## DETERMINANTS OF SAVING BEHAVIOUR AMONG THE UNIVERSITY STUDENTS IN MALAYSIA

BY

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- (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 by each group member in completing the research project.
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#### LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
TPB	Theory of Planned Behaviour
Н	Hypothesis
UM	University of Malaya
UUM	University
USM	University Sains Malaysia
UPM	University Putra Malaysia
UTAR	University Tunku Abdul Rahman
MMU	Multi-Media University
SPSS	Statistical Package for Social Science
R <sup>2</sup>	Coefficient of Determination
FL	Financial Literacy
PS	Parental Socialization
PI	Peer Influence
SC	Self-Control
SB	Saving Behaviour
IV	Independent Variable
DV	Dependent Variable
PTPTN	Pinjaman Tabung Pendidikan Tinggi National

#### PREFACE

The global economics rise in a fast growing trend in recent years. The financial management of the people varies around the world and the most common one is saving. Saving can be defined as the part of an individual's income that is not spent. Over the past decades, saving plays an important role in the process of economic growth and development. Moreover, Malaysia has managed to sustain a high level of saving rate. This is due to the frequent practice of saving behaviour of Malaysians. Saving behaviour can be defined as the act or manner of an individual in reducing expenditures or deferring consumptions.

Therefore, we came about to engage in the determinants of saving behaviour among the university students in Malaysia for our research. Based on past researches, we decided to choose four determinants of saving behaviour which is financial literacy, parental socialization, peer influence, and self-control. Moreover, we chose university students as our target respondents due to their significant future contribution to the country.

This is because one's saving behaviour varies when he or she has different level of financial knowledge. Besides, parent plays an important role in affecting their children in the conduct of saving. Furthermore, peer influence can have a great impact on saving behaviour of university students due to their close relationship other than parents. Lastly, no one can affect another easily. In other words, self-control plays an important role for university students to practice saving.

In our research, we had discussed the implications of saving behaviour and the determinants that can affect it. Thus, based on our research, readers can gain much knowledge on the factors affecting saving behaviour and practice saving accordingly.

#### ABSTRACT

Over the years, numerous researchers have studied on the determinants of personal saving behaviour among the households and employees rather than young adults such as university students. Despite there are few studies focus on the financial behaviour of university students, most of the studies were not drove by theory and merely focused on single factors. Therefore, this research is aims to investigate whether financial literacy (FL), parental socialization (PS), peer influence (PI) and self-control (SC) have significant influence on the saving behaviour (SB) of university students in Malaysia by applying the Theory of Planned Behaviour (TPB).

Primary data are collected using self-administered questionnaire. The samples comprised 420 students from four public universities (UM, UUM, USM, UPM) and two private universities (UTAR, MMU) in Malaysia. Meanwhile, Pearson Correlations and Multiple Regression Analysis are employed to identify whether the four factors have relationship with the saving behaviour of university students.

The findings show that all the FL, PS, PI and SC have positive relationship with SB while PS has the greatest impact on SB among the four independent variables. This signifies that parents are playing important roles in ensuring their children to establish saving behaviour. In practical, this research can contribute to the retail banks in designing effective strategies to penetrate the young savers specifically university students. Besides, it also enlightens the policy makers to stimulate savings among the university students via raising their financial literacy. Last but not least, it also provides insights to the parents in ensuring their children to foster a sound saving behaviour.

# **CHAPTER 1: RESEARCH OVERVIEW**

## **1.0 Introduction**

Chapter one aims to introduce the overview of the research topic. The background of the study is stated initially and followed by clarification of problem statement, defining research objectives and research questions, set up of relevant hypotheses and discussion of the significance of study. Lastly, this chapter is concluded with an outline of each chapter of the research.

## **1.1 Background of the Study**

Over the past decades, saving plays an important role in the process of economic growth and development. Logically, saving encourages investment that triggers the economic growth of one country. According to Harrod (1939) and Domar (1946), the speed of economic growth is determined by the ability to save because high savings rate will drive up the rate of investment and consequently stimulate economic growth. After empirically examine the vindication of the savings-led growth hypothesis for Malaysia within the multivariate frameworks through the TYDL Granger causality test, Tang (2010) claimed that saving will lead to a long run economic growth and increases of savings eventually affect the capital accumulation.

However, Malaysia savings rate has declined in recent years. As per World Bank data, Gross Domestic Saving (% of GDP) of Malaysia has been oscillating between 42% and 43% from year 1999 to 2008 but falls sharply to 36% in 2009. The "Asian Survey Monitor" conducted by HSBC Bank in 2010 also reported a lower personal saving rate among Malaysians as they found that average Malaysians only save 25% of their disposable income and 79% of them save merely for rainy day rather than other purposes such as health care, retirements or investment.

Furthermore, 60% of the respondents reported they are not saving enough and worse is 15% of the respondents do not practice saving. As stated in the past studies, insufficient saving is usually caused by wrong prediction in spending (Ulkumen, Thomas, & Morwitz, 2008), lapses in self-control (Baumeister, 2002), over emphasis on the present rather than the future (Lynch & Zauberman, 2006), or culture effects (Briley & Aaker, 2006).

Other than lack of saving awareness, Malaysians also incurred substantial amount of debts due to overuse of credit, lack of budgeting, overspending, inadequate shopping and spending skills, low salary and lack of knowledge about money. From 1990 to 2010, Malaysia Department of Insolvency has recorded 224,943 cases of bankruptcy and the worst is majority of them are young adults aged before 30. Therefore, study on the financial behaviour of university students is quite popular for many Malaysian scholars (Bakar, Masud, & Jusoh; Ibrahim, Harun, & Isa, 2009; Sabri, MacDonald, Masud, Paim, Hira, & Othman, 2008) as many students borrow money for their education and easily fall into debt due to the lack of financial planning for the future.

#### **1.2 Problem Statement**

Owing to the unfavourable reduction in Malaysian saving rate, study on the saving behaviour of Malaysians has become great concern of many researchers, educators as well as the policy makers. In recent year, Sabri and McDonald (2008) have revealed that, due to the lack of financial literacy, university students in Malaysia are not likely to save upon they received their student loans and spent aggressively for non-academic purposes. As a result, many of them encountered financial problems. Skills and ability to manage financial resources are essential for daily life activities as they help people to deal with the day to day financial matters and make the right decisions (Kempson, Collard, & Moore, 2006). On the other hand, the role of parents is crucial in the financial socialization of their children. Majority of the students also reported that their parents influenced their money management behaviour (Cude, Lawrence, Lyons, Metzger, Lejeune, Marks,

& Machtmes, 2006). Other than that, Pinto, Mansfield, and Parente (2004) also revealed that students who carry forward large unpaid balances were more likely to purchase and the use their credit cards impulsively. According to Cohran, Aleksa, and Sanders (2008), impulsive and present-oriented individuals with little self-control are less likely to be influenced by perceived risks and future costs. In the absent of self-control, students are more likely to spend according to their preference and eventually lead to overspending and inability to save for a "rainy day". All these factors are crucial in determining students' saving behaviour but most of the past researches only focus on single factor instead of a multiple factors that affecting students' behaviour. Therefore, this research aims to include several factors in order to be more accurate in determining the university students saving behaviour. In addition, there is dearth of theory-driven research which focused on individuals' saving. Typically, theory-driven research would facilitate a better understanding of the attitudinal and behavioural factors that influence a particular behaviour. Therefore, the stated problem could be solved by this study as the Theory of Planned Behaviour (TPB) is applied to investigate the factors that affect the saving behaviour of university students in Malaysia.

Apart from that, there is limited research done to investigate the saving behaviour of university students in Malaysia (Falahati, Paim, Ismail, Haron, & Masud, 2011). Indeed, most of the studies were focused on factors affecting the households and employees' saving behaviour. Otto (2009) also claimed that saving behaviour of young adults such as university students has been a neglected area. Given the importance of saving and insufficient empirical research to clearly establish the determinants of saving behaviour among university students in Malaysia in previous studies, the researchers have great interest to conduct a study on this topic.

# **1.3 Research Objectives**

## **1.3.1 General Objectives**

The general aim of this research is to investigate whether the saving behaviour of university students in Malaysia can be determined by factors such as financial literacy, parental socialization, peer influence and selfcontrol.

### **1.3.2 Specific Objectives**

- i. To examine the relationship between financial literacy and saving behaviour among the university students in Malaysia.
- ii. To analyze the relationship between parental socialization and saving behaviour among the university students in Malaysia.
- iii. To investigate the relationship between peer influence and saving behaviour among the university students in Malaysia.
- iv. To determine the relationship of self-control and saving behaviour among the university students in Malaysia.

# **1.4 Research Questions**

#### **1.4.1 General Research Questions**

What is the overall relationship between the determinants (financial literacy, parental socialization, peer influence and self-control) and saving behaviour of university students in Malaysia?

## **1.4.2 Specific Research Questions**

- i. Does financial literacy affects saving behaviour of university students in Malaysia?
- ii. Does parent socialization affects saving behaviour of university students in Malaysia?
- iii. Does peer influence affects saving behaviour of university students in Malaysia?
- iv. Does self-control affects saving behaviour of university students in Malaysia?

## **1.5** Hypotheses of the Study

- H1: There is a significant relationship between financial literacy and saving behaviour of university students in Malaysia.
- H2: There is a significant relationship between parental socialization and saving behaviour of university students in Malaysia.
- H3: There is a significant relationship between peer influence and saving behaviour of university students in Malaysia.
- H4: There is a significant relationship between self-control and saving behaviour of university students in Malaysia.

### **1.6** Significance of the Study

This research is conducted to identify the factors affecting the saving behaviour of degree students, with purpose to create financial awareness among them towards saving. On the grounds of determination of core problems, educators and regulators are able to develop appropriate programs and design relevant financial courses to help students in managing personal money and avoid the debt tracks. Furthermore, retail banks can therefore develop more appropriate marketing strategies to tap and penetrate young savers in Malaysia (Lim, Sia, & Gan, 2011). By doing this, the profitability and competitiveness of retail banks can be improved. Additionally, as university student is the group of concern and there is lack of researchers' attention on the saving behaviour of university students, this study can be an inspiration for other researchers to continuously exploring on this topic. Last but not least, it also helps the parents to define what the factors that affecting their children saving behaviour, thus they can effectively monitor their children and ensure them on the right track of money management.

# 1.7 Chapter Layout

There are five chapters in this study. In chapter one, an overall concept for this study is provided. Subsequently, chapter two discusses the past empirical studies and theoretical frameworks that are relevant to this topic, the proposed conceptual framework formed for the study and justification of the hypotheses developed in chapter one by past studies. Meanwhile, chapter three describes the methodology used for the research, which means how the research is being conducted while chapter four would be the presentation of data analysis results obtained via SPSS analyses. Finally, the last chapter will provide summarization on all the descriptive and inferential analyses stated in the previous chapter, justify the major findings and implications of the study and concludes with the limitations of study as well as recommendations for future research.

## 1.8 Conclusion

Chapter one attempts to ensure the readers to capture the big picture of the study and give the researchers a clear direction to conduct the research by providing an overview on the research topic. After getting an insight of the topic, the following chapter will discuss relevant literature review and theoretical models, and subsequently develop a proposed conceptual framework for the study and hypotheses.

# **CHAPTER 2: LITERATURE REVIEW**

## 2.0 Introduction

This chapter explains the theory applied for the research and discover how each independent variable affects the dependent variable by reviewing past literatures related to the topic. This chapter also includes a proposed conceptual framework developed for the research and hypotheses to be tested.

## 2.1 Review of the Literature

#### 2.1.1 Dependent Variable – Saving Behaviour

The word "saving" contained broad-based meaning and numerous explanations. In economic contexts, saving is defined as the residual income after deducting current consumption over a certain period of time (Browning & Lusardi, 1996; Warneryd, 1999). Conversely, saving in psychological context is referred to the process of not spending money for current period in order to be used in future (Warneryd, 1999). In other word, saving behaviour is the combination of perceptions of future needs, a saving decision and a saving action. On the other hand, people are likely to define saving as investing, putting money in a bank account, speculating and paying off mortgages (Warneryd, 1999).

### 2.1.2 1<sup>st</sup> Independent Variable – Financial Literacy

Financial literacy is defined as sufficient knowledge of personal finance facts and terms for successful personal financial management (Garman & Forgue, 1997). Meanwhile, Anthes (2004) defines financial literacy as the ability to read, analyse, manage and communicate about the personal financial conditions that affect the material well being.

