

THE INDIVIDUAL SAVINGS BEHAVIOUR IN  
MALAYSIAN NEW VILLAGES

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## DECLARATION

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

	Page
Copyright Page.....	ii
Declaration.....	iii
Acknowledgements.....	iv
Dedication.....	v
Table of Contents.....	vi
List of Tables.....	xi
List of Figures.....	xii
List of Abbreviations.....	xiii
List of Appendices.....	xiv
Preface.....	xv
Abstract.....	xvi
CHAPTER 1 RESEARCH OVERVIEW.....	1
1.0 Research Background.....	1
1.1 Problem Statement.....	3
1.2 Research Objectives.....	7
1.3 Research Questions.....	7
1.4 Scope of Study.....	7

1.5	Significance of Study.....	8
1.6	Chapter Outline.....	9
CHAPTER 2 LITERATURE REVIEW.....		10
2.0	Introduction.....	10
2.1	Review of Variables.....	10
2.1.1	Saving Behaviour.....	10
2.1.2	Financial Literacy.....	12
2.1.3	Risk Tolerance.....	15
2.1.4	Financial Socialization Agents.....	18
2.1.4.1	Parent.....	18
2.1.4.2	Peer Group.....	20
2.2	Theoretical Model.....	21
2.2.1	Theory of Reasoned Action.....	21
2.2.2	Risk-bearing and Consumption Theory.....	22
2.2.3	Social Learning Theory.....	23
2.3	Conceptual Framework.....	25
2.4	Hypothesis Development.....	25
2.5	Conclusion.....	26
CHAPTER 3 METHODOLOGY.....		27
3.0	Introduction.....	27
3.1	Research Design.....	27

3.2	Data Collection Method.....	28
3.3	Sampling Design.....	29
3.3.1	Target Population.....	29
3.3.2	Sampling Frame and Sampling Location.....	29
3.3.3	Sampling Element.....	30
3.3.4	Sampling Technique.....	30
3.3.5	Sampling Size.....	31
3.4	Research Instrument.....	31
3.5	Constructs Measurement.....	32
3.6	Data Processing.....	34
3.6.1	Data Checking.....	34
3.6.2	Data Editing.....	35
3.6.3	Data Coding.....	35
3.6.4	Data Transcribing.....	35
3.7	Data Analysis.....	35
3.7.1	Descriptive Analysis.....	36
3.7.2	Reliability Test.....	36
3.7.3	Inferential Analysis.....	37
3.7.3.1	Pearson's Correlation Analysis.....	37
3.7.3.2	Multiple Linear Regression.....	38
3.8	Conclusion.....	38



CHAPTER 4 DATA ANALYSIS.....	39
4.0 Introduction.....	39
4.1 Descriptive Analysis.....	39
4.1.1 Respondent Demographic Profile.....	39
4.1.2 Central tendencies Measurement of Construct.....	43
4.2 Scale Measurement.....	52
4.2.1 Reliability Test.....	52
4.3 Inferential Analysis.....	52
4.3.1 Pearson’s Correlation Analysis.....	53
4.3.2 Multiple Linear Regression & ANOVA.....	54
4.4 Conclusion.....	57
CHAPTER 5 DISCUSSION, CONCLUSION AND IMPLICATIONS.....	58
5.0 Introduction.....	58
5.1 Summary of Statistical Analysis.....	58
5.1.1 Descriptive Analysis.....	58
5.1.1.1 Respondents’ Demographic Profile.....	58
5.1.1.2 Central Tendencies Measurement of Construct....	59
5.1.2 Scale Measurement.....	61
5.1.2.1 Reliability Analysis.....	61
5.1.3 Inferential Analysis.....	61
5.1.3.1 Pearson’s Correlation Analysis.....	61

5.1.3.2 Multiple Linear Regression Analysis.....	62
5.1.3.3 Multiple Linear Regression Equation.....	62
5.2 Discussion on Major Findings.....	63
5.2.1 Financial Literacy.....	63
5.2.2 Risk Tolerance.....	64
5.2.3 Financial Socialization Agents.....	64
5.3 Implications of the Study.....	65
5.4 Limitations of the Study.....	67
5.5 Recommendations for Future Study.....	68
5.6 Conclusion.....	68
References.....	70
Appendices.....	87

LIST OF TABLES

	Page
Table 4.1: Information based on gender	40
Table 4.2: Information based on ethnicity	40
Table 4.3: Information based on age	41
Table 4.4: Information based on education	41
Table 4.5: Information based on marital status	42
Table 4.6: Information based on work status	42
Table 4.7: Information based on income	43
Table 4.8: Individual Savings Behaviour	44
Table 4.9: Financial Literacy	45
Table 4.10: Risk Tolerance	48
Table 4.11: Financial Socialization Agents	49
Table 4.12: Reliability Test (Cronbach's Alpha)	52
Table 4.13: Pearson's Correlation Matrix	53
Table 4.14: Coefficients to Individual Savings Behaviour	54
Table 4.15: Ranking on Coefficient of Independent Variables	55
Table 4.16: Model Summary	55
Table 4.17: ANOVA	56
Table 5.1: Summary of the Result of Hypotheses Testing	63

## LIST OF FIGURES

	Page
Figure 2.1: Variable affect saving behaviour	25

## LIST OF ABBREVIATIONS

BNM	Bank Negara Malaysia
CFCS	Canadian Financial Capability Survey
EPF	Employees Provident Fund
FOMCA	Federation of Malaysian Consumers Associations
MFPC	Malaysian Financial Planning Council's
PRS	Private Retirement Scheme
SLT	Social Learning Theory
SPSS	Statistical Package for the Social Sciences
SSPN	Skim Simpanan Pendidikan Nasional
TRA	Theory of Reasoned Action

LIST OF APPENDICES

	Page
Appendix A: Research Survey Questionnaire.....	87
Appendix B: Pilot Test (Reliability Test - Cronbach's Alpha).....	95
Appendix C: Frequencies of Demographic Profile.....	96
Appendix D: Frequencies of Variables.....	98
Appendix E: Reliability Test (Cronbach's Alpha).....	106
Appendix F: Pearson's Correlation Analysis.....	108
Appendix G: Multiple Linear Regression Model.....	109
Appendix H: Permission to Conduct Survey.....	110

## PREFACE

Every individual should have savings, shouldn't we? Savings is the amount of money or funds that left over after spending. Savings serves a purpose to meet financial needs in the future. However, savings of Malaysian are relatively low nowadays due to several reasons. In fact, savings in rural area are lower than urban area. This situation has caused people face difficulties to take out their savings fund during emergencies. Besides, savings behaviour is vital to improve country economic growth. Due to the lack of savings of people will lead to the growth of income decrease as well as low level of consumption. This has become a major issue for the government.

Since the government concerns about the rural wellbeing. It raises our curiosity in studying the factors that would affect individual savings behaviour in new villages across Malaysia. Hence, this research project is conducted to understand the factors and individual savings behaviour in Johor new villages because Johor has the most developed new villages in Malaysia.

## ABSTRACT

Malaysians are facing a low and stagnant income, which lead to a low rate of savings. The savings rate of household in rural area is usually lower than urban area. New village is one of the places in rural area which surrounded by Chinese communities. The objective of this study is to investigate the factors affecting the individual savings behaviour in Malaysian new villages. The independent variables include financial literacy, financial socialization agents and financial risk tolerance.

In order to conduct informative research, questionnaire is constructed and distributed physically and electronically to 396 villagers in Johor new villages. The data are then gathered and rearranged in order to carry out extensive analysis on the pattern, causality, consistency and significance of the relationship between variables by using SPSS software.

The results obtained from SPSS indicate that the financial literacy and financial socialization agents exhibit a significant relationship with savings behaviour. Nevertheless, financial risk tolerance shows a negative impact on savings behaviour. The results of this study are consistent with the expectation relationship.



## CHAPTER 1: RESEARCH OVERVIEW

### 1.0 Research Background

Savings is one of the assets which can increase the lifetime consumption and improve the financial welfare to future generations. Savings serve as insurance when individuals face difficulties and emergencies (Chowa, Masa & Ansong, 2012). Otherwise, they may face much financial distress because there are many financial emergencies such as car maintenance, healthcare and sudden job loss, and this leads to increase anxiety (Prawitz, Garman, Sorhaindo, O'Neill, Kim & Drentea, 2006). Besides, savings have a positive effect on the economy (Kriekhaus, 2002), since the funds as one of the financial assets which can be invested by firms through the financial intermediaries to benefits the country with high productivity and economic growth. In addition, high savings can also help the country to overcome the recession and financial crisis, and most importantly a way to improve their well-being (Mahdzan & Tabiani, 2013). In the economic point of view, savings can be explained as a source of capital which improves the labor productivity with specialization and enhances large-scale production with the use of technology in this modern world in order to increase Gross Domestic Product (Jagadeesh, 2015). Hence, many studies investigated the causal relationship that exists between domestic savings and economic growth. Example from Turan and Gjergji (2014) in Albania, Anoruo and Ahmad (2001) in Congo, and Hafizah, Zaherawati, Hussin, Nik and Mahazril (2011) in Malaysia from 1978 to 2007. Example in the Republic of Azerbaijan, Bairamli and Kostoglou (2010) argued that savings are the resources of making the domestic investments (e.g. non-oil sector), and this can speculate economic growth and employment. Thus, savings do not merely benefit the households, it also benefits the country development.

However, Malaysians tend to save less nowadays. Malaysians are facing a low and stagnant income, which lead to difficulty for savings money (Nadason, 2018).

According to Surendran (2018), the individual savings deposit in a bank in 2017 only increased by 3.98% from the savings in 2016. This growth of bank deposit in 2017 is considering as low compared with the previous year. Former Bank Negara Malaysia (BNM) governor did claim that BNM survey found that 75 percent of individuals in Malaysia could not even afford RM1,000 only when they faced difficulties (Ho, 2018; Chua, 2018). Based on the survey done by Merdeka Center, 29% of respondents in Malaysia did not have enough savings even only RM500 to face difficulties in 2017 (Lim, 2017). Over the last five years, 64,632 individuals aged between 18 to 44 in Malaysia had been declared bankrupt by the Department of Insolvency. The reason mentioned by Nair, Paim Sabri and Abdul Rahim (2016), many civil servants in Malaysia have the misconception of borrowing debts, and they do not have a habit of adequate savings to handle their future expenses.

According to Nga and Yeoh (2018), the increase of cost of living in Malaysia caused Malaysians to use up their retirement savings in these recent years. This becomes a major issue for the person who needs to provide financial support to their families as they became older. Besides that, since the unemployment issue and the income instability problems were increasing and negatively affecting the purchasing power of Malaysian nowadays, so it is important for Malaysians to know how to manage their personal wealth and plan to save for retirement in the future in order to afford the cost of living.

According to Khazanah Research Institute, it stated that Malaysians are borrowing too much instead of enough savings nowadays. From the report, 82% of Malaysians are not expected to have enough savings for retirement. Based on the data from EPF in 2013, about 90% of Malaysians did not have enough savings to maintain their basic lifetime within five years (Shukry, 2014). This incredible result may due to many citizens are too dependent on their Employees Provident Fund (EPF) savings, and they have no further financial planning for savings and investment (Beyond Insights, 2018). Especially, the majority of the employees in Malaysia is permitted to withdraw money from their EPF for housing, health and education purposes (The Star Online, 2017). The report also mentioned that the EPF return in Malaysia is still low even though its investment had been

diversified. From these statements, it clearly proves that savings in EPF are not enough for retirement.

According to Zakaria, Leinbach, Ooi and Lockard (2019), the rural population is one-fourth of Malaysia's total population and basically, the measures for people in a small region is villages or communities. For example, the four main types of rural Malay settlement are fishing villages, paddy villages, cash-crop villages, and mixed-crop villages. In the early 19th century, first immigrant settlements were mining camps which were established primarily by Chinese around tin fields in the west. According to the Centre for Malaysian Chinese Studies (2011), new villages have become the permanent settlements of former rural Chinese residents in Peninsular Malaysia which were originally established as relocation settlements by the government for rural Chinese during the Malayan Emergency. Malayan Emergency is a period of intense conflict between the British administration and a largely Chinese communist guerrilla insurgency. However, some of the New Villages were abandoned after Malayan Emergency, but most of them became permanent settlements.

The motive of this study is to investigate the determinants of individual savings in new villages. This study is to examine the savings behaviour of individual in new village which influenced by financial literacy, risk tolerance and financial socialization agents (parents, peers).

## **1.1 Problem Statement**

New village can be considered as one of the places in rural area. The villages were set up in many rural areas which included the large Chinese populations (Phang & Tan, 2013). Bautista and Lamberte (1990) stated that the savings rate of household in rural area usually is lower than urban area. This may be influenced by the lack of financial literacy, limited internet facilities to get the financial knowledge and insufficient financial knowledge of financial socialization agents in rural area (Mohamed, 2017). Hence, this may be a trouble for the person in new village

when they need emergency money in the future. It has been reported that an astounding 90% of rural households do not have any savings at all (The Star Online, 2018). Not only that, the Malaysia government also implemented 21st Century Village program to convince the younger generations continue to stay in rural areas (Adnan, 2019) as well as New villages (Tan, 2019). Especially, the new village is treated as an economic category since 1980 by Malaysia government (Strauch, 1981). In this research, Johor is the target area to determine the Malaysian's savings behaviour in new village. The reason for Johor as the targeted area is Johor has the largest proportion in the developed new villages compare with other states in Malaysia. According to New Villages Master Plan Peninsular Malaysia, Johor consist of 34.71 percent from 121 developed new villages in Malaysia.

Malaysia, one of the developing countries, also faces a crucial issue regarding financial behaviours among the general public (Kimiyaqhalam & Yap, 2017). Malaysians are generally found not taking care of their own financial affairs (Tan, Hoe & Hung, 2011). The Malaysian Financial Planning Council's (MFPC) research found that most Malaysians are hard to save money because they do not have enough financial literacy and income (Ng, 2018). Based on the report of "Financial Capability and Utilisation of Financial Advisory Services in Malaysia", the results showed that 40% of the respondents do not have financial planning due to lack of concept of personal financial management (Ng, 2018). Although people may save their money all the time, but they may not have sufficient financial planning to save their money at an adequate rate. Employees do not construct for few savings plans resulting in cutting their spending when they accidentally unemployed (Delafrooz & Paim, 2011). In addition, the investigation also showed that most of the Malaysians have the behaviour of spending for instant satisfaction instead of preparing for long term financial plans (Mokhtar, Dass, Sabri & Ho, 2018). In fact, Malaysians with the low level of financial literacy education do not have much of the personal financial behaviour such as savings, investment, retirement planning (Selvadurai, Kenayathulla, & Siraj, 2018) as well as the young Malaysians (Jay, 2017). Thus, this is important to study whether low financial literacy causes low individual savings.

Lim, Ng, Chin and Boo (2014) stated that most of the youngsters in Malaysia were overspending their money on the credit card, hence, it led to personal bankruptcy. The young generations in Malaysia recently may be misunderstanding the credit card (The New Straits Times, 2017). This proved that the financial literacy of youngsters considered low in Malaysia. Moreover, the consumers nowadays are mostly purchasing on branded products, electronic devices and vehicles in Malaysia (Diana-Rose & Zariyawati, 2015). Lim et al. (2014) mentioned that the elder generations have the habit to save money first and spend money later, however, youngsters nowadays tend to spend first regardless of their financial conditions. In short, elder Malaysians have better money management than younger Malaysians. This issue of uncontrolled spending behaviour may be due to the youth desire to follow up on the latest technology trend (Idris, Krishnan, & Azmi, 2013). Moreover, many studies have found the impacts of money management is directly on personal bankruptcy (Selvanathan, Krisnan, & Wen, 2016; Othman, Rahim, & Sabri, 2015). Ringgit Plus (2018) reported that 30% of Malaysians are living paycheck to paycheck. A result from an online Malaysian Financial Literacy Survey by RinggitPlus stated that 33% of respondents either spend exactly or overspend their monthly income. Therefore, it is the motivation for finding the relationship between financial literacy and individual savings.

