, do not reject.

P-value [Sig (2-tailed)]: 0.000

Decision making: Reject H_0 since the p-value (0.000) is less than significance level (0.05).

Conclusion: There is sufficient evidence to conclude that there is a significant relationship between the financial behaviour and financial awareness among UTAR students.

Since the p-value (0.000) is less than significance level (0.05), it can be concluded that the financial behaviour and financial awareness among UTAR students have a significant relationship. The result obtained from the research is consistent with the hypothesis proposed in Chapter 2, and also proved by the previous researchers, Xiao, Tang and Shim (2009); Lusardi and Mitchell (2011).

4.3.1.2 Financial Attitude

Next, the correlation between financial attitude and financial awareness is 0.308. This shows a weak positive correlation among financial attitude and financial awareness.

H_0 : There is no significant relationship between financial attitude and financial awareness among UTAR students.

H_1 : There is a significant relationship between financial attitude and financial awareness among UTAR students.

Level of significance, α : 0.05

Decision rule: Reject H_0 if p-value less than level of significance. Otherwise, do not reject.

P-value [Sig (2-tailed)]: 0.000

Decision making: Reject H_0 since the p-value (0.000) is less than significance level (0.05).

Conclusion: There is sufficient evidence to conclude that there is a significant relationship between the financial attitude and financial awareness among UTAR students.

Since the p-value (0.000) is greater than significant level (0.05), it can be concluded that the financial attitude and financial awareness among UTAR students have a significant relationship. The result also in line with the hypothesis proposed in Chapter 2, and also proved by the previous researchers, Agarwalla, Barua, Jacob and Varma (2012).

4.3.2 Independent Sample T-test

Table 4.15: Independent Sample T-test among Gender

Independent Variables	Gender	N	Mean	Standard Deviation	t	Sig. (2-tailed)
Financial Behaviour	Male	173	3.5087	0.62968	-0.304	0.761
	Female	202	3.5277	0.58175		
Financial Attitude	Male	173	3.4890	0.53456	1.857	0.064
	Female	202	3.3822	0.57275		

Source: Developed for the research

4.3.2.1 Financial Behaviour

H_0 : There is no significant difference between the respondent's gender and financial behaviour.

H_1 : There is a significant difference between the respondent's gender and financial behaviour.

Level of significance, α : 0.05

Decision rule: Reject H_0 if p-value less than level of significance. Otherwise, do not reject.

P-value [Sig (2-tailed)]: 0.761

Decision making: Do not reject H_0 since the p-value (0.761) is greater than significant level (0.05).

Conclusion: There is insufficient evidence to conclude that there is significant difference between the respondent's gender and financial behaviour.

Since the p-value (0.761) is greater than significant level (0.05), it can be concluded that the gender among UTAR students have no significant difference with financial behaviour. This result also inconsistent with the hypothesis proposed in Chapter 2.

4.3.2.2 Financial Attitude

H_0 : There is no significant difference between the respondent's gender and financial attitude.

H_1 : There is a significant difference between the respondent's gender and financial attitude.

Level of significance, α : 0.05

Decision rule: Reject H_0 if p-value less than level of significance. Otherwise, do not reject.

P-value [Sig (2-tailed)]: 0.064

Decision making: Do not reject H_0 since the p-value (0.064) is greater than significant level (0.05).

Conclusion: There is insufficient evidence to conclude that there is significant difference between the respondent's gender and financial attitude.

Since the p-value (0.064) is greater than significant level (0.05), it can be concluded that the gender among UTAR students have no significant difference with financial attitude. This result also inconsistent with the hypothesis proposed in Chapter 2.

4.3.3 One Way ANOVA

4.3.3.1 Financial Behaviour

Table 4.16: One Way ANOVA

	ANOVA (Sig.)		Test of Homogeneity of Variances (Sig.)
Financial Behaviour	0.073	> 0.05, no difference	0.084
Financial Attitude	0.176	> 0.05, no difference	0.166

Source: Developed for the research

H_0 : There is no significant difference on between the respondent's age and financial behaviour.

H_1 : There is significant difference between the respondent's age and financial behaviour.

Level of significance, α : 0.05

Decision rule: Reject H_0 if p-value less than level of significance. Otherwise, do not reject.

Degree of freedom: $df_1 = 1$, $df_2 = 369$

P-value (Sig): 0.073

Decision making: Do not reject H_0 since the p-value (0.073) is greater than significant level (0.05).

Conclusion: There is insufficient evidence to conclude that there is significant difference between the respondent's age and financial behaviour.

Since the p-value of financial behaviour (0.073) is greater than the significant level (0.05), it can be defined that there is no significant

difference between the respondent's age and financial behaviour. It is inconsistent with the hypothesis proposed in Chapter 2.

4.3.3.2 Financial Attitude

H_0 : There is no significant difference between the respondent's age and financial attitude.

H_1 : There is significant difference between the respondent's age and financial attitude.

Level of significance, α : 0.05

Decision rule: Reject H_0 if p-value less than level of significance. Otherwise, do not reject.

Degree of freedom: $df_1 = 1$, $df_2 = 369$

P-value (Sig): 0.176

Decision making: Do not reject H_0 since the p-value (0.176) is greater than significant level (0.05).

Conclusion: There is insufficient evidence to conclude that there is significant difference between the respondent's age and financial attitude.

From table 4.16, the p-value (0.176) is greater than the significant level (0.05). Hence, there is not enough evidence to conclude that there is significant difference between the respondent's age and financial attitude. It is inconsistent with the hypothesis proposed in Chapter 2.

4.4 Conclusion

In Chapter 4, the paper has used few tests to find out the relationship and difference between independent variables and dependent variable based on gender and age among UTAR students. Descriptive analysis, reliability test, Pearson's correlation analysis, independent sample t-test and one-way ANOVA are the main indicators to run the data from collected questionnaires. The findings of the result will be explained and discussed on Chapter 5.

CHAPTER 5 DISCUSSION, IMPLICATIONS AND CONCLUSION

5.0 Introduction

The result and conclusion of this research will be outlined in this chapter. This chapter is going to discuss the results of statistical analysis, which consists of descriptive analysis, central tendencies measurement of constructs, reliability analysis, inferential analysis, Pearson correlation analysis and one-way ANOVA. Apart from that, this chapter will provide the major findings, implication and limitation of the research, and recommendations for future research as well. Last but not least, conclusion for whole research is the last part of this research project.

5.1 Summary of Statistical Analysis

5.1.1 Descriptive Analysis

5.1.1.1 Respondents' Demographic Profile

There were six demographic variables tested in descriptive analysis of 375 respondents' profile. The first demographic variable tested is gender. There are 46.1% or 173 male respondents and 53.9% or 202 respondents resulted in the descriptive analysis. Next, age is the second demographic variable tested. The majority respondents are 22 years old, which represents 22.7% or 85 respondents. In contrast, the minority respondents are 23 years old and it only consists of 21 or 5.6% of respondents. Besides, there are 81 or 21.6% of respondents who are 20 years old and 76 or 20.3% of respondents who are 21 years old. Apart from that, there are 74 or 19.7% of respondents who are 19 years old and 38 or 10.1% of respondents who are above 23 years old.