Delafrooz and Laily (2011) have conducted a study in Malaysia to examine the degree to which financial literacy influenced the saving behaviour. This research had been conducted via quantitative methodology by distributing self-administered questionnaires to 2246 employees in the public and private sectors. The finding shows that saving behaviour is significantly influenced by the financial literacy whereby individuals with low level of financial literacy are not intended to save and eventually encounter financial problems in future.

The study of Hilgert, Hogarth and Beverly (2003) is found to be consistent with the above study. The researchers explore the connection between knowledge and behaviour of US Household by using the secondary data adopted from the University of Michigan's monthly Surveys of Consumers conducted in 2001. This survey was carried out by interviewing 1004 households within the state via telephone. The researchers found that the correlation between financial knowledge and saving behaviour was significant. Result shows that households obtain higher financial scores (answered the quiz correctly) tend to have higher scores on saving index (achieved more saving practices). Thus, the researchers concluded that increase in financial knowledge can lead to better saving behaviour.

In addition, the research of Sabri and MacDonald (2010) also demonstrates that financial literacy had a positive and significant effect on college students' savings behaviour. They had included 3850 students from 11 universities located in Malaysia and questionnaires were distributed to 350 students randomly selected from each of the targeted universities. The result of this research suggests that participants who have greater knowledge on personal finance tend to engage in effective saving behaviour.

## 2.1.3 2<sup>nd</sup> Independent Variable - Parental Socialization

In previous study, Webley and Nyhus (2005) have investigated the concept in respect of parents' behaviour in influencing the economic behaviour of their children. The results show that parental behaviour and parental orientation have a weak but clear impact on the economic behaviour of their children and in adulthood. The research was conducted in Netherlands with 690 Dutch participants who are 191 husbands, 191 wives, and 308 children aged from 16 to 21. DNB Household Survey (DHS) was used in this research which includes detailed information on financial behaviour and various psychological concepts of the parents and children.

According to Otto (2009), there is empirical evidence that parents can promote the development of skills to their children that are important for saving. The purpose of the research is to investigate the role of parents in developing their children's saving ability and competence in adolescence. A total number of 446 students aged 13 to 14 from Devon, England were included in this research. A questionnaire on money management was given to the students during their normal school lesson.

A research was carried out by Furnham (1999) to investigate the saving and spending habits of young people. A total amount of 158 males and 122 females British children and adolescent from South East of England participated in the research. The participants were requested to answer a set of questionnaire and the results showed that most of the children and adolescents' saving behaviour was caused by parental requests and requirements.

#### 2.1.4 3<sup>rd</sup> Independent Variable - Peer Influence

A study was done by Erskine, Kier, Leung, and Sproule (2005) to examine further predictors for the saving behaviour of young people. The study was conducted in Toronto, Canada and a total number of 1806 young Canadians aged 12 to 24 participated in this research. According to the economic theory of time preference and psychological theories about adolescent crowds, they predicted that the groups would be more patient and more likely to save money if they are placed high on the adult or academic-oriented dimension while the groups that are placed high on the peer-oriented dimension were expected to be less patient and less likely to save money. Thus, the result indicates that peer influence has an impact on individuals' saving behaviour.

In the study of Duflo and Saez (2001), the researchers found that peer effects play an important role in retirement savings decisions. The survey was conducted in United Stated by using individual data from employees of a large university with 12,172 employees which divided into 358 departments. The purpose of the study was to examine the relationship between role of information and social interaction in retirement plan decision. These findings suggested that members of the same group share a common environment, which may influence their behaviour. The reason is people with similar preferences tend to belong to the same group. Both of these factors generate a correlation between group behaviour and individual behaviour which consequently affect their saving behaviour.

Besides, Beshears, Choi, Laibson, Madrian and Milkman (2010) have conducted a field experiment involving 15000 employees from 500 manufacturing firms in USA about retirement saving behaviour. The population is divided into two major groups which are employees who contributed to company retirement saving plan and employees who had no contribution to the plan. They found that there is a weak correlation between peer influence and retirement saving behaviour as the peer influence only encourages a small amount of co-workers to participate in the retirement saving plan.

# 2.1.5 4<sup>th</sup> Independent Variable - Self-control

Self-control is the ability to identify and regulate one's emotions and desires. It is characterized by the exertion of will, self-discipline, and ability to delay gratification (Baumeister, 2002).

In research of Esenvalde (2010) has provided empirical evidence that selfcontrol was positively associated with saving behaviour. The author claimed that self-control is a very solidly and uniformly factor used to explain saving behaviour. In this research, snowball sampling method has been adopted and survey questionnaires were mailed to target respondents. Primary data were collected from 272 employees with regular incomes in the United States.

According to Lim, Sia, and Gan (2011), there is a significant impact of self-control on saving behaviour. This study was conducted in Malaysia whereby 500 survey questionnaires were distributed to participants who aged above 21. In this study, the researchers found that ability of individual to maintain self-control for saving depends on the strength of two opposing forces known as desire and willpower. The finding shows that people are more likely to save if they are able to control themselves via implementing sound budgeting and economic cost assessment.

In the study of Otto (2009) which is aimed to investigate the measures that enhance our understanding and predict saving during adolescence. Yet, the paper also studied on whether the adolescent likes spending a lot or finds it difficult to resist temptation. From the research, it was found that conscientiousness was associated with positive saving attitudes (Nyhus, 2002) and financial self-control (Warneryd, 1996). In addition, it was found that psychological variables relevant to adult saving yet highlights that self-control and ability to delay gratification are important skills for saving when young. The research was conducted by requesting 290 students from two colleges which are Exmouth Community College and Clyst Vale Community College in United Kingdom to complete a fourpage anonymous questionnaire that consists of five parts.

## 2.2 Review of Relevant Theoretical Models

Theory of Planned Behaviour (TPB) is applied in our research as proposed by Icek Ajzen in 1991. TPB is the extension of the Theory of Reasoned Action which jointly formulated by Ajzen and Fishbein (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Generally, it seeks to explain why people perform certain actions.

TPB has been used in several fields such as information system research (Mathieson, 1991; Pavlou & Fygenson, 2006), health-related research (Pellino, 1997), economic (Cook, Kerr & Moore, 2002) as well as human resource (Wiethoff, 2004).

According to Ajzen (1991), people perform certain behaviour because they form an intention to do so. In TPB the three concepts that determine the intention are attitude towards the behaviour, subjective norm and perceived behavioural control. First, attitude towards the behaviour refers to the degree to which a person forms a positive or negative evaluation towards the behaviour. Meanwhile, subjective norm refers to the perceived social pressure to perform or not to perform the behaviour. The social pressure is derived from salient referents such as parents, spouse, peers and colleagues. The third determinant of intention is perceived behavioural control which refers to people's perception of their ability to perform a given behaviour. It implies a person's intention to carry out certain actions is predicted by the perceived ease or difficulty of performing the behaviour and it is assumed to reflect past experience as well as anticipated impediment. This is illustrated in the study of Furnham (1985) whereby least well-educated people are not likely to practise saving as they believe saving will not bring wealth to them. As a general rule, favourable attitude and subjective norm and greater perceived behavioural control can lead to a stronger intention to perform specific behaviour.

In this study, attitude towards behaviour and perceived behavioural control are used to explain how financial literacy predicts students' saving behaviour. Typically, students with greater financial knowledge will perceive the beneficial of saving and problems encounter if savings account is not maintained. Hence this behavioural belief will drive the students to form a positive attitude towards saving behaviour. Meanwhile, students are intended to save if they possess better cognitive ability pertaining to financial management as they believe they can save appropriately. Furthermore, perceived behavioural control can be used to explain self-control as students with high level of self-control will perceive the ease of saving because they have the ability to regulate their desires, self-disciplined and delay gratification.

Meanwhile, subjective norm is applied in explaining how parents and peer affecting the students' saving behaviour. Social pressures are normally created by parents and peer, therefore their behaviours is deemed to significantly affect students' intention to save. In conclusion, all the determinants (financial literacy, parental socialization, peer influence and self-control) can be well explained by the concepts of TPB in predicting students' saving behaviour.

# 2.3 Proposed Conceptual Framework/ Research Model



Figure 2.1: Proposed Conceptual Framework

Source: Developed for the research

The above framework is adapted from the framework developed by Lim et al. (2011) and serve as the foundation of this study. The framework is formulated to explain the relationship of the independent variables (financial literacy, parental socialization, peer influence and self-control) and dependent variable (saving behaviour).

## 2.4 Hypotheses Development

The relationship between financial literacy and saving behaviour specified in the proposed framework is supported by the study of Sabri et al. (2008) that concluded that financial literacy is an important factor in determining the saving behaviour and financial problems. Other researchers (Lusardi, 2005; Lusardi, 2008; Delafrooz et al., 2011) include financial literacy as the key determinant of saving behaviour in their respective studies. Thus, the following hypothesis is proposed.

H1: There is a relationship between financial literacy and saving behaviour of university students in Malaysia.

The economic behaviour of an individual can be affected by parental socialization. This is supported by the study of Cude et al. (2006) who found that parents are playing the central role in the financial socialization of their children. This is found consistent to the research done by Mischel (1961) whereby he has proved that parents can influence the saving behaviour of their children. Moreover, past researcher (Otto, 2009; Bodnar, 1997; Furnham, 2001) has proved that the development of saving behaviour of young adults is linked to the relationship with their parents. This proposed the following hypothesis:

H2: There is a relationship between parental socialization and saving behaviour of university students in Malaysia.

According to Inkeles (1969), peer groups are more influential during adolescent. In addition, Youniss and Haynie, (1992) mentioned that the influence of peers, parents remain strong socializing agents throughout young adult. This is because young adult become less dependent on their parents and more oriented towards their peers as well as to the adult world (Otto, 2009). Furthermore, Tooth (2006) conducted a survey with the result of one person's choice of consumption is dependent on the consumption choice of the person's peers and thus, these propose the following hypothesis.

H3: There is a relationship between peer influence and saving behaviour of university students in Malaysia.

Self-control is frequently mentioned as an important determinant of an individual's saving and spending, both in economic and economic psychological literature. Many past researchers (Ainslie, 1975; Strotz, 1956; Warneryd, 1999; Wood, 1998) proved that this factor has impact on a range of economic and other decisions. Besides, the conjecture was explored further in the research study by Webley and Nyhus (2005). This proposed the following hypothesis:

H4: There is a relationship between self-control and saving behaviour of university students in Malaysia.

## 2.5 Conclusion

After discovering the independent variables and dependent variable by reviewing relevant literature review and theoretical models, a conceptual framework is proposed along with the developed hypotheses to be tested. In the next chapter, the methodologies used to conduct the research are discussed in details.

# **CHAPTER 3: METHODOLOGY**

#### 3.0 Introduction

This chapter aims to highlight the design and methodology used to obtain required data. It explains thoroughly about the research design, data collection methods, sampling design, research instrument, constructs measurement, data processing and methods of data analysis.

### 3.1 Research Design

This is an explanatory study on the determinants of saving behaviour among university students in Malaysia. Quantitative method is employed by the researchers as the empirical assessments consist of numerical measurement and analysis. In the perspective of time horizon, the research can be classified as cross-sectional study where data were collected on 3 months basis from October to December 2011. The researchers has followed a deductive approach by conducting the research based on existing theories and researches (Saunders, Lewis & Thornhill, 2009) to test the relationship between students' saving behaviour and the four factors (financial literacy, parental socialization, peer influence and self-control).

## **3.2 Data Collection Methods**

According to Burns and Bush (2003), the method of data collection used is determined by the type of data needed and pre-set research design. The two types of data are primary data and secondary data. In this research, primary data collection method is used to obtain information and opinions directly and specifically from the university students in Malaysia (Saunders et al., 2009).

### 3.2.1 Primary Data

Primary data ensures the most up-to-date information and realistic view to answer the hypotheses and research questions (Saunders et al., 2009). In the research, the primary data is collected via survey questionnaire technique which required less skill and sensitivity (Jankowicz, 2005). To increase the response rate, the researchers distribute and collect the selfadministered questionnaires to and from the target respondents after they answered the questionnaires.

# 3.3 Sampling Design

Sampling design is a process to select an appropriate amount of units from the population of interest to provide accurate information about the entire population (Hair, Babin, Money, & Samouel, 2003).