According to Zakaria, Nor and Ismail (2017), the Malaysia government already implemented the tax exemption plans in order to increase the involvement of Malaysian in long-term investment scheme such as Private Retirement Scheme (PRS) to improve Malaysian retirement savings. However, the involvement of Malaysians in the long-term investment scheme still low due to the low level of risk tolerance. According to Karim, Wenceslas & Shukri (2016), the survey results show that the majority of respondents in Kuala Lumpur, Malaysia are risk-averse which they have preference on liquid assets such as savings account, cash in hand and Employment Pension Funds (EPF) while a small number of respondents invest in risky assets such as gold and real estate.

Parents are the first financial socialization agents among children to educate financial behaviour of children (Mohamed, 2017). As the parents have insufficient

financial literacy, this may influence the savings habit of the children. Gudmunson and Danes (2011) had discussed how the parent's financial socialization positively influence the savings habit of their children. The reasons provided by Davidov and Grusec (2007) are parents and children have a close relationship, and the children observe their parents' behaviours to establish their habits. Besides, parents have a responsibility to educate their children. Moreover, the parents control the economics of the family-like monetary resources to the children. For example, there is only 40% of Malaysians are financially ready for retirement, the rest of them are not. This behaviour would cause their children also lack of savings plans habit in the future (The Edge Markets, 2017). This condition may be due to the parents in Malaysia have not sufficient financial literacy to educate their children, especially in rural areas. Moreover, Alwi, Hashim and Ali (2015) defined that the young generations decision making will be easily affected by peers surrounding them. As children grow up, they will be more communicate with their peer group (Mohamed, 2017). From the survey of National Health and Morbidity, twenty-nine percent of students will feel the pressure from their family, eleven percent of them will face the stress issues with friends in Malaysia (Lee, Menon & Rajaendram, 2018). This proved that the peer group is also one of the important variables to influence individual behaviour.

For the research gap, financial literacy and financial socialization agent are the independent variables being frequently used by past researchers as main variables in predicting the savings behaviour. In contrast, the previous researcher cannot conclude any concluding relationship between these two variables. For another IV which is risk tolerance, the past researcher cannot come out with a final relationship that risk tolerance affects savings behaviour in one way. Past research had found out that the relationship between risk tolerance and savings behaviour are positive, negative and no relationship. Besides, there are numbers of research being conducted in Malaysia but few of the research focuses on rural areas or new villages. There are insufficient information or content that mentioned regarding savings behaviour in new villages because of lack of research being done before. This is why we need to carry out our research to figure out the savings behaviour in new villages so that the government can take action to solve it.

Hence, it is crucial to examine how these independent variables such as financial literacy, risk tolerance and financial socialization agents give impact on individual savings behaviour.

## **1.2 Research Objectives**

1. To examine the effects of financial literacy on savings behaviour in new villages of Malaysia.
2. To examine the effects of risk tolerance on savings behaviour in new villages of Malaysia.
3. To examine the effects of financial socialization agents on savings behaviour in new villages of Malaysia.

## **1.3 Research Questions**

1. What is the relationship between financial literacy on the savings behaviour in new villages of Malaysia?
2. What is the relationship between risk tolerance on savings behaviour in new villages of Malaysia?
3. What is the relationship between financial socialization agents on the savings behaviour in new villages of Malaysia?

## **1.4 Scope of Study**

In this study, the aim is to find out the effects of financial literacy, risk tolerance, and financial socialization agents on individual savings behaviour in Malaysian New Villages. Hence, the scope of study will be the Malaysian New villages. New villages in Malaysia is the permanent settlements of former rural Chinese residents in Peninsular Malaysia. Besides, Johor will be the target population because the numbers of developed New villages in Johor is the highest compared

to other states with 34.71 percent (42/121). Therefore, the target respondents will be the new villagers in Johor. In detail, the target locations will be at Paloh, Sri Lalang, Yong Peng, and Layang Layang.

## **1.5 Significance of Study**

This study contributes to provide the information about the determinants of individual savings behaviour (financial socialization agents, risk tolerance and financial literacy) in new villages. The purpose of this study is to remind the Malaysia government and Malaysians in new villages that the significance of individual savings behaviour. Based on this research, it may provide a guideline to the Malaysia government to understand the factors that most influence the individual savings behaviour. Thus, the Malaysia government may acknowledge the citizens who really need help to educate and improve their individual savings behaviour. Therefore, this study may contribute to the Malaysia government some ways to improve it. From the results, this could concern the contribution of financial literacy on individual savings in new villages. Due to this, the Malaysians may be aware of the importance of financial literacy, and subsequently, they may improve in the future.

In addition, this study could be a reference material for other researchers to figure out the other determinants of individual savings behaviour. Furthermore, this research combined various variables from a few researches which are different from past researches. Moreover, the results of the study could suggest that Malaysians how to improve their individual savings behaviour. It is crucial for adulthood, especially youth to understand the primary factors affecting individual savings behaviour in order to avoid financial troubles and bankruptcy cases as well as retirement issues. Once the Malaysians in new villages have better individual savings behaviour, they would be able to have better socio-economic wellbeing.



## **1.6 Chapter Outline**

### **Chapter 1: Introduction**

Chapter 1 consists of background and the problem statement of individual savings behaviour in Malaysia. Refer to the discussion above, the research objectives are formed accordingly in order to answer the research questions. Ultimately, the hypothesis as well as the significance of the study will be also included in this chapter.

### **Chapter 2: Literature Review**

Chapter 2 consists of the past relevant studies of the relationship between financial socialization agents, risk tolerance and financial literacy to the individual savings behaviour. Relevant theories and theoretical or conceptual framework are also discussed in this chapter.

### **Chapter 3: Methodology**

Chapter 3 consists of research design for defining the types of data and determining the method to acquire the dataset, sampling design for the construction of questionnaires, and the data analysis technique for the description of the tests used to compute in the chapter 4.

### **Chapter 4: Data Analysis**

Chapter 4 consists of data analysis (descriptive: central tendencies, etc.; inferential: correlation, etc.) as well as scale measurement (i.e. reliability test) which are the results of the tests proposed in chapter 3.

### **Chapter 5: Discussions, Conclusions, and Implication**

Chapter 5 consists of data analysis summary, policy implications, limitations of the study and recommendations for future researchers.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

In chapter 2, the relationship between savings behaviour and other IV have been done in the literature review. The independent variables consist of financial literacy, risk tolerance and financial socialization agents. Definition and findings about the independent variables are carried out from the past researches. Moreover, theories have been applied which are Theory of Reasoned Action (TRA), Risk-bearing and Consumption Theory and Social Learning Theory (SLT) as well as theoretical framework and hypothesis development are also comprised in this chapter.

### **2.1 Review of Variables**

#### **2.1.1 Savings Behaviour**

Savings is computed as the difference between income and consumption in the simplest way (Keynes, 1936). From the past studies, the researchers found that the majority of the individuals, they are saving for retirement (Ando & Modigliani, 1963), for emergencies (Leland, 1968) and for housing (Hayashi, Ito & Slemrod, 1988). Not only that, people are saving for avoiding shortage of income if they experience jobless or major illness (Anong & DeVaney, 2010). This means that savings can afford insufficient money in the short term even though the unexpected unemployment occurs. Fisher and Anong (2012) also said that savings can

meet certain financial goals (e.g. purchasing using cash rather than credit). In short, savings is a behaviour for individuals to fulfill their needs.

Browning and Lusardi (1996) revealed that there are different savings behaviours based on different well-being and demographic variables. For example, those countries that the income highly dependent on the agriculture sector (e.g. Africa) are much more uncertain compared to those countries that have a more stable income, thus they have different savings behaviours. According to Collier and Gunning (1999), the agriculture sector consists of high risk such as unpredictable climate (e.g. continuous rainfall) will lead to the failure of crop, hence, this will lead to an unstable income. Browning and Lusardi (1996) also stated that savings is highly correlated to current consumption, hence there is proposed the theory of consumption.

There are many researchers developed their model to explain the savings behaviour from the past. One the most familiar model is the life-cycle hypothesis was developed by Modigliani and Brumberg (1954), it explained that majority of the individuals tend to save for a particular age when their income is more than their consumptions, and spend out their savings after retirement, assuming the consumption is roughly the same over their lifetime. Life-cycle hypothesis model is supported by the permanent income hypothesis developed by Friedman (1957), this model is explaining how the individuals are spending at a consistent level based on their long-term average income. Not only that, Fisher (1930) proposed a theory of intertemporal choice that explains the higher the current consumption of individuals, the lower the future consumptions, vice versa. This model also explained how the interest rates could influence the savings of the individuals. For example, if there is an increase in interest rates, there is expected that consumers will save more now and gain interests, then spend more in the future, vice versa.

In economic point of view, savings is one of the main components that can enhance the economic growth (Costa-Font, Giuliano, & Ozcan, 2018; Webb, 1993; Salam & Kulsum, 2002). The savings increase will lead to

the increase in investment, then the investment will increase more savings to individuals and use of these savings for more additional investment, hence contribute to the economic growth (Salam & Kulsum, 2002).

Savings behaviour can also be defined as the process or attitude to afford future needs (Chia, Chai, Fong, Lew, & Tan, 2011). For instance, individuals can save their money in bank deposit, retirement savings or investment to improve their income in the future since there was consist of many uncertainties (e.g. inflation) in the future. According to Howard (1978), the savings behaviour will be influenced by the individual perception about the uncertainty (e.g. inflation) in the future. On the other hand, savings provide a stable amount of money for consumption spending in the future (Moore, 1978). Moreover, savings help to smooth out the fluctuation of income level and reduce the uncertainty effect toward the consumption in the future (Ismail, Khairuddin, Alias, Loon-Koe, & Othman, 2018).

### **2.1.2 Financial Literacy**

Financial literacy is the combination of financial, credit and debt management and financial knowledge that is required to make responsible financial decisions (Kimiyağhalam & Yap, 2017). One can analyse and access to the right information before making a financial decision (Ali, Rahman & Bakar, 2013). Thus, good financial decision enabling to plan and manage the life event better such as education, illness, housing purchase, or retirement (Mahdzan & Tabiani, 2013).

From the researches that have been found, the results indicate financial literacy will be affecting savings. Most of the researches show that financial literacy gives a significant impact on savings in a positive way (Nguyen, Rózsa, Belás and Belásová, 2017; Bayar, Sezgin, Öztürk & Şaşmaz, 2017; Jamal, Ramlan, Karim, Mohidin & Osman, 2015; Mahdzan

& Tabiani, 2013; Jappelli & Padula, 2013). Financial literacy may affect savings in a positive way in different perspectives like nations, individuals, household, demographic factor and so on.

The relationship between financial literacy and savings that found by the past researchers in developed and developing countries indicated a positive relationship among each other. By narrow down into the developing countries, Nguyen et al. (2017) claimed that people who possess a higher level of financial literacy in Vietnam have a positive impact on savings behaviour. This shows that the higher the financial concepts a person equipped with, the more they tend to save their money. From the study that examined among young Malaysian adults which comprises university and college students in Kota Kinabalu Sabah. Jamal et al. (2015), they revealed that people that equipped with a high level of financial literacy will elevate their savings. Next, according to recent studies, Beckmann (2013) found out that financial literacy significantly affects household savings and investment in Romania. Individuals who have high literacy, they tend to save more when facing inflation. Moreover, a research was being conducted by Murendo and Mutsonziwa (2016) from 4000 sample adult of Zimbabwe's financial consumer. The result showed that there was a significant relationship between financial literacy and individual decision on savings on the adult in Zimbabwe. Also, the result of a study found out that financial literacy is positively associated with individual savings behaviour in Manso Atwere in Amansie West from 155 respondents (Amponsah, 2016). Thus, as per Grohmann (2018), the results showed that the middle class in Bangkok who have high financial literacy leads to improved financial decision making such as savings decisions and borrowing decisions. From the perspective of developed countries, Koh, Mitchell and Rohwedder (2018) said that financial literacy is positively related to the more wealth and Central Provident Fund within the respondents Singapore. In addition, the deficiency of emergency savings in the US population suggests that most of the Americans are far from the financial ruin. Current research results show that financial literacy is positively related to emergency savings (Lusardi & Mitchell, 2014). By the

same token, Mullock and Turcotte (2012) found that financial literacy does affect retirement savings behaviour significantly in Canada from the event of distributing Canadian Financial Capability Survey (CFCS).

Furthermore, research was done by numerous researchers based on the view of demographic factor (i.e. occupation), financial literacy does affect savings positively. For instance, from the method of distributing a questionnaire to Usak University staff, they found that financial literacy will give a positive significant relationship towards personal savings (Bayar et al., 2017). On the other hand, Hidajat (2015) claimed that the fishermen in Indonesia are financially illiterate and most of them did not save their money and have no savings account. This can prove that personal financial literacy strongly affects household savings. Besides, a finding from Ariffin, Sulong and Abdullah (2017) on the undergraduate students whose taking business administration programme in University of Putra Malaysia and the result found out that financial literacy did impact savings behaviour in a positive way. Then, Bhabha, Khan, Qureshi, Naeem and Khan (2014) described that working women in Pakistan have a significant relationship between financial literacy and savings and investment behaviour. Most of the Pakistan people lack of financial literacy resulted majority of them does not assess to financial product and services.

From the sides of household, Hilgert, Hogarth, and Beverly (2003) carried out a survey among the households showing that the correlation of financial literacy and savings behaviours was positively significant. Also, from earlier studies, it pointed out that there is generally positive association between financial literacy and wealth (Behrman, Mitchell, Soo & Bravo, 2012; Gustman, Steinmeier & Tabatabai, 2012; Van Rooij, Lusardi & Alessie, 2012).

Moreover, Jappelli and Padula (2013) discovered that consumers who involved in a variety of investment are supposed to have a high level of financial literacy that may increase their savings significantly. A research

conducted by Klapper and Panos (2011) and stated private pension funds and schemes in the retirement investing and planning are heavily depending on financial literacy. In addition, it may be reaching the goals which will decrease poverty and hence promote financial literacy.

There are several researchers do carry out investigations among a group of individuals. Yoshino, Morgan and Trinh (2017) did carry out an investigation from twenty-five thousand persons from the ages of 18-79, they found that financial literacy has a positive correlation with savings. Furthermore, the study which examined to study the relationship between financial literacy and individual savings from two hundred individuals in Klang Valley, Malaysia, they found that the correlation between these two variables was positive (Mahdzan & Tabiani, 2013). Moreover, the benefits of financial literacy enhancement among the public have the positive impact on retirement planning, stock market participation, personal savings, appropriate use of debt, and credit card behaviour (Hanson & Olson, 2018). Malaysian with a low level of financial literacy education does not have much of the basic financial knowledge such as savings, mortgages, retirement planning. Moreover, the better the financial knowledge, the better the money management for young adults (Sundarasan, Rahman, Othman & Danaraj, 2016).

### **2.1.3 Risk Tolerance**

Risk tolerance is a risk that willingness of individual can be taken based on the current asset or wealth and current financial situation for the future growth (Gibson, Michayluk & Venter, 2013). Risk-taking is one of the vital elements that can be explained by economists to study differences in individual behaviour (Buccioli & Zarri, 2015). A competence of individuals to bearing the risk is according to some characteristics such as income, age, financial knowledge, time duration and attitude toward price fluctuation (Sung & Hanna, 1996).

There are some research showing that risk tolerance is associated with savings. This means that the risk tolerance has a strong impact on savings behaviours on certain individuals and households (Jacobs-Lawson & Hershey, 2005; Babiarz & Robb, 2013; Fisher & Montalto 2011; Finke & Huston 2003).

Risk tolerance has also been affected by financial knowledge and time horizon indirectly. Based on the research done by Jacobs-Lawson and Hershey (2005), he discovers the scope of individuals risk tolerance in retirement savings behaviours. He found out that there is a significant relationship between risk tolerance and retirement savings behaviours of an individual in a short period of time and rich in financial knowledge. Besides, individuals with low time perspective and knowledge, there is no relationship between risk tolerance and savings behaviours. From another perspective, individual with an orientation towards future and high or low knowledge, the relationship between risk tolerance and savings behaviour is significant. In short, different time perspective and financial knowledge will indirectly affect risk tolerance impact the savings behaviour.