The third demographic variable tested is faculty. Out of the 375 respondents, there are 232 or 61.9% of respondents come from Faculty of Business and Finance (FBF) and 143 or 38.1% of

respondents come from other faculties. The fourth demographic variable tested is monthly spending. Most of respondents spend from RM401 to RM600, which consists of 118 or 31.5% of respondents. Furthermore, there are 82 or 21.9% of respondents spend from RM201 to RM400 in a month. Out of the 375 respondents, there are 81 or 21.6% of respondents spend above RM800 per month. Last but not least, there are 75 or 20.0% of respondents spend from RM601 to RM800 and 19 or 5.1% of respondents only spend from RM1 to RM200 in a month.

The fifth demographic variable tested is the spending ranking. Majority of the respondents spend most of their allowance on living. There are 319 or 85.07% of respondents ranked in this category. In contrast, minority of the respondents spend their allowance on investment as there are only 88 or 23.47% of respondents ranked this category. The second highest ranking falls on education as there are 216 or 57.60% of respondents ranked this category, followed by entertainment, transportation and clothing/beauty, with the respondents of 210 (56.00%), 204 (54.40%) and 121 (32.27%) respectively.

The sixth demographic variable tested is the source of information. Families are the source of information who are highly influencing the respondents in the decision of choosing financial products. There are 262 or 69.87% of respondents choose this answer. However, there are only 9 respondents out of 375 respondents (2.40%) feel that other sources like financial advisors and prices will influence them in choosing financial products. There are 235 or 62.67% of respondents feel that friends are the second important group who will influence their decision. Apart from that, there are 168 or 44.80% of respondents believed that online information will influence their decisions, followed by banker with 119 or 31.73% of respondents. Lastly, 69 or 31.73% of respondents feel that

magazine/newspaper will influence their decision in choosing financial products.

5.1.1.2 Central Tendencies Measurements of Construct

From Chapter 4, the central tendencies measurements of construct released the results of means of dependent variable and independent variables. For the section B, E and F, the reliability test is high when the mean value more than 3.0. With referring to the table 4.7, all of the questions from section B, E and F have high reliability result. The researchers can use those questions in the future research. This paper is using open-ended question to analyse the section C and D. Hence, the mean value of section C and D will not influence the result of reliability test.

The highest mean value from section B is 3.9787 which is “financial awareness helps you to learn the right approach to invest for your future needs”. Most of the students agree that the higher level of financial awareness will lead them to have the right investment decisions. The lowest mean value is 3.6667 which is “financial awareness helps you buy the right kind of insurance to protect you from catastrophic risk”. Students may not understand the meaning of “catastrophic risk”.

As the result of section C, general financial products, there have 343 respondents with correct answer is question 4. The question is “Extra fees will be charged when you withdraw money from ATM which is different from your existing bank”. However, there have only 93 respondents know that visa payWave cards which is in the new function of credit cards and debit cards in Malaysia and it can be worked within 4cm from the card reader.

From section D, most of the respondents have high level of understanding towards financial knowledge from the results of questions. The lowest number of respondents with correct answer is

question 2 which is “Now imagine that the brothers have to wait for one year to get their shares of the RM X. In one year’s time will they be able to buy?” Some of the students will add extra interest in the answer.

In additional, the highest mean in section E is 3.9520 which is “I compare prices when shopping for purchases”. As a consumer, it is important to compare the prices before purchasing. The lowest mean is 3.2933 which is “I maintain adequate financial records”. Some students may not have the determination in maintaining financial records.

From section F, the highest mean value is 3.7627 which is I feel having life insurance is a significant way to protect my loved ones. Students aware that life insurance plays an important role to protect someone. The lowest mean value is 3.0747 which is “I enjoy talking to my friends regarding money management issues (e.g. credit cards, taxes, investing, etc.)”. Students might have less interest towards money management issues.

5.1.2 Inferential Analyses

5.1.2.1 Level of Understanding towards General Financial Products

Table 5.1: The Number of Correct Answer by Respondents on
General Financial Products

Level	Correct Number	Respondents	Percentage
Low	0	2	0.53%
	1	10	2.67%
	2	12	3.20%
	3	29	7.73%
	4	58	15.47%
	Total	111	29.60%
Moderate	5	85	22.67%
	6	66	17.60%
	7	69	18.40%
	Total	220	58.67%
High	8	26	6.93%
	9	13	3.47%
	10	5	1.33%
	Total	44	11.73%

Source: Developed for the research

Table above shows the level of understanding towards general financial products. Those who get four correct answers and below are bed to have low level of understanding. Those who get five to seven correct answers fall on moderate level. Respondents who successfully get eight correct answers and above are considered to have high level of understanding. Out of 375 respondents, 220 respondents (58.67%) able to get five to seven correct answers. Thus, most of the respondents are having moderate

level of understanding towards general financial products. There are 111 respondents (29.60%) fall under the low level of understanding. Only 44 respondents (11.73%) have high level of understanding towards general financial products. It can be concluded that most UTAR students are having moderate level of understanding towards general financial products.

5.1.2.2 Level of Understanding towards Financial Knowledge

Table 5.2: The Number of Correct Answer by Respondents on Financial Knowledge

Level	Correct Number	Respondents	Percentage
Low	1	1	0.27%
	2	6	1.60%
	Total	7	1.87%
Moderate	3	23	6.13%
	4	59	15.73%
	Total	82	21.86%
High	5	122	32.53%
	6	106	28.27%
	7	58	15.47%
	Total	286	76.27%

Source: Developed for the research

The table above shows the level of understanding towards financial knowledge. Those who get two correct answers and below are believed to own low level of understanding towards financial knowledge. Those who get three or four correct answers fall on moderate level. Respondents who successfully get five correct answers and above are believed to have high level of understanding towards financial

knowledge. Out of 375 respondents, 286 respondents (76.27%) are believed to own high level of understanding towards financial knowledge. There are 82 respondents (21.86%) fall under moderate level because they get to answer three or four questions correctly. Only 7 respondents (1.87%) are having low level of understanding towards financial knowledge. In conclusion, UTAR students have high level of understanding towards financial knowledge.

5.1.2.3 Pearson's Correlation Analysis

The summary of the correlation coefficient between independent variables (financial behaviour and financial attitude) and dependent variable (financial awareness) are 0.208 and 0.308 respectively. It shows that financial behaviour and financial attitude has a positive relationship with financial awareness.

Coefficient of financial behaviour (0.208) indicated there is only a little positive relationship with financial awareness. Whereas, the financial attitude (0.308) have a weak positive relationship with financial awareness.

To achieve the purpose of identifying relationship between independent variables and dependent variable, hypothesis testing is conducted to prove the hypotheses which are proposed in Chapter 2. From the result, both financial behaviour and financial attitude reject H_0 . It means that both of these two variables have significant relationships with financial awareness. As the hypothesis proposed in Chapter 2, these two variables will have significant relationships with financial awareness. Whereas the result obtained from Chapter 4, it proved that financial behaviour and financial attitude have important relationship with financial awareness.

5.1.2.4 Independent Sample T-test

Independent sample t-test is used to test whether there is a difference between the independent variables (financial behaviour and financial attitude) and respondent's gender. The result obtained from Chapter 4 shows that the independent variables (financial behaviour and financial attitude) among UTAR students have no significant difference based on gender. However, the result is inconsistent with the hypotheses developed in Chapter 2, which is the previous researcher found that females have low financial behaviour and financial attitude compared to males.