## **3.3.1 Target Population**

The target population is defined as the entire group of people the researcher is interested in (Easton & McColl, 1997). The target population for the research is 1,004,409 university students in Malaysia whereby 462,780 students from public universities and 541,629 from private universities. (See Appendix 3.1)
### 3.3.2 Sampling Frame and Sampling Location

A sampling frame is irrelevant for the study as it employs a nonprobability sampling method (Saunders et al., 2009). Meanwhile, four public universities (UM, UUM, USM, UPM) and two private universities (UTAR, MMU) with students population of approximately 20,000 and above are targeted as the sampling locations (See Appendix 3.1). The number of students in the selected universities is deemed significant in representing the entire population of university students in Malaysia and enables the researchers to draw samples in an efficient manner.

### **3.3.3 Sampling Elements**

The target respondents are students who enrolled in different qualifications and courses of study at the selected universities. Since they are varied in personality and views, a more accurate and generalize results can be obtained.

### **3.3.4 Sampling Technique**

Non-probability sampling technique is employed in the research as it ensures good estimates of the population characteristics (Malhotra, 2010). The researchers adopt convenience sampling method to obtain data. This is the easiest non-probability sampling technique as the sample is selected randomly until the required sample size has been met (Saunders et al., 2009). Therefore, the questionnaires will be distributed to the university students haphazardly to the amount equal to the sample size.

## 3.3.5 Sampling Size

The minimum sample size of 384 students is considered to be representative and sufficient at a 95 confidence level for population range from 1,000,000 to 10,000,000 (Saunders et al., 2009). Besides, Cattell (1978) also recommended a minimum size of 250 respondents for research with three to six independent variables. Since there are only four independent variables to be studied, a total of 420 samples are deemed sufficient to represent the population.

## **3.4 Research Instrument**

Self-administered questionnaire method has been used to obtain data. The study adapts the questionnaires from various past studies related to this topic and mainly uses Likert scale measurement for all the variables constructed in the proposed theoretical framework. The questionnaire has been divided into two sections whereby section A consists of demographic profiles of the respondents while the four independent variables and dependent variable are asked in section B (Appendix 3.2).

Before the questionnaire is disseminated to the target respondents, a pilot test is conducted to ensure the respondents can easily understand and answer the questionnaires without confusions (Saunders et al., 2009). Pilot test is a small-scale exploratory research technique that uses sampling without applying rigorous standards (Zikmund, 2003). 10 sets of questionnaire have been distributed to the UTAR lecturers and tutors and 20 are distributed to the course mates to test their understanding of those questions. It enables the researchers to remove ambiguities, confusion and improve wording at the early stage. Thereafter, 420 sets of improved questionnaires are distributed evenly by the research team to the respondents in the six selected universities. Hence, 70 samples are obtained from

each of the selected universities. The pilot testing and data collection process have last for three months from October 2011 to December 2011.

## 3.5 Constructs Measurement

Measurement is refers to the assignment of numbers to objects or event systematically. The four levels of measurement scales are nominal, ordinal, interval and ratio.

### **3.5.1 Demographic variables**

Both ordinal and nominal scales are used to measure the demographic profile of respondents in Section A. Nominal scale is suitable for variables that can be distinguished by a simple naming system (Malhotra, 2010). Thus, gender, marital status, course of study, and part-time engagement are measured in nominal scale. In contrast, ordinal scale is used to measure the attitude, opinion and measurement on the object whether it has more or less of a characteristic in the study (Malhotra, 2010). Therefore, ordinal scale is applied for age and allowance received from parents per month that contain "less than" and "greater than" judgments from respondents (Malhotra, 2010).

### 3.5.2 Independent variables

Interval scale measurement is employed to measure the independent variables. All the independent variables are measured via five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

#### 3.5.2.1 Financial literacy

Seven questions are designed to obtain the agreement level of respondents on the extent to which the financial literacy they possessed. These questions are mainly adopted from Hira and Loibl (2005) and Cude et al. (2006). A higher scale indicates respondents possess greater financial literacy and vice versa.

#### 3.5.2.2 Parental socialization

The researchers have developed eight questions adopted from Otto (2009) to test the relationship between respondents' saving behaviour and their parents. A higher scale shows a greater influence of parental socialization to the respondents' saving behaviour and vice versa.

#### 3.5.2.3 Peer influence

In measuring the extent of peer influence, the researchers establish five questions adopted from Otto (2009). These questions aid in rating the extent to which respondents are being influenced by their peers upon their saving behaviour. Hence, a higher score signifies greater peer influence and vice versa.

#### 3.5.2.4 Self-control

Another ten questions adopted from Multistate North Central Research Project 1013 (2007), Otto (2009), and Esenvalde (2011) have been set up to measure the impulsivity of the respondents. A higher score indicates respondents have greater impulsivity which results a lower self-control and vice versa.

### **3.5.3** Dependent variables

Meanwhile, the researchers also employ a five-point Likert scale to measure the saving behaviour of the respondents. Eight questions are adopted from Nga, Yong, and Sellappan (2010), Delafrooz et al. (2011), and Sabri et al. (2010). The respondents were asked to rate on the statements that describe their saving behaviour. A higher scale demonstrates the respondents practises effective saving behaviour and vice versa.

## 3.6 Data Processing

420 sets of questionnaire distributed are returned from the respondents and the data is processed via SPSS version 17. The purpose is to ensure the data are in the standard of quality. The process includes checking, editing, coding and transcribing. Initially, the researchers check and review each questionnaire to verify its completeness and incomplete questionnaire will be discarded. No amendment is required as there is no missing data. Thus, the researchers further proceed to coding process by identifying and assigning a numerical score or other character symbols to the data. For instance, for the gender of respondents in Section A, male has been coded as "1" while female as "2". Lastly, the data are entered and transformed into a more suitable format for data analysis.

## 3.7 Data Analysis

The processed data are further analysed in SPSS version 17. The objectives of data analysis include measuring central of tendency and variability, testing reliability and the hypotheses developed for the study (Sekaran, 2003). It is important to prevent error that may invalidate the conclusions.

## 3.7.1 Descriptive Analysis

Data analysis enables describing and comparing variables numerically which enhances the statistical analysis and data interpretation (Saunders et al., 2009). Mean, median and mode are used to measure the central tendency while standard deviation, variance and skewness are used to measure variability of the data. Additionally, pie charts are inserted to make the data more understandable and effectively communicate with the readers in visually appealing way (Hair, et al., 2003).

All the data obtained from the questionnaires collected are interpreted and summarized in average, frequency distribution and percentage distribution (Zikmund, 2003). The frequency analysis of respondents' demographic data is illustrated in the pie charts in next chapter while the table of frequency counts, percentages and cumulative percentages of these data can be found in Appendix 4.1.

## 3.7.2 Scale Measurement

### 3.7.2.1 Reliability Analysis

Reliability analysis is a test of Cronbach's alpha to ensure the measurements are free from bias in order to obtain consistent results (Sekaran, 2003). The test of Cronbach's alpha value is appropriate for multi- scaled items and is a perfectly adequate index of the inter-item consistency reliability (Cavana, Delahaye, & Sekaran, 2001). The coefficient alpha value is range from zero (0) to one (1) whereby value less than 0.60 indicate unsatisfactory internal consistency reliability (Hair et al., 2006; Malhotra, 2010). The rule of thumb for Cronbach's alpha coefficient value is shown in the following table.

Alpha Coefficient Range	Strength of Association
Less than 0.60	Poor
0.60 to less than 0.70	Moderate
0.70 to less than 0.80	Good
0.80 to less than 0.90	Very good
0.90 and above	Excellent

Table 3.1: The rule of thumb for Cronbach's alpha coefficient value.

Source: Hair, J. F., Babin, B. Jr., Money, A. H., & Samouel, P. (2003). *Essential of business research methods*. United Stated of America: John Wiley & Sons.

#### 3.7.2.2 Normality

The assumption of normality is a perquisite for inferential analysis such as Multiple Regression Analysis (Coakes, Steed, & Ong, 2010). Skewness and kurtosis are used for normality test in this research. According to Coakes et al. (2010), skewness and kurtosis refer to the shape of the distribution. If the observed distribution is exactly normal, there will be a zero value for skewness and kurtosis. Positive value for skewness and kurtosis represent a distribution is positively skewed and is more peaked than a normal distribution. In contrast, negative value for skewness and kurtosis indicate the distribution is negatively skewed and is flatter. Skewness and kurtosis of all variables must not exceed the absolute value of  $\pm 1$  in order to satisfy the assumptions of multivariate model (Sit, Ooi, Lin, & Chong, 2009).

## 3.7.3 Inferential Analysis

Inferential analysis is used to test the hypotheses developed for the research by investigating the relationships between the four independent variables (financial literacy, parental socialization, peer influence and self-control) and dependent variable (saving behaviour). The inferential analyses included are Pearson Correlation, Multicollinearity and Multiple Linear Regression.

#### 3.7.3.1 Pearson Correlation

Pearson correlation is a statistical test that assesses the strength of the relationship between two numerical data variables (Saunders et al., 2009). Therefore, the relationship of independent variables and dependent variable is measured via Pearson Correlation. The significance level is 0.05 in the Pearson Correlation test, which means there is 95% of confidence level. Therefore, the hypotheses only can be accepted if the significant p-value is less than 0.05 (Malhorta, 2010).

### 3.7.3.2 Multicollinearity

Multicollinearity test is applied to measure the extent to which two or more independent variables are correlated with each other (Saunders et al., 2009). (Hair, Anderson, Tatham, & Blank, 1998) proposed that the intercorrelations among the independent variables should not exceed 0.90, otherwise, the multicollinearity is exists and one of the highly correlated variables have to be removed.

### 3.7.3.3 Multiple Regression Analysis

Multiple regression analysis is conducted to determine the relationship between two or more independent variables and one dependent variable by calculating the coefficient of multiple determination and regression equation (Saunders et al., 2009). Practically, multiple regression analysis provides an understanding on whether there is a relationship exists between the independent variables and dependent variable, how strong the relationship is, whether the relationship is positively or negatively skewed and the proper way to describe the relationship (Hair et al., 2006).

The strength of the relationship between independent variables and dependents is determined by the coefficient of determination  $(r^2)$  as it measures the proportion of the variation in a dependent variable that can be explained by the independent variables. In other word, how well the saving behaviour of university students in Malaysia (dependent variable) can be explained by the financial literacy, parental socialization, peer influence and self-control.

ANOVA is a hypothesis-technique that used by the researchers to test whether there is significant variance in means occurs between three or more groups. In other words, it evaluates if there is a difference among the means of the groups. This test must have dependent variable in metric which is saving behaviour in this case. The following formula is known as F-test which is use to determine the degree of variability in the scores of one sample to the scores of another sample.

$$F = \frac{Variance-between-group (SSB)}{Variance-within-groups (SSE)}$$

The following equation is formed to determine the statistical significance of each independent variable on the dependent variable.

Equation: 
$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

Where:

Y	=	Saving behaviour of university students in Malaysia
a	=	Fixed; equal to Y when $b_1$ , $b_2$ , $b_3$ , $b_4=0$
$b_1, b_2, b_3, b_4$	=	Slope of regression line
$X_1$	=	Financial literacy
$X_2$	=	Parental socialization
$X_3$	=	Peer influence
$X_4$	=	Self-control

## 3.8 Conclusion

Methodologies used for the research are described and justified in this chapter. The following chapter will examine the data obtained from the questionnaire and provides a detail analysis on those data.

# **CHAPTER 4: DATA ANALYSIS**

## 4.0 Introduction

In this chapter, 420 copies of questionnaire collected are analysed by using SPSS 17.0 software. The results are explained by using descriptive analysis, reliability test, and inferential analyses such as Pearson Correlation Analysis, Multicollinearity and Multiple Regression Analysis.