The low financial risk tolerance of households is less likelihood to acquire financial assets including savings. The research being conducted by Finke and Huston (2003) and the data is being used from Survey of Consumer Finances in 1998 to figure out the savings behaviour of households with high, low or normal income. Income below than reference level of households who are loss aversion is negatively correlated with the savings. In contrast, households with incomes above the reference level do not bring impact on savings behaviour.

Households are unwilling to bear the risks because they have insufficient funds and unable to face losses their acquired assets (Fisher & Montalto, 2011). The result indicates that people with low-risk tolerance are less likely to save for retirement and emergencies needs According to Chatterjee, Fan, Jacobs and Haas (2017), the results show that there is a significant relationship between risk tolerance and savings behaviours



based on their goals of households such as emergency funds and retirement funds. Besides, a research has been done and it was found out that those who are willing to take an average and a higher level of financial risk, they have a huge amount of retirement assets. This indicates when risk tolerance is higher, the more the retirement assets (Yang & DeVaney, 2012). Babiarz and Robb (2013) claimed that risk tolerance has a positive significant relationship with emergency savings to cover a quarter of distinctive expenditures. According to research done by Fisher (2013), the results showed that households with average and low-risk tolerance are less likely to have savings behaviours. This is because households unable to bear the risk resulted less likely to save for the future.

According to Lusardi (1998), all measurements of risks such as longevity, income and health are important to precautionary savings which bring positive impact to the savings on elderly, young and middle-aged households and owners of businesses. Precautionary savings is important for business owners and non-business owners in respect of income risk. Risk-averse can be known as the investor that favours lower returns or earnings with known risks. Just as Rey-Ares, Fernández-López and Vivel-Búa (2015), they claimed that financial risk aversion will give a negative impact on the decision to purchase the pension fund.

An attitude towards risk also affects an individual investment decision. Investors willing to hold the deposit, they tend to have a high propensity for taking the risks of equity, foreign exchange and portfolio (Aren & Zengin, 2016). According to Schooley (1996), researchers found out investors attitude against the risk tolerance and it indicates the investors are willing to take financial risk in return for a higher profit. The result shows the tendency of risk tolerance with high ratio compared who do not take the risk. In the increasing and complex of the investment product, a research has been done to find out the individual's assessment on investment decision making in Australia (Nguyen, 2015). Clients who have high risk tolerance they likely make an investment in potential

growth assets. This suggests that there is a positive relationship between risk tolerance and investment in risky assets.

As per Magendans, Gutteling and Zebel (2017), they claimed that there is an inverse relationship between financial risk tolerance savings. This indicates that individuals who equipped with higher financial risk tolerance will lead to the low intention of savings. From the study that has been examined from a number of individuals, the result showing that their intention to save were decreased when they holding bond and stock in a large amount (Zhong & Xiao, 1995). This indicates that their risk tolerance will affect savings in a negative way.

One of the researchers found out that there is no relationship between risk tolerance and savings. According to Dahlback (1991), the tendency of risk-taking is not significant with the savings capital for the use of sudden and further expenses.

#### **2.1.4 Financial Socialization Agents**

Financial socialization agents are the individuals who influence other individuals to improve their financial skills and financial knowledge (Senevirathne, Jayendrika & Silva, 2016). The financial socialization agents included family (parents), peer group (friends), teacher and the media (Gudmunson, Ray & Xiao, 2016). In this research, the family (parents) and peer group (friends) will be the main factor to evaluate the relationship between the financial socialization agents and savings.

##### **2.1.4.1 Parent**

According to Sundarassen et al. (2016), the research found that there is a statistically positive and significant relationship of financial socialization

agents (e.g. parents, friends and peers) on money management. The parent is the primary character who will teach the matter about money management to their children (Lyons, Scherpf, & Roberts, 2006). From the result analysis done by Lyons et al. (2006), there was consist of around 76.7% of the students got the information about the financial matters and knowledge from their parents. Besides, the study found that if the families always have a discussion about the financial matter and always advise the students in their money management, the students will be able to control and manage their money appropriately (Salikin, Wahab, Zakaria, Masruki, & Nordin, 2013).

There are few researchers stated that parents will affect the children financial behaviour. According to the study of Cude, Lawrence, Lyons, Metzger, LeJeune, Marks, and Machtmes, (2006), parents have a strong impact on the children financial behaviour. From the study of Jamal et al. (2015), parents are the most positive influence on savings behaviour compared to peers. Khatun (2018) also stated that the parent as one of the financial socialization agents has a positive impact on savings behaviour and better than financial literacy. According to Kumar, Watung, Eunike and Liunata (2017), parents are the first person for the children when the children born to this world, so parents should have the good financial literacy and responsibility to influence their children about the financial knowledge in order to affect their financial behaviour (cash, credit & savings management) in their future. This proves that the parents have a stronger impact on the savings behaviour of the children.

There was also another research found that the financial socialization agents which are parental socialization were positively affected the savings behaviour among the young adult (Jamal, Ramlan, Mohidin & Osman, 2016). The role played by parents have more significant influence than the working experience and the higher financial education of young adults (Shim, Barber, Card, Xiao & Serido, 2009). Parents teach their norms, beliefs and knowledge to their children in order to form the financial behaviour of their children by following their behaviour (Clarke, Heaton,

Israelsen, & Eggett, 2005). Normally, Children will follow what the habit or behaviour displayed by parents (Dewi, Prihatsanti, Setyawan, & Siswati, 2015). Hence, the good financial behaviour displayed by a parent will lead to a positive impact on the savings behaviour among the young generation in the future (Jamal et al., 2016).

Besides, there is the impact of financial socialization on financial management behaviour among the students. Ameliawati and Setiyani (2018) & Kamarudin and Hashim (2018) found that the financial socialization has a positive impact on financial management behaviour which includes savings behaviour and spending behaviour among the students. The research in Purwodadi City, Grobogan Regency showed that the major factor to influence the savings behaviour is a family environment which highly influence on self-control of high school students (Ningsih, Widiyanto, & Sudarma, 2018). The good family environment will tend to form and improve self-control for students. Lim, Sia and Gan (2011) stated that a high level of self-control will lead to improve the savings behaviour of individuals.

According to Mohamed (2017), the parents highly influence their children in rural area compared to the peers since parents as an important role in the early stage of the education process of the children. Due to the lack of internet services in rural areas, the children may face trouble to get financial information and improve their financial knowledge. Thus, parents have a responsibility to educate their children about the financial matter in rural area.

#### **2.1.4.2 Peer Group**

Peer group is also one of the financial socialization agents which have a positive significant impact on the savings behaviour (Jamal et al., 2016; Kamarudin & Hashim, 2018). As the children were grow up, they will have more communication with their friend and shape the strong impact on

the youth (Mohamed, 2017). The children will spend more time with their peers in outdoor activities as they rely on peers. Moschis and Churchill (1978) found that there was a positive relationship between financial knowledge among teenagers with peer's communications. The increase of communication with peers with improves the financial knowledge, financial information and financial behaviour among young generations. According to Alekam, Salleh and Mokhtar (2018), savings behaviour among the young adult will be influenced by the activities during leisure time with peers and discuss about the financial issues with peers.

Apart from the lack of internet services, there would also consist of a lack of financial knowledge of parents in rural areas. Due to the lack of financial knowledge of parents, young generation should communicate with their peers who have good financial behaviour in order to improve their financial wellbeing (Mohamed, 2017). According to Jamal et al. (2016), the role played by peers was important for the retirement decision making of university workers in the United States.

## **2.2 Theoretical Model**

### **2.2.1 Theory of Reasoned Action (TRA)**

Theory of Reasoned Action (TRA) explains how attitude affects behaviour from the field of social psychology (Vallerand, Deshaies, Cuerrier, Pelletier & Mongeau, 1992). There are two components of TRA, which are attitude and subjective norms. Attitudes mean that the behavioural beliefs of every individual towards the outcome or consequences of executing the specific action while subjective norms mean that individual perceptions towards important referents' behaviour or motivations to mimic the referents' behaviour (Otieno, O. C., Liyala, S., Odongo, B. C., & Abeka, 2016).

In this research, the influence of financial literacy on savings behaviours could be explained by TRA (Yong, Yew & Wee, 2018). People need subjective norms to make correct financial decisions or behaviours since they may provide some useful financial messages. Besides that, the individuals' attitudes could influence financial behaviour according to their expectations for the outcomes. According to Ozmete and Hira (2011), normative beliefs is for subjective norms while behavioral beliefs are for attitude, so both subjective norms and attitude will help to develop financial messages in order to make a correct financial decision.

### **2.2.2 Risk-bearing and Consumption Theory**

Risk-bearing and consumption theory is consumption theory that considered the risky situation and added savings substitution for insurance and two new concepts which are risk-bearing budget and effective risk coverage in order to evaluate more accurate and optimal risk-bearing decision (Moffet, 1975). The decision-makers need to balance between the consumption for risk-bearing purpose and risk-bearing budget between insurance and savings simultaneously (Moffet, 1975). From the result of Moffet (1975), people with lesser risk aversion will not buy full insurance coverage and complementing their risk coverage with savings which the study shows the substitution effect between insurance coverage and savings. Therefore, risk-bearing and consumption can explain how risk tolerance affects savings behaviour.

Risk is the uncertainty of possible outcomes and risk tolerance can define in the percentage of risky assets in total financial assets owned (Duasa & Yusof, 2013). The survey showed that majority of the respondents in Malaysia prefer to have a liquid asset such as savings account and cash instead of another asset because they have the lowest level of risk among other assets (Duasa & Yusof, 2013). According to Karim et al. (2016), the survey results show that the majority of respondents in Kuala Lumpur,

Malaysia are risk averse which they have preference on liquid assets such as savings account, cash in hand and Employment Pension Funds (EPF) while a small amount of respondents invest in risky assets such as gold and real estate. This means that an individual with low-risk tolerance will save money instead of investing in risky investments or assets.

### **2.2.3 Social Learning Theory (SLT)**

Social learning theory is the theory about people are learning from other people by paying attention to other people's behaviour in order to develop identical behaviours (Bethards, 2014). According to Ward (1974), SLT is similar to consumer socialization which explained the process of people learn different skills, knowledge and attitudes in different positioning of their work. SLT is always the basis of other traditional learning theory because the theory includes attention, memory and motivation (Nabavi, 2012). However, Albert Bandura who is the father of cognitive theory think that the three elements cannot fully explain all types of learning, so he added social element which extends to people observing other people's behaviour to acquire new knowledge or imitate similar behaviours that benefit them (Nabavi, 2012).

SLT assume people learn from three ways, which are observation, imitation and modeling (Nabavi, 2012). Observational learning is the action of observe and imitate people's behaviour while imitate process is that the person observes and imitates enough to redo the behaviour (Edinyang, 2016). People that are being observed are called models and the action of observing the models is called modeling (Nabavi, 2012). For modeling process, there is a four-step process, which are attention, retention, reproduction and motivation (Bandura & Walters, 1977). Attention is paying attention to the model, retention is remembering the behaviour observed from the model, reproduction is the ability to redo the said behaviour and motivation is the reason to redo the behaviour. According to Jorgensen (2007), SLT can have a better explanation of

financial socialization agent, which include parental socialization and peer influence.

Financial socialization is the process of learning and enhancing values, attitudes, standards, norms, knowledge, and behaviours that will benefit an individual from financial socialization agent such as parents and peers (Jorgensen, 2007). Parental socialization is the influence of the parent on their children with the aspect of behaviour learning while peer influence extends to the influence of people from the school, workplace and the surrounding environment which are mostly friends and media (Jorgensen, 2007).

According to Cude et al. (2006), parents act as an important role on the savings behaviour of their children. The communication of parents with their children at early stages and with financial education at school gives a good foundation on better monetary decision-making by young adults (Sundarassen et al., 2016). Parental money attitude is important and can help their children to develop an awareness of money at an early age by giving support and relevant education for favourable money management (Manchanda, 2014). Parents should be the role model of their children for savings behaviour and management because they have a high influence on their children (Jamal et al., 2015).

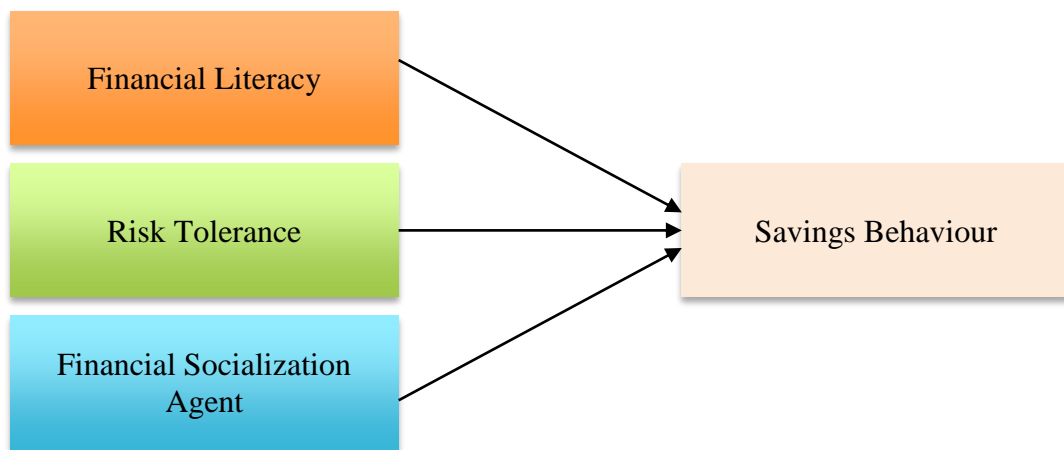
As the age of an individual increase, the influence of parents will slowly decrease and the influence of friends will increase (Jorgensen, 2007). Peers have an influence on forming an individual's money related action, so it is assumed to be an important part of an individual's monetary behaviour (Sundarassen et al., 2016). In Malaysia, peer pressure was the reason for hindering young adults to manage their financial affairs (Jamal et al., 2015). Therefore, peers are also important on the side of influence an individual's savings behaviour (Jamal et al., 2015).



## 2.3 Conceptual Framework

This research is to study the effect of financial literacy, risk tolerance and financial socialization agent on the savings behaviour. The framework diagram that represents the flow of dependent and independent variables are shown below:

Figure 2.1: Variable affect savings behaviour



Based on the literature reviews which has been done in the previous section (“2.1 Literature Review”), this study expects that financial literacy will have positive relationship towards savings behaviour (Sundarasen et al., 2016). Besides, risk tolerance is expected to have negative relationship with savings behaviour (Duasa & Yusof, 2013). Lastly, financial socialization agent is expected to have a positive relationship with savings behaviour (Jamal et al., 2016).

## 2.4 Hypothesis Development

In this research, it aims to find out the significant relationship between independent variables (financial socialization agents, risk tolerance and financial literacy) and dependent variable (savings behaviour). In total, there are three hypotheses developed in this study which are shown below:

H<sub>0</sub>: There is no significant relationship between financial socialization agents and savings behaviour.

H<sub>1</sub>: There is a significant relationship between financial socialization agents and savings behaviour.

H<sub>0</sub>: There is no significant relationship between risk tolerance and savings behaviour.

H<sub>1</sub>: There is a significant relationship between risk tolerance and savings behaviour.

H<sub>0</sub>: There is no significant relationship between financial literacy and savings behaviour.

H<sub>1</sub>: There is a significant relationship between financial literacy and savings behaviour.

## **2.5 Conclusion**

As a summary, the definition, findings and relationship of the independent variables from the past researches have been discussed. Besides, the theories of each variable that brought the impact on savings behaviour are determined. The findings from this chapter is to provide a better understanding for the reader how the independent variables affect savings behaviour. Furthermore, the demonstration of the relationship between financial literacy, risk tolerance as well as financial socialization agents and savings behaviour is under conceptual framework. Next, hypotheses are developed for Chapter 4 related tests.

## **CHAPTER 3: METHODOLOGY**

### **3.0 Introduction**

In chapter 2, the literature review discussed how financial literacy, risk tolerance and financial socialization agents influence the savings behaviour separately. From the past researchers, they clearly pointed out that there is a high connection between them. Next, the methods for collecting, analysing, and interpreting data will be discussed in this chapter. Eventually, these methods can achieve the research objectives of this study.