5.1.2.5 One-way ANOVA

In one-way ANOVA, this paper is using p-value to test whether to reject the hypothesis testing of the independent variables or not. H_0 represents that there is no significant difference between the respondent's age and independent variables. In contrast, H_1 represents that there is a significant difference between the respondent's age and independent variables. The independent variables that had been tested are financial behaviour and financial attitude. The p-value of financial behaviour (0.073) is greater than significant level (0.05) and the p-value of financial attitude (0.176) is greater than significant level (0.05). As the result from previous chapter, both of the hypothesis testing result of independent variables are concluded that there is no significant difference between the respondent's age and independent variables.

5.2 Discussion of Major Findings

Table 5.3: Summary of Hypothesis Testing

Hypothesis	Reject H_0	Do not reject H_0
There is no significant relationship between financial behaviour and financial awareness among UTAR students.	$\alpha: 0.05$ P-value = 0.000 < 0.05 ➤ There is a significant relationship.	
There is no significant relationship between financial attitude and financial awareness among UTAR students.	$\alpha: 0.05$ P-value = 0.000 < 0.05 ➤ There is a significant relationship.	
There is no significant difference on gender between independent variables (financial behaviour and financial attitude) and dependent variable (financial awareness) among UTAR students.		Behaviour $\alpha: 0.05$ P-value = 0.761 > 0.05 Attitude $\alpha: 0.05$ P-value = 0.064 > 0.05 ➤ There is no significant difference on gender.
There is no significant difference on age between independent variables (financial behaviour and		Behaviour $\alpha: 0.05$ P-value = 0.073 > 0.05

financial attitude) and dependent variable (financial awareness) among UTAR students.		Attitude $\alpha: 0.05$ $P\text{-value} = 0.176 > 0.05$ ➤ There is no significant difference on age.
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Source: Developed for the research

5.2.1 General Financial Products

The result shows that UTAR students have moderate level of understanding towards general financial products. There are only 48% of respondents have basic knowledge about the financial products and services (Muir, Reeve, Connolly, Marjolin, Salignac & Ho, 2016). It is slightly different with the finding of this paper. There are 58.67% of UTAR students who able to get five to seven correct answers mean that half of the respondents are grouped into moderate level of understanding towards general financial products. Sample size, geographic location, targeted people, difference in financial products will lead to the several results in testing the level of understanding towards general financial products.

From the result of Atkinson and Messy (2013), they found that most of the citizens in Malaysia are aware of five or more financial products. However, it does not mean that the citizens in Malaysia have the high level of understanding towards financial products. It is because most of the respondents have no confident and unable to analyse the functions of financial products. On the other hand, most of the consumers prefer to invest in single product than multiple products (Albert, 2011). In this paper, students are more confident answering the questions of fixed deposit account.

Students are unable to get the high level of understanding towards financial products because they do not understand and do not compare the financial products by doing financial research. Individuals failed to have appropriate

financial planning and failed to buy the products that meet their needs (Brouwer & Sforza, 2009).

5.2.2. Financial Knowledge

There are 51% of respondents who have the percentage scoring of six or more in Malaysia (Atkinson & Messy, 2012). The result is closed to the finding in this research. In this research, there are 43.73% respondents who have the percentage scoring of six or more. The results from this research is slightly different to the results of Atkinson and Messy may due to the different group of respondents. The respondents included in this research are only undergraduate students. Different from the previous study of Atkinson and Messy where the respondents included are all the citizen in that countries.

According to Thapa and Nepal (2015), college students are having basic knowledge in finance. As cited by Jorgensen (2007), personal financial knowledge need to be possessed by students so that they are financially secured. Basic skills and knowledge enable them to make good personal financial decision. In contrast, those who are lack of basic skills and knowledge are those who are unable to make good personal financial decision.

The level of knowledge for students are high in term of division (Atkinson & Messy, 2012; Thapa & Nepal, 2015). This is consistent with the result of this study which concluded that UTAR students are knowledgeable in division question. It can be concluded that UTAR students are having moderate level of understanding on diversification as well as time value of money.

5.2.3 Financial Behaviour

According to the result obtained from finding in Chapter 4, it shows that financial behaviour is significantly correlated with financial awareness. The coefficient of financial behaviour is 0.208 which shows that there is a little

positive correlation with financial awareness. The result is same as the theoretical framework proved in Chapter 2, that is financial behaviour is positively related to financial awareness (Lusardi & Mitchell, 2011).

In the contrary, some researchers found that financial behaviour has a negative relationship with financial awareness. Based on the research done by Robb and Sharpe (2009), they found that students who are financially knowledgeable have high balances of debts. This indicated that those students are having low financial awareness although they have high level of financial knowledge.

The result of this research is in line with the outcome of previous study from Britt et al. (2004) which stated that financial behaviour have a significant relationship with financial awareness. The researchers found that college and university students have a good financial behaviour in managing their finance because they are interested to learn how to do budgeting and also choose to buy goods when there is promotion. When students know how to manage their finance wisely, they tend to save more and in the long run, students are aware of the importance of budgeting.

5.2.4 Financial Attitude

Financial attitude has a significant relationship with financial awareness. As stated in the findings from previous chapter, financial attitude variable has a correlation of 0.308 with the financial awareness variable.

The result is in line with the research of Alberdy and Gharleghi (2015). They stated that there is significant positive relationship between financial awareness and financial attitude among youths in university, which represents that financial attitude increases one unit, the financial awareness will increase by 0.501 accordingly. As stated in their findings, the ability and willingness to control money appropriately of a youngster will be increased if he or she perceives money positively. On the contrary, Thapa et. al (2015) found that financial awareness and financial attitude are positively correlated. Youngsters in university are more knowledgeable to

deal with monetary affairs if they are having good and positive financial attitude.

5.2.5 Financial Behaviour and Financial Attitude based on Gender

According to the result obtained from Chapter 4, there is no significance difference on gender between the financial behaviour and financial attitude.

Selcuk (2015) found that financial behaviour among male and female students have a significance difference. Female students are found to be better in controlling their finances than male students. On the contrary, Dahlia, Rabitah and Zuraidah (2009) found that there is a significant difference between the level of financial attitude and gender. Based on their study carried out in UITM Kedah, financial attitude among undergraduate students is affected by gender. Their result shows that male students have better understanding on knowledge of finance and strong in financial management than female students. Female students do not have good financial attitude because they do not have the knowledge in finance and therefore weak in financial management as compared to males students.

However, the previous researchers found there is significant difference on gender between financial behaviour and financial attitude, either male students have better financial awareness than female students or female students have high financial awareness level than male students. The results in this research showed that financial behaviour and financial attitude is no difference based on gender. The result is proved by Mohamad, MacDonald, Hira and Masud (2010); Noor et al. (2013) because they found that there is no significant difference between financial behaviour and financial attitude based on gender.

5.2.6 Financial Behaviour and Financial Attitude based on Age

According to the result obtained from Chapter 4, there is no significance difference on age between the financial behaviour and financial attitude

Marsh (2006) found that students in different age group have a significance difference with financial behaviour. From their result, past researchers found that students who are under aged 24 and below have a high financial behaviour scores than students with aged 25 and above. Other than that, March (2006) also found that financial attitude will be influenced by age. The research showed that non-fresh-enrolled students will tend to have more positive financial behaviour and financial attitude than fresh-enrolled students. This is due to non-fresh-enrolled students have advanced level of finance as they have further studied in university for at least one year (Marsh, 2006). Atkinson and Messy (2012) also found that individuals who with higher level of education will tend to show positive behaviours and attitudes toward the finance.