# 4.1 Descriptive Analysis

## 4.1.1 Respondent Demographic Profile

### 4.1.1.1 Gender

Figure 4.1: Percentage of Respondents based on Gender



Source: Developed for the research

Figure 4.1 shows that majority of the respondents are female (61%) while male (39%) represents the minority. (See Appendix 4.1)

### 4.1.1.2 Age



Figure 4.2: Percentage of Respondents based on Age

Source: Developed for the research

Figure 4.2 shows that majority of the respondents fall into the age group of 21 to 22 years old (74%). Followed by the age group of 19 to 20 years old (17%) and 21 to 22 years old (8%). Meanwhile, there is only 1% of the respondents fall into the age group of 23 years old and above. (See Appendix 4.1)

#### 4.1.1.3 Marital Status





Source: Developed for the research

Figure 4.3 demonstrates that almost all the respondents (99%) are single whereas only 1% of respondents are married. (See Appendix 4.1)

#### 4.1.1.4 Course of Study

Figure 4.4: Percentage of Respondents based on Course of Study



Source: Developed for the research

According to Figure 4.4, the respondents who enrolled in non-business course (56%) are more than those who enrolled in business course (44%). (See Appendix 4.1)

### 4.1.1.5 Monthly Allowance from Received Parents

Figure 4.5: Percentage of Respondents based on Monthly Allowance Received
<u>from Parents</u>



#### Source: Developed for the research

Based on the chart above, most of the respondents receive allowance less than RM200 (33%) per month from their parents, followed by allowance received between RM201-RM500 (28%) and RM501-RM800 (25%). Result shows that only small portion of respondents receive substantial allowance from their parents whereby 9% of them fall into the range of RM801-RM1000 and only 5% respondents receive more than RM1000. (See Appendix 4.1)

### 4.1.1.6 Engagement in Part-time Job

Figure 4.6: Percentage of Respondents based on Engagement in Part-time Job



Source: Developed for the research

Figure 4.5 shows that 74% of the respondents did not engage in part-time whereas 26% reported that they engaged in part-time. (See Appendix 4.1)

## 4.1.2 Central Tendencies Measurement of Constructs

### 4.1.2.1 Financial Literacy

Table 4.1: Summar	y of Central Tendency	y for Financial Literacy

			Std.		
No.	Items	Mean	Deviation	Skewness	Kurtosis
FL1	I have better understanding of how to invest my money.	3.12	.864	081	199
FL2	I have better understanding of how to manage my credit use.	3.35	.903	357	307
FL3	I have a very clear idea of my financial needs during retirement.	3.06	.921	026	427
FL4	I have the ability to maintain financial records for my income and expenditure.	3.15	.869	.022	702
FL5	I have little or no difficulty in managing my money.	3.23	.935	259	609
FL6	I have better understanding of financial instruments (eg. bonds, stock, T-bill, future contract, option and etc.).	2.98	.886	062	370
FL7	I have the ability to prepare my own weekly (monthly) budget.	3.26	.941	268	557

Source: Developed for the research

Table 4.1 shows that FL2 has the highest mean score of 3.35; while FL6 has the lowest mean score of 2.98. For standard deviation, FL7 has the highest score of 0.941; whereas 0.864 is the lowest value scored by FL1.

There is only one statement which is positively skewed (FL4), and the rest are negatively skewed. The values for kurtosis of all the statements for FL are negative which indicate the distributions of these statements are flatter than a normal distribution (Coakes et al., 2010). All the statements are normally distributed as the value for skewness and kurtosis are within the range of  $\pm 1$  (Sit et al., 2009). (See Appendix 4.2)

#### 4.1.2.2 Parental Socialization

			Std.		
No.	Items	Mean	Deviation	Skewness	Kurtosis
PS1	My parents are good example for me when it comes to money management.	3.43	.938	365	406
PS2	I always talk about money management with my parents.	2.95	.912	.014	547
PS3	It's good when my parents control my spending.	3.29	1.021	241	613
PS4	It's a good thing to ask my parents to keep hold of my money sometimes to help me save.	3.32	1.059	361	548
PS5	My parents are proud of me for saving.	3.30	.865	120	299
PS6	I appreciate it when my parents give me advice about what to do with my money.	3.54	.846	396	069
PS7	I save money because I don't think my parents should pay for things I don't really need but like	3.41	.919	196	274
PS8	Saving is something I do regularly because my parents wanted me to save when I was little.	3.60	.981	504	148

#### Table 4.2: Summary of Central Tendency for Parental Socialization

Source: Developed for the research

As reported in Table 4.2, PS8 has the highest mean score of 3.60. among the eight statements. Meanwhile, PS4 scores the highest standard deviation, which is 1.059; whereas PS6 (0.846) scores the lowest.

On the other hand, PS2 is the only statement with positive value for skewness and the rest are negatively skewed. While for kurtosis, all the

statements is negative which indicate the distributions of these statements are peaked than a normal distribution (Coakes et al., 2010). Nonetheless, the distributions of all statements are assumed to be normal as the value for skewness and kurtosis is within the range of  $\pm 1$  (Sit et al., 2009). (See Appendix 4.2)

#### 4.1.2.3 Peer Influence

			Std.		
No.	Items	Mean	Deviation	Skewness	Kurtosis
PI1	As far as I know, some of my friends regularly do save with a saving account.	3.48	.833	624	.230
PI2	I always discuss about money management issue (saving) with my friends.	3.06	.845	075	466
PI3	I always compare the amount of saving and spending with my friends.	2.82	.939	.120	690
PI4	I always spend my leisure time with friends.	3.41	.834	318	127
PI5	I always involve in money spending activities with friends.	3.28	.901	107	438

#### Table 4.3: Summary of Central Tendency for Peer Influence

Source: Developed for the research

Table 4.3 demonstrates that PI1 (3.48) and PI3 (2.82) has the highest and lowest mean score respectively. Besides, highest standard deviation is scored by PS3 (0.939) and PS1 (0.833) has the lowest scores.

All the statements are negatively skewed except for PI3. Other than PI1, the distribution for other statements with negative values for kurtosis is flatter than a normal distribution (Coakes et al., 2010). They are assumed

to be normally distributed as all the values for skewness and kurtosis are within the range of  $\pm 1$  (Sit et al., 2009). (See Appendix 4.2)

#### 4.1.2.4 Self-control

#### Table 4.4: Summary of Central Tendency for Self-control

No.	Items	Mean	Std. Deviation	Skewness	Kurtosis
SC1	I don't save, because I think it's too hard.	3.58	.975	508	196
SC2	I enjoy spending money on things that aren't practical	3.36	.988	277	459
SC3	When I get money, I always spend it immediately (within 1 or 2 days).	3.56	1.024	429	454
SC4	'I see it, I like it, I buy it' describes me.	3.45	1.043	228	689
SC5	'Just do it' describes the way I buy things.	3.51	.995	340	498
SC6	'Buy now, think about it later' describes me.	3.58	1.062	501	499
SC7	I'm easily attracted by lure.	3.27	1.014	219	549
SC8	I always failed to control myself from spending money.	3.35	1.021	286	627
SC9	When I set saving goals for myself, I rarely achieve them.	3.15	.958	243	435
SC10	I am more concerned with what happens to me in short run than in the long run.	3.35	.977	235	573

Source: Developed for the research

Ten statements for SC are shown in Table 4.4. Both SC1 and SC6 score the highest mean of 3.58 and the lowest mean falls on SC9 (3.15). In term of standard deviation, SC6 scores the highest value (1.062); whereas SC9 (0.958) is the lowest.

All the statements have negative values for both skewness and kurtosis which indicate the distributions are flatter than a normal distribution and negatively skewed (Coakes et al., 2010). Besides, as the value for skewness and kurtosis are within the range of  $\pm 1$ , all the statements are deemed to be normally distributed (Sit et al., 2009). (See Appendix 4.2)

#### 4.1.2.5 Saving Behaviour

			Std.		
No.	Items	Mean	Deviation	Skewness	Kurtosis
SB1	I put money aside on a regular basis for the future	3.31	.787	395	021
SB2	In order to save, I often compare prices before I make a purchase.	3.59	.926	439	305
SB3	In order to save, I often consider whether the real necessity before I make a purchase.	3.66	.823	592	.106
SB4	In order to save, I always follow a careful monthly budget.	3.27	.823	106	314
SB5	I always have money available in the event of emergency.	3.50	.825	344	161
SB6	In order to save, I plan to reduce my expenditure.	3.59	.753	555	.287
SB7	I save to achieve certain goals	3.55	.784	368	.140
SB8	I save until the end of my semester.	3.30	.851	325	.141

#### Table 4.5: Summary of Central Tendency for Saving Behaviour

Source: Developed for the research

Table 4.5 demonstrates that the highest mean of 3.66 is falls on SB3; while SB4 scores the lowest mean (3.27). In contrast, SB2 (0.926) has the highest scores on standard deviation; whereas SB6 has the lowest value of 0.753.

All the statements for SB are negatively skewed while four statements with positive values for kurtosis have peaked distributions (Coakes et al., 2010). All the statements are deemed to be normally distributed as the value for skewness and kurtosis are within the range of  $\pm 1$  (Sit et al., 2009). (See Appendix 4.2)

## **4.2 Scale Measurement**

## 4.2.1 Reliability Analysis

Construct	Cronbach's Alpha	Number of Items
Financial Literacy (IV1)	0.833	7
Parental Socialization (IV2)	0.754	8
Peer Influence (IV3)	0.654	5
Self-control (IV4)	0.918	10
Saving Behaviour (DV)	0.819	8

Table 4.6: Summary of Reliability Statistics

Source: Developed for the research

The research instrument was tested for reliability using the Cronbach's coefficient as reported in the above table. The Cronbach's alpha for all dimensions are exceeding the minimum alpha value of 0.60 (Hair et al., 1998), thus the construct measures are deemed reliable and all items in the construct measures are retained. (See Appendix 4.3)

# 4.3 Inferential Analyses

## **4.3.1 Pearson Correlation Analysis**

		Saving Behaviour (DV)
Financial Literacy (IV1)	Pearson Correlation	0.442**
	Sig. (2-tailed)	.000
Parental Socialization (IV2)	Pearson Correlation	0.521**
	Sig. (2-tailed)	.000
Peer Influence (IV3)	Pearson Correlation	0.174**
	Sig. (2-tailed)	.000
Self-control (IV4)	Pearson Correlation	0.381**
	Sig. (2-tailed)	.000
Saving Behaviour (DV)	Pearson Correlation	1
	Sig. (2-tailed)	

Table 4.7: Summary of Pearson Correlation Analysis

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

Source: Developed for the research

According to Table 4.7, all the independent variables have positive association with the dependent variable. PS has the strongest relationship with SB (r=0.521), followed by the FL (r=0.443) and SC (r=0.381). On the other hand, PI has the weakest correlation with SB (r=0.173). All hypotheses of this study are accepted as the p-values are less than 0.05 (Malhorta, 2010). (See Appendix 4.4)

## 4.3.2 Multicollinearity

			Financial Literacy	Parental Socialization	Peer Influence	Self-Control
Control Variables		(IV1)	(IV2)	(IV3)	(IV4)	
Saving Behaviour (DV)	Financial Literacy (IV1)	Correlation Significance (2-tailed)	1.000			
	Parental Socialization (IV2)	Correlation Significance (2-tailed)	0.187 0.000			
	Peer Influence (IV3)	Correlation Significance (2-tailed)	0.101 0.040		1.000	
	Self-control (IV4)	Correlation Significance (2-tailed)	0.012		-0.330 0.000	

#### Table 4.8: Summary of Partial Correlation

Source: Developed for the research

Table 4.8 shows the intercorrelations among all the independent variables in this study. Since both the significance p-values of SC and FL, and SC and PS are greater than 0.05, SC is deemed independent from FL and PS (no correlation). Meanwhile, SC and PI have the highest absolute value of intercorrelation of 0.330 among the independent variables. Given that all the intercorrelations between the independent variables are less than 0.90, therefore there is no multicollinearity exists among the various constructs in the measurement model (Hair et al., 1998). (Appendix 4.5)

## 4.3.3 Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.650 <sup>a</sup>	.422	.416	.41727

Table 4.9: Model Summary

a. Predictors: (Constant), Financial Literacy, Parental Socialization, Peer Influence, Self-control

b. Dependent Variable: Saving Behaviour

Source: Developed for the research

Table 4.9 shows the  $R_2$  for this model is 0.422 which indicates 42.20% of the variation in the SB (dependent variable) can be explained by FL, PS, PI and SC (independent variables).

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.722	4	13.181	75.702	.000 <sup>a</sup>
	Residual	72.256	415	.174		
	Total	124.978	419			

Table 4.10: Analysis of Variance (ANOVA)

a. Predictors: (Constant), Financial Literacy, Parental Socialization, Peer Influence, Self-Control

b. Dependent Variable: Saving Behaviour

Source: Developed for the research

According to Table 4.10, the F-value of 76.337 is significant at the 0.05 level. This indicates that the overall regression model with these four independent variables (FL, PS, PI, & SC) can well explain the variation of the dependent variable (SB) (Coakes et al., 2010).