In this research, financial literacy, risk tolerance as well as financial socialization agents are combined to test their significance toward individual savings behaviour. A survey questionnaire is constructed and distributed to the target respondents (New Villagers in Johor) and collected 396 sets of data.

### **3.1 Research Design**

This study applied quantitative research because Aliaga and Gunderson (2002) mentioned that this kind of research is much easier to explain the data in figure form through several approaches, thus the readers and researchers could understand the information easily. For example, descriptive statistics (e.g. frequency, percentage, mean, median, etc.) and inferential statistics (e.g. Pearson's correlation, multiple linear regression, etc.) (Castellan, 2010).

For every research, the raw data gathered by the researchers could be in terms of qualitative or quantitative manners. In quantitative research, there is necessary to collect the data (primary or secondary) in number form in order to test and explain such phenomenon in mathematical ways (Creswell, 2014). Hence, survey questionnaires are distributed physically using printed papers and sent electronically using smartphones to fill up the questionnaire via link to target

respondents (New Villagers in Johor) after face-to-face interview to ensure they are the target respondents in order to achieve the research objectives. The questions are based on 4-point Likert scale for risk tolerance, 5-point Likert scale for financial socialization agents, and individual savings behaviour. For financial literacy, the mark scoring from 1 to 10 will be calculated based on the number of questions answered correctly by the respondent.

### **3.2 Data Collection Method**

Data has the role to be the raw material in doing research analysis in order to figure out the conclusion for a particular phenomenon and to compare the policies of others as well as alternatives (Walliman, 2017). Primary data (first-hand data) and secondary data (published data) are commonly used by researchers to do their study. For this study, it employed primary data for analysis. Primary data are also known as first-hand data, which is gathered by own researchers to achieve research objectives using the appropriate approaches to match the research hypothesis best (Hox & Boeijie, 2005; Kothari, 2004). Walliman (2017) said that primary data can help the researchers to obtain the most suitable data they want.

In this study, the respondents that researchers aim will be distributed the questionnaires as the main sources for data collection method in order to find out the significant influence of financial literacy, risk tolerance as well as financial socialization agents on individual savings behaviour. According to Brace (2004), the questions in the questionnaire are standardized, and it constructed by the researchers to get that necessary information from the target respondents to achieve their research objectives. Moreover, the questionnaire is a famous way to collect data efficiently and effectively.

### **3.3 Sampling Design**

Sampling design is used to make a conclusion for a population based on a sample itself through inferential analysis. This mostly due to the population is too large for the researchers to study, imply that it is sometimes impossible to learn from the population. Hence, the researchers could pick an appropriate sample to represent the whole population.

#### **3.3.1 Target Population**

According to Department of Statistics Malaysia (2019), the total observations of the whole population in Johor is about 3.74 million in 2018, and the respondents come from many geographical locations, which is too time-consuming for the researchers to study all the respondents. Therefore, the new villagers from several New villages in Johor are the target respondents to examine the factors of individual savings behaviour in New villages in this research. According to the New Villages Master Plan Peninsular Malaysia, the reason of employing new villagers in Johor as the targeted state in Malaysia is due to the numbers of developed New villages in Johor is the highest compared to other states with 34.71 percent (42/121).

#### **3.3.2 Sampling Frame and Sampling Location**

Process of taking sample must be implemented by the researchers to help them in drawing the results or conclusions of the population from the samples (subset of population) (Singh & Masuku, 2014). Furthermore, a list or set of raw data which are collected from the selected sample is called the sampling frame. For the research, the data collected from the sample will be representing the overall population of about 3.74 million

residents in Johor. For sampling location, it is in Johor New villages such as Paloh, Sri Lalang, Yong Peng, and Layang Layang.

### **3.3.3 Sampling Element**

Sampling element in a simple explanation, it means that everyone is given the chance of being targeted to become one of the respondents in the research. The designed questionnaires are distributed to every respondent in Johor New villages for obtaining data. In this study, all people in Johor New villages are the target respondents except those below 18 years old are excluded since they could not provide valuable information.

### **3.3.4 Sampling Technique**

Classification of sampling technique is probability (given the equal chance to everyone in population to become a part of sample for representing the population) as well as non-probability sampling (people in the population do not have equal chance). Probability sampling includes four methods which are simple random sampling, stratified sampling, cluster sampling and systematic sampling. For non-probability sampling, there are also four methods which are quota sampling, convenience sampling, judgement sampling and snowball sampling. Convenience sampling is planned to conduct this research. Etikan, Musa and Alkassim (2016) explained convenience sampling is the most efficient way to collect data among the sampling techniques. Hence, this method is used in this research to save costs like transportation, time, and labour. However, the results may be biased if employing convenience sampling (Taherdoost, 2016).

The questionnaires designed in “Paper Form” and “Google Form”. Kim and Park (2012) said that “Google Form” is a free service of the online survey system provided by Google, and it supports multiple choice and

scale needed in questionnaire. Hence, the respondents could answer the questions online through internet via the link. In order to collect primary data in this study, the questionnaire in Google Form will be sent priority to target respondents in order to save paper costs. Otherside, the printed questionnaire will be distributed for questionnaire filling and receive back from them. The process including face-to-face interview to make sure the person is the target respondents in this research. In addition, the main version of the questionnaire is in English, thus there is required to translate into Chinese since the target respondents are mostly Chinese.

### **3.3.5 Sampling Size**

The size of the sample equal to a number of observations, and it is very important for every research to make inferential analysis about a population from a sample. In practice, the more the sample data, the results would be more likely unbiased to represent the whole population. Based on the formula provided by Krejcie and Morgan (1970), there is convergence to the minimum sample size of 384 required to represent the whole population in Johor about 3.74 million in this research.

## **3.4 Research Instrument**

Based on the experience of past researchers, the questionnaire is built to collect the required information for their studies. The questionnaires' questions and statement are adopted from past several authors about the variables used in this study. The structure of the questionnaire consists of section A, section B, section C and section D.

In section A, there are 7 items and basically constructed to obtain the respondent's demographic variables. Followed by section B which generates information about financial socialization agents and risk tolerance. 10 statements are adopted from

the questionnaire of Otto (2009) in order to measure the financial socialization agents based on 5-point Likert scale. For risk tolerance, 5 items are adopted from Kuzniak, Rabbani, Heo, Ruiz-Menjivar and Grable (2015) to generate the information regarding risk tolerance of the respondents. In section C, the items aim to generate the financial literacy of the respondents with 10 questions adopted by Tan et al. (2011). Lastly, there are 7 statements for individual savings behaviour in section D and adopted from Parrotta and Johnson (1998).

Before the researchers can distribute to the target respondents, there is always required to have a pilot test. Pilot test must be conducted to confirm that the participants can clearly understand every single question in the questionnaire so that the answer collect from them can be more accurate. This study, 30 respondents are participated in a pilot test. Then, Statistical Package for Social Science (SPSS version 20) estimates reliability based on Cronbach's alpha. The Cronbach's alpha for individual savings behaviour (0.815), risk tolerance (0.717), and financial socialization agents (0.761) (see Appendix B). The results showed that all the questions for each variable are jointly important, relevance, and valid since Cronbach's alpha is more than 0.70 (Rosaroso, 2015). This implies that further analysis results will be consistent and reliable.

### **3.5 Constructs Measurement**

The function of the measurement scale is to convert the complicated data into meaningful statistical information in the research study based on their different level of measurement (e.g. nature) (Walliman, 2017). In other words, it is being a function and process of identifying and recording the data in terms of category, ranking order, and scores (Kothari, 2004). There are four types of most commonly used measurement scales namely nominal, ordinal, interval and ratio. The researchers must identify the most appropriate scale for data in order to have the proper analysis. In this research, four level of measurements are adopted.



Nominal scale is the most basic, and it is just simply assigning the items into categories. This scale is used mostly on qualitative variables because there is no ranking order, hence the difficulty to quantify them (Walliman, 2017). In the questionnaire, nominal scale is used for demographic characteristics (e.g. gender, ethnicity, marital status, and work status) in section A.

Ordinal scale categorizes the items, and further arrange the sequence of them in ranking order without taking into account the distance between each ranking order (Walliman, 2017). In the questionnaire of section A, demographic variables (i.e. age, education, and individual monthly income) are considered ordinal scale.

For interval scale, it has the properties of both nominal, and ordinal with the equal distance, and every point contains a meaning since there is no absolute zero point. Most importantly, interval scale has more variety and powerful statistical measures (e.g. mean and standard deviation) (Walliman, 2017). Likert scale, a psychometric response scale is considered as an interval scale, which it is widely used in the questionnaire to ask about how strong the respondents agree to a particular statement. Based on the questionnaire in section B part I (financial socialization agents), and in section D (individual savings behaviour) are measured as 5-point Likert scale as below:

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

Under section B part II (risk tolerance), the statements are measured in 4-point Likert scale as below:

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Agree
- 4 - Strongly Agree

Ratio scale has the same features as interval but it exists an absolute zero point, and it is impossible to get a negative figure in data (Walliman, 2017). Ratio is widely used in statistical analysis because it provides an exact value, ranking order and clear definition. In the questionnaire section C, financial literacy is measured as ratio scale. The data will be calculated based on the number of questions answered correctly by the respondent, indicated by mark scoring from 1 to 10.

### **3.6 Data Processing**

Process of transforming input into output is known as data processing. In order to gain useful information, which is the purpose of processing. The first step of data processing is data checking, next the researchers need to proceed to data editing. After that, it is data coding as well as data transcribing for the final. On the other hand, the aim of data processing is to create proper results and conclusions in the study.

#### **3.6.1 Data Checking**

Data checking is very important as the first step of data processing when carrying out the survey. This step must be taken into account for the researchers because the respondents may answer the statements or questions inaccurately if there are mistakes (e.g. grammar, etc.) and jargon that may lead to misunderstanding by the respondents in the questionnaire. Therefore, there is necessary for the researchers to conduct a pilot test as well to confirm the respondents would understand all the questions before distributing to target respondents.

### **3.6.2 Data Editing**

The objective of the second step (data editing) is to minimize the risks that could obtain an improper and unreliable result from the data. The illogical and inconsistent responses will be edited by the researchers, especially those uncompleted questionnaires would be ignored. Until all data are qualified and well prepared, they are ready to proceed to data coding.

### **3.6.3 Data Coding**

Data coding is the third to help the researchers to simplify the complex items into a simple coding in order to run the results for a particular analysis in an easy way. For example, the researchers can code the 5-point Likert scale as strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). Thus, the coding assists researchers in managing the data more efficiently and effectively.

### **3.6.4 Data Transcribing**

Finally, it is data transcribing. After all the previous steps are well prepared and utilized, the last job is to transform the data into computer and run by Statistical Package for the Social Sciences (SPSS version 20) software. With the assistance of SPSS version 20, the researchers can check the consistency and reliability based on the data whether any data is out of range or extreme value.

## **3.7 Data Analysis**

Data analysis is the most important part in the research because there are many results can be generated by SPSS version 20 (e.g. descriptive, reliability and

inferential analysis). In order to figure out research questions stated at the beginning, there is required inferential analysis to investigate the connection between the variables based on the hypothesis. In addition, the results generated are very important once they are converted into meaningful information.

### **3.7.1 Descriptive Analysis**

The tools for doing analysis and summary of large amounts of sample data gathered from the questionnaire responded by respondents is called descriptive analysis. The analysis would express the results such easy to explain and understand. From past researchers, they presented data in a more wonderful way (e.g. average, percentage, frequency, standard deviation, etc.) (Hinton, 2014). Moreover, SPSS version 20 can convert the huge amount of data into a comprehensive summary in forms of charts, histogram, and others (Hinton, McMurray & Brownlow, 2014). In a nutshell, this analysis converts the raw data into meaningful information for people.

### **3.7.2 Reliability Test**

According to Bruton, Conway and Holgate (2000), reliability test is testing how consistent the questions within each variable. Cronbach's alpha test is developed by Iacobucci and Duhachek (2003) regarding the reliability test to enhance the effectiveness with the value between 0 (low consistency) and 1 (high consistency). From the previous researches, Cicchetti's standards are frequently used to make sure the results are consistent and reliable. The Cronbach's alpha is considered as poor if below 0.40, fair if between 0.40 and 0.59, good if between 0.60 and 0.74 and excellent if 0.75 and above.

In this research, pilot test (randomly selecting 30 respondents) as a reliability test, and Cronbach's alpha for 30 questionnaires are done. The Cronbach's alpha should at least 0.70 to have the valid questionnaires designed (Rosaroso, 2015). This is to make sure that every single question is relevance with respect to its variables.

### **3.7.3 Inferential Analysis**

Inferential could help the researcher to deduce conclusions from the data based on several tests, and to explain the phenomenon of the population from the sample (Rochowicz Jr, 2011). In this study, the inferential analysis involves Pearson's correlation as well as multiple linear regression. According to past studies, 1%, 5% and 10% significance level are commonly applied (Burton, 2000; Fisher, 1925).

#### **3.7.3.1 Pearson's Correlation Analysis**

How strong the variables are correlated can be measured by Pearson's correlation (Goodwin & Leech, 2006). For interpretation of correlation, the value close to +1 implies that there is a perfect positive relationship, close to -1 indicates that there is a perfect negative relationship and 0 states that there is no relationship between two variables. Based on Rule of Thumb, the correlation from 0.90 to 1.00, 0.70 to 0.89, 0.50 to 0.69, 0.30 to 0.49 and 0.00 to 0.29 are considered as very high positive correlation, high positive correlation, moderate positive correlation, low positive correlation and negligible correlation respectively, vice versa (Mukaka, 2012). If the p-value is less than alpha (0.01, 0.05 or 0.10), then rejecting the null hypothesis. Hence, there is sufficient evidence to conclude that there is a significant correlation between two variables and vice versa. SPSS version 20 is able to capture the correlation between independent variables and dependent variable (Verma, 2012).

### 3.7.3.2 Multiple Linear Regression

Single linear regression (1 independent variable influence dependent variable) is advanced to multiple linear regression (independent variables influence dependent variable). The functions of multiple linear regression are to examine the significance, size, and sign of the beta coefficient. Nevertheless, there is required to fulfill the assumptions (e.g. linear in parameters, normally distributed in residual, no autocorrelation, homoscedasticity, and no serious multicollinearity) in order to make sure the results of the hypothesis are valid and reliable. The multiple linear regression model will be developed as below:

$$Y_i = B_1X_{1i} + B_2X_{2i} + \dots + B_pX_{pi} + \varepsilon_i$$

Where,

Y = Dependent Variable

B = Beta Coefficient

X = Independent Variables

$\varepsilon$  = Error Term

i = Cross Sectional Data

## 3.8 Conclusion

The conclusion of this chapter is explained about the methodology would be used in chapter 4. The methodology is the most contribute to the research objectives. Not only that, the researchers can compare their results to the supporting theory and previous researchers' findings because of the research methodology discussed. Hence, research methodology serves as the basis for obtaining useful information from the data that researchers collected. In the next chapter, it will discuss how the researchers apply the research methodology to get the results and interpret them.

## **CHAPTER 4: DATA ANALYSIS**

### **4.0 Introduction**

Data analysis is analyzing the data pooled by all questionnaires and is showing the results related to the objectives of this research. The data is collected from 396 respondents in Johor New villages from all groups of gender, age, marital status, etc. through survey questionnaires. With SPSS version 20, descriptive analysis (e.g. summary of demographics, central tendencies, etc.) will be carried out. Next, the reliability test will be based on Cronbach's alpha. Not only that, Pearson's correlation as well as multiple linear regression (for testing sign, size, and significance). The results from SPSS version 20 will be further stated and discussed below.

### **4.1 Descriptive Analysis**

The process of pooling and summarizing the data into useful and meaningful ways is descriptive analysis (e.g. frequency, percentage, mean, etc.). By looking at the analysis results, the researchers or readers can easily understand the data and have a big picture in their mind. For example, the descriptive statistics will be pointed out that the characteristics and behaviours of the respondents. Here, there are 396 answers from those target respondents, and their data will be tested in the following.

#### **4.1.1 Respondent Demographic Profile**

Following table is summarized the demographic profile, and the information will be further interpreted in the following. The demographic profile including the seven factors of gender, ethnicity, age, education,

marital status, work status and individual monthly income. The results of these factors are generated from the 396 respondents.