Nevertheless, the result in this research showed that financial behaviour and financial attitude has no difference on age. The result obtained are inconsistent with the result proved by previous researchers, March (2006) and (Atkinson & Messy, 2012).

5.3 Implication of Research

The result is to highlight the importance of financial awareness. There are few factors influencing financial awareness. The factors are general financial products, financial knowledge, financial behaviour and financial attitude.

5.3.1 Managerial Implications

Based on this study, it can be concluded that UTAR students have adequate financial awareness. This can be proved from the mean value. The means value for each of the question under financial awareness are greater than 3.6. Even though UTAR students have high financial awareness, this does not mean that they really understand each of the products offered by financial institutions. This can be proved from the result of this study. Most of the UTAR students are having moderate level of understanding towards general financial products. All of the UTAR students are having Public Bank debit cards. They may know the usage of the debit cards but not the characteristics of the cards. For example, most UTAR students are using debit card to either pay for their student bill or grocery but they do not know the function of payWave which available for their debit cards. Therefore, the bankers should explain the usage and features to their customers.

In this study, the result of financial awareness is consistent with financial knowledge. UTAR students have high level of understanding towards financial knowledge. This indicates that UTAR students have high financial awareness. Financial knowledge is an important element for students so that they are secured in term of finance (Jorgensen, 2007). In contrast, if students are lack of financial knowledge, they will make poor financial decision (Mandell, 2008). According to an article stated in New Straits Times dated on 17th November 2015, almost 23,000 Malaysians from Generation-Y, who are below aged 35 years old, were declared bankrupt over the past five years. Thus, there is a need to increase financial knowledge among students. For instance, Agensi Kaunseling dan Pengurusan Kredit (AKPK) should co-

operate with universities to organize more talks so that students can receive more information regarding financial management.

It is found that there is a positive relationship between financial behaviour and financial awareness (Ahmad et al., 2006). This study also showed that financial behaviour has a positive relationship with financial awareness. From the past research of Albeerdy and Gharleghi (2015), families are the one that will highly influence financial behaviour. This is proven in the result of this research as 69.87% of the respondents feel that families are the one that will influence the decision. Therefore, families member especially parents should educate their children with financial information since they are young. Furthermore, parents should cultivate their children to have saving since they are young.

There is a positive relationship between financial attitude and financial behaviour (Albeerdy & Gharleghi, 2015), which the result of this research also consistent with previous result. If students have positive attitude towards money, they are willing to control their money wisely. On the other hand, students with negative attitude towards money are unable to control their money wisely. Thus, students need to have good attitude towards money so that they will have good control over their money. Students have to bear in mind that saving and planning are important for them. Parents also play an important role in enhancing good attitude towards their children. Parents have to educate their children to have good financial management.

5.4 Limitations of Research

There are few limitations encountered in this research. This research aimed to determine the level of financial awareness among students. Due to the geographical constraint, the targeted respondents were the students who are studying at University Tunku Abdul Rahman (UTAR), Kampar Campus only. The result obtained from this research cannot represent the level of financial awareness among students in Malaysia since the research only carried in UTAR Kampar. The reliability and the accuracy of this research are limited by this situation due to the location only targeted in Kampar.

Apart from that, those 380 sets of questionnaire are randomly distributed to undergraduate students. Since there are six faculties in UTAR, which are Faculty of Business and Finance (FBF), Faculty of Science (FSC), Faculty of Arts and Social Science (FAS), Faculty of Information and Communication Technology (FICT), Faculty of Engineering and Green Technology (FEGT) and Institute of Chinese Studies (ICS), respondents who come from FBF will have more finance background as compared to those non-FBF respondents. However, this research do not compare the result between FBF and non-FBF. Therefore, the researchers cannot compare the level of financial awareness among those students.

Next, questionnaire is the simplest instrument for the researchers to carry out their research when adopting method of primary data. However, the researchers may obtain inaccurate result if the questions of the survey are set unclear. This research faced this problem because there is one question which is “How much do you spend per month?”. The respondents provide feedback that the question do not stated whether the monthly spending is included with rental or not. This is because rental is considered as a ‘fixed expenses’ for students who study far away from their hometown and they need to rent hostel outside. If students include rental in their spending, the researchers cannot clearly examine their monthly spending and this will lead to bias and inaccurate result.

There might be some students include with their rental but some do not. The situation cause to an inaccurate and bias result and this affect the finding of the research.

Even though there are some limitations which faced by the researchers in this research, but the result of this research is not much affected. Instead, these limitations act as the platforms to future researchers in order to improve on the result.

5.5 Recommendations for Future Research

This paper is focusing only in UTAR students in Kampar Campus. Future researchers can carry out this research in more private and public universities in Malaysia or target on the broader scope, such as foundation and postgraduate students in UTAR Kampar. From here, researchers can discuss whether the types of university will influence the financial awareness among students or the geographical location will affect the results. Urban area and rural area will have different outcomes of financial awareness among students.

Secondly, future researchers can compare between students from Faculty of Business and Finance with non-faculty of Business and Finance. The researchers can compare their level of knowledge on financial awareness because the course structures taken by FBF students are focusing on financial planning, awareness, understanding and calculation. As a results, the researchers can know whether the financial awareness among FBF students is higher than non-FBF students or vice versa.

Last but not least, the researchers should construct more specific questions. Based on the question in this survey, the researchers should specify that rental is excluded in monthly spending question. This is one of the suggestion for future researchers in order to get more accurate result. Additionally, future researchers should use simple English when constructing their questionnaire because respondents may not understand the questions being asked and simply answer to the questions.

5.6 Conclusion

The primary objective of this research is to analyse the financial awareness among UTAR undergraduate students in Kampar Campus. The financial awareness is determined by the common factors such as general financial products, financial knowledge, financial behaviour and financial attitude. There are a total of 375 respondents which are randomly selected in UTAR. All the data collected were run and analysed by using SPSS version 22 and Microsoft Excel. Frequency, percentage, mean and standard deviation are adopted to describe the collected data, and two hypotheses were tested using independence sample t-test and One Way ANOVA.

The result found that students have moderate level of understanding towards general financial products whereas level of understanding towards financial knowledge is high. Financial behaviour and financial attitude were found that has a relationship with financial awareness respectively. Similarly, this research found that financial behaviour and financial attitude among students is not affected by gender. The result shows that there is no difference between independent variables (financial behaviour and financial attitude) and respondent's age.

From this research, all the steps have been fulfilled in order to complete this research. Financial awareness is essential for everyone nowadays because most of the students are lack of financial management, fail in managing their finance and spend beyond their budget. Therefore, this research enables individuals especially students to have better understanding on financial awareness.

In this chapter, researchers discuss and analyse the summary of statistical analyses, discussion of major findings and also implication of the study. Limitations faced by the researchers in this research are discussed in this chapter as well. There are few recommendations being proposed and suggested to future researchers in order to solve the limitations. It can be conclude that this research accomplished its purpose in analysing the financial awareness among UTAR undergraduate students in Kampar Campus.