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.596	.186		3.208	.001
	Financial Literacy (IV1)	.204	.035	.239	5.847	.000
	Parental Socialization (IV2)	.329	.040	.345	8.264	.000
	Peer Influence (IV3)	.121	.039	.125	3.086	.002
	Self-Control (IV4)	.215	.029	.301	7.496	.000

Table 4.11: Summary of Regression Coefficients

a. Dependent Variable: Saving Behaviour (DV)

Source: Developed for the research

An equation is formed based on Table 4.11 to determine the statistical significance of each independent variable on the dependent variable.

Equation: 
$$SB = 0.596 + 0.204FL + 0.329PS + 0.121PI + 0.215SC$$

The linear equation above shows that FL, PS, PI, and SC have significant positive relationship with SB. (p<0.05).

According to the results, PS ( $\beta$ =0.345) has the greatest impact on saving behaviour. This can be explained as every unit increase in PS will result an increase of 0.345 units in SB, holding other variables constant. Subsequently, SC ( $\beta$ =0.301) has the second strongest impact and followed by FL ( $\beta$ =0.239). In contrast, PI ( $\beta$ =0.125) has the most insignificant impact on SB whereby SB only increase 0.125 units for every unit increase in PI.

Figure 4.7: Normal Probability Plot of Regression Standardized Residual



Source: Developed for the research

Figure 4.7 shows that the estimated SB = 0.596 + 0.204FL + 0.329PS + 0.121PI + 0.215SC has a linear relationship. Therefore, all the independent variables (FL, PS, PI, & SC) are linearly related to the dependent variable (SB). (See Appendix 4.6)

# 4.4 Conclusion

In this chapter, respondents' demographic characteristics have been analysed via frequency analysis and central tendency measurements were conducted on all the four independent variables. Moreover, the reliability test has proved that all the construct measures of this study can generate consistent results. Meanwhile, Pearson Correlation Analysis, Partial Correlation Analysis, and Multiple Regression Analysis have shown that there is a significant relationship between the four independent variables and saving behaviour in this study.

By applying these results generated from this chapter, we can discuss on the major findings, implications and limitation of the study and recommendations for the research thoroughly in the following chapter.

# <u>CHAPTER 5: DISCUSSION, CONCLUSION AND</u> <u>IMPLICATIONS</u>

## 5.0 Introduction

After presenting and interpreting the details of descriptive analysis, scale measurement and inferential analyses in previous chapter, this chapter will discuss on the major findings, implication, limitations of the research and recommendations for future research.

# **5.1 Summary of Statistical Analyses**

## **5.1.1 Descriptive Analysis**

### 5.1.1.1 Respondent Demographic Profile

The descriptive analysis results derived from the previous chapter shows that majority respondents are female and fall into the age group between 21-22 years old. Besides, nearly all the respondents are still single and most of them enrolled in non-business course. Meanwhile, most of the university students reported that they receive monthly allowance between RM0-RM200 from their parents and they are more likely to engage in part-time as well.

#### 5.1.1.2 Central Tendencies Measurement of Constructs

The data collected is deemed to be normally distributed as the values for kurtosis and skewness of all items in each construct do not exceed the absolute value of  $\pm 1$  (Sit et al., 2009). Thus the normality assumption of multiple regression analysis is satisfied.

### **5.1.2 Scale Measurement**

The result of reliability test has proved that all the constructs are able to yield consistent findings as their Cronbach's alpha are greater than the threshold of 0.60 (Hair et al., 1998).

### **5.1.3 Inferential Analyses**

#### 5.1.3.1 Pearson Correlation Analysis

The Pearson Correlation analysis evidently shows that there is a positive correlation between the independent variables (FL, PS, PI, & SC) and the dependent variable (SB). The findings show that PS has the strongest relationship with SB. In contrast, independent variable which has the weakest relationship with SB is PI. The findings also proved that all the hypotheses of this study are accepted as all the p-values of the independent variables are less than 0.05.

#### 5.1.3.2 Multicollinearity

None of the absolute values of correlation shown in Table 4.8 is greater than 0.90. Thus, it is confirming that multicollinearity is not significantly exists among the various independent variables in the model (Sit et al., 2009). The multicollinearity assumption of Multiple Regression Analysis is satisfied.

#### 5.1.3.3 Multiple Regression Analysis

The results of the regression analysis show that 42.20% ( $R_{2=}0.422$ ) of the variation in SB can be explained by FL, PS, PI and SC. In addition, an equation is formed as follow:

$$SB = 0.596 + 0.204FL + 0.329PS + 0.121PI + 0.215SC$$

The four independent variables are significantly associated with saving behaviour as all the significant p-values are less than 0.05.

## 5.2 Discussions of Major Findings

## 5.2.1 First Hypothesis

H1 : There is a significant relationship between financial literacy and saving behaviour of university students in Malaysia.

Based on the result in previous chapter, there is sufficient evidence to conclude that the financial literacy has a significant relationship with saving behaviour of the university students in Malaysia (p<0.05). This finding indicates that students with higher level of financial literacy are more likely to save. It is found consistent with the research of Sabri et al. (2010) which revealed that FL is significantly related to college students' saving behaviour in a positive magnitude. Other researchers such as Delafrooz et al. (2011) and Hilgert et al. (2003) also proved that individual's saving behaviour is significantly influenced by the financial literacy are more likely to save as they have the ability identify the importance and knowledge of savings.

### 5.2.2 Second Hypothesis

H2 : There is a significant relationship between parental socialization and saving behaviour of university students in Malaysia.

Furthermore, the finding shows that parental socialization and saving behaviour are positively related (p<0.05). The result obtained is agreed with the studies of Webley et al.(2005) which concluded that parental orientation have a clear impact on the saving behaviour of children. In addition, both studies of Otto (2009) and Furnham (1999) also supported

the above hypothesis as they also found that parents have significant influence over the saving behaviour of their children. Hence, parental socialization is inevitable in guiding and encouraging their children to save.

## 5.2.3 Third Hypothesis

H3 : There is a significant relationship between peer influence and saving behaviour of university students in Malaysia.

Meanwhile, the finding also proves that there is a positive relationship between peer influence and saving behaviour (p<0.05) and this is corroborated by the results from the past study conducted by Erskine et al. (2005) which focused on the predictors of young people's saving behaviour in Canada. Moreover, the results also consent with the studies of peer influence by Duflo et al. (2001) and Beshears et al. (2010) which proved that individuals' behaviour is likely to be influenced by peer because peer is the salient referent to an individual and one can be easily influenced by peer's behaviour.

## 5.2.4 Fourth Hypothesis

H4 : There is a significant relationship between self-control and saving behaviour of university students in Malaysia.

Furthermore, the generated result also shows a positive relationship between self-control and saving behaviour with a significance value of p<0.05 and is found similar to the findings of Esenvalde (2010) and Lim et al. (2011), which evidently proved that self-control was positively associated with saving behaviour. Besides, conscientiousness (Nyhus,

2002) and financial self-control (Warneryd, 1996) were also associated with positive saving attitudes. These show that self-control of an individual plays an important role towards the behaviour of saving.

## 5.3 Implications of the Study

## **5.3.1 Managerial Implications**

This research has provided the findings on how each factor can influence the university students' saving behaviour. Recently, this topic has grabbed the attention of many Malaysian scholars due to the declining saving rate in our country. Meanwhile, if saving behaviour is not practiced by the university students, they may eventually encountered financial problems (Sabri et al., 2010) such as unable to repay the study loans and poor financial management. Thus, the researchers believe this study can provide practical implications to the retail banks, policy makers and parents by identifying the factors affecting university students' saving behaviour.

### 5.3.1.1 Retail banks

This study will help retail banks to gain better understanding of saving behaviour among university students in Malaysia. Therefore, the findings enlighten the retail banks to discover new opportunities for acquiring this group of university students as their valuable customers. Retail banks can develop financial products or services according to the needs and preferences of university students so as to match or exceed their expectations. Understanding about the fact that parents could play an important role in facilitating their children saving behaviour is important for retail banks to design their marketing strategies in targeting the young savers. Instead of directly communicate the financial products to the young savers, retail banks can offer more attractive saving schemes to encourage saving among parents since their attitude and behaviour are highly adhered by their children. Therefore, retail banks can attract the young savers indirectly through their parents' behaviour.

This study also enlightens the retail banks that peer influence is a significant factor to stride forward to a high saving generation. For instance, students who surrounded by peers who do practise saving are more likely to save as they believed by doing so ensure them to fit into the group easily. As a result, retail banks can easily promote their products among this flock of young savers as the students are more likely to spread the relevant information among their peers. Thus, this study eventually helps the retail bank to design an effective marketing strategy and alleviate the cost of advertising. Whilst the retail banks is possible to attain more potential customers since the effect of peer influence is tremendous.

#### 5.3.1.2 Policy Makers

The findings of study are also important for policy makers. Having identified that financial literacy is important for university students to maintain an effective saving behaviour, it becomes clear that increasing of financial literacy will enable the students to manage their money effectively. As most research has emphasized, financial education is the best way to enhance students' financial knowledge and skills. (Leila Falahati, 2011).

Therefore, it is important for policy makers to develop an effective education programs based on the needs and financial literacy level of the
students. The educational program should focus on improving the students' basic financial knowledge and skill. However, not all the programs in university have included financial courses especially non business programs. Hence, organize seminars or workshop can be an alternative manner for improving the students' financial knowledge, attitudes and behaviour. Consequently, students are well equipped with essential skills to manage their income upon graduation before they fresh enter into society. Besides, providing effective financial education during university could mitigate the bad financial habits and attitudes of the students at the same time also decrease the rate of default in repayment PTPTN loan.

Further, financial socialization process of young saver can be achieved through communication, observation and interaction with socialization agents such as parents and peers. Therefore, it is important for policy makers to consider the financial socialization process is the main process in building up students' financial behaviour. Policy makers can actively organize financial campaigns or talks that involve parents to encourage communication of financial matters between them and their children in an effective manner. Besides, developers of educational program need to recognize that self-control is an important skill for students to perform sound financial management. Hence, such programs should focus on how to help the students develop strategies to maintain self-control.

## 5.3.1.3 Parents

In this study, parental socialization is a good predictor of their children's saving behaviour. Parents always play the central role in facilitating and promoting their children's saving behaviour (Cude et al., 2006). Many students agreed that they will maintain a sound saving behaviour if their parents restrict on their spending or keep part of their money for saving. Therefore, this finding enlightens the parents on how they can encourage

saving among their children and eventually impact on their future life and personal well-being.

Additionally, university students agreed that possessing a sense of selfcontrol can help them to handle their finances in proper manners. They also believe that self-control will delay their immediate gratification and thus avoid impulsive spending. Hence, this suggests that it is important for parents to monitor their children financial behaviour and also establish self-control among their children. Parents should always encourage their children not to spend impulsively and also guide them in managing their financial matters.

# **5.3.2** Theoretical Implications

From the theoretical perspectives, this study highlights the importance of TPB in determining individual's saving behaviour, specifically the university students. The proposed framework model of this study provides emphasis upon how the saving behaviour is affected by the elements of TPB model. In order to understand students' saving behaviour, it is important to figure out on what their attitudes and beliefs towards saving and also consider how social pressure may affect their saving decision. Eventually, this study has proved that TPB would be an effective theory in predicting the saving behaviour of university students, and hence it is applicable in studies which focused on individual's saving behaviour.

# 5.4 Limitations of Study

There were several limitations encountered during the course of study where future researchers can further improve on them.

# 5.4.1 Sample size and geographical constraint

This study only confined to 420 university students in Peninsular Malaysia to represent a population of 1,004,409 university students in Malaysia. Although the sample size has met the minimum criteria as proposed by Saunders et al. (2009) and Cattell (1978), the results obtained may not robust and less representative as the samples drawn are not large enough and the university students in East Malaysia (Sabah and Sarawak) are excluded.

## 5.4.2 Cross-sectional study

This is a cross-sectional study which merely records information about students' behaviour instead of observes students' saving behaviour within a timeframe. Hence, time sequence of the relationships between the variables could not be determined since cross-sectional data were used (Sit et al., 2009). The results obtained might not be persuasive as a longitudinal study and unable to show the causal relationship between the variables (Saunders et al., 2009).