**Table 4.1: Information based on gender**

	Category	Frequency	Percentage (%)
Gender	Male	194	48.99
	<b>Female</b>	<b>202</b>	<b>51.01</b>

Source: Developed for research (SPSS)

Gender is the first demographic factor to be discussed. The proportion of male and female is almost half, which the male respondents are 8 or 2.02% less than the female respondents only. There are 194 male respondents which are 48.99%. For females, there are 202 respondents which are 51.01% in the survey.

**Table 4.2: Information based on ethnicity**

	Category	Frequency	Percentage (%)
Ethnicity	<b>Chinese</b>	<b>306</b>	<b>77.27</b>
	Malay	53	13.38
	Indian	31	7.83
	Others	6	1.52

Source: Developed for research (SPSS)

Next factor is about ethnicity. From this survey, majority of the respondents are Chinese with 306 (77.27%). Followed by Malay and Indian respondents are 53 (13.38%) and 31 (7.83%) respectively. The least respondents are categorized in others with 6 respondents which is 1.52% only over 396 respondents.



Table 4.3: Information based on age

	Category	Frequency	Percentage (%)
Age	<b>18 - 30 years old</b>	<b>210</b>	<b>53.03</b>
	31 - 40 years old	90	22.73
	41 - 50 years old	54	13.64
	51 - 60 years old	23	5.81
	Above 60 years old	19	4.80

Source: Developed for research (SPSS)

Moreover, the age information cannot be ignored. 53.03% of the respondents are aged 18 to 30 years old which is 210 respondents. Subsequently, the frequency of the respondents for 31 to 40 years old, 41 to 50 years old and 51 to 60 years old are 90 (22.73%), 54 (13.64%) and 23 (5.81%) respectively. At the minimum, the respondents above 60 years old are 19 which is 4.80% out of 396 respondents only.

Table 4.4: Information based on education

	Category	Frequency	Percentage (%)
Highest Education Qualification	Primary school	43	10.86
	<b>Secondary school</b>	<b>196</b>	<b>49.49</b>
	Undergraduate	149	37.63
	Post-graduate	8	2.02

Source: Developed for research (SPSS)

Highest education qualification categorized into primary school, secondary school, undergraduate and postgraduate. Almost half of the respondents are secondary school with 196 (49.49%) respondents. 149 respondents are

undergraduate which is 37.63%. There are 43 respondents and 8 respondents are primary school (10.86%) and postgraduate (2.02%) respectively in the research study.

**Table 4.5: Information based on marital status**

	Category	Frequency	Percentage (%)
Marital Status	<b>Single</b>	<b>221</b>	<b>55.81</b>
	Married	175	44.19

Source: Developed for research (SPSS)

Furthermore, marital status is categorized into single and married only. From the data, single respondents are 221 which is 55.81%. Married respondents are 175 which is 44.19%.

**Table 4.6: Information based on work status**

	Category	Frequency	Percentage (%)
Work Status	<b>Full-time employed</b>	<b>180</b>	<b>45.45</b>
	Part-time employed	36	9.09
	Self-employed	29	7.32
	Unemployed	10	2.53
	Retiree and student	122	30.81
	Housewife	19	4.80

Source: Developed for research (SPSS)

In addition, respondents' work status also collected as a demographic profile. From the results, there are 180 respondents which are 45.45% of the respondents are full-time employed. Followed by the retirees and

students amount of 122 (30.81%), the part-time employed respondent's amount of 36 (9.09%) and the self-employed respondent's amount of 29 (7.32%). Among the respondents, 4.80% are housewives which are 19 respondents. Nonetheless, there are still 10 unemployed respondents with 2.53% out of the overall.

**Table 4.7: Information based on income**

	Category	Frequency	Percentage (%)
Individual Monthly Income	<b>Under RM1,000</b>	<b>164</b>	<b>41.41</b>
	RM1,001 - RM3,000	143	36.11
	RM3,001 - RM5,000	62	15.66
	RM5,000 - RM7,000	14	3.54
	Above RM7,000	13	3.28

Source: Developed for research (SPSS)

Lastly, income is also an important demographic factor. From above, it clearly shows that 41.41% of the respondents which is 164 respondents' income are below RM1,000. There are 143 respondents are fall between RM1,001 to RM3,000 which is 36.11% represent the second largest proportion. Between RM3,001 to RM5,000, there are 62 respondents with 15.66%. For respondents who earn RM5,001 to RM7,000 and above RM7,000, there are only 14 respondents (3.54%) and 13 respondents (3.28%) respectively.

#### **4.1.2 Central Tendencies Measurement of Construct**

This analysis can help researchers and readers to understand which question for a particular variable is giving the essential contribution in

explaining the variables respectively. The results will be interpreted in the form of frequency, percentage and mean. Not only that, every question will be ranked based on the mean value obtained. The tables and interpretations are discussed below.

Table 4.8: Individual Savings Behaviour

Question	SD	D	N	A	SA	Mean	Rank
Q1.	25 (6.31%)	60 (15.15%)	89 (22.47%)	160 (40.40%)	62 (15.66%)	3.4392	4
Q2.	54 (13.64%)	77 (19.44%)	133 (33.59%)	98 (24.75%)	34 (8.59%)	2.9524	6
Q3.	7 (1.77%)	43 (10.86%)	123 (31.06%)	146 (36.87%)	77 (19.44%)	3.6135	3
Q4.	10 (2.53%)	42 (10.61%)	123 (31.06%)	126 (31.82%)	95 (23.99%)	3.6416	2
Q5.	8 (2.02%)	39 (9.85%)	107 (27.02%)	150 (37.88%)	92 (23.23%)	3.7045	1
Q6.	54 (13.64%)	94 (23.74%)	156 (39.39%)	76 (19.19%)	16 (4.04%)	2.7625	7
Q7.	25 (6.31%)	48 (12.12%)	148 (37.37%)	128 (32.32%)	47 (11.87%)	3.3129	5

Source: Developed for research (SPSS)

Individual savings behaviour is the dependent variable in this study. Firstly, the highest mean value of 3.7045 is Question 5: “I usually do not spend all my current income without savings.”. This question has the highest mean because most of the participants have high agreement. There are 8 (2.02%) respondents strongly disagree, and 39 (9.85%) disagree only; there are 107 (27.02%) stand at neutral, 150 (37.88%) agree, and 92 (23.23%) are strongly agree. Question 4: “I pay my yearly expenses out of my current income or savings (not with loan).” is ranked second with the average of 3.6416. The mean score from this question is calculated from 10 (2.53%) respondents strongly disagree, 42 (10.61%) disagree, 123 (31.06%) are neutral, 126 (31.82%) agree, and 95 (23.99%) are strongly

agree that they would not overspending. The third rank statement is Question 3: “I set specific financial goals for my future (e.g. education, marriage, car, house), and save money accordingly to achieve goals.” with mean of 3.6135. This statement showed that 7 (1.77%) respondents are strongly disagree, 43 (10.86%) disagree, 123 (31.06%) are neutral, 146 (36.87%) agree, and 77 (19.44%) are strongly agree to save money to ensure the specific financial goals can be achieved. Next rank statement is Question 1: “I regularly set aside money for savings once I get my monthly income.” with mean of 3.4392. This statement is under middle rank because there are 25 (6.31%) strongly disagree, 60 (15.15%) disagree, 89 (22.47%) stand neutral, 160 (40.40%) agree, and 62 (15.66%) are strongly agree that they would save first before spending. For fifth rank, the statement is Question 7: “I contribute annually to a retirement savings plan (e.g. EPF, PRS).” with mean of 3.3129. There are 25 (6.31%) respondents are strongly disagree, 48 (12.12%) disagree, 148 (37.37%) are neutral, 128 (32.32%) agree, and 47 (11.87%) are strongly agree that they are willing to save money for retirement. Moreover, Question 2: “I record my sources of spending to determine the amount of my monthly savings.” is ranked number six with mean of 2.9524. Under this statement, 54 (13.64%) respondents are strongly disagree, 77 (19.44%) disagree, 133 (33.59%) stand neutral, 98 (24.75%) agree, and 34 (8.59%) are strongly agree to say that they do their budgeting. Lastly, the lowest ranked statement is Question 6: “Each year I invest money in higher-return investments such as stocks, bonds, or mutual funds as part of my savings.” with mean of 2.7625. This statement has the lowest mean value because the respondents mostly do not save to invest. Hence, 54 (13.64%) are strongly disagree, 94 (23.74%) disagree, 156 (39.39%) are neutral, 76 (19.19%) agree, and 16 (4.04%) are strongly agree.

Table 4.9: Financial Literacy

Question	A	B	C	D	Rank
Q1.	<b>274 (69.19%)</b>	61 (15.40%)	32 (8.08%)	25 (6.31%)	3
Q2.	62 (15.66%)	<b>155 (39.14%)</b>	133 (33.59%)	46 (11.62%)	7

Q3.	<b>217 (54.80%)</b>	65 (16.41%)	77 (19.44%)	37 (9.34%)	5
Q4.	38 (9.60%)	<b>285 (71.97%)</b>	32 (8.08%)	41 (10.35%)	2
Q5.	86 (21.72%)	70 (17.68%)	<b>153 (38.64%)</b>	87 (21.97%)	8
Q6.	104 (26.26%)	<b>126 (31.82%)</b>	94 (23.74%)	72 (18.18%)	10
Q7.	152 (38.38%)	<b>169 (42.68%)</b>	36 (9.09%)	39 (9.85%)	6
Q8.	129 (32.58%)	89 (22.47%)	<b>128 (32.32%)</b>	50 (12.63%)	9
Q9.	21 (5.30%)	35 (8.84%)	<b>312 (78.79%)</b>	28 (7.07%)	1
Q10.	54 (13.64%)	<b>248 (62.63%)</b>	50 (12.63%)	44 (11.11%)	4

Source: Developed for research (SPSS)

Financial literacy is the factor as well. In this survey, 312 (78.79%) respondents which is the most respondents are able to answer correctly for Question 9: “Normally, which asset displays the highest fluctuations over time?”, the answer is **C: Stocks**. Other than that, 21 (5.30%) answer A: Savings account; 35 (8.84%) answer B: Bonds; and 28 (7.07%) answer D: Do not know. For the second rank, the question is Question 4: “Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?”, 285 (71.97%) respondents answer correctly **B: Less**. 38 (9.60%) answer A: More; 32 (8.08%) choose C: Exactly the same; and 41 (10.35%) choose D: Do not know. Question 1: “If 5 people all have the winning number in the lottery and the prize is RM2,000,000, how much will each of them get?” is ranked number three because 274 (69.19%) choose the correct answer **A: RM400,000**. There are 61 (15.40%) respondent answer B: RM40,000; 32 (8.08%) choose C: RM2,000,000; and 25 (6.31%) choose D: Do not know. For fourth rank question, it is Question 10: “When an investor spreads his money among different assets, the risk of losing money is?” since 248 (62.63%) respondents answered correctly **B: Decrease**. 54 (13.64%) answer A: Increase; 50 (12.63%) answer C: Stay the same; and 44 (11.11%) answer D: Do not know. For the top number five rank, it is Question 3: “Suppose you have a friend inherits RM10,000

today and his siblings will inherit RM10,000 after 3 years. Who will be richer in the end?”, 217 (54.80%) respondents able to answer **A: My friend** correctly. Others, 65 (16.41%) choose B: His sibling; 77 (19.44%) choose C: They are equally rich; and 37 (9.34%) answer D: Do not know.

For the bottom, five ranks will be discussed below. Question 7: “If the interest rate falls, what should happen to bond prices?” is ranked sixth because 169 (42.68%) respondents answer **B: Fall** correctly. 152 (38.38%) answer A: Rise; 36 (9.09%) answer C: Stay the same; and 39 (9.85%) answer D: None of the above. For seventh rank question, it is Question 2: “Let’s say you have RM200 in a savings account. The account earns 10% interest per year. How much would you have in the account at the end of two years? Assuming you did not take out the money and interest after the first year.”, 155 (39.14%) respondents choose correct answer **B: RM242**. 62 (15.66%) answer A: RM220; 133 (33.59%) answer C: RM240; and 46 (11.62%) answer D: Do not know. Question 5: “Which of the following statements describes the main function of the stock market?” is ranked the eighth position because 153 (38.64%) respondents choose correct answer **C: The stock market brings people who want to buy stocks together with those who want to sell stocks**. There are 86 (21.72%) answer A: The stock market helps to predict stock earnings; 70 (17.68%) answer B: The stock market results in an increase in the price of stocks; and 87 (21.97%) answer D: None of the above. For Question 8: “Considering a long time period (for example 10 or 20 years), which asset normally gives the highest return?”, it is ranked ninth since 128 (32.32%) answer correctly **C: Stocks**. 129 (32.58%) answer A: Savings account; 89 (22.47%) answer B: Bonds; and 50 (12.63%) answer D: Do not know. Question 6: “Which of the following statements is correct?” is the least respondents answer correctly with 126 (31.82%) choose **B: Mutual funds can invest in several assets, for example, invest in both stocks and bonds**. 104 (26.26%) answer A: Once one invests in a mutual fund, one cannot withdraw the money in the first year; 94 (23.74%) answer C: Mutual funds pay a guaranteed rate of return which depends on their past performance; and 72 (18.18%) answer D: None of the above.

Table 4.10: Risk Tolerance

Question	SD	D	A	SA	Mean	Rank
Q1.	51 (12.88%)	152 (38.38%)	127 (32.07%)	66 (16.67%)	2.5253	1
Q2.	96 (24.24%)	140 (35.35%)	111 (28.03%)	49 (12.37%)	2.2851	3
Q3.	91 (22.98%)	141 (35.61%)	123 (31.06%)	41 (10.35%)	2.2878	2
Q4.	85 (21.46%)	176 (44.44%)	101 (25.51%)	34 (8.59%)	2.2123	5
Q5.	93 (23.48%)	148 (37.37%)	126 (31.82%)	29 (7.32%)	2.2296	4

Source: Developed for research (SPSS)

In this research, risk tolerance has been taken into account as IV. The first rank statement with the highest mean of 2.5253 is Question 1: “I will not cancel my trip if I have lost my job three weeks before my vacation even though it is my ‘once-in-a-lifetime’ vocation.”. The calculation is the highest for this statement due to the respondents tend to go for vacation even though they will lose the job. From there, 51 (12.88%) respondents are strongly disagree, 152 (38.38%) disagree, 127 (32.07%) agree, and 66 (16.67%) are strongly agree. For second rank statement, it is Question 3: “I am willing to accept an investment with the chance of getting high loss in exchange for high return.” with a mean value of 2.2878. Since 91 (22.98%) 41 respondents are strongly disagree, 141 (35.61%) disagree, 123 (31.06%) agree, and 41 (10.35%) are strongly agree, this statement is at the top rank. In short, the respondents are not willing to accept high risk for a high return. Question 2: “I perceive the word of “risk” carries the meaning of opportunity instead of loss.” is the third rank statement with a mean score of 2.2851. This statement is at middle rank in risk tolerance due to 96 (24.24%) respondents are strongly disagree, 140 (35.35%) disagree, 111 (28.03%) agree, and 49 (12.37%) are strongly agree that risk will make loss. Furthermore, Question 5: “I prefer to invest in high risk investment tools such as stock investment rather than savings my money



into a savings account.” is the fourth rank statement with mean of 2.2296. For this statement, 93 (23.48%) respondents are strongly disagree, 148 (37.37%) disagree, 126 (31.82%) agree, and 29 (7.32%) are strongly agree that they prefer to save money in a savings account rather than high risk investment. Finally, Question 4: “I am willing to invest my monthly salary into high risk investment rather than low risk investment.” with an average of 2.2123. The low mean of this statement is because 85 (21.46%) respondents are strongly disagree, 176 (44.44%) disagree, 101 (25.51%) agree, and only 34 (8.59%) are strongly agree that they are not willing to suffer higher risk investment.