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APPENDICES

Appendix 3.1: Research Questionnaire Sample



UNIVERSITY TUNKU ABDUL RAHMAN
FACULTY OF BUSINESS AND FINANCE
BACHELOR OF BUSINESS ADMINISTRATION
(HONS) BANKING AND FINANCE

FINAL YEAR PROJECT

RESEARCH TOPIC:

FINANCIAL AWARENESS AMONG UNIVERSITY TUNKU ABDUL
RAHMAN (UTAR) UNDERGRADUATE STUDENTS IN KAMPAR CAMPUS

Survey Questionnaire

Dear respondents,

We are final year undergraduate students in Bachelor of Business Administration (Hons) Banking and Finance, from University Tunku Abdul Rahman (UTAR), Kampar Campus, Perak. We are currently conducting a research for the subject UBFZ3026 Research Project. The main **purpose** of this survey is to examine **the financial awareness among UTAR students**. All the information gathered will be kept confidential and will be used for academic purposes only.

Thank you for your participation.

Instructions:

- 1) There are **six (6)** sections in this questionnaire. Please answer **ALL** questions in **ALL** sections.
- 2) Completion of this survey will take you approximately 10 to 15 minutes.
- 3) Please feel free to share your comment in the space provided. The contents of this questionnaire will keep **strictly confidential**.

Group members:		
No.	Name	Student ID
1.	Bong Soo Chee	14ABB02110
2.	Khor Saw Peng	14ABB03506
3.	Wong Kian Li	14ABB02109
4.	Wong Suet Leng	14ABB01385

Section A: Demographic Profile

1. Gender:

- Male.
- Female.

2. Age:

- 19
- 20
- 21
- 22
- 23
- Above 23 years old

3. Faculty:_____

4. How much do you spend per month?

- RM1 – RM200.
- RM201 – RM400.
- RM401 – RM600.
- RM601 – RM800.
- RM801 and above.

5. How do you spent your allowance? Please choose three.

Transportation	:_____	Education	:_____
Entertainment	:_____	Investment	:_____
Clothing/Beauty	:_____	Living (rental)	:_____

6. Which sources of information will influence your decision in choosing the financial products? (can choose more than one)

- Bankers.
- Families.
- Magazine/newspaper.
- Others:(please specify) _____
- Online.
- Friends.

Section B: Financial Awareness

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

1.	Financial awareness prevents you from being victimized by financial scams.	1	2	3	4	5
2.	Financial awareness helps you to learn the right approach to invest for your future needs.	1	2	3	4	5
3.	Financial awareness helps you to form healthy spending habits that lead you to have financially secured life.	1	2	3	4	5
4.	Financial awareness helps you buy the right kind of insurance to protect you from catastrophic risk.	1	2	3	4	5
5.	I am aware that a bank is an institution which offering various financial services to its customers.	1	2	3	4	5

Section C: General Financial Products

	General Financial Products	Yes	No	Don't know
1.	Interest of saving account will be given yearly.			
2.	Fixed deposits rate is higher than savings account rate.			
3.	Fixed deposits with commercial banks are risk free.			
4.	Extra fees will be charged when you withdraw money from ATM which is different from your existing bank. (For e.g.: Using Public Bank card to withdraw money at Maybank's ATM).			

Financial Awareness among Universiti Tunku Abdul Rahman
Undergraduate Students in Kampar Campus

5.	If cardholders waved their card more than once, would they be charged twice?			
6.	Visa payWave cards work when the card is within 4cm from the card reader.			
7.	Finance charges for credit cards are calculated as a percentage of the balance outstanding every month.			
8.	In general, investments that offer quick returns carry high risks.			
9.	Buying insurance is cheaper at younger ages.			
10.	The longer you pay the insurance premiums, the higher the cash surrender value.			

Section D: Financial Knowledge

1. Imagine that five brothers are given a gift of RM1000. If the brothers have to share the money equally, how much does each one get?

RM _____

2. Now imagine that the brothers have to wait for one year to get their share of the RMX. In one year's time will they be able to buy.

- A. More
- B. The same amount
- C. Less than they could buy today

3. You lend RMX to a friend one evening and he gives you RMX back the next day. How much interest has he paid on this loan?

RM _____

4. Suppose you put RM100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made?

RM _____

5. Suppose you put RM100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of five years?
 - A. More than RM110
 - B. Exactly RM110
 - C. Less than RM110

6. High inflation means that the cost of living is increasing rapidly?
 - A. True
 - B. False

7. It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares.
 - A. True
 - B. False

Section E: Financial Behaviour

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

1.	I plan and implement a regular savings/investment program.	1	2	3	4	5
2.	I read to increase my financial knowledge.	1	2	3	4	5
3.	I maintain adequate financial records.	1	2	3	4	5
4.	I compare prices when shopping for purchases.	1	2	3	4	5
5.	I budget and track my spending.	1	2	3	4	5

Section F: Financial Attitude

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

1.	I feel that I have the ability to use my future revenue in achieving my financial goals.	1	2	3	4	5
2.	I feel that I am capable in controlling my financial situation.	1	2	3	4	5
3.	I feel that I have the ability to handle my financial future (e.g. investments, buying insurance, etc.).	1	2	3	4	5
4.	I feel having life insurance is a significant way to protect my loved ones.	1	2	3	4	5
5.	I enjoy talking to my friends regarding money management issues (e.g. credit cards, taxes, investing, etc.).	1	2	3	4	5

Appendix 3.2 Sampling Size

Table for Determining Sample Size from a Given Population

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size.

S is sample size.

Source: Adapted from (Krejcie and Morgan, 1970)

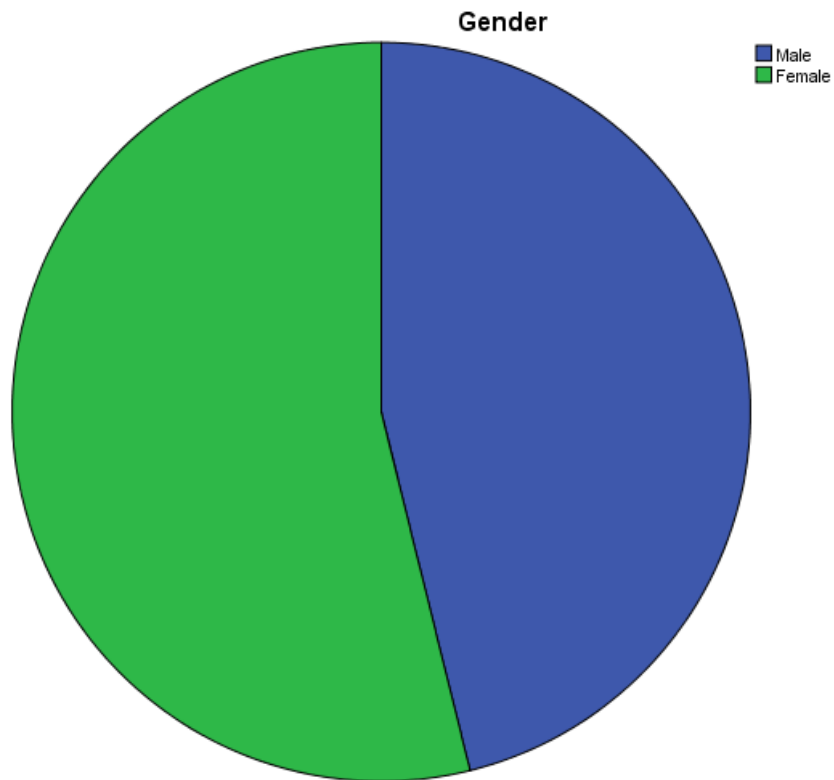
Appendix 4.1: The Frequencies of Demographic