# 5.4.3 Mediating factor

This study only focuses on the relationship directly from independent variables to dependent variable. Other mediating factors which might have great influence on the actual behaviour are excluded. Hence, the accuracy and reliability of the research might be affected in the absence of mediating factors.

# 5.4.4 Self-report measurement

This study has applied self-report measures as the sole source of data. When students are asked to report on their behaviour by themselves, problems such as method bias, subjective self-evaluation will arise and subsequently lead to lower validity (Podsakoff & MacKenzie, 2003). For instance, students might distort their answers to exaggerate their personality or do not report accurately. Although sometimes students are willing to report themselves genuinely, but self-report emotional intelligence may be tapping a self-perception of emotional ability (Zeng & Miller, 2001). Therefore, the reliability of the study might be affected.

# 5.5 Recommendations

This study has suggested several directions for other researchers in their future research.

## 5.5.1 Embrace a larger sample size and cover broader area

According to the law of large numbers, larger sample size is more likely to be representative and the sample mean is more likely to equal the population mean (Saunders et al., 2009). Therefore, future research are recommended to draw a larger sample size to generate a more accurate and representative manners (Lim et al., 2011). Meanwhile, the samples should be drawn from multiple geographical locations in Malaysia including East Malaysia, possibly from other countries in the Asia-pacific region given that the students' perceptions and attitudes towards savings are likely to vary across countries or cultures throughout the world.

## 5.5.2 Adopt a longitudinal research

The future research is suggested to conduct a longitudinal research to observe the saving behaviour of university students over time. This would facilitate the researchers to gain valuable data which would provide a robust finding on how each factor affecting the students saving behaviour.

## 5.5.3 Instill mediating factors

Given the study is insufficient to explain all the systematic variance, future studies are recommended to comprise mediating factors to better explain the relationship between independent variables and dependent variable. Hence, behavioural intention is suggested to be included as a mediating variable in future study as it can explain a person's readiness to perform a given behaviour (Ajzen, 1991). For instance, perhaps a student with high level of financial literacy and self-control is not likely to foster a saving behaviour because he or she does not have the intention to save. In other words, the saving behaviour is established only if the intention to save is formed, and the intention to save is typically affected by other independent variables such as financial literacy and self-control. Therefore, mediating variable can ensure the future researchers to certainly conclude upon the relationship between independent and dependent variables.

# 5.5.4 Conduct alternative data collection methods

To avoid desirability bias arise in self-report measure, future research may find it helpful to verify participants' perception by using additional measures (Erskine et al, 2005). Rather than using the self-administered questionnaire to collect data solely, researchers are suggested to use alternative data collection method such as field observations.

# **5.6 Conclusion**

In a nutshell, this research has provided insight on how each proposed determinants in predicting the saving behaviour of university students in Malaysia. Thus, this is essential for other researchers to conduct future study in deep on this topic because the saving of university students is foreseen as a vital issue for our country to achieve high saving generation.

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# APPENDICES

# Appendix 3.1

Enrolment of Public HEI Students by Universities 2010							
Public HEI	Number of students						
University Teknologi MARA	167,535						
University Utara Malaysia	37,334						
University Teknologi Malaysia	31,678						
University Islam Antarabangsa Malaysia	29,477						
University Putra Malaysia	29,007						
University Malaya	27,340						
University Sains Malaysia	27,005						
University Kebangsaan Malaysia	25,619						
UniversityPendidikan Sultan Idris	13,525						
University Malaysia Sabah	13,494						
University Tun Hussein Onn Malaysia	9,659						
University Malaysia Sarawak	8,136						
University Teknikal Malaysia Melaka	7,427						
University Malaysia Terengganu	6,932						
University Malaysia Pahang	6,668						
University Sains Islam Malaysia	6,468						
University Malaysia Perlis	6,206						
University Sultan Zainal Abidin	5,262						
University Pertahanan Nasional Malaysia	2,122						
University Malaysia Kelantan	1,886						
Total	462,780						

Enrolment of Public HEI Students by Universities 2010

Adopted from: Macro Data of Higher Education

Enrolment of Private HEI Students by Universities 2010						
Private HEI	Number of students					
OUM	74,805					
MMU	22,064					
UTAR	18,280					
UniKL	15,325					
UNISEL	14,543					
UNITEN	10,746					
MUCH	10,356					
MAHSA	9,970					
UNITAR	9,815					
SYUC	9,310					
TAYLOR'S	8,587					
UCSI U	8,270					
KUIS	7,345					
UTP	6,778					
MSU	6,661					
INTI	6,642					
Asia Pacific UCTI	6,347					
SWINBURNE	6,227					
IUCTT	6,047					
HUC	5,783					
Others	277,728					
Total	541,629					

**Enrolment of Private HEI Students by Universities 2010** 

Adopted from: Macro Data of Higher Education

#### Appendix 3.2



## UNIVERSITI TUNKU ABDUL RAHMAN

To Whom It May Concern

Dear Sir/Madam

Permission to Conduct Survey

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

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

The students are as follows:	
Name of Student	Student ID
Chai Ming Thung	09ABB06565
Chia Ying Kai	09ABB07445
Fong Sheng Nie	09ABB07096
Lew Wan Chiun	09ABB07100
Tan Chang Tsen	09ABB06066

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

Thank you.

Yours sincerely

Leong Lay Ying Head of Department, Faculty of Business and Finance Email: <u>leongly@utar.edu.my</u>

. . . . . . . . . .

Wong Tai Seng Supervisor, Faculty of Business and Finance Email: wongts@utar.edu.my

Address: 13, Jalan 13/6, 46200 Petaling Jaya, Selangor Darul Ehsan, Malaysia Postal Address: P O Box 11384, 50744 Kuala Lumpur, Malaysia. Tel: (603) 7958 2628 Fax: (603) 7956 1923 Homepage: http://www.utar.edu.my



# UNIVERSITI TUNKU ABDUL RAHMAN Faculty of Business and Finance

# BACHELOR OF COMMERCE HONS ACCOUNTING FINAL YEAR PROJECT

# **RESEARCH TOPIC:** DETERMINANTS OF SAVING BEHAVIOUR AMONG UNIVERSITY STUDENTS INMALAYSIA

# **Survey Questionnaire**

Dear respondent,

We are final year undergraduate students of Bachelor of Commerce (Hons) Accounting, from Universiti Tunku Abdul Rahman (UTAR). The **purpose** of this survey is to exam if the saving behaviour of university students in Malaysia can be determined by factors such as financial literacy, parental socialization, peer influence, and self-control.

Thank you for your participation.

#### Instructions:

- 1) There are **TWO** (2) sections in this questionnaire. Please answer ALL questions in ALL sections.
- 2) Completion of this form 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 be kept **strictly confidential**.

#### Section A: Demographic Profile

Please indicate (/) in the appropriate information about yourself. Each question should only have ONE answer. All responses are strictly confidential.

1. Gender:

- □ Male
- □ Female

#### 2. Age:

- $\Box$  18 and below
- □ 19-20
- □ 21-22
- $\hfill\square$  23 and above

#### 3. Marital status:

- $\Box$  Single
- $\Box$  Married

#### 4. Course of study:

- $\square$  Business
- $\hfill\square$  Non business

#### 5. How much allowance do you get from your parents per month?

- $\Box$  RM0  $\leq$  RM200
- $\Box$  RM201  $\leq$  RM500
- $\Box$  RM501  $\leq$  RM800
- $\square$  RM801  $\leq$  RM1000
- $\Box$  More than RM1000
- 6. Do you engage in part-time?
  - □ Yes
  - □ No

## Section B: Independent and Dependent Variables

Please circle your answer to each statement using 5 Likert scale [(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree and (5) = strongly agree]

Finar	ncial Literacy (1 <sup>st</sup> Independent Variable)						
No.	Questions	Strongly	Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I have better understanding of how to invest my money	1			3	4	5
2	I have better understanding of how to manage my credit use	1	1		3	4	5
3	I have a very clear idea of my financial needs during retirement	1		2	3	4	5
4	I have the ability to maintain financial records for my income and expenditure.	1	1		3	4	5
5	I have little or no difficulty in managing my money	1		2	3	4	5
6	I have better understanding of financial instruments (eg. bonds, stock, T-bill, future contract, option and etc.)	1		2	3	4	5
7	I have the ability to prepare my own weekly (monthly) budget	1		2	3	4	5

Parental Socialization (2 <sup>nd</sup> Independent Variable)						
No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My parents are good example for me when it					
	comes to money management	1	2	3	4	5
2	I always talk about money management with my					
	parents	1	2	3	4	5
3	It's good when my parents control my spending	1	2	3	4	5
4	It's a good thing to ask my parents to keep hold of					
	my money sometimes to help me save	1	2	3	4	5
5	My parents are proud of me for saving	1	2	3	4	5
6	I appreciate it when my parents give me advice					
	about what to do with my money	1	2	3	4	5
7	I save money because I don't think my parents					
	should pay for things I don't really need but like	1	2	3	4	5
8	Saving is something I do regularly because my					
	parents wanted me to save when I was little	1	2	3	4	5

Peer	Influence (3 <sup>rd</sup> Independent Variable)						
No.	Questions	Strongly	Disagree	Disagree	Neutral	Agree	Strongly Agree
1	As far as I know, some of my friends regularly do save with a saving account.		1	2	3	4	5
2	I always discuss about money management issue (saving) with my friends.		1	2	3	4	5
3	I always compare the amount of saving and spending with my friends.	1		2	3	4	5
4	I always spend my leisure time with friends	1		2	3	4	5
5	I always involve in money spending activities with friends		1	2	3	4	5

Self-C	Control (4 <sup>th</sup> Independent Variable)						
No.	Questions	Strongly	Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I don't save, because I think it's too hard.	1		2	3	4	5
2	I enjoy spending money on things that aren't practical.	1		2	3	4	5
3	When I get money, I always spend it immediately (within 1 or 2 days).	1		2	3	4	5

4	"I see it, I like it, I buy it" describes me.	1	2	3	4	5
5	"Just do it" describes the way I buy things.	1	2	3	4	5
6	"Buy now, think about it later" describes me.	1	2	3	4	5
7	I'm easily attracted by lure.	1	2	3	4	5
8	I always failed to control myself from spending money.	1	2	3	4	5
9	When I set saving goals for myself, I rarely achieve them.	1	2	3	4	5
10	I am more concerned with what happens to me in short run than in the long run.	1	2	3	4	5

Savin	g Behaviour (Dependent Variables)					ſ
No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly A oree
1	I put money aside on a regular basis for the future.	1	2	3	4	5
2	In order to save, I often compare prices before I make a purchase	1	2	3	4	5
3	In order to save, I often consider whether the real necessity before I make a purchase.	1	2	3	4	5
4	In order to save, I always follow a careful monthly budget.	1	2	3	4	5
5	I always have money available in the event of emergency	1	2	3	4	5
6	In order to save, I plan to reduce my expenditure.	1	2	3	4	5
7	I save to achieve certain goals.	1 2		3	4	5
8	I save until the end of my semester.	1	2	3	4	5

# Appendix 4.1

#### Statistics



	gender								
	-	Frequency	Percent	Valid Percent	Cumulative Percent				
Valid	male	163	38.8	38.8	38.8				
	female	257	61.2	61.2	100.0				
	Total	420	100.0	100.0					

Statistics

а	ge	

N	Valid	420
	Missing	0

			age		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 and below	5	1.2	1.2	1.2
	19-20	69	16.4	16.4	17.6
	21-22	311	74.0	74.0	91.7
	23 and above	35	8.3	8.3	100.0
	Total	420	100.0	100.0	

Statistics					
marital status					
N	Valid	420			
	Missing	0			

	marital status							
	-	Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	single	418	99.5	99.5	99.5			
	married	2	.5	.5	100.0			
	Total	420	100.0	100.0				

#### Statistics

course of study

N	Valid	420
	Missing	0

#### course of study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	business	185	44.0	44.0	44.0
	non business	235	56.0	56.0	100.0
	Total	420	100.0	100.0	

#### Statistics

How much allowance do you get

from your parents per month?

Ν	Valid	420
	Missing	0

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-200	137	32.6	32.6	32.6
	201-500	119	28.3	28.3	61.0
	501-800	105	25.0	25.0	86.0
	801-1000	39	9.3	9.3	95.2
	more than 1000	20	4.8	4.8	100.0
	Total	420	100.0	100.0	

#### How much allowance do you get from your parents per month?

#### Statistics

Do you engage in part-time?