**Table 4.11: Financial Socialization Agents**

Question	SD	D	N	A	SA	Mean	Rank
Q1.	16 (4.04%)	57 (14.39%)	91 (22.98%)	163 (41.16%)	69 (17.42%)	3.5350	5
Q2.	8 (2.02%)	52 (13.13%)	108 (27.27%)	132 (33.33%)	96 (24.24%)	3.6461	3
Q3.	46 (11.62%)	58 (14.65%)	106 (26.77%)	132 (33.33%)	54 (13.64%)	3.2275	7
Q4.	83 (20.95%)	62 (15.66%)	136 (34.34%)	88 (22.22%)	27 (6.82%)	2.7827	10
Q5.	0 (0%)	50 (12.62%)	86 (21.72%)	183 (46.21%)	77 (19.44%)	3.7244	2
Q6.	9 (2.27%)	53 (13.38%)	130 (32.83%)	168 (42.42%)	36 (9.09%)	3.4265	6
Q7.	10 (2.53%)	23 (5.81%)	123 (31.06%)	141 (35.61%)	99 (25.00%)	3.7477	1
Q8.	4 (1.01%)	26 (6.57%)	169 (42.68%)	141 (35.61%)	56 (14.14%)	3.5533	4

			)	)	)		
Q9.	17 (4.29%) )	113 (28.54%) )	123 (31.06%) )	106 (26.77%) )	37 (9.34%)	3.083 3	8
Q10.	59 (14.90%) )	94 (23.74%) )	135 (34.09%) )	84 (21.21%) )	24 (6.06%)	2.797 9	9

Source: Developed for research (SPSS)

Financial socialization agents is also an important IV in this research. First and foremost, 3.7477 is top one average for Question 7: “As far as I know, my parents regularly do save with a savings account.”. In calculation, there are 10 (2.53%) respondents are strongly disagree, 23 (5.81%) disagree only; 123 (31.06%) stand neutral, 141 (35.61%) agree, and 99 (25.00%) are strongly agree that their parents save money in a savings account. Next rank statement is Question 5: “I appreciate it when my parents give me advice about what to do with my money.” with mean of 3.7244. This statement is ranked second since no respondents are strongly disagree, 50 (12.62%) disagree, 86 (21.72%) are neutral, 183 (46.21%) agree, and 77 (19.44%) are strongly agree that they feel thankful if parents give financial advice. In addition, the third rank statement is Question 2: “I try to save money because I know that my parents do not like it when I rely on them.” with average of 3.6416. There are 8 (2.02%) respondents are strongly disagree, 52 (13.13%) disagree, 108 (27.27%) stand neutral, 132 (33.33%) agree, and 96 (24.24%) are strongly agree that they want to be independent. For fourth rank statement, it is Question 8: “As far as I know, some of my friends regularly do save with a savings account.” carry mean score of 3.5533. 4 (1.01%) respondents are strongly disagree, 26 (6.57%) disagree, 169 (42.68%) are neutral, 141 (35.61%) agree, and 56 (14.14%) are strongly agree that they know their friends save money in a savings account. Question 1: “Savings is something I do regularly because my parents educated me to save regularly when I was young.” is ranked number five with mean of 3.5350. This statement is ranked top five because 16 (4.04%) respondents are strongly disagree, 57 (14.39%)

disagree, 91 (22.98%) stand neutral, 163 (41.16%) agree, and 69 (17.42%) are strongly agree that their parents taught them the habit of savings.

The bottom five rank statement will be discussed below. Question 6: “I appreciate it when my friends give me advice about what to do with my money.” is ranked number six with mean of 3.4265. There are 9 (2.27%) respondents are strongly disagree, 53 (13.38%) disagree, 130 (32.83%) are neutral, 168 (42.42%) agree, and 36 (9.09%) are strongly agree that they feel thankful if their friends give financial advice. Not only that, the seventh rank statement is Question 3: “It’s good when my parents control my spending.” with a mean score of 3.2275. This mean is based on 46 (11.62%) respondents are strongly disagree, 58 (14.65%) disagree, 106 (26.77%) stand neutral, 132 (33.33%) agree, and 54 (13.64%) are strongly agree that parents control the spending is good. Question 9: “I always discuss money management issue (savings) with my parents.” is ranked number eight with an average of 3.0833. From this statement, there are 17 (4.29%) respondents are strongly disagree, 113 (28.54%) disagree, 123 (31.06%) are neutral, 106 (26.77%) agree, and 37 (9.34%) are strongly agree that they would discuss money management with their parents. For Question 10: “I always discuss about money management issue (savings) with my friends.”, it is ranked ninth with mean of 2.7979. There are 59 (14.90%) respondents are strongly disagree, 94 (23.74%) disagree, 135 (34.09%) stand neutral, 84 (21.21%) agree, and 24 (6.06%) are strongly agree to the statement. Last rank statement is Question 4: “It’s good when my friends control my spending.” with an average of 2.7827. For the lowest rank statement, there are 83 (20.95%) respondents are strongly disagree, 62 (15.66%) disagree, 136 (34.34%) stand neutral, 88 (22.22%) agree, and only 27 (6.82%) are strongly agree that it is good if friends control their spending.

## 4.2 Scale Measurement

### 4.2.1 Reliability Test

Table 4.12: Reliability Test (Cronbach's Alpha)

	<b>Elements</b>	<b>Cronbach's Alpha</b>	<b>N</b>
Dependent Variable	Individual Savings Behaviour	0.827	7
Independent Variables	Risk Tolerance	0.801	5
	Financial Socialization Agents	0.886	10

Source: Developed for research (SPSS)

Table 4.12 shows the Cronbach's Alpha results run by SPSS version 20 software for each variable. This test is important to check the consistency of the variables among their questions. Based on the table above, the Cronbach's Alpha for individual savings behaviour, risk tolerance and financial socialization agents are 0.827, 0.801 and 0.886 respectively. The results proved that all the variables are excellent in their consistency and reliability because their value is above 0.75. In short, the subsequent analysis will be proceeding since the Cronbach's Alpha exceed the minimum requirement (0.70) of consistency and reliability (Rosaroso, 2015).

## 4.3 Inferential Analysis

### 4.3.1 Pearson's Correlation Analysis

Table 4.13: Pearson's Correlation Matrix

Dependent Variable	Independent Variables	N	p-value	Pearson's Correlation
Individual Savings Behaviour	Financial Literacy	396	0.000	0.401
	Risk Tolerance	396	0.000	-0.492
	Financial Socialization Agents	396	0.000	0.726

Source: Developed for research (SPSS)

From the table 4.13, the Person's correlation coefficient between individual savings behaviour and financial literacy is +0.401. This implies that between these variables are positive relationship. This result had matched with the results of researchers done previously. Furthermore, there is 99% confident to say that this factor is important, which is supported by rejecting the null hypothesis due to p-value (0.000) less than  $\alpha$  (0.01). +0.401 is under low positive correlation because this figure is between +0.30 to +0.49.

Moreover, -0.492 is the correlation coefficient between individual savings behaviour and risk tolerance. It clearly pointed out that there is a negative relationship between them, and this result is the same as those previous researchers found. This negative relationship is significant at 99% confidence interval due to the p-value (0.000) smaller than  $\alpha$  (0.01). This negative correlation is considered low since -0.492 is fall between -0.30 to -0.49.

Furthermore, the correlation coefficient between individual savings behaviour and financial socialization agents is +0.726. This showed that there is a positive relationship between these variables, and this is expected from the past researchers. It is enough evidence to conclude that the

relationship between them is significant at 99% confidence interval due to the p-value (0.000) smaller than  $\alpha$  (0.01). For +0.726, it is high positive correlation since the value is between 0.70 to 0.89.

### 4.3.2 Multiple Linear Regression & ANOVA

Table 4.14: Coefficients to Individual Savings Behaviour

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Std. Error	Beta		
Constant	1.401	0.207		6.754	0.000
FL	0.059	0.012	0.168	4.719	0.000
RT	-0.153	0.043	-0.143	-3.593	0.000
FSA	0.595	0.042	0.589	14.106	0.000

Source: Developed for research (SPSS)

$H_0$ : There is no significant relationship between independent variables (financial literacy, risk tolerance, and financial socialization agents) and dependent variable (individual savings behaviour).

$H_1$ : There is a significant relationship between independent variables (financial literacy, risk tolerance, and financial socialization agents) and dependent variable (individual savings behaviour).

Based on Table 4.14, 99% confidence to conclude that financial literacy, risk tolerance as well as financial socialization agents are significantly influencing individual savings behaviour since all their p-value are closely (0.000) less than alpha (0.01). Thus, there are concluded that reject  $H_0$  for all independent variables.

#### Multiple Linear Regression Equation

Based on Table 4.14:

$$\text{Expected ISB}_i = 1.401 + 0.059\text{FL}_i - 0.153\text{RT}_i + 0.595\text{FSA}_i$$

Where,

ISB = Individual Savings Behaviour

FL = Financial Literacy

RT = Risk Tolerance

FSA = Financial Socialization Agents

Table 4.15: Ranking on Coefficient of independent variables

IV	Coefficient	Rank
Financial Literacy	0.168	2
Risk Tolerance	-0.143	3
Financial Socialization Agents	0.589	1

Source: Developed for research (SPSS)

From the Table 4.15, the ranking depends on the contribution level of their (standardized) coefficients toward the dependent variable.

Financial socialization agents have the highest contribution to influence the individual savings behaviour since the (standardized) coefficient is 0.589. The second rank of contribution is financial literacy with the (standardized) coefficient of 0.168. Among all independent variables, risk tolerance is the least influential factor that includes in this research, which is the (standardized) coefficient is -0.143.

Table 4.16: Model Summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of Estimate
	0.752	0.565	0.562	0.48802

Source: Developed for research (SPSS)

Based on Table 4.16, the model summary explained about how strong the relationship between financial literacy, risk tolerance as well as financial socialization agents and individual savings behaviour. From the table, R =

0.752 is the value of correlation coefficient, and this implies independent variables and dependent variable are highly correlated in overall model. Other than that, R-Squared = 0.565 is the coefficient of determination of the model. From the figure, 56.50% of the variation in individual savings behaviour is explained by the variation in its independent variables (financial literacy, risk tolerance as well as financial socialization agents). In other words, it also means that 43.50% of the variation in individual savings behaviour is not explained by the variation of this model's independent variables. In short, there may be other important factors ignored in this model. Moreover, the adjusted R-Squared = 0.562 indicated that 56.20% of the variation in individual savings behaviour is explained by the variation in financial literacy, risk tolerance as well as financial socialization agents took into account the degree of freedom.

Table 4.17: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	121.391	3	40.464	169.895	0.000
Residual	93.362	392	0.238		
Total	214.753	395			

Source: Developed for research (SPSS)

H<sub>0</sub>: All B<sub>i</sub> = 0, where i = FL, RT, FSA (The model is not significant)

H<sub>1</sub>: At least one of the B<sub>i</sub> ≠ 0 (The model is significant)

According to Table 4.17, probability of F-statistics (0.000) smaller than alpha (0.01). This implies financial literacy, risk tolerance as well as financial socialization agents are jointly important in explaining the individual savings behaviour. In a simple explanation, the overall model in this regression is significant at 1% level.



## **4.4 Conclusion**

In summary, this chapter is interpreted several analyses being used in this research such as descriptive analysis (e.g. central tendencies on demographic profile, dependent variable, and independent variables) and inferential analysis (e.g. Pearson's correlation as well as multiple linear regression, hypothesis testing, and ANOVA). The outcomes discussed here will proceed to chapter 5 for implications.

## **CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS**

### **5.0 Introduction**

This chapter is the last chapter for the research, and the discussion would be meaningful to Malaysia. The contents involve the most important and relevance of the descriptive analysis as well as inferential analysis; the implication of this study, limitations followed by the recommendations for future researchers in order to improve or enhance their study. For the last subchapter would be summarized the overall of this research, and close this project as a conclusion.

### **5.1 Summary of Statistical Analysis**

#### **5.1.1 Descriptive Analysis**

##### **5.1.1.1 Respondents' Demographic Profile**

Seven demographic variables are analysed for 396 respondents in Johor New villages. First of all, gender is the most basic profile to be analysed. There are 194 (48.99%) respondents are male, and 202 (51.01%) are female. Female respondents are slightly 8 more than male which is 2.02%. The second demographic factor is ethnicity with 306 (77.27%) respondents are Chinese; and there are only 6 (1.52%) are others. Age is the third demographic variable. More than half of the participants are 18 to 30 years old with 210 (53.03%). The minority of them are above 60 years old which is 19 (4.80%). Next, it is the highest education qualification of

the respondents. From the analysis, 196 (49.49%) are secondary school. However, 8 (2.02%) respondents are post-graduate.

Not only that, marital status also cannot be ignored. From there, 221 (55.81%) respondents are single. For married respondents, it is 175 (44.19%) only. Furthermore, work status is the eight-demographic variable. There is concluded that majority (45.45%) which is 180 respondents are full-time employed. Nonetheless, there are 10 (2.53%) are unemployed. Lastly, individual monthly income is one of the important demographic variables as well. As a result, showed that 164 (41.41%) respondents' income are under RM1,000. There are only 14 (3.54%) and 13 (3.28%) respondents are RM5,000 to RM7,000 and above RM7,000 respectively.

#### **5.1.1.2 Central Tendencies Measurement of Construct**

Which question needs to be more concern for each of the variables can be found out based on the maximum and minimum mean value criterion. Example in this research, the dependent variable is individual savings behaviour; independent variables are financial literacy, risk tolerance and financial socialization agents. There are a total of 32 questions based on 396 respondents in New villages.

Firstly, individual savings behaviour is dependent variable. Most participants have a good savings behaviour in Question 5: "I usually do not spend all my current income without savings." with the highest mean of 3.7045. 150 (37.88%) agree, and 92 (23.23%) respondents are strongly agree with this statement. For Question 6: "Each year I invest money in higher-return investments such as stocks, bonds, or mutual funds as part of my savings.", it is the lowest mean of 2.7625. From here, 54 (13.64%) respondents are strongly disagree, 94 (23.74%) disagree, and 156 (39.39%) stand neutral to point that they do not save for investment.

In addition, financial literacy is one of the important factors. From the analysis, it clearly showed that majority 312 (78.79%) of the respondents understand that the highest fluctuation is stocks, which is Question 9: “Normally, which asset displays the highest fluctuations over time?”. Nevertheless, minority 126 (31.82%) of the respondents only know that mutual funds can invest in several assets, for example, invest in both stocks and bonds. This result from Question 6: “Which of the following statements is correct?”. 104 (26.26%) respondents answered that once one invests in a mutual fund, one cannot withdraw the money in the first year.

Moreover, risk tolerance is included in this study as well. The highest mean value of 2.5253 is Question 1: “I will not cancel my trip if I have lost my job three weeks before my vacation even though it is my ‘once-in-a-lifetime’ vocation.”. The calculation is the highest for this statement due to the respondents tend to go for vacation even though they will lose the job. From there, 51 (12.88%) respondents are strongly disagree, 152 (38.38%) disagree, 127 (32.07%) agree, and 66 (16.67%) are strongly agree. For the lowest mean is Question 4: “I am willing to invest my monthly salary into high risk investment rather than low risk investment.” with an average of 2.2123. The low mean of this statement is because 85 (21.46%) respondents are strongly disagree, 176 (44.44%) disagree, 101 (25.51%) agree, and only 34 (8.59%) are strongly agree that they are not willing to suffer higher risk.

The importance of financial socialization agents in this research also cannot be ignored. From the analysis, 3.7477 is top one average for Question 7: “As far as I know, my parents regularly do save with a savings account.”. This is due to the majority of the respondents 141 (35.61%) agree, and 99 (25.00%) are strongly agree. Obviously, Question 4: “It’s good when my friends control my spending.” with an average of 2.7827 is the lowest mean among questions. From there, 83 (20.95%) respondents are strongly disagree, 62 (15.66%) disagree with this statement.

## **5.1.2 Scale Measurement**

### **5.1.2.1 Reliability Analysis**

Reliability test is the scale measurement in this research. To test the reliability of the variables, the Cronbach's alpha is used to examine the consistency. There are 3 variables consist of 22 questions in the survey questionnaire. The 3 variables are risk tolerance (5 questions), financial socialization agents (10 questions), and individual savings behaviour (7 questions).

The highest Cronbach's alpha is financial socialization agents with 0.886. For the second rank, it is individual savings behaviour with 0.827, followed by the lowest Cronbach's alpha of 0.801. From the results, all variables are considered excellent since all Cronbach's alpha are higher than 0.75. Hence, there is sufficient evidence to conclude that the overall of the research as well as the entire variables are consistent and reliable.

## **5.1.3 Inferential Analysis**

### **5.1.3.1 Pearson's Correlation Analysis**

Pearson's Correlation analysis is to examine and identify the relationship between independent variables and dependent variable in research. In summary, the results showed the highest Pearson's correlation coefficient is financial socialization agents with +0.726, implies that financial socialization agents are high positive correlated to individual savings behaviour. For financial literacy, Pearson's correlation coefficient is +0.401, means that financial literacy is low positive correlated to individual savings behaviour. Last for risk tolerance, the Pearson's

correlation coefficient is -0.492, indicates that risk tolerance is low negative correlated to individual savings behaviour. From Pearson's correlation analysis, all independent variables from this study are significant at 1% level since all p-value (0.000) is less than alpha (0.01).

### **5.1.3.2 Multiple Linear Regression Analysis**

One of the model's functions explained the correlation coefficient between three independent variables and dependent variable,  $R = 0.752$ . This result proved that there is a positive relationship between dependent variable and independent variables. Furthermore, the adjusted coefficient of determination, adjusted R Square = 0.562. In other words, 56.20% of the variation in individual savings behaviour is explained by the variation in financial literacy, risk tolerance, and financial socialization agents adjusted from the degree of freedom. Moreover, the probability of F-statistics (0.000) is less than  $\alpha$  (0.01) provided by ANOVA result, implies that all independent variables are important to explain the individual savings behaviour. In short, 99% confidence to say that this model is significant.

### **5.1.3.3 Multiple Linear Regression Equation**

$$\text{Expected ISB}_i = 1.401 + 0.059\text{FL}_i - 0.153\text{RT}_i + 0.595\text{FSA}_i$$

Where,

ISB = Individual Savings Behaviour

FL = Financial Literacy

RT = Risk Tolerance

FSA = Financial Socialization Agents

## 5.2 Discussion on Major Findings

Table 5.1: Summary of the Result of Hypotheses Testing

Hypothesis	Supported	Not Supported
There is a significant relationship between financial literacy and individual savings behaviour.	$\beta = 0.059$ $p = 0.000 > 0.05$	
There is a significant relationship between risk tolerance and individual savings behaviour.	$\beta = -0.153$ $p = 0.000 > 0.05$	
There is a significant relationship between financial socialization agent and individual savings behaviour.	$\beta = 0.595$ $p = 0.000 > 0.05$	

### 5.2.1 Financial Literacy

The correlation coefficient in Table 5.1 shows that there is a significant and positive relationship between financial literacy and individual savings behaviour with the value of 0.059. The positive relationship between the financial literacy and individual savings behaviour is consistent with the study results from (Nguyen et al., 2017; Bayar et al., 2017; Jamal et al., 2015; Mahdzan & Tabiani, 2013; Jappelli & Padula, 2013). Research done by numerous researchers concluded that financial literacy does affect savings positively. For instance, from the method of distributing questionnaire to Usak University staff, they found that financial literacy will give a positive significant relationship towards personal savings (Bayar et al., 2017). Hidajat (2015) claimed that the fishermen in Indonesia are financially illiterate and most of them did not save their money and have no savings account. This can prove that personal financial

literacy strongly affects household savings. Furthermore, the study which examined to study the relationship between financial literacy and individual savings from two hundred individuals in Klang Valley, Malaysia, they found that the correlation between these two variables was positive (Mahdzan & Tabiani, 2013). In conclusion, this proved that there is a significant positive relationship between financial literacy and individual savings behaviour.

### **5.2.2 Risk Tolerance**

The correlation coefficient in Table 5.1 shows that there is a significant but negative relationship between risk tolerance and individual savings behaviour with the value of -0.153. The negative relationship between risk tolerance and individual savings behaviour is associated with the study result from Magendans et al. (2017). Individuals who are equipped with high financial risk tolerance will lead to the low intention of savings. From the study that has been examined from a number of individuals, the result showing that their intention to save were decreased when they holding bond and stock in a large amount (Zhong & Xiao, 1995). This indicates that their risk tolerance will affect savings in a negative way. In conclusion, this proved that there is a significant negative relationship between risk tolerance and individual savings behaviour.

### **5.2.3 Financial Socialization Agents**

The correlation coefficient in Table 5.1 shows that there is a significant and positive relationship between financial socialization agent and individual savings behaviour with the value of 0.595. The positive relationship between the financial socialization agent and individual savings behaviour is associated with the study result from Sundarasan et al. (2016). According to Kumar et al. (2017), parents are the first person



for the children when the children born to this world, so parents should have the good financial literacy and responsibility to influence their children about the financial knowledge in order to affect their financial behaviour (cash, credit & savings management) in their future. This proves that the parents have a stronger impact on the savings behaviour of the children. Peer group is also one of the financial socialization agents that have a positive significant impact on the savings behaviour (Jamal et al., 2016; Kamarudin & Hashim, 2018). As the children grow up, they will have more communication with their friend and shape a strong impact on the youth (Mohamed, 2017). The increase of communication with peers with improves the financial knowledge, financial information and financial behaviour among young generations. According to Alekam et al. (2018), savings behaviour among the young adult will be influenced by the activities during leisure time with peers and discuss the financial issues with peers. In conclusion, there is a significant positive relationship between the financial socialization agent and individual savings behaviour.

### **5.3 Implications of the Study**

The factors that affect the individual savings behaviour in Malaysia new village can be investigated from this research. These provide a guideline for Malaysia new villagers to improve their savings behaviour through understanding the related factors by themselves. Besides, these remind Malaysia government to implement some policies in order to enhance the savings behaviour in Malaysia new village. By improving the savings behaviour, the standard of living in Malaysia new village will improve, hence, it may lead to the economic growth of the nation in the future.

In order to improve savings behaviour, the government may improve financial literacy in Malaysia. Based on the result from Chapter 4, high financial literacy will lead to high individual savings behaviour in developed new village in Johor. Thus, it was important for Malaysia government to improve Malaysian financial

literacy in order to improve their savings behaviour. For example, Malaysia government can launch the financial literacy program in all states in Malaysia and promote the program through social media, school or other social activities. According to The Star Online (2018), Federation of Malaysian Consumers Associations (FOMCA) had implemented the financial literacy activity in Malaysia. to help individuals obtain financial matter, financial knowledge, financial planning and money management. Besides, FOMCA also had established the financial literacy program in school, university and workplace. Thus, these programs can improve the financial literacy of Malaysian and lead to improve of the savings behaviour.

Besides, the Malaysia government may sustain to develop new savings plans and programs to enhance the savings behaviour in Malaysia. The most common savings plans for retirement such as EPF can be considered as a good savings plan for the retirees have enough savings to continue and enjoy their retirement life. However, some past research stated that the retirees will spend all their retirement savings around 5 years (Free Malaysia Today, 2019). This is important for the government to develop more savings plans to make sure the retirees have enough savings to sustain their retirement life. For Instance, Private Retirement Scheme, National Protection Scheme (MySalam) and Healthcare Protection Scheme (PeKa) and other related savings plans. It is advisable for Malaysian plan to save in these savings plan for the future and hence, it can reduce the financial stress of their children.

Although parents are the primary educator for children to form their behaviour, parents should increase their awareness to the importance of savings behaviour. However, the individuals in Malaysia does not aware about the importance of savings behaviour nowadays (Asri, 2018). Parents should consider their children in the future and save money early to afford the cost in the future. Since the cost of education for students was increasing, parents were suggested to save money early to afford their children future education cost. According to Chin (2018), the government was introduced one savings scheme for education, Skim Simpanan Pendidikan Nasional (SSPN). This scheme can reduce the dependence of parents on their children's education fees in the future. Furthermore, it can be one of the

matters to educate the savings behaviour of children since the child can know about the importance of savings from this savings scheme.

## **5.4 Limitations of the Study**

The limitation that has been found in this present study is the research quality may be limited by available resources such as budget and time. Primary data collection is slightly more expensive as there are a number of costs incurred. For instance, the costs that have been incurred was the cost to prepare questionnaires and execute the process of distributing questionnaires to targeted people physically. In addition, from the event of distributing and collecting the data physically, the researchers often require a longer time to get it done. Therefore, the researchers could not reach a large number of sample and there might be a high probability that some of the bias are created.

Next, the targeted location of the respondents is one of the limitations. For further clarification, the research had conducted only in Johor new village but not any other new villages in Malaysia, which the result might not fully reflect the situation of the whole country. Therefore, it might be a different behaviour or pattern if the study was conducted in other states.

Furthermore, the meaning of the questions might not be delivered comprehensively in the process of translation. Before the process of disseminating the questionnaires to respondents, the researchers have translated the content from English to Mandarin according to their reading and writing proficiency. Hence, this will lead to a selection bias that generates an inaccurate result. In addition, the respondents may not fill in the correct answer but simply circle one of the choices because of the time constraint. Hence, the overall result would be affected that might lead to low accuracy.

## **5.5 Recommendations for Future Study**

Due to limitations have been discussed previously, future researchers are suggested to maximize the usage of online questionnaire distribution and minimize the usage of traditional questionnaire distribution. Future researchers can distribute the questionnaire through social media platforms such as Facebook, Telegram, Twitter and so on. This method can help researchers to save sufficient amount of cost of printing out the questionnaire and time when collecting back the data.

Besides, future researchers are recommended to expand the targeted area of respondents of new village to respondents of new villages throughout Malaysia. The data collected from different places will make the outcomes of results more reliable and accurate. Thus, the overall results can represent or a guideline for individual savings behaviour in Malaysia.

Furthermore, futures researchers are recommended to increase the data reliability collected from new villages by using mix collection method. In this research, some of the citizens just simply answer the questionnaire especially at the part of examining their financial literacy. For example, they do not choose the answer to “Do not know” when they do not know the answer and they tend to simply choose one of the answers. It may affect our data reliability significantly. Therefore, future researchers may implement another data collection method or combine two methods such as a combination of interview method and questionnaire distribution method together in order to make the data more reliable and accurate.

## **5.6 Conclusion**

In conclusion, this research could assist the existing or future end users for evaluating the determinants of individual savings behaviour in New villages. From the findings, the factors (financial literacy, risk tolerance as well as financial socialization agents) are significant influence the individual savings behaviour in

new villages. Hence, findings of this study are very interesting for people to live in new villages. In addition, the Malaysia government may know which factors that really important and take actions to improve the individual savings behaviour in new villages. When the information provided by this research is fully utilized by society, the wellbeing or socioeconomic status of the new villagers will be better off at the end.

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## Appendix A: Research Survey Questionnaire



# UNIVERSITI TUNKU ABDUL RAHMAN

## SURVEY QUESTIONNAIRE

### Individual Savings Behaviour in Malaysia New Village

Dear Respondent,

We are the final year students of Bachelor of Finance (Hons) from Universiti Tunku Abdul Rahman (UTAR). We are currently conducting a survey on our final year project with the topic of “Individual Savings Behaviour in Malaysia New Village.” Your co-operation to answering this questionnaire is much important in helping us to complete our research. We appreciate for your time in completing these questions. All of the information obtained with regards with this research will be remained private and confidential. This information is solely for academic research purposes.

Thank you very much for your time and participation. If you have any question or inquiry, please do not hesitate to contact us.

Yours Sincerely,

Cheong Wai Lorn  
Faculty of Business and Finance  
Universiti Tunku Abdul Rahman  
Jalan Universiti, Bandar Barat  
31900 Kampar,  
Perak, Malaysia  
Tel: +605-468 8888

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

Acknowledgment of Notice:

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

**Section A: Demographic Profile**

*(Please put a tick “ / ” in the box.)*

1. Gender

- Male
- Female

2. Ethnicity

- Malay
- Chinese
- Indian
- Others (e.g. Bumiputera)

3. How old are you?

- 18 - 30 years old
- 31 - 40 years old
- 41 - 50 years old
- 51 - 60 years old
- Above 60 years old

4. Highest education qualification

- Primary School
- Secondary School
- Undergraduate
- Post-graduate



5. Marital status

- Single
- Married

6. Which of the following best describes your current work status?

- Full-time employed
- Part-time employed
- Self-employed
- Unemployed
- Retirees and students

7. Individual monthly income

- Under RM1,000
- RM1,001 - RM3,000
- RM3,001 - RM5,000
- RM5,001 - RM7,000
- Above RM7,000

**Section B: Factors that Influence Individual Savings in Malaysia on New Villages**

**I. Financial Socialization Agents (Parents and Peers)**

*(Please circle the number to indicate the degree of agreement.)*

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>

No.	Questions	Rating				
		1	2	3	4	5
8.	Savings is something I do regularly because my parents educated me to save regularly when I was young.	1	2	3	4	5
9.	I try to save money because I know that my parents do not like it when I rely on them.	1	2	3	4	5
10.	It's good when my parents control my spending.	1	2	3	4	5
11.	It's good when my friends control my spending.	1	2	3	4	5
12.	I appreciate it when my parents give me advice about what to do with my money.	1	2	3	4	5
13.	I appreciate it when my friends give me advice about what to do with my money.	1	2	3	4	5
14.	As far I know, my parents regularly do save with a savings account.	1	2	3	4	5
15.	As far I know, some of my friends regularly do save with a savings account.	1	2	3	4	5
16.	I always discuss about money management issue (savings) with my parents.	1	2	3	4	5
17.	I always discuss about money management issue (savings) with my friends.	1	2	3	4	5

**II. Risk Tolerance**

*(Please circle the number to indicate the degree of agreement.)*

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>

No.	Questions	Rating			
		1	2	3	4
18.	I will cancel my trip if I have lost my job three weeks before my vocation even though it is my “once-in-a-lifetime” vocation.	1	2	3	4
19.	I perceive the word of “risk” carries the meaning of loss instead of opportunity.	1	2	3	4
20.	I am not willing to accept an investment with the chance of getting high loss in exchange for high return.	1	2	3	4
21.	I am willing to invest my monthly salary into low risk investment rather than high risk investment.	1	2	3	4
22.	I prefer to save my money into a savings account rather than invest in high risk investment tools such as stock investment.	1	2	3	4

**Section C: Additional Information on Savings Behaviour**

**I. Financial Literacy**

*(Please circle the correct answer.)*

23. If 5 people all have the winning number in the lottery and the prize is RM2,000,000, how much will each of them get?

- A. RM400,000
- B. RM 40,000
- C. RM2,000,000
- D. Do not know

24. Let's say you have RM200 in a savings account. The account earns 10% interest per year. How much would you have in the account at the end of two years? Assuming you did not take out the money and interest after first year.

- A. RM220
- B. RM 242
- C. RM 240
- D. Do not know

25. Suppose you have a friend inherits RM10,000 today and his siblings will inherit RM10,000 after 10 years. Who will be richer in the end?

- A. My friend
- B. His sibling
- C. They're equally rich
- D. Do not know

26. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?

- A. More
- B. Less
- C. Exactly the same
- D. Do not know

27. Which of the following statements describes the main function of the stock market?

- A. The stock market helps to predict stock earnings
- B. The stock market results in an increase in the price of stocks
- C. The stock market brings people who want to buy stocks together with those who want to sell stocks
- D. None of the above

28. Which of the following statements is correct?

- A. Once one invests in a mutual fund, one cannot withdraw the money in the first year
- B. Mutual funds can invest in several assets, for example invest in both stocks and bonds
- C. Mutual funds pay a guaranteed rate of return which depends on their past performance
- D. None of the above

29. If the interest rate falls, what should happen to bond prices?

- A. Rise
- B. Fall
- C. Stay the same
- D. None of the above

30. Considering a long time period (for example 10 or 20 years), which asset normally gives the highest return?

- A. Savings accounts
- B. Bonds
- C. Stocks
- D. Do not know

31. Normally, which asset displays the highest fluctuations over time?

- A. Savings accounts
- B. Bonds
- C. Stocks
- D. Do not know

32. When an investor spreads his money among different assets, the risk of losing money:

- A. Increase
- B. Decrease
- C. Stay the same
- D. Do not know

**Section D: Savings Behaviour**

Rate each of the following statements on a scale of 1 – 5.

*(Please circle the number to indicate the degree of agreement.)*

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>

No.	Questions	Rating				
		1	2	3	4	5
33.	I regularly set aside money for savings once I get my monthly income.	1	2	3	4	5
34.	I record my sources of spending to determine the amount of my monthly savings.	1	2	3	4	5
35.	I set specific financial goals for my future (e.g. education, marriage, car, house), and save money accordingly to achieve goals.	1	2	3	4	5
36.	I pay my yearly expenses out of my current income or savings (not with loan).	1	2	3	4	5
37.	I usually not spend all my current income without savings.	1	2	3	4	5
38.	Each year I invest money in higher-return investments such as stocks, bonds, or mutual funds as part of my savings.	1	2	3	4	5
39.	I contribute annually to a retirement savings plan (e.g. EPF, PRS).	1	2	3	4	5

**Appendix B: Pilot Test (Reliability Test - Cronbach's Alpha)**

**Case Processing Summary**

		N	%
Cases	Valid	31	100.0
	Excluded <sup>a</sup>	0	.0
	Total	31	100.0

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

1. Individual Savings Behaviour

**Reliability Statistics**

Cronbach's Alpha	N of Items
.815	7

2. Risk Tolerance

**Reliability Statistics**

Cronbach's Alpha	N of Items
.717	5

3. Financial Socialization Agents

**Reliability Statistics**

Cronbach's Alpha	N of Items
.761	10

**Appendix C: Frequencies of Demographic Profile**

1. Gender

**Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Female	202	51.0	51.0	51.0
Male	194	49.0	49.0	100.0
Total	396	100.0	100.0	

2. Ethnicity

**Ethnicity**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Chinese	306	77.3	77.3	77.3
Malay	53	13.4	13.4	90.7
Indian	31	7.8	7.8	98.5
Others (e.g. Bumiputera)	6	1.5	1.5	100.0
Total	396	100.0	100.0	

3. Age

**Age**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18 to 30 years old	210	53.0	53.0	53.0
31 to 40 years old	90	22.7	22.7	75.8
41 to 50 years old	54	13.6	13.6	89.4
51 to 60 years old	23	5.8	5.8	95.2
Above 60 years old	19	4.8	4.8	100.0
Total	396	100.0	100.0	

4. Highest Education Qualification

**Education**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Secondary School	196	49.5	49.5	49.5
Undergraduate	149	37.6	37.6	87.1
Primary School	43	10.9	10.9	98.0
Post-graduate	8	2.0	2.0	100.0
Total	396	100.0	100.0	



5. Marital Status

**MaritalStatus**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Single	221	55.8	55.8	55.8
Married	175	44.2	44.2	100.0
Total	396	100.0	100.0	

6. Work Status

**WorkStatus**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Full-time employed	180	45.5	45.5	45.5
Retirees and students	122	30.8	30.8	76.3
Part-time employed	36	9.1	9.1	85.4
Self-employed	29	7.3	7.3	92.7
Housewife	19	4.8	4.8	97.5
Unemployed	10	2.5	2.5	100.0
Total	396	100.0	100.0	

7. Individual Monthly Income

**IndividualMonthlyIncome**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Under RM1,000	164	41.4	41.4	41.4
RM1,001 to RM3,000	143	36.1	36.1	77.5
RM3,001 to RM5,000	62	15.7	15.7	93.2
RM5,001 to RM7,000	14	3.5	3.5	96.7
Above RM7,000	13	3.3	3.3	100.0
Total	396	100.0	100.0	

**Appendix D: Frequencies of Variables**

1. Individual Savings Behaviour

**Statistics**

		ISB1	ISB2	ISB3	ISB4	ISB5	ISB6	ISB7
N	Valid	396	396	396	396	396	396	396
	Missing	0	0	0	0	0	0	0
Mean		3.4394	2.9520	3.6136	3.6414	3.7045	2.7626	3.3131
Median		4.0000	3.0000	4.0000	4.0000	4.0000	3.0000	3.0000
Std. Deviation		1.11554	1.15407	.97551	1.03738	.99674	1.04055	1.03749

**ISB1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	25	6.3	6.3	6.3
	2.00	60	15.2	15.2	21.5
	3.00	89	22.5	22.5	43.9
	4.00	160	40.4	40.4	84.3
	5.00	62	15.7	15.7	100.0
	Total	396	100.0	100.0	

**ISB2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	54	13.6	13.6	13.6
	2.00	77	19.4	19.4	33.1
	3.00	133	33.6	33.6	66.7
	4.00	98	24.7	24.7	91.4
	5.00	34	8.6	8.6	100.0
	Total	396	100.0	100.0	

**ISB3**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	7	1.8	1.8	1.8
	2.00	43	10.9	10.9	12.6
	3.00	123	31.1	31.1	43.7
	4.00	146	36.9	36.9	80.6
	5.00	77	19.4	19.4	100.0
	Total	396	100.0	100.0	

**ISB4**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	10	2.5	2.5	2.5
	2.00	42	10.6	10.6	13.1
	3.00	123	31.1	31.1	44.2
	4.00	126	31.8	31.8	76.0
	5.00	95	24.0	24.0	100.0
	Total	396	100.0	100.0	

**ISB5**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	8	2.0	2.0	2.0
	2.00	39	9.8	9.8	11.9
	3.00	107	27.0	27.0	38.9
	4.00	150	37.9	37.9	76.8
	5.00	92	23.2	23.2	100.0
	Total	396	100.0	100.0	

**ISB6**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	54	13.6	13.6	13.6
	2.00	94	23.7	23.7	37.4
	3.00	156	39.4	39.4	76.8
	4.00	76	19.2	19.2	96.0
	5.00	16	4.0	4.0	100.0
	Total	396	100.0	100.0	

**ISB7**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	25	6.3	6.3	6.3
	2.00	48	12.1	12.1	18.4
	3.00	148	37.4	37.4	55.8
	4.00	128	32.3	32.3	88.1
	5.00	47	11.9	11.9	100.0
	Total	396	100.0	100.0	

**2. Financial Literacy**

**Statistics**

		FL1	FL2	FL3	FL4	FL5	FL6	FL7	FL8	FL9	FL10
N	Valid	396	396	396	396	396	396	396	396	396	396
	Missing	0	0	0	0	0	0	0	0	0	0

**FL1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	274	69.2	69.2	69.2
B	65	16.4	16.4	85.6
C	32	8.1	8.1	93.7
D	25	6.3	6.3	100.0
Total	396	100.0	100.0	

**FL2**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	62	15.7	15.7	15.7
B	155	39.1	39.1	54.8
C	133	33.6	33.6	88.4
D	46	11.6	11.6	100.0
Total	396	100.0	100.0	

**FL3**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	217	54.8	54.8	54.8
B	65	16.4	16.4	71.2
C	77	19.4	19.4	90.7
D	37	9.3	9.3	100.0
Total	396	100.0	100.0	

**FL4**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	38	9.6	9.6	9.6
B	285	72.0	72.0	81.6
C	32	8.1	8.1	89.6
D	41	10.4	10.4	100.0
Total	396	100.0	100.0	

**FL5**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	86	21.7	21.7	21.7
B	70	17.7	17.7	39.4
C	153	38.6	38.6	78.0
D	87	22.0	22.0	100.0
Total	396	100.0	100.0	

**FL6**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	104	26.3	26.3	26.3
B	126	31.8	31.8	58.1
C	94	23.7	23.7	81.8
D	72	18.2	18.2	100.0
Total	396	100.0	100.0	

**FL7**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	152	38.4	38.4	38.4
B	169	42.7	42.7	81.1
C	36	9.1	9.1	90.2
D	39	9.8	9.8	100.0
Total	396	100.0	100.0	

**FL8**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	129	32.6	32.6	32.6
B	89	22.5	22.5	55.1
C	128	32.3	32.3	87.4
D	50	12.6	12.6	100.0
Total	396	100.0	100.0	

**FL9**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	21	5.3	5.3	5.3
B	35	8.8	8.8	14.1
C	312	78.8	78.8	92.9
D	28	7.1	7.1	100.0
Total	396	100.0	100.0	

**FL10**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid A	54	13.6	13.6	13.6
B	248	62.6	62.6	76.3
C	50	12.6	12.6	88.9
D	44	11.1	11.1	100.0
Total	396	100.0	100.0	

3. Risk Tolerance

**Statistics**

		RT1	RT2	RT3	RT4	RT5
N	Valid	396	396	396	396	396
	Missing	0	0	0	0	0
Mean		2.5253	2.2854	2.2879	2.2121	2.2298
Median		2.0000	2.0000	2.0000	2.0000	2.0000
Std. Deviation		.91782	.96882	.93481	.87754	.89172

**RT1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	51	12.9	12.9	12.9
	2.00	152	38.4	38.4	51.3
	3.00	127	32.1	32.1	83.3
	4.00	66	16.7	16.7	100.0
	Total	396	100.0	100.0	

**RT2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	96	24.2	24.2	24.2
	2.00	140	35.4	35.4	59.6
	3.00	111	28.0	28.0	87.6
	4.00	49	12.4	12.4	100.0
	Total	396	100.0	100.0	

**RT3**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	91	23.0	23.0	23.0
	2.00	141	35.6	35.6	58.6
	3.00	123	31.1	31.1	89.6
	4.00	41	10.4	10.4	100.0
	Total	396	100.0	100.0	

**RT4**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	85	21.5	21.5	21.5
	2.00	176	44.4	44.4	65.9
	3.00	101	25.5	25.5	91.4
	4.00	34	8.6	8.6	100.0
	Total	396	100.0	100.0	

**RT5**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	93	23.5	23.5	23.5
2.00	148	37.4	37.4	60.9
3.00	126	31.8	31.8	92.7
4.00	29	7.3	7.3	100.0
Total	396	100.0	100.0	

4. Financial Socialization Agents

**Statistics**

	FSA1	FSA2	FSA3	FSA4	FSA5	FSA6	FSA7	FSA8	FSA9	FSA10
N Valid	396	396	396	396	396	396	396	396	396	396
Missing	0	0	0	0	0	0	0	0	0	0
Mean	3.5354	3.6465	3.2273	2.7828	3.7247	3.4268	3.7475	3.5530	3.0833	2.7980
Median	4.0000	4.0000	3.0000	3.0000	4.0000	4.0000	4.0000	3.0000	3.0000	3.0000
Std. Deviation	1.06320	1.04881	1.20079	1.20266	.91817	.91247	.97921	.85074	1.04609	1.11813

**FSA1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	16	4.0	4.0	4.0
2.00	57	14.4	14.4	18.4
3.00	91	23.0	23.0	41.4
4.00	163	41.2	41.2	82.6
5.00	69	17.4	17.4	100.0
Total	396	100.0	100.0	

**FSA2**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	8	2.0	2.0	2.0
2.00	52	13.1	13.1	15.2
3.00	108	27.3	27.3	42.4
4.00	132	33.3	33.3	75.8
5.00	96	24.2	24.2	100.0
Total	396	100.0	100.0	

**FSA3**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	46	11.6	11.6	11.6
	2.00	58	14.6	14.6	26.3
	3.00	106	26.8	26.8	53.0
	4.00	132	33.3	33.3	86.4
	5.00	54	13.6	13.6	100.0
	Total	396	100.0	100.0	

**FSA4**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	83	21.0	21.0	21.0
	2.00	62	15.7	15.7	36.6
	3.00	136	34.3	34.3	71.0
	4.00	88	22.2	22.2	93.2
	5.00	27	6.8	6.8	100.0
	Total	396	100.0	100.0	

**FSA5**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	50	12.6	12.6	12.6
	3.00	86	21.7	21.7	34.3
	4.00	183	46.2	46.2	80.6
	5.00	77	19.4	19.4	100.0
	Total	396	100.0	100.0	

**FSA6**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	9	2.3	2.3	2.3
	2.00	53	13.4	13.4	15.7
	3.00	130	32.8	32.8	48.5
	4.00	168	42.4	42.4	90.9
	5.00	36	9.1	9.1	100.0
	Total	396	100.0	100.0	



**FSA7**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	10	2.5	2.5	2.5
	2.00	23	5.8	5.8	8.3
	3.00	123	31.1	31.1	39.4
	4.00	141	35.6	35.6	75.0
	5.00	99	25.0	25.0	100.0
	Total	396	100.0	100.0	

**FSA8**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	1.0	1.0	1.0
	2.00	26	6.6	6.6	7.6
	3.00	169	42.7	42.7	50.3
	4.00	141	35.6	35.6	85.9
	5.00	56	14.1	14.1	100.0
	Total	396	100.0	100.0	

**FSA9**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	17	4.3	4.3	4.3
	2.00	113	28.5	28.5	32.8
	3.00	123	31.1	31.1	63.9
	4.00	106	26.8	26.8	90.7
	5.00	37	9.3	9.3	100.0
	Total	396	100.0	100.0	

**FSA10**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	59	14.9	14.9	14.9
	2.00	94	23.7	23.7	38.6
	3.00	135	34.1	34.1	72.7
	4.00	84	21.2	21.2	93.9
	5.00	24	6.1	6.1	100.0
	Total	396	100.0	100.0	

**Appendix E: Reliability Test (Cronbach's Alpha)**

1. Individual Savings Behaviour

**Case Processing Summary**

		N	%
Cases	Valid	396	100.0
	Excluded <sup>a</sup>	0	.0
	Total	396	100.0

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

**Reliability Statistics**

Cronbach's Alpha	N of Items
.827	7

2. Risk Tolerance

**Case Processing Summary**

		N	%
Cases	Valid	396	100.0
	Excluded <sup>a</sup>	0	.0
	Total	396	100.0

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

**Reliability Statistics**

Cronbach's Alpha	N of Items
.801	5

3. Financial Socialization Agents

**Case Processing Summary**

		N	%
Cases	Valid	396	100.0
	Excluded <sup>a</sup>	0	.0
	Total	396	100.0

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

**Reliability Statistics**

Cronbach's Alpha	N of Items
.886	10

**Appendix F: Pearson's Correlation Analysis**

**Correlations**

		ISB	FL	RT	FSA
ISB	Pearson Correlation	1	.401**	-.492**	.726**
	Sig. (2-tailed)		.000	.000	.000
	N	396	396	396	396
FL	Pearson Correlation	.401**	1	-.173**	.353**
	Sig. (2-tailed)	.000		.001	.000
	N	396	396	396	396
RT	Pearson Correlation	-.492**	-.173**	1	-.543**
	Sig. (2-tailed)	.000	.001		.000
	N	396	396	396	396
FSA	Pearson Correlation	.726**	.353**	-.543**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	396	396	396	396

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

### Appendix G: Multiple Linear Regression Model

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	FSA, FL, RT <sup>b</sup>	.	Enter

a. Dependent Variable: ISB

b. All requested variables entered.

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.752 <sup>a</sup>	.565	.562	.48802

a. Predictors: (Constant), FSA, FL, RT

b. Dependent Variable: ISB

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	121.391	3	40.464	169.895	.000 <sup>b</sup>
	Residual	93.362	392	.238		
	Total	214.753	395			

a. Dependent Variable: ISB

b. Predictors: (Constant), FSA, FL, RT

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.401	.207		6.754	.000
	FL	.059	.012	.168	4.719	.000
	RT	-.153	.043	-.143	-3.593	.000
	FSA	.595	.042	.589	14.106	.000

a. Dependent Variable: ISB

## Appendix H: Permission to Conduct Survey



**UNIVERSITI TUNKU ABDUL RAHMAN**

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10<sup>th</sup> April 2019

**To Whom It May Concern**

Dear Sir/Madam,

**Permission to Conduct Survey**

This is to confirm that the following students are currently pursuing their *Bachelor Of Finance (Hons)* 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.

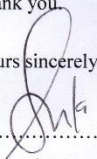
The students are as follows:

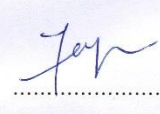
<u>Name of Student</u>	<u>Student ID</u>
Alex Tan Che Xin	15ABB02845
Cheong Wai Lorn	16ABB00938
Chong Chun Juen	16ABB00144
Lee Roger	15ABB02933
Liou Ye Hang	16ABB00537

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

Thank you.

Yours sincerely,

  
.....  
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