FINANCIAL SATISFACTION AMONG THE URBAN ELDERLY IN SELANGOR, MALAYSIA

BY

HO POOI YEN
NG JO-LYN
SIEW MUN KEAT

A research project submitted in partial fulfillment of the requirement for the degree of

BACHELOR OF ECONOMICS (HONS) GLOBAL ECONOMICS

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT
DEPARTMENT OF ECONOMICS

APRIL 2013

DECLARATION

We hereby declare that:

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

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

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

(4) The word count of this research report is _____.

Name of Student:	Student ID:	Signature:
1. HO POOI YEN	09UKB06952	_____
2. NG JO-LYN	09UKB06490	_____
3. SIEW MUN KEAT	10UKB07220	_____

Date: _____

ACKNOWLEDGEMENT

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ABBREVIATIONS

et al.   and others

SPSS   Statistical Package for Social Sciences

Anova   Analysis of Variance

etc.   et cetera

i.e.   "id est" which translates to "that is"

e.g.   "exempli gratia" which translates to "for example"

PREFACE

The research project is submitted in partial fulfillment for a bachelor of economics student in Universiti Tunku Abdul Rahman. The work outlined in this research project was carried out in the Department of Economics (HONS), Universiti Tunku Abdul Rahman, over the period from October 2012 to April 2013. As the aging population has become an issue for most of the developed countries as well as other developing countries. It came across to our mind under to study the financial satisfaction of elderly suggestion by our supervisor, Mr. Steven Chong and Mr. Sia Bik Kai. We has chosen to study elderly in Selangor, Malaysia as Malaysia is now at the edge of aging population due to longer life expectancy and low birth rate. In our study, financial satisfaction is one of method to identify the welfare level of elderly in Malaysia. Hence, in the future, government could impose some new policies based on the financial satisfaction level from the study.

ABSTRACT

Malaysia is currently having a demographical change as the population of elderly has increasing gradually due to long life expectancy. It eventually creates additional social cost due to higher demand of healthcare services and more unproductive workers in a nation. Hence, the study is made and tends to identify and interpret the urban elderly in Malaysia about the relationship between financial satisfaction with demographic characteristics and income. There are a total of 754 respondents using stratified random sampling method to explain our study in financial satisfaction among elderly in Selangor, Malaysia Data processing after data collection has led to some statistical results that show there is significant positive relationship between source of income, personal assets possession, monthly household expenditure on average and average monthly contribution to household expenditure with financial satisfaction. Hence, the results of the study have given some practical implication for policy makers to impose new policies or rules and regulation amendment in the purposes to protect the welfare and avoid poverty among the elderly.

CHAPTER 1: INTRODUCTION

1.0　Introduction

Robust technology and medical advancement in the recent few decades have extended the life span of human around the world. Empirical study has showed that the life expectancy at birth of Malaysians have been extended from an average of 70 years old in 1990 to an average of 74 years old in 2010 (UNICEF). A better quality of lifestyle and an enhancement in medical care, skills, procedures and knowledge are the vital factors that lengthen their life span. Hence, a longer life span in elderly has retained a high percentage in the total population of Malaysia and because of that, well-being has been emphasized recently to assess and improve their welfare.

Well-being refers to the "simple notions" in variety of ways, which includes a person's good, benefit, advantage, interest, prudential value, welfare, happiness, flourishing, eudaimonia, utility, quality of life, and thriving (Angner, 2008). Well-being is also defined as a form of happiness as a global assessment of a person's quality of life according to his or her own chosen criteria (Shin & Johson, 1978). Meanwhile, well-being can be measured at the level of individual or society and it accounts for elements of life satisfaction that cannot be defined, explained or primarily influenced by economic growth (Camfield, Streuli, & Woodhead, 2010). From the previous paragraph regarding Malaysians having a longer life span and expectancy, this implies that elderly need more money to sustain their life. Hence, the source of happiness and life satisfaction of human is derived from the level of income. Income has a positive relationship with the level of well-being in which that a higher income obtained from a particular person results in a better well-being.

Income is defined as the consumption and saving opportunity gained by an entity within a specified time frame, which is generally expressed in monetary terms (Barr, 2004). It comprises of any source of income for a particular person in a particular

time frame such as wages, salaries, profit, dividends, rents payment, interest rate payment and any legal form of earnings received. Income level is good so as to measure and identify the condition of the people whether poor, middle or rich. The level of income can measured in a few aspects such as education level, total personal assets holding, heritage, consumption and intelligence. Furthermore, different levels of income may lead to different levels of personal financial satisfaction.

Subsequently, financial satisfaction is defined as how comfortable the current possession of assets, either tangible or intangible is convertible to money. Different people have different financial satisfaction among each other. The variables that affect different levels of financial satisfaction are demographic and socioeconomic characteristics, financial stressors and stress, financial behaviors, financial solvency, financial attitudes, and financial knowledge. Since every people have different perception and knowledge in deciding their financial assets, every person would have different levels of financial satisfaction. For instance, a ten thousand ringgit yearly expenditure is sufficient for an elderly who is poor in financial knowledge and have low quality of life, but it may insufficient for an elderly who is knowledgeable especially in terms of managing finance and have high quality lifestyle.