Ν	Valid	420
	Missing	0

Do you engage in part-time?

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	109	26.0	26.0	26.0
	no	311	74.0	74.0	100.0
	Total	420	100.0	100.0	

# Appendix 4.2

# **Financial Literacy**

			Statistics				
	I have better	I have better	I have a	I have the	I have little	I have better	I have the
	understanding	understanding	very clear	ability to	or no	understandi	ability to
	of how to	of how to	idea of my	maintain	difficulty in	ng of	prepare my
	invest my	manage my	financial	financial	managing	financial	own
	money	credit use	needs	records for my	my money	instruments	weekly
			during	income and		(eg. bonds,	(monthly)
			retirement	expenditure.		stock, T-	budget
						bill, future	
						contract, option and	
						etc.)	
N Valid	420	420	420	420	420	420	420
Missing	0	0	0	0	0	0	0
Mean	3.12	3.35	3.06	3.15	3.23	2.98	3.26
Std. Error of Mean	.042	.044	.045	.042	.046	.043	.046
Median	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Mode	3	4	3	3	4	3	4
Std. Deviation	.864	.903	.921	.869	.935	.886	.941
Variance	.747	.815	.848	.755	.874	.785	.886
Skewness	081	357	026	.022	259	062	268
Std. Error of Skewness	.119	.119	.119	.119	.119	.119	.119
Kurtosis	199	307	427	702	609	370	557
Std. Error of Kurtosis	.238	.238	.238	.238	.238	.238	.238
Range	4	4	4	4	4	4	4
Minimum	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5
Sum	1311	1407	1285	1321	1356	1251	1370

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	11	2.6	2.6	2.6
	disagree	83	19.8	19.8	22.4
	neutral	188	44.8	44.8	67.1
	agree	120	28.6	28.6	95.7
	strongly agree	18	4.3	4.3	100.0
	Total	420	100.0	100.0	

#### I have better understanding of how to invest my money

#### I have better understanding of how to manage my credit use

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	strongly disagree	9	2.1	2.1	2.1
	disagree	67	16.0	16.0	18.1
	neutral	141	33.6	33.6	51.7
	agree	174	41.4	41.4	93.1
	strongly agree	29	6.9	6.9	100.0
	Total	420	100.0	100.0	

#### I have a very clear idea of my financial needs during retirement

-	-	Eroguanau	Percent	Valid Percent	Cumulative Percent
		Frequency	Percent	vand Percent	Percent
Valid	strongly disagree	15	3.6	3.6	3.6
	disagree	101	24.0	24.0	27.6
	neutral	168	40.0	40.0	67.6
	agree	116	27.6	27.6	95.2
	strongly agree	20	4.8	4.8	100.0
	Total	420	100.0	100.0	

		Frequency	Percent		Cumulative Percent
Valid	strongly disagree	4	1.0	1.0	1.0
	disagree	102	24.3	24.3	25.2
	neutral	161	38.3	38.3	63.6
	agree	135	32.1	32.1	95.7
	strongly agree	18	4.3	4.3	100.0
	Total	420	100.0	100.0	

I have little or no difficulty in managing my money

		Frequency	Percent	Valid Percent	Cumulative Percent
	-				
Valid	strongly disagree	11	2.6	2.6	2.6
	disagree	90	21.4	21.4	24.0
	neutral	134	31.9	31.9	56.0
	agree	162	38.6	38.6	94.5
	strongly agree	23	5.5	5.5	100.0
	Total	420	100.0	100.0	

I have better understanding of financial instruments (eg. bonds, stock, T-bill, future contract, option and etc.)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	strongly disagree	17	4.0	4.0	4.0
	disagree	106	25.2	25.2	29.3
	neutral	178	42.4	42.4	71.7
	agree	107	25.5	25.5	97.1
	strongly agree	12	2.9	2.9	100.0
	Total	420	100.0	100.0	

1		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	11	2.6	2.6	2.6
	disagree	85	20.2	20.2	22.9
	neutral	134	31.9	31.9	54.8
	agree	163	38.8	38.8	93.6
	strongly agree	27	6.4	6.4	100.0
	Total	420	100.0	100.0	

I have the ability to prepare my own	n weekly (monthly) budget
--------------------------------------	---------------------------

# Parental Socialization

			5	tatistics				
	My parents	I always	It's good	It's a good	My parents	I appreciate	I save	Saving is
	are good	talk about	when my	thing to ask	are proud of	it when my	money	something I
	example for	money	parents	my parents	me for	parents give	because I	do regularly
	me when it	managemen	control my	to keep	saving	me advice	don't think	because my
	comes to	t with my	spending	hold of my		about what	my parents	parents
	money	parents		money		to do with	should pay	wanted me
	managemen			sometimes		my money	for things I	to save
	t			to help me			don't really	
				save			need but	little
							like	
N Valid	420	420	420	420	420	420	420	420
Missing	0	0	0	0	0	0	0	0
Mean	3.43	2.95	3.29	3.32	3.30	3.54	3.41	3.60
Std. Error of Mean	.046	.044	.050	.052	.042	.041	.045	.048
Median	4.00	3.00	3.00	3.00	3.00	4.00	3.00	4.00
Mode	4	3	4	4	3	4	3	4
Std. Deviation	.938	.912	1.021	1.059	.865	.846	.919	.981
Variance	.881	.831	1.042	1.122	.748	.717	.844	.962
Skewness	365	.014	241	361	120	396	196	504
Std. Error of	.119	.119	.119	.119	.119	.119	.119	.119
Skewness								
Kurtosis	406	547	613	548	299	069	274	148
Std. Error of	.238	.238	.238	.238	.238	.238	.238	.238
Kurtosis								
Range	4	4	4	4	4	4	4	4
Minimum	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5
Sum	1441	1241	1382	1396	1384	1488	1432	1510

#### Statistics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	8	1.9	1.9	1.9
	disagree	67	16.0	16.0	17.9
	neutral	123	29.3	29.3	47.1
	agree	180	42.9	42.9	90.0
	strongly agree	42	10.0	10.0	100.0
	Total	420	100.0	100.0	

#### My parents are good example for me when it comes to money management

I always talk about money management with my parents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	4.0	4.0	4.0
	disagree	120	28.6	28.6	32.6
	neutral	161	38.3	38.3	71.0
	agree	109	26.0	26.0	96.9
	strongly agree	13	3.1	3.1	100.0
	Total	420	100.0	100.0	

#### It's good when my parents control my spending

	-				Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	strongly disagree	16	3.8	3.8	3.8
	disagree	84	20.0	20.0	23.8
	neutral	125	29.8	29.8	53.6
	agree	152	36.2	36.2	89.8
	strongly agree	43	10.2	10.2	100.0
	Total	420	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	22	5.2	5.2	5.2
	disagree	75	17.9	17.9	23.1
	neutral	116	27.6	27.6	50.7
	agree	159	37.9	37.9	88.6
	strongly agree	48	11.4	11.4	100.0
	Total	420	100.0	100.0	

#### It's a good thing to ask my parents to keep hold of my money sometimes to help me save

#### My parents are proud of me for saving

		Frequency	Percent		Cumulative Percent
Valid	strongly disagree	6	1.4	1.4	1.4
	disagree	67	16.0	16.0	17.4
	neutral	172	41.0	41.0	58.3
	agree	147	35.0	35.0	93.3
	strongly agree	28	6.7	6.7	100.0
	Total	420	100.0	100.0	

#### I appreciate it when my parents give me advice about what to do with my money

-	-				Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	strongly disagree	4	1.0	1.0	1.0
	disagree	44	10.5	10.5	11.4
	neutral	134	31.9	31.9	43.3
	agree	196	46.7	46.7	90.0
	strongly agree	42	10.0	10.0	100.0
	Total	420	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	8	1.9	1.9	1.9
	disagree	56	13.3	13.3	15.2
	neutral	158	37.6	37.6	52.9
	agree	152	36.2	36.2	89.0
	strongly agree	46	11.0	11.0	100.0
	Total	420	100.0	100.0	

I save money because I don't think my parents should pay for things I don't really need but like

Saving is something I do regularly because my parents wanted me to save when I was little

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	11	2.6	2.6	2.6
	disagree	47	11.2	11.2	13.8
	neutral	114	27.1	27.1	41.0
	agree	177	42.1	42.1	83.1
	strongly agree	71	16.9	16.9	100.0
	Total	420	100.0	100.0	

# **Peer Influence**

Statistics						
	As far as I know,	I always discuss	I always	I always spend	I always involve	
	some of my	about money	compare the	my leisure time	in money	
	friends regularly	management	amount of saving	with friends	spending	
	do save with a	issue (saving)	and spending		activities with	
	saving account.	with my friends.	with my friends.		friends	
N Valid	420	420	420	420	420	
Missing	0	0	0	0	0	
Mean	3.48	3.06	2.82	3.41	3.28	
Std. Error of Mean	.041	.041	.046	.041	.044	
Median	4.00	3.00	3.00	3.00	3.00	
Mode	4	3	2	4	3	
Std. Deviation	.833	.845	.939	.834	.901	
Variance	.694	.714	.882	.696	.812	
Skewness	624	075	.120	318	107	
Std. Error of Skewness	.119	.119	.119	.119	.119	
Kurtosis	.230	466	690	127	438	
Std. Error of Kurtosis	.238	.238	.238	.238	.238	
Range	4	4	4	4	4	
Minimum	1	1	1	1	1	
Maximum	5	5	5	5	5	
Sum	1462	1287	1185	1432	1377	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	7	1.7	1.7	1.7
	disagree	46	11.0	11.0	12.6
	neutral	131	31.2	31.2	43.8
	agree	210	50.0	50.0	93.8
	strongly agree	26	6.2	6.2	100.0
	Total	420	100.0	100.0	

I always discuss about money management issue (saving) with my friends.

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	strongly disagree	9	2.1	2.1	2.1
	disagree	99	23.6	23.6	25.7
	neutral	179	42.6	42.6	68.3
	agree	122	29.0	29.0	97.4
	strongly agree	11	2.6	2.6	100.0
	Total	420	100.0	100.0	

#### I always compare the amount of saving and spending with my friends.

	-				Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	strongly disagree	24	5.7	5.7	5.7
	disagree	147	35.0	35.0	40.7
	neutral	139	33.1	33.1	73.8
	agree	100	23.8	23.8	97.6
	strongly agree	10	2.4	2.4	100.0
	Total	420	100.0	100.0	
		Frequency	Percent	Valid Percent	Cumulative Percent
-------	-------------------	-----------	---------	---------------	-----------------------
Valid	strongly disagree	5	1.2	1.2	1.2
	disagree	52	12.4	12.4	13.6
	neutral	157	37.4	37.4	51.0
	agree	178	42.4	42.4	93.3
	strongly agree	28	6.7	6.7	100.0
	Total	420	100.0	100.0	

## I always spend my leisure time with friends

I always involve in money spending activities with friends

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	7	1.7	1.7	1.7
	disagree	76	18.1	18.1	19.8
	neutral	161	38.3	38.3	58.1
	agree	145	34.5	34.5	92.6
	strongly agree	31	7.4	7.4	100.0
	Total	420	100.0	100.0	

# Self-Control

				D	tatistics					
	I don't	I enjoy	When I	'I see it, I	'Just do	'Buy now,	I'm easily	I always	When I	I am
	save,	spending	get	like it, I	it'	think	attracted	failed to	set saving	more
	because I	money on	money, I	buy it'	describes	about it	by lure.	control	goals for	concerne
	think it's	things that	always	describes	the way I	later'		myself	myself, I	d with
	too hard.	aren't	spend it	me.	buy	describes		from	rarely	what
		practical.	immediate		things.	me.		spending	achieve	happens
		<u>^</u>	ly (within		-			money.	them.	to me in
			1 or 2					5		short run
			days).							than in
			aays).							the long
										run.
NY XY 1' 1	120	120	120	120	120	120	120	120	120	120
N Valid	420	420	420	420	420	420	420	420	420	420
Missing	0	0	0	0	0	0	0	0	0	0
Mean Std. Error of	3.58	3.36	3.56	3.45	3.51	3.58	3.27	3.35	3.15	3.35
Mean	.048	.048	.050	.051	.049	.052	.049	.050	.047	.048
Median	4.00	3.00	4.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00
Mode	4	4	4	4	4	4	4	4	3	4
Std. Deviation	.975	.988	1.024	1.043	.995	1.062	1.014	1.021	.958	.977
Variance	.950	.975	1.049	1.088	.990	1.127	1.029	1.043	.917	.955
Skewness	508	277	429	228	340	501	219	286	243	235
Std. Error of Skewness	.119	.119	.119	.119	.119	.119	.119	.119	.119	.119
Kurtosis	196	459	454	689	498	499	549	627	435	573
Std. Error of Kurtosis	.238	.238	.238	.238	.238	.238	.238	.238	.238	.238
Range	4	4	4	4	4	4	4	4	4	4
Minimum	1	1	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5	5	5
Sum	1504	1411	1495	1448	1474	1503	1374	1405	1324	1409

Statistics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	10	2.4	2.4	2.4
	disagree	52	12.4	12.4	14.8
	neutral	108	25.7	25.7	40.5
	agree	184	43.8	43.8	84.3
	strongly agree	66	15.7	15.7	100.0
	Total	420	100.0	100.0	

## I don't save, because I think it's too hard.

### I enjoy spending money on things that aren't practical.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	13	3.1	3.1	3.1
	disagree	71	16.9	16.9	20.0
	neutral	134	31.9	31.9	51.9
	agree	156	37.1	37.1	89.0
	strongly agree	46	11.0	11.0	100.0
	Total	420	100.0	100.0	

## When I get money, I always spend it immediately (within 1 or 2 days).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	11	2.6	2.6	2.6
	disagree	60	14.3	14.3	16.9
	neutral	107	25.5	25.5	42.4
	agree	167	39.8	39.8	82.1
	strongly agree	75	17.9	17.9	100.0
	Total	420	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	11	2.6	2.6	2.6
	disagree	73	17.4	17.4	20.0
	neutral	123	29.3	29.3	49.3
	agree	143	34.0	34.0	83.3
	strongly agree	70	16.7	16.7	100.0
	Total	420	100.0	100.0	

### 'I see it, I like it, I buy it' describes me.

#### 'Just do it' describes the way I buy things.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	9	2.1	2.1	2.1
	disagree	63	15.0	15.0	17.1
	neutral	118	28.1	28.1	45.2
	agree	165	39.3	39.3	84.5
	strongly agree	65	15.5	15.5	100.0
	Total	420	100.0	100.0	

# 'Buy now, think about it later' describes me.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	13	3.1	3.1	3.1
	disagree	65	15.5	15.5	18.6
	neutral	89	21.2	21.2	39.8
	agree	172	41.0	41.0	80.7
	strongly agree	81	19.3	19.3	100.0
	Total	420	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	4.0	4.0	4.0
	disagree	81	19.3	19.3	23.3
	neutral	135	32.1	32.1	55.5
	agree	145	34.5	34.5	90.0
	strongly agree	42	10.0	10.0	100.0
	Total	420	100.0	100.0	

### I'm easily attracted by lure.

#### I always failed to control myself from spending money.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	14	3.3	3.3	3.3
	disagree	82	19.5	19.5	22.9
	neutral	116	27.6	27.6	50.5
	agree	161	38.3	38.3	88.8
	strongly agree	47	11.2	11.2	100.0
	Total	420	100.0	100.0	

### When I set saving goals for myself, I rarely achieve them.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	19	4.5	4.5	4.5
	disagree	85	20.2	20.2	24.8
	neutral	152	36.2	36.2	61.0
	agree	141	33.6	33.6	94.5
	strongly agree	23	5.5	5.5	100.0
	Total	420	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	10	2.4	2.4	2.4
	disagree	78	18.6	18.6	21.0
	neutral	129	30.7	30.7	51.7
	agree	159	37.9	37.9	89.5
	strongly agree	44	10.5	10.5	100.0
	Total	420	100.0	100.0	

I am more concerned with what happens to me in short run than in the long run.

# Saving Behaviour

			L.	Statistics				
	I put money	In order to	In order to	In order to	I always	In order to	I save to	I save until
	aside on a	save, I often	save, I often	save, I	have money	save, I plan	achieve	the end of
	regular	compare	consider	always	available in	to reduce	certain	my
	basis for the	*	whether the	follow a	the event of	my	goals.	semester.
	future.	before I	real	careful	emergency	expenditure.		
		make a	necessity	monthly				
		purchase	before I	budget.				
			make a purchase.					
			-					
N Valid	420	420	420	420	420	420	420	420
Missing	0	0	0	0	0	0	0	0
Mean	3.31	3.59	3.66	3.27	3.50	3.59	3.55	3.30
Std. Error of	.038	.045	.040	.040	.040	.037	.038	.042
Mean								
Median	3.00	4.00	4.00	3.00	4.00	4.00	4.00	3.00
Mode	3	4	4	3	4	4	4	3
Std. Deviation	.787	.926	.823	.823	.825	.753	.784	.851
Variance	.619	.858	.678	.677	.680	.567	.615	.724
Skewness	395	439	592	106	344	555	368	325
Std. Error of	.119	.119	.119	.119	.119	.119	.119	.119
Skewness								
Kurtosis	021	305	.106	314	161	.287	.140	.141
Std. Error of	.238	.238	.238	.238	.238	.238	.238	.238
Kurtosis								
Range	4	4	4	4	4	4	4	4
Minimum	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5
Sum	1389	1508	1538	1375	1468	1509	1492	1384

#### Statistics

		Frequency	Percent		Cumulative Percent
Valid	strongly disagree	6	1.4	1.4	1.4
	disagree	54	12.9	12.9	14.3
	neutral	178	42.4	42.4	56.7
	agree	169	40.2	40.2	96.9
	strongly agree	13	3.1	3.1	100.0
	Total	420	100.0	100.0	

#### I put money aside on a regular basis for the future.

## In order to save, I often compare prices before I make a purchase

		Frequency	Percent		Cumulative Percent
Valid	strongly disagree	5	1.2	1.2	1.2
	disagree	54	12.9	12.9	14.0
	neutral	109	26.0	26.0	40.0
	agree	192	45.7	45.7	85.7
	strongly agree	60	14.3	14.3	100.0
	Total	420	100.0	100.0	

#### In order to save, I often consider whether the real necessity before I make a purchase.

-	-				Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	strongly disagree	2	.5	.5	.5
	disagree	42	10.0	10.0	10.5
	neutral	99	23.6	23.6	34.0
	agree	230	54.8	54.8	88.8
	strongly agree	47	11.2	11.2	100.0
	Total	420	100.0	100.0	

		Frequency	Percent		Cumulative Percent
Valid	strongly disagree	4	1.0	1.0	1.0
	disagree	67	16.0	16.0	16.9
	neutral	180	42.9	42.9	59.8
	agree	148	35.2	35.2	95.0
	strongly agree	21	5.0	5.0	100.0
	Total	420	100.0	100.0	

#### In order to save, I always follow a careful monthly budget.

I always have money available in the event of emergency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	.7	.7	.7
	disagree	47	11.2	11.2	11.9
	neutral	143	34.0	34.0	46.0
	agree	193	46.0	46.0	91.9
	strongly agree	34	8.1	8.1	100.0
	Total	420	100.0	100.0	

## In order to save, I plan to reduce my expenditure.

	-				Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	strongly disagree	2	.5	.5	.5
	disagree	33	7.9	7.9	8.3
	neutral	128	30.5	30.5	38.8
	agree	228	54.3	54.3	93.1
	strongly agree	29	6.9	6.9	100.0
	Total	420	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	.7	.7	.7
	disagree	33	7.9	7.9	8.6
	neutral	148	35.2	35.2	43.8
	agree	201	47.9	47.9	91.7
	strongly agree	35	8.3	8.3	100.0
	Total	420	100.0	100.0	

## I save to achieve certain goals.

## I save until the end of my semester.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	11	2.6	2.6	2.6
	disagree	52	12.4	12.4	15.0
	neutral	182	43.3	43.3	58.3
	agree	152	36.2	36.2	94.5
	strongly agree	23	5.5	5.5	100.0
	Total	420	100.0	100.0	

# **Financial Literacy**

	<b>Case Processing Summary</b>				
		Ν	%		
Cases	Valid	420	100.0		
	Excluded <sup>a</sup>	0	.0		
	Total	420	100.0		

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

#### **Reliability Statistics**

Cronbach's	
Alpha	N of Items
.833	7

## **Parental Socialization**

**Case Processing Summary** 

		Ν	%
Cases	Valid	420	100.0
	Excluded <sup>a</sup>	0	.0
	Total	420	100.0

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

### **Reliability Statistics**

Cronbach's	
Alpha	N of Items
.754	8

## **Peer Influence**

Case Processing Summary							
	N %						
Cases	Valid	420	100.0				
	Excluded <sup>a</sup>	0	.0				
	Total 420 100.0						

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

### **Reliability Statistics**

Cronbach's	
Alpha	N of Items
.654	5

## Self-Control

## **Case Processing Summary**

	-	Ν	%
Cases	Valid	420	100.0
	Excluded <sup>a</sup>	0	.0
	Total	420	100.0

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

## **Reliability Statistics**

Cronbach's	
Alpha	N of Items
.918	10

# **Saving Behaviour**

<b>Case Processing Summary</b>						
	N %					
Cases	Valid	420	100.0			
	Excluded <sup>a</sup>	0	.0			
	Total	420	100.0			

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

## **Reliability Statistics**

Cronbach's	
Alpha	N of Items
.819	8

# **Pearson Correlation**

Correlations								
		Financial_Lit eracy	Parental_Soci alization	Peer_Influenc e	Self_Control	Saving_Beha viour		
Financial_Li	Pearson Correlation	1	.374**	.165**	.178**	.442**		
teracy	Sig. (2-tailed)		.000	.001	.000	.000		
	Ν	420	420	420	420	420		
Parental_So	Pearson Correlation	.374**	1	.232**	.191**	.521**		
cialization	Sig. (2-tailed)	.000		.000	.000	.000		
	Ν	420	420	420	420	420		
Peer_Influen	Pearson Correlation	.165**	.232**	1	234**	.174**		
ce	Sig. (2-tailed)	.001	.000		.000	.000		
	Ν	420	420	420	420	420		
Self_Control	Pearson Correlation	.178**	.191**	234**	1	.381**		
	Sig. (2-tailed)	.000	.000	.000		.000		
	Ν	420	420	420	420	420		
Saving_Beh	Pearson Correlation	.442**	.521**	.174**	.381**	1		
aviour	Sig. (2-tailed)	.000	.000	.000	.000			
	Ν	420	420	420	420	420		

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

# **Partial Correlation**

Correlations						
Control Vori	ablaa			Parental_Soci alization		Self_Control
Control Vari	ables		eracy	alization	e	
Saving_Beh	Financial_Li	Correlation	1.000	.187	.100	.012
aviour	teracy	Significance (2-tailed)		.000	.040	.809
		df	0	417	417	417
	Parental_So cialization	Correlation	.187	1.000	.168	010
		Significance (2-tailed)	.000		.001	.846
		df	417	0	417	417
	Peer_Influen	Correlation	.101	.168	1.000	330
	ce	Significance (2-tailed)	.040	.001		.000
		df	417	417	0	417
	Self_Control	Correlation	.012	010	330	1.000
		Significance (2-tailed)	.809	.846	.000	
		df	417	417	417	0

## **Multiple Regression**

	Model Summary <sup>b</sup>						
	Std. Error of the						
Model	R	R Square	Adjusted R Square	Estimate			
1	.650 <sup>a</sup>	.422	.416	.41727			

a. Predictors: (Constant), Financial\_Literacy, Parental\_Socialization,

Peer\_Influence, Self\_Control

b. Dependent Variable: Saving\_Behaviour

	ANOVA <sup>b</sup>							
Model	1	Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	52.722	4	13.181	75.702	.000 <sup>a</sup>		
	Residual	72.256	415	.174				
	Total	124.978	419					

a. Predictors: (Constant), Financial\_Literacy, Parental\_Socialization, Peer\_Influence, Self\_Control

b. Dependent Variable: Saving\_Behaviour

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.596	.186		3.208	.001
	FL_Avg	.204	.035	.239	5.847	.000
	PS_Avg	.329	.040	.345	8.264	.000
	PI_Avg	.121	.039	.125	3.086	.002
	SC_Avg	.215	.029	.301	7.496	.000

a. Dependent Variable: Saving\_Behaviour





# Scatterplot

## Dependent Variable: Saving\_Behaviour