Section A: Respondent Demographic Profile

1. Gender

Gender

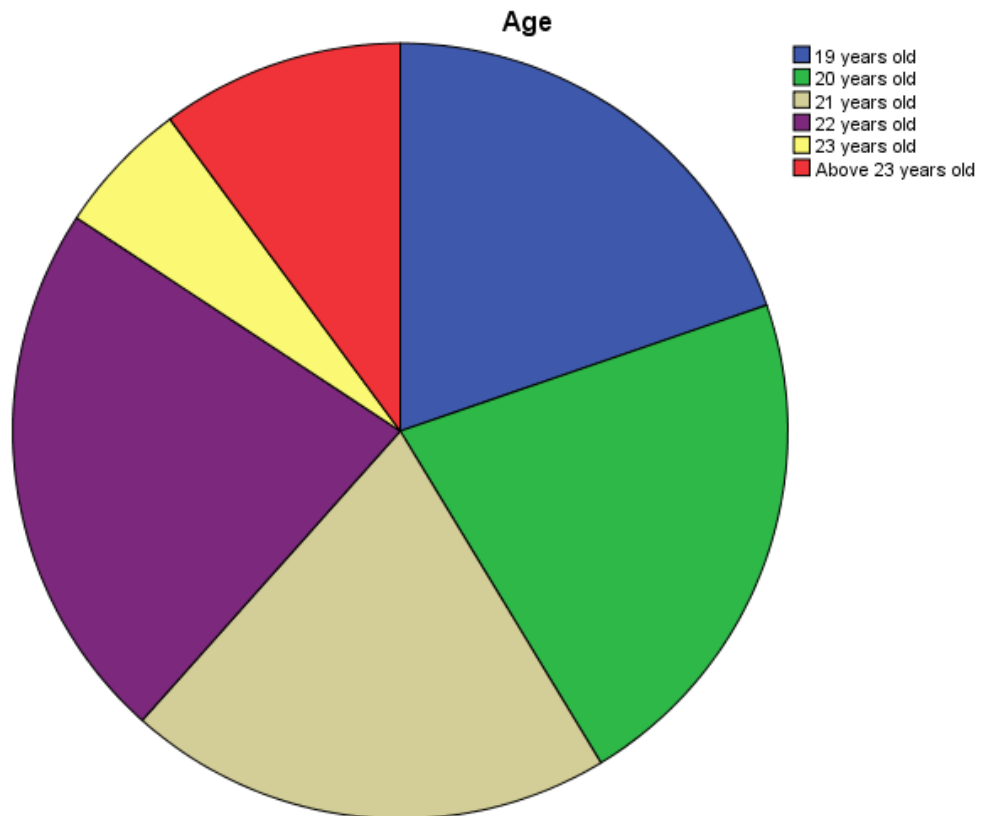
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	173	46.1	46.1	46.1
	Female	202	53.9	53.9	100.0
	Total	375	100.0	100.0	



2. Age of Respondents

Age

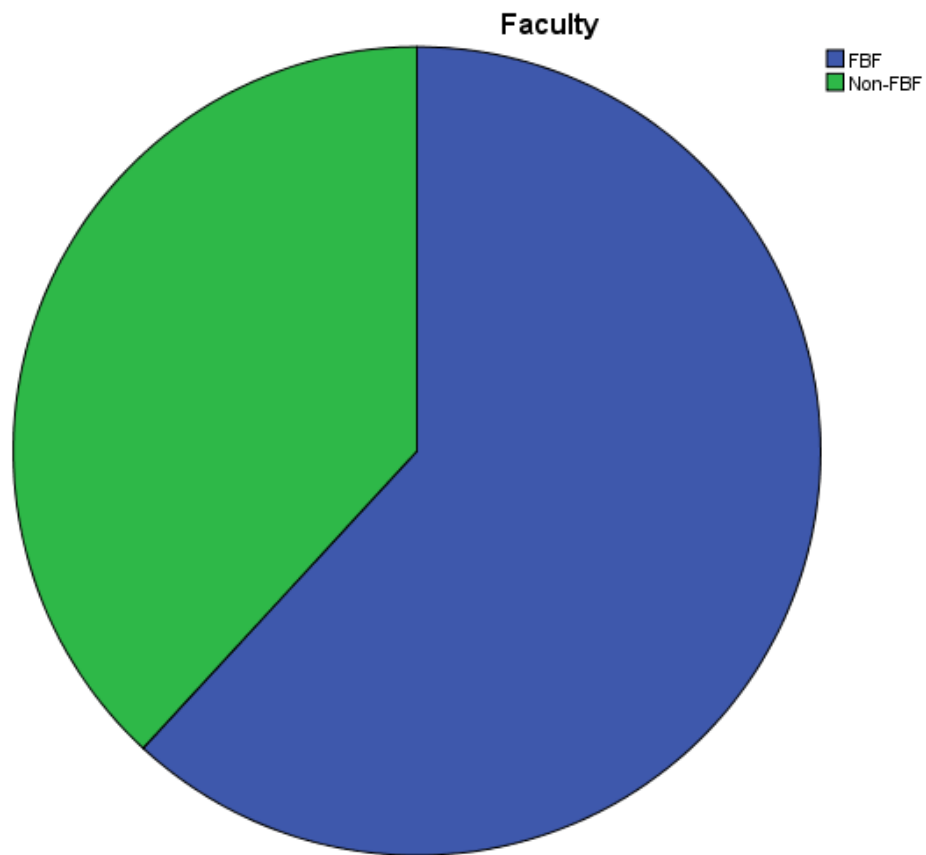
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 19 years old	74	19.7	19.7	19.7
20 years old	81	21.6	21.6	41.3
21 years old	76	20.3	20.3	61.6
22 years old	85	22.7	22.7	84.3
23 years old	21	5.6	5.6	89.9
Above 23 years old	38	10.1	10.1	100.0
Total	375	100.0	100.0	



3. Faculty

Faculty

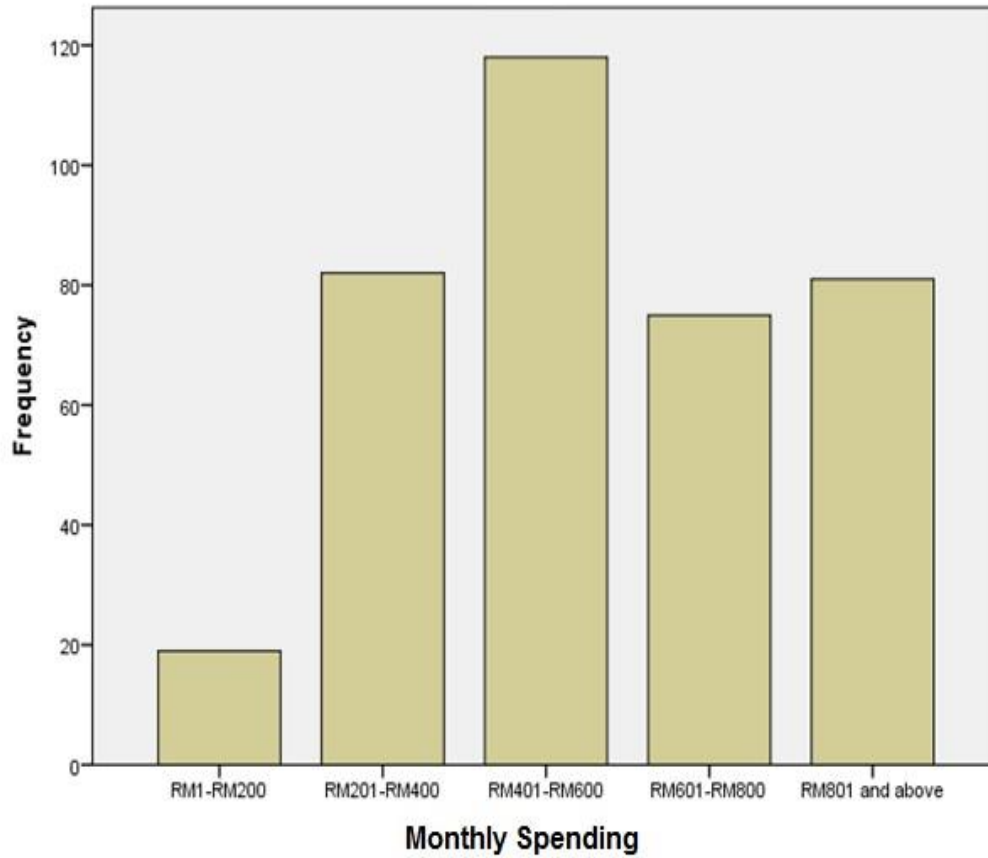
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FBF	232	61.9	61.9	61.9
	Non-FBF	143	38.1	38.1	100.0
	Total	375	100.0	100.0	



4. Monthly Spending of Respondents

Monthly Spending

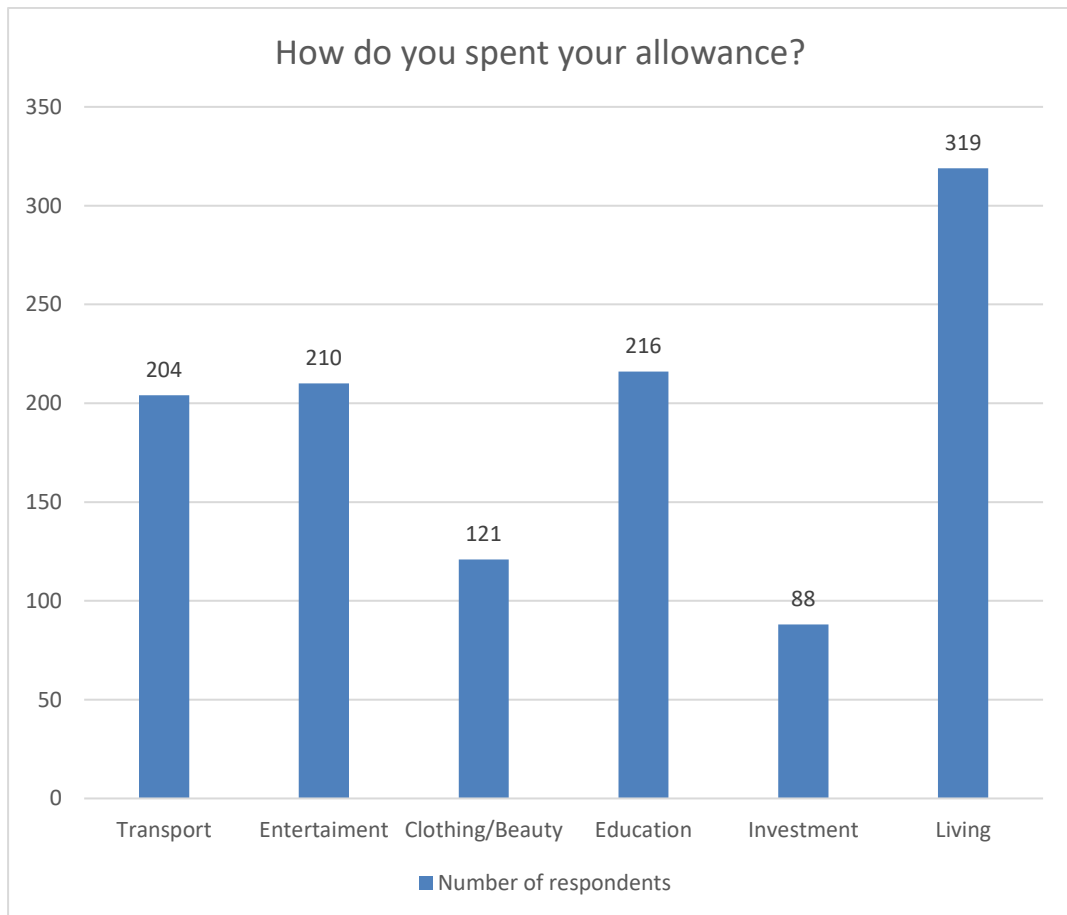
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RM1-RM200	19	5.1	5.1	5.1
	RM201-RM400	82	21.9	21.9	26.9
	RM401-RM600	118	31.5	31.5	58.4
	RM601-RM800	75	20.0	20.0	78.4
	RM801 and above	81	21.6	21.6	100.0
	Total	375	100.0	100.0	



5. How do you spent your allowance?

Spending Ranking

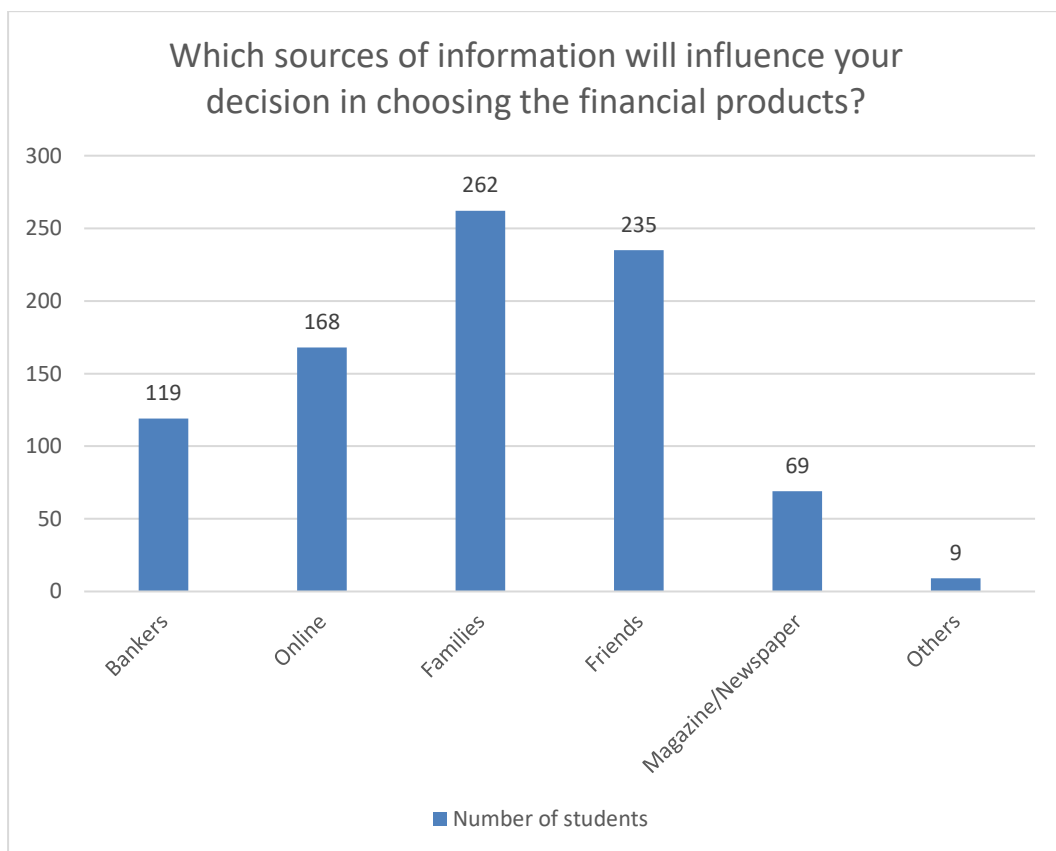
	Frequency	Percent
Transport	204	54.40
Entertainment	210	56.00
Clothing/Beauty	121	32.27
Education	216	57.60
Investment	88	23.47
Living(rental)	319	85.07



6. Which sources of information will influence your decision in choosing the financial products?

Source of Information

	Frequency	Percent
Bankers	119	31.73
Online	168	44.80
Families	262	69.87
Friends	235	62.67
Magazine/Newspaper	69	18.40
Others	9	2.4



Appendix 4.2: Mean of Variables

Section B: Financial Awareness

Item Statistics

	Mean	Std. Deviation	N
B1	3.9520	.79963	375
B2	3.9787	.72729	375
B3	3.8453	.77568	375
B4	3.6667	.82302	375
B10	3.7680	.80907	375

Section C: General Financial Products

C1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	238	63.5	63.5	63.5
	No	79	21.1	21.1	84.5
	Don't know	58	15.5	15.5	100.0
	Total	375	100.0	100.0	

C2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	282	75.2	75.2	75.2
	No	23	6.1	6.1	81.3
	Don't know	70	18.7	18.7	100.0
	Total	375	100.0	100.0	

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C3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	151	40.3	40.3	40.3
	No	96	25.6	25.6	65.9
	Don't know	128	34.1	34.1	100.0
	Total	375	100.0	100.0	

C4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	343	91.5	91.5	91.5
	No	19	5.1	5.1	96.5
	Don't know	13	3.5	3.5	100.0
	Total	375	100.0	100.0	

C5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	74	19.7	19.7	19.7
	No	116	30.9	30.9	50.7
	Don't know	185	49.3	49.3	100.0
	Total	375	100.0	100.0	

C6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	93	24.8	24.8	24.8
	No	33	8.8	8.8	33.6
	Don't know	249	66.4	66.4	100.0
	Total	375	100.0	100.0	

Financial Awareness among Universiti Tunku Abdul Rahman
Undergraduate Students in Kampar Campus

C7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	142	37.9	37.9	37.9
	No	47	12.5	12.5	50.4
	Don't know	186	49.6	49.6	100.0
	Total	375	100.0	100.0	

C8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	280	74.7	74.7	74.7
	No	43	11.5	11.5	86.1
	Don't know	52	13.9	13.9	100.0
	Total	375	100.0	100.0	

C9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	215	57.3	57.3	57.3
	No	72	19.2	19.2	76.5
	Don't know	88	23.5	23.5	100.0
	Total	375	100.0	100.0	

C10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	178	47.5	47.5	47.5
	No	58	15.5	15.5	62.9
	Don't know	139	37.1	37.1	100.0
	Total	375	100.0	100.0	

Section D: Financial Knowledge

D1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RM200	365	97.3	97.3	97.3
	Other than RM200	10	2.7	2.7	100.0
	Total	375	100.0	100.0	

D2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	200	53.3	53.3	53.3
	No	175	46.7	46.7	100.0
	Total	375	100.0	100.0	

D3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RM0	317	84.5	84.5	84.5
	Other than RM0	58	15.5	15.5	100.0
	Total	375	100.0	100.0	

D4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RM102	312	83.2	83.2	83.2
	Other than RM102	63	16.8	16.8	100.0
	Total	375	100.0	100.0	

Financial Awareness among Universiti Tunku Abdul Rahman
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D5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	232	61.9	61.9	61.9
	No	143	38.1	38.1	100.0
	Total	375	100.0	100.0	

D6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	341	90.9	90.9	90.9
	False	34	9.1	9.1	100.0
	Total	375	100.0	100.0	

D7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	203	54.1	54.1	54.1
	False	172	45.9	45.9	100.0
	Total	375	100.0	100.0	

Section E: Financial Behaviour

Item Statistics

	Mean	Std. Deviation	N
E1	3.3013	.90298	375
E2	3.3173	.87636	375
E3	3.2933	.85864	375
E4	3.9520	.83879	375
E5	3.7307	.87722	375

Section F: Financial Attitude

Item Statistics

	Mean	Std. Deviation	N
F1	3.4240	.84585	375
F2	3.5280	.80350	375
F3	3.3680	.82930	375
F4	3.7627	.88341	375
F5	3.0747	1.02366	375

Appendix 4.3: Reliability Test (Cronbach's Alpha)

Case Processing Summary

		N	%
Valid		375	100.0
Cases Excluded ^a		0	.0
Total		375	100.0

a. Listwise deletion based on all variables in the procedure.

1. Financial Awareness

Reliability Statistics

Cronbach's Alpha	N of Items
.758	5

2. Financial Behaviour

Reliability Statistics

Cronbach's Alpha	N of Items
.729	5

3. Financial Attitude

Reliability Statistics

Cronbach's Alpha	N of Items
.626	5

Appendix 4.4: Pearson's Correlation Analysis

Correlation between financial awareness and financial behaviour

Descriptive Statistics

	Mean	Std. Deviation	N
meanfb	3.5189	.60359	375
meanfawrn	3.8421	.56154	375

Correlations

		meanfb	meanfawrn
meanfb	Pearson Correlation	1	.208**
	Sig. (2-tailed)		.000
	N	375	375
meanfawrn	Pearson Correlation	.208**	1
	Sig. (2-tailed)	.000	
	N	375	375

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

Correlation between financial awareness and financial attitude

Descriptive Statistics

	Mean	Std. Deviation	N
meanfawrn	3.8421	.56154	375
meanfa	3.4315	.55728	375

Correlations

		meanffawrn	meanfa
meanfawrn	Pearson Correlation	1	.308**
	Sig. (2-tailed)		.000
	N	375	375
meanfa	Pearson Correlation	.308**	1
	Sig. (2-tailed)	.000	
	N	375	375

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

Appendix 4.5: Independent Sample T-test

Group Statistics

Independent Variables	Gender	N	Mean	Standard Deviation	t	Sig. (2-tailed)
Financial Behaviour	Male	173	3.5087	0.62968	-0.304	0.761
	Female	202	3.5277	0.58175		
Financial Attitude	Male	173	3.4890	0.53456	1.857	0.064
	Female	202	3.3822	0.57275		

Appendix 4.6: One-way ANOVA

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
FinancialBehaviour	1.959	5	369	.084
FinancialAttitude	1.577	5	369	.166

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
FinancialBehaviour	Between Groups	3.660	5	.732	2.037	.073
	Within Groups	132.596	369	.359		
	Total	136.256	374			
FinancialAttitude	Between Groups	2.378	5	.476	1.542	.176
	Within Groups	113.771	369	.308		
	Total	116.149	374			