1.1   Research Background

Malaysia is formed in 1963. At that time, the population of the country was approximately 9 million. The population of Malaysia then increased to 10.8 million in 1970 and 13.7 million in 1980. From the statistical review, Malaysia has a healthy growth in population from 18.4 million in 1991, 23.3 million in 2000 to 28.3 million in 2010 (Department of Statistics, Malaysia., 2010). Within the period of 1991-2000, the average annual growth of population is 2.6 per cent. It is relatively higher compared to the period of 2000-2010 which is only 2 per cent in average annual population growth. United nation expects Malaysia's population to grow annually and reach 31.3 million by 2025 and 37.85 million by 2050 (United Nations). The expected

2

growth rate of the population of Malaysia will slow down because of high expected life span, low fertility rate, and high living cost which are considered to be more serious in the future.

Table 1.1: Malaysia's Total Population from 1963-2010

Year	1963	1970	1980	1991	2000	2010
Total Population(million)	9	10.8	13.7	18.4	23.3	28.3

Source: Department of Statistics, Malaysia

From the statistical results, it shows that from the 28.3 million of population in Malaysia in 2010, 5.72 million of Malaysians stayed in East Malaysia while 22.5 million stayed in Peninsular Malaysia (Department of Statistics, Malaysia). This shows that most of the citizens preferred to stay in Peninsular Malaysia rather than East Malaysia. Besides that, in 2010, Malays held the highest population in Malaysia which is 60.3 per cent followed by 22.9 per cent held by Chinese and 6.8 per cent held by Indians (Department of Statistics, Malaysia). The population in Malaysia is mostly concentrated in the areas of Selangor, Johor, Sabah, Sarawak and Kuala Lumpur. Among these areas, Selangor held the highest population among the states which is 5.46 million, 19.29 per cent from the total population of Malaysia. The reason is because Kuala Lumpur is the main city in Malaysia and most of the businesses and employment opportunities are there, and Kuala Lumpur is just within Selangor area (Department of Statistics, Malaysia).

Figure 1.1 Population Distributions

East Malaysia, 5.72 million

Peninsular Malaysia, 22.5 million

Indians, 7.30%

Others 0.70%

Chinese, 24.60%

Malays, 67.40%
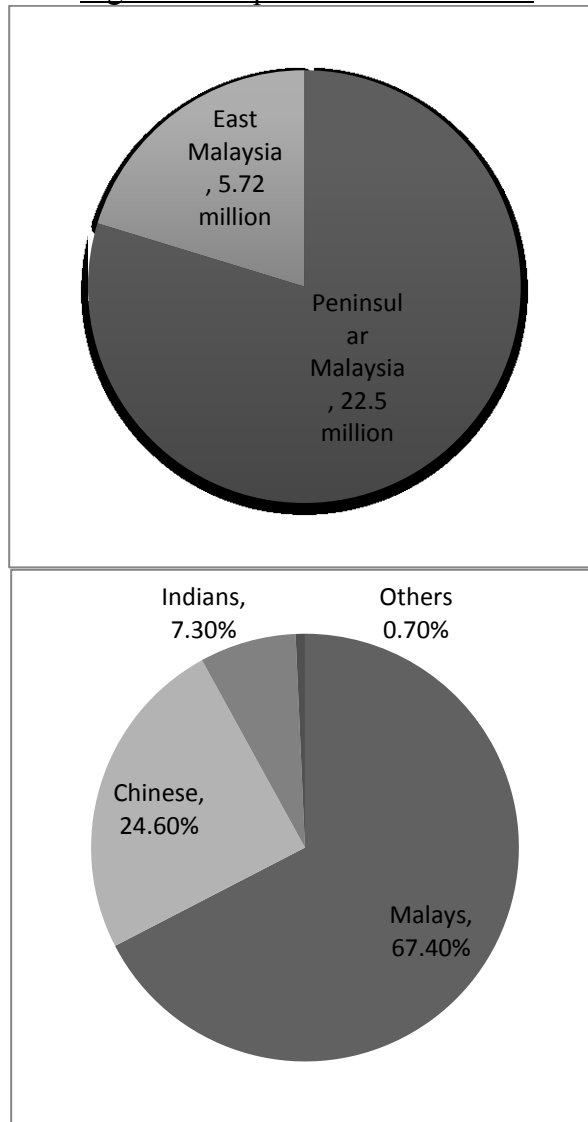
Source: Department of Statistics, Malaysia.

Urbanization is growing rapidly in Malaysia whereby it grew from 34.2 per cent in 1980 to 71.0 per cent in 2010 of the total population in Malaysia (Department of Statistics, Malaysia). Urbanization is the process of migration from rural area to urban area. Hence, the growth of urbanization in Malaysia enhances the quality of life and well-being of Malaysians. The most urbanized cities are Kuala Lumpur and Putrajaya which contains 100 per cent of urbanization rate. On the other hand, the proportion of the population of Malaysia below 15 years old decreased from 33.3 per cent in 2000 to 27.6 per cent in 2010. This shows that the fertility rate of Malaysia has slowed

down. Meanwhile, those from age 15 to 64 years increased from 62.8 per cent in 2000 to 67.3 per cent in 2010 of the total population. The population of those aged 65 years and above increased from 3.9 per cent in 2000 to 5.1 per cent in 2010. From the statistical results, aging population is expected to grow constantly (United Nations).

1.2   Problem Statement

The main factor of aging population is because of increasing life expectancy and decreasing fertility rate (Ong, F. S., 2001). An increase in life expectancy raises the average age of the elderly population which encourages them to live longer. A low fertility rate means lower number of babies, which will directly affect the number of young generation. From the sociological view, this has seriously harmed the society whereby the society of Malaysia is getting older. Moreover, this may raise social costs namely health and medical and it would also bring issues to every household. The proportion of government expenditure increased so as to build hospitals and clinics, as well as purchase medical and health instruments to meet the future needs of elderly population.

In the household point of view, an increase in elderly burdens the household expenditure. As the inflation rate is growing robustly in these few years especially in year 2008, it has pushed the price of things (Trading Economics, 2012). The real personal income due to high inflation is low among the citizens of Malaysia especially the young generation. Hence, low income return may burden the household members who work to maintain the household daily expenditure. The aging population issue has created trouble for most of the households and may cause them to live in poverty.

Next, from statistical review as sourced from the Department of Statistics, Malaysia, the elderly population started growing from 2000 to 2010, which increased from 0.9 million in 2000 to 1.44 million in 2010. This shows that aging population is no longer

an issue only for developed countries. As a developing country, Malaysia faces the issues of aging population in which that it could be a cost for the government or even the country. Inability and incapability among the elderly to seek their income would result in them being forced to live in poverty. Then, in order to fight against poverty and protect the well-being of the elderly, monthly allowances for poor elderly could be a burden for the government to sustain their life with minimum life requirement.

According to United Nation's expectation theory, Malaysia's elderly population tend grow bigger with an estimation of 23.7 million in 2025 and 39.9 million in 2050 (United Nations). Hence, elderly population may become an important population in Malaysia in the future which cannot be ignored or neglected. In a few more decades, elderly population may become a vital group in contributing their ideas, opinions and knowledge based on their field of professions. In contrast, they may be unable to contribute in physical works due to weakened body strength. Hence, it may lead to shrinkage of working population which would then create insufficient workforce and social problems.

As the elderly population becomes bigger, management and allocation of finance among the elderly has become important in terms of proper planning and utilizing their assets and money. Thus, it could be a cost by transferring financial knowledge on how to manage their current assets and available cash. The education expenditure from the government may tend to fall with aging group as less proportion of education expenditure would fall into the new generation in the future. Aging population would also reduce the government expenditure on education because there would be fewer children in the population whereas medical expenditure would increase as it would be highly demanded by aging population in the future. As a person gets older, the more likelihood he or she would need medical service.

1.3   Research Objectives

1.3.1   General Objective

- To study the financial satisfaction among the elderly in Selangor, Malaysia.
- To identify the relationship between demographic characteristics and financial satisfaction among the elderly in Selangor, Malaysia.
- To identify the relationship between income and financial satisfaction among the elderly in Selangor, Malaysia.

1.3.2   Specific Objectives

- To identify the relationship between source of income and financial satisfaction among the elderly in Selangor, Malaysia.
- To identify the relationship between personal assets and financial satisfaction among the elderly in Selangor, Malaysia.
- To identify the relationship between monthly household expenditure and financial satisfaction among the elderly in Selangor, Malaysia.
- To identify the relationship between average monthly contribution to household expenditure and financial satisfaction among the elderly in Selangor, Malaysia.
- To identify the relationship between education level and financial satisfaction among the elderly in Selangor, Malaysia.

1.4 Research Questions

- What is the relationship between source of income and financial satisfaction among the elderly in Selangor, Malaysia?
- What is the relationship between personal assets and financial satisfaction among the elderly in Selangor, Malaysia?
- What is the relationship between monthly household expenditure and financial satisfaction among the elderly in Selangor, Malaysia?
- What is the relationship between average monthly contribution to household expenditure and financial satisfaction among the elderly in Selangor, Malaysia?
- What is the relationship between education level and financial satisfaction among the elderly in Selangor, Malaysia?

1.5 Hypotheses of the Study

The hypothesis is to determine the relationship between income variables and financial satisfaction among the urban elderly in Selangor, Malaysia. The hypotheses are stated as below:

To identify the relationship between income and financial satisfaction among the elderly in Selangor, Malaysia.

- Hypothesis 1: Is there any relationship between sources of income and financial satisfaction among the urban elderly in Selangor, Malaysia?
  - H_0: There is no relationship between sources of income and financial satisfaction among the urban elderly in Selangor, Malaysia.
  - H_1: There is a relationship between sources of income and financial satisfaction among the urban elderly in Selangor, Malaysia.

- Hypothesis 2: Is there any relationship between personal assets and financial satisfaction among the urban elderly in Selangor, Malaysia?
  - H_0: There is no relationship between personal assets and financial satisfaction among the urban elderly in Selangor, Malaysia.
  - H_1: There is a relationship between personal assets and financial satisfaction among the urban elderly in Selangor, Malaysia.

- Hypothesis 3: Is there any relationship between monthly household expenditure and financial satisfaction among the urban elderly in Selangor, Malaysia?
  - H_0: There is no relationship between monthly household expenditure and financial satisfaction among the urban elderly in Selangor, Malaysia.
  - H_1: There is a relationship between monthly household expenditure and financial satisfaction among the urban elderly in Selangor, Malaysia.

- Hypothesis 4: Is there any relationship between average monthly contribution to household expenditure (percentages) and financial satisfaction among the urban elderly in Selangor, Malaysia?
  - H_0: There is no relationship between average monthly contribution to household expenditure (percentages) and financial satisfaction among the urban elderly in Selangor, Malaysia.
  - H_1: There is a relationship between average monthly contribution to household expenditure (percentages) and financial satisfaction among the urban elderly in Selangor, Malaysia.

To identify the relationship between demographic characteristics and financial satisfaction among the elderly in Selangor, Malaysia.

- Hypothesis 1: Is there any difference among the education level and financial satisfaction among the urban elderly in Selangor, Malaysia?

- H_0: There is no difference among the education level and financial satisfaction among the urban elderly in Selangor, Malaysia.
- H_1: There is a difference between education level and financial satisfaction omong the urban elderly in Selangor, Malaysia.

1.6   Significance of Study

This part provides the information on why and to whom the study is generated as well as the likelihood of the contribution to the advancement of the knowledge.

Higher life expectancy and falling birth rates have raised alarm bells in most of the developing and developed countries. The first trend is the increase in the relative number of old, while the second trend is the decrease in the relative number of young. In a few more decades, many countries may face issues of large population in the elderly. Hence, the awareness and study on the elderly population is to find out what are the factors of income for them and how financially satisfied they are. By doing this research, it is to read and identify the behavior and the well-being of the elderly population in Malaysia. Besides that, this research project is also to find out the relationship between income and financial satisfaction among the elderly in Malaysia.

This research project is generated for all the citizens of Malaysia as well as people around the world since they may encounter aging population issues in time to come. This study is not only for elderly population because every human will grow older as time passes by. They should expect the life conditions and uncertainties when they get old in the future. At an older age, incapability to work and weak health conditions will make their life harder as well as affect their well-being. Hence, the awareness of financial arrangement and allocation during young and middle age is vital to ensure life protection and avoidance from poverty. Other than that, this research also generates awareness to Malaysia's government on the importance and role of elderly

population in Malaysia. Emphasis on their well-being should be considered during their yearly budgeting plan.

This research project has contributed benefits not only for the elderly; there are also public and private sectors and citizen that are also benefited. Firstly, population for elderly in Malaysia is expected to live longer. As the elderly increases, the demand for professionals with their knowledge and expertise among the elderly are increasing as well. Career opportunities in the field of gerontology and geriatrics are provided to study, determine, analyze and interpret the behavior, thinking and the trend of the elderly population. Other than that, private sectors also benefit especially bank sectors, mutual trusts, investment banks and insurance companies. As the elderly population become larger, the awareness on financial management and allocation is crucial to ensure prudent life during older age. Pension funds or low risk investment portfolio have been provided for the elderly to have proper planning on their assets and cash. Advice and assistance will be provided as well from the finance planners or experts to meet different types of elderly. This study also provides business opportunities in which the elderly population has become a big and potential market for entrepreneurs. They are able to generate profits by designing and producing the products to relatively match with their culture, preferences, age, gender, health, financial condition and etc. For instance, Euro Asia Access Solutions (EAAS) is selling stairlifts products to allow the elderly who are unable to walk to have access from a certain floor to another floor.

From this research project, as the aging population gets bigger, certain policies should be imposed on the elderly to protect their welfare. For instance, the government may impose higher personal tax on rich groups in Malaysia. The extra amount of tax charged on the rich groups should be subsidized on the elderly to avoid them from living in poverty. Besides that, more home care centers should be built and provided for those elderly people who are lacking shelter. The government may also implement monthly allowances for the needy elderly people with the condition that their income is below one thousand ringgit. Free medical care and treatment as well as medicine

should be provided in public hospitals so as to reduce the burden of the elderly on medical expenditures.

1.7   Chapter Layout

Overall, this research project contains five major chapters namely introduction, literature review, research methodology, data analysis, and discussion, conclusion and implications. The research project chapters in detail are as the following:

Chapter one contains introduction, background of the aging population in Malaysia, research questions, objective of study and significance of study. This chapter briefly summarizes and gives the idea of the whole research project which contains the introduction, background information and scope of the topic, purpose and nature of the research, and research methodology. This chapter also acts as a guideline for the researcher to ensure the research project is within the framework.

Chapter two contains literature review which would show the path of prior research and how this current project is linked to it. This allows obtaining and summarizing the ideas of prior researchers and integrating with this current research project.

Chapter three contains research methodology which is also the important part of this research project. It deals with the all possible methods organized and executed to collect, analyze and interpret the data. The works for data collection comprises of designing the sample and questionnaire, methods of data collection such as survey and secondary data source and etc. The result of this research project will come out in this chapter where the theory would be formed.

Chapter four contains data analysis that represents the results of this research project. The analysis is implied to show whether the result fit the hypothesis and objectives of this study. Descriptive analysis, reliability analysis and multiple regression were used

for this research study. This is a vital chapter of the research which would indicate the significance relationship among the variables and study the demographic profile of the elderly.

Chapter five contains discussion, conclusion and implications. The discussion part summarizes the statistical results in chapter four including description and inferential analysis, and the validation of the hypothesis as well as objectives of the study. This chapter also provides some practical implications from the study for policy makers and practitioners targeting the elderly population. Limitation and recommendation for the study will be listed out for future research purposes. Finally, conclusion for the entire research project would be made in line of the objectives of the study to be achieved.

1.8 Conclusion

The world especially in developed countries like Japan, United States, and European countries are currently facing the problem of aging population due to low birth rate and longer expectancy of life. Aging population in Malaysia not as serious compared to other countries, but yet is at the edge towards the aging population. Hence, elderly population is treated as an important asset of the nation in the future. They may still contribute themselves in development and production of the country as their retirement age and life expectancy has been extended.

Subsequently, the welfare of the elderly is considered important and financial satisfaction was used to determine the current welfare of elderly in Malaysia. The government, the third party in the nation, plays an important role in imposing policies and rules and regulation amendment to protect the welfare of the elderly. Private sectors could take these opportunities by offering elderly-oriented products and services such as medical and financing tools and assistance.

In conclusion, aging population may be seen as a problem to a nation because it incurs higher costs towards the government expenditure. However, it also provides benefits where elderly nowadays can choose to work longer based on their mass working experiences. Hence, the allocation of fund and budget planning are important to ensure the economy is growing while at the same time, the welfare of elderly population is protected.

CHAPTER 2: LITERATURE REVIEW

2.0   Introduction

Literature review is a summary from published materials as found in academic books, journals, and thesis. The purpose of literature review is to provide a review of previous studies. It is the fundamental too for the research project so as to develop the conceptual framework to proceed with further hypothesis testing. There are a number of researchers who conducted research on the relationship between income and financial satisfaction on the elderly in urban areas. Results of the empirical studies from different researchers are not very consistent so we would draw different conclusions. In this section, research done previously would be discussed based in Malaysia.

2.1 Definition of Financial Satisfaction

The Free Dictionary defined financial as a part of finance whereas finance is defined as the management of money, banking, investments, and credit. On the other hand, satisfaction is defined as the fulfillment or contentment derived from such gratification (The Free Dictionary, 2013). Partha Iyengar from Moneycontrol.com wrote an article regarding financial satisfaction describing satisfaction as a feeling of fulfillment or contentment and society tend to refer financial satisfaction as having a lot of money (Iyengar, 2013).

Money, also known as income, is seldom chosen to be a source of individual utility or happiness. This is because income comes as a mean to fulfill individual's needs and desires through things we want in life, like job security, status, or power. With reference to the utility theory, individuals aspire to have high income, but even so,

they are assumed to maximize their utility in any given financial situation. Thus, the level of satisfaction from a given financial situation would eventually be a determinant of individual happiness. Diener and Biswas-Diener (2002) argued that financial satisfaction between income and happiness can be seen as a "mediator" as many factors other than income influenced life satisfaction, while income is a major input in financial satisfaction (Vera-Toscano, Ateca-Amestoy & Serbano-Del-Rosal, 2005).

2.2   Measurement of Financial Satisfaction

The study of financial satisfaction can be said to be vague in the sense that there is no consensus on the best way to measure financial satisfaction, as concluded by Godwin (1994). Nonetheless, there are generally two ways to measure it. Some researches would use a single item scale to measure and analyse the 'overall satisfaction' of the respondents while others would use multiple item resources to allow researchers to find out about the financial satisfaction level of the respondents. An example of a single item scale to measure financial satisfaction is by Morgan (1992) who asked 'how satisfied are you with your financial situation?'. Likewise, Greenley, Greenberg, and Brown (1997) used the question: 'how comfortable and well-off are you financially? Another way to measure financial satisfaction is by using a seven point Likert-type response scale as created by Danes (1998).

Looking into multiple item measures, financial satisfaction can be discussed using three components: financial adequacy, perceived economic well-being, and satisfaction with level of living (Draughn, LeBoeuf, Wozniak, Lawrence, & Welch 1994). Financial adequacy was defined as an objective assessment of adequacy of income to meet overall economic survival. Next, perceived economic well-being was defined as a subjective assessment of overall economic survival. Finally, satisfaction with level of living was hypothesized to reflect the perception of one's ability to meet financial demands.

16

Besides that, there are other different measurements to measure financial satisfaction. One combination consists of income, financial security, savings, and liability (Hayhoe & Wilhelm 1998). Another combination consists of amount of money saved, money owed, financial situation, ability to achieve long-term goals, ability to meet emergencies and financial management skills (Hira & Mugenda 1990a, 1999b). In addition, factors such as financial behaviors, financial stress, financial knowledge, financial solvency, risk tolerance, and demographic variables such as income and education affected the level of financial satisfaction of individuals (Joo & Grable 2004). Research that has been conducted to date shows that both methods have an acceptable level of validity and reliability of findings when used appropriately.

2.3 Determinants of Financial Satisfaction

2.3.1 Demographic and Socioeconomic Characteristics

Common factors that affect financial satisfaction under demographic and socioeconomic characteristics include gender, marital status, education, ethnicity, age, income, and home ownership (Ackerman & Paolucci, 1983; Davis & Schumm, 1987a; George, 1992; Hira *et al.* 1999a, 1999b; Hong & Swanson, 1995; Joo, 1998; Porter, 1990). An example of their connection is that financial satisfaction is positively related to income, education, and age.

According to Diener *et al.* (2002), income is said to be a major input of measurement to identify a person's financial satisfaction level. In the real world, many people tend to make the assumption that financial satisfaction is linked to individual's income, accumulated wealth and financial freedom because it is the only way to keep the life satisfaction of the individual from sinking (Wilkinson 2007).

Significant evidence illustrates the relationship between financial resources, by using income as an indicator, and financial satisfaction to tend to have a weak relationship among the elderly (Fletcher & Lorenz, 1985; Francoeur, 2002; George, 1992; Hsieh, 2001, 2002, 2003). George (1992) concluded from her review of the U.S. literature that income explains only about half as much of the variance in financial satisfaction among the elderly when compared to the total population.

Looking into age, one would expect an inverse relationship between age and financial satisfaction. In other words, we would think that an elderly who earns considerably lesser compared to someone who is in his or her midlife would be less satisfied. In contrast, there is consistent evidence from the U.S. and Europe that links age positively with financial satisfaction, with age at least from about forty years old (Hazelrigg & Hardy, 1997; Praag & Ferrer-i-Carbonell, 2004; Schieman, Gundy & Taylor, 2001; Seghieri, Desantis & Tanturri., 2006).

An assessment of the U.S. data shows that while mean income declines over the second half of life, particularly after retirement, financial satisfaction follows an opposite trend with a distinct increase among those beyond working age (Burholt & Windle, 2006; Easterlin, 2006; Hsieh, 2003; Mirowsky & Ross, 1999). What is more puzzling is that the elderly tend to be financially satisfied even at very low levels of income (e.g., George, 1992; Stroller & Stroller, 2003). These findings correspond with the "satisfaction paradox" phenomenon which associates high satisfaction with poor living conditions (Olson & Schober, 1993; Slagsvold, 1985), and which seems to be more prevalent in the elderly then the nonelderly (Burholt *et al.*, 2006; Ferring & Filipp, 1997).

2.3.2 Financial Stressors and Stress

Financial stressors, commonly linked to financial satisfaction, are generally defined as life events that impact a family unit that can produce changes in a family social system (McCubbin & Patterson, 1983a & 1983b). It can be divided into three categories; personal, family, and financial situations. Personal stressors include investment losses, injuries, disabilities, accidents, illnesses, and wage fixing or garnishments. Family stressors include major life-cycle events, such as marriages, births, retirement, job loss, divorce, and death. With the occurrence of any of these events, it would normally consume a substantial amount of money, which would naturally cause financial problems.

Subsequently, financial stressors also include personal consumer choice situations. Situations like moving house, paying for household and vehicle repairs, removal of right to redeem mortgage, legal problems, bankruptcy, medical bills, and pre-existing consumer debt tend to increase total stress and financial stress levels, which would then lower the level of financial satisfaction (Freeman, Carlson & Sperry, 1993; Joo, 1998).

Other factors that could lead to financial stress include the decision whether to sell the house in order to finance retirement or whether one already has a proper retirement plan.

The financial satisfaction literature does show a relationship between financial stress levels and financial satisfaction. Previous research findings have shown that financial stress is negatively related with financial satisfaction (Bailey, Woodiel, Turner, & Young, 1998). An example is shown in a study of health care professionals (Bailey *et al.*, 1998) where financial stress explained 30 per cent of the variance in financial satisfaction.

2.3.3 Financial Behaviors

According Xiao (2008), financial behaviours includes proper behaviour with various personal topics. Individuals need to exhibit desirable behaviours and habits with things such as cash management, credit and debit management, planning for various life cycles (eg. marriage, college planning, retirement, estate planning) and consumerism (Xiao, 2008).

Likewise, the literature suggests that financial behaviours can affect financial satisfaction (Godwin, 1994; Godwin & Carroll, 1986; Joo, 1998; Mugenda, Hira, & Fanslow, 1990). Mugenda and her associates (1990) did a research on causal relationships of factors that influence money management practices. They concluded that "net worth, savings, monthly debt payments, and absence of Financial Difficulties were the main determinants of managers' satisfaction with financial status". Similarly, Joo's (1998) research showed that positive financial behaviours like paying credit card bills in full each month is positively related to financial satisfaction. Other than that, a study showed that positive financial behaviours increase financial satisfaction, which in turn positively influences life satisfaction (Xiao, Tang, & Shim, 2009).

The elderly may have different points of view when looking into planning for various life cycles. Some adults would think that it is important for adult children to provide financial assistance to elderly parents while others may think that it is more important for the elderly parents to will their properties and provide financial assistance to their children. The subject of bequest is another point that some adults may feel is very important so as to plan the future of their children.

2.3.4 Financial Solvency

Personal finance solvency has also been used to measure financial satisfaction (DeVaney & Lytton, 1995). In general, a positive relationship has been found between those who are more solvent or have better ratios, with an increased amount of financial satisfaction (Davis *et al.*, 1987a).

According to Lee *et al* (2000), there is a significant relationship between financial management practices and household solvency status. Hira (1987) studied that financial management acts as the distribution of making financial decision, the frequency of evaluation of spending habits and financial charges, total financial evaluation, financial objectives, the number of credit cards held, and the amount of debt the household felt comfortable accumulating on credit cards.

However, some families may overspend if they do not follow the recommended financial practises (Bae, Hanna, & Lindamood ,1993). Hence, financial solvency may be lower compared to those who would avoid overspending.

2.3.5 Financial Attitudes

A number of researches have shown that financial attitudes play an important role in determining a person's level of satisfaction (Davis & Schumm, 1987b; Joo, 1998; Porter, 1990). Examples include a person's subjective perception of his or her cash management, consumer shopping skills, and relative economic status in comparison to others. These would play an important role in shaping an individual's financial satisfaction. Previous research findings have shown that in general, those persons who possess a stronger perception and have a proactive financial attitude tend to be more satisfied.

Nevertheless, the topic of financial attitudes is pretty broad. One subconstruct that can be related to financial satisfaction is risk tolerance including physical danger risk, gambling risk, and life experience risk (Bromiley & Curley,1992; Byrnes, Miller & Schafer, 1999). For instance, different levels of risk tolerance can affect financial decisions and outcomes, which would then lead to different levels of financial satisfaction. Research findings by Grable and Lytton (1997), and Sung and Hanna (1996) suggested that there is a positive relationship between predictor variables such as demographic factors, financial knowledge, and subjective risk tolerance. Both Grable *et al.* (1997) and Roszkowski (1999) concluded that risk tolerant individuals have a common profile with those with more financial knowledge, allowing them to make financial decisions that may ultimately lead to better financial satisfaction.

Besides that, financial risk tolerance will focus on individuals' general financial investment decisions. In terms of investment, risk-tolerant and risk adverse individuals prefer to invest in high risk options such as equities and invest in bonds or certificates of deposits respectively. Some studies indicated that risk tolerance focuses on retirement investment (Bajtelsmit, Bernasek & Jianakoplos, 1999; Hariharan, Chapman & Domian, 2000; Sunden & Surette, 1998). Likewise, Grable & Joo (1997) showed that risk tolerance is a significant predictor of retirement investment and saving strategies.

2.3.6   Financial Knowledge

Looking into financial knowledge, it suggests that basic knowledge of financial concepts allows one to function efficiently in the four activities of financial management including cash flow management, credit management, saving, and investment. Many of the subcategories would include banking,

22

insurance, housing, autos, credit cards, taxes, and retirement (Hilgert, Hogarth, & Beverly, 2003).

The research by Joo *et al.* (2004) also shows that there exist a relationship between financial satisfaction and financial knowledge. This relationship is special in the sense that it may be both positive and negative. A negative relationship between knowledge and the perception of financial status is shown in the research of Mugenda *et al.* (1990). They came to a conclusion that those who are more knowledgeable have a tendency to evaluate events and situations differently than others. This often reveals the "negative along with positive aspects of a household's financial status". Mugenda and her associates concluded that more knowledgeable people would tend to strive to increase their standard of living through financial means because they are less satisfied, whereas those with less knowledge may not realise that their financial situation is comparatively weak.

Nonetheless, it is important for one to have sufficient financial knowledge as it would help in understanding one's own financial status. This would then be helpful in terms of managing finances. Some questions that can be used to evaluate financial satisfaction include 'do I have a good financial knowledge?', 'how satisfied are you/am i with the current financial situation?', 'how satisfied are you with the current money saved?', 'how satisfied are you with your current amount of money owed?', 'how satisfied are you with your current preparedness to meet emergencies?', 'how satisfied are you with your current financial management skills?', and 'how comfortable and well-off are you financially?'. From there, the standing point could be identified and improvements or adjustments can be made accordingly.

2.4 Income

According to Frey and Stutzer (2002), in terms of utility theory, increase in income is desirable from an individual's perspective. Higher income will allow the insatiability of the consumer to reach a higher indifference curve. Moreover, various researchers proved the relation between income and happiness or well-being since 1970.

However, some of the researchers noticed that income correlates very little with individual's well-being. Hence, happiness of an individual is not affected by the continuous income growth. In a country, the richer individuals are not exactly happier than the poor and this shows that increase in income does not lead to higher satisfaction of well-being (Easterlin 1974, 1995, 2001). In 2002, Ferrer-i-Carbonell concluded that richer individuals in the same country are only (if at all) slightly happier as compared to their poor co-citizens, and economic growth has not led to happier individuals in Western countries.

Some of the studies also noticed that higher income has higher average level of well-being in the countries (Diener, Diener & Diener 1995; Inglehart, 1990). This means that those people who are rich will feel slightly happy in rich countries. This is because income allows people to purchase luxury goods, the latest technologically goods, expensive cars and others especially in the modern societies. Indirectly, this indicates that majority of the individuals express much interest in obtaining a higher income (Ferrer-i-Carbonell, 2002). In contrast, the perception of well-being may be affected by many factors that may be unrelated to the level of income of an individual (Angeles 2009; Clark, Diener, Georgellis & Lucas, 2008; Clark & Georgellis 2010; Diener, Lucas & Scollon 2006).

2.5   Sources of Incomes

2.5.1 Salary

Salary is defined as an agreed-upon regular compensation for <u>employment</u> or remuneration of a person that someone received from an employer for rendering services to the employer (Kaur, 2006). It is the most important source of income for elderly if they have not yet retired.

Elderly in public service predicts financial constraint to be a major challenge upon retirement (Merriam & Mohamad, 2000). As a result, many of elderly still need to work at retirement age and have careful financial planning in earlier years and financial management in older years. However, they have limited sources of income through their salary because of their lower educational level which would lessen their working capabilities (Mat & Taha, 2003).

An exception is Johnson and Neumark (1996) who estimated the relationship between aging and wages for elderly in the United States, testing the human capital theory developed by Becker, in which human capital is expected to depreciate with age, and resulting in a decline of productivity and wages. Wage declines appear to begin for workers at the aged of 60 years old and above. Nevertheless, the decline may be related to interactions with Social Security. It means that the elderly workers shift from full-time to part-time work when they start to receive the benefits from social security and thus causes the lower reported wages. They emphasized that the sample of workers not eligible for Social Security demonstrated even weaker evidence that wages decline at older ages (Parker, 1999).

2.5.2 Pension Fund

Pensions are a major policy issue in developed and developing countries alike. Pensions are the sum of money paid regularly as a retirement benefit or by way of patronage. Essentially, it is one of the sources of income for the elderly which acts as a retirement plan. Pension systems may be privately or publicly administered, but ultimately the responsibility to guarantee, regulate and supervise the delivery of a basic pension lies solely with on government (United Nations New York, 2007).

Besides that, pension systems should ensure income security during old age for all and, as a minimum, provide benefits that place recipients above the poverty line or any other socially acceptable minimum standard. Pension systems could reduce the probability of poverty level from 5.7 per cent in 2004 to 3.8 per cent in 2009 in Malaysia (United Nations New York, 2007).

In the absence of access to old-age pensions, the greater risk of falling into poverty at an older age is typically caused by the limited job opportunities and/or reduced working capacity of older persons. As a result, the elderly would be satisfied with their financial condition as their pension amount is higher. This would then lead them for a retirement plan in future (United Nations New York, 2007).

2.5.3 Provident Fund/ KWSP

Employee Provident Fund (EPF) is set up by the government. It is considered as one of the Trust Fund and functions as a trustee for its members which is established under the EPF Ordinance in 1951. In 1991, it was amended to the EPF Act. EPF is a defined contribution plan based on a prescribed rate of

contribution by employers and employees, accumulated as savings in a personal account and full withdrawal upon retirement. The rate of contribution is 12 per cent and 11 per cent for employers and employees respectively, regardless of the age of employees (Ong, 2001).

In Malaysia, EPF was established to reduce the poverty among the elderly who were working before. Unfortunately, (Olsen, 1994) stated that it does not adequately address poverty among older persons. This is due to the reason that EPF covers only small portions of the elderly with 5.8 per cent who have been employed in 1977 (United Nations, 2001).

Nevertheless, there are disadvantages of the EPF for the elderly whereby EPF as a source of financial support may not be significant in the end. There are three reasons: Firstly, a large proportion of the elderly are in the informal sector in whose contribution is not made mandatory. Secondly, the question of whether people will have enough in their EPF account to see them through till the end if EPF is the only source of income still remains (Mehta, 1997). Thirdly, the lump sum nature of withdrawals tend to have high exposure to improper management or investment which does not provide the insurance needed for old age (Ong, 2011).

2.5.4 Saving and Fixed Deposit

Saving is disposable income minus consumption. According to Keynesian economics, saving is the amount leftover when the cost of a person's consumer expenditure is subtracted from the amount of disposable income that he or she earns in a given period of time.

In economic theory, it predicts that an absolute amount of savings will increase with association to income. This is because the elderly have more

resources available to save since they have higher income. Praag *et al.* (2004) found that savings and income were about equally predictive of financial satisfaction. However, financial satisfaction correlates somewhat more strongly to income than to assets, measured as savings minus debt. (Johnson & Kruger, 2006).

Other than that, the study of Deaton (2007) stated that savings relative to income and the savings rate will increase with income. This is due to the reason of they will tend to consume more as they have more income. As a result, the elderly who have higher income save a larger portion of their income, and accumulate greater wealth, compared to lower-income elderly.

Nonetheless, most of the low-income elderly have very low or negative saving rates and very limited or negative asset accumulation (Bernheim & Scholz, 1993; Bunting, 1991; Carney & Gale, 2001; Hubbard, Skinner, & Zeldes, 1994; Wolff, 1998).

Fixed deposit is a deposit of money that pays higher interest than a saving account but imposes conditions on the amount, frequency and period of withdrawals. It is also known as time deposit. The benefit of this deposit is higher return than a saving account. However, this kind of deposits is suitable for the young insured rather than elderly insured. This is because this scheme creates moral hazards in the markets.

Besides that, it involves higher risk for the fixed depositors as they plan to gain higher return in the future. It has the same concept with the economic theory whereby higher risk will gain higher return. Fixed deposit will create the problem of withdrawal of money when elderly sometimes lose their ability to manage their financial affairs (Ong, 2011).

2.5.5 Dividend and other investment returns

Investment can be differentiated in numerous definitions according to a variety of principles. According to the economics and finance sectors, investment is defined as the utilization of resources or money with the purpose to buy financial assets such as stocks and bonds and with the expectation to gain positive return in the future. The return of the investment is named as dividend. Thereafter, dividend too, is a form of earning extra money as an income for elderly.

For the elderly, they are encouraged to make some investments such as mutual funds to protect their future life. These investments are highly recommended for them because it contains the lowest risk which is affordable for them.

In the world of finance and economics, the lower the risk of the investment, the lower the return for them which indicates a significant positive relationship between risk and return (Ross, 1973). Financial theory stated that risk adverse behavior is manifested when high risk is rewarded with high return while low risk is associated with low return (Fisher & Hall, 1969). According to Bettis (1981), there are a number of other studies which supported the positive risk-return relationship.

2.5.6 Remittances

Remittance is defined by Dictionary.com (2012) as the sending of money, checks or its equivalent to a recipient at a distance. The process is most often done through an electronic network, wire transfer, or mail (Investopedia, 2013). With relation to remittances, in accordance to Masud, Haron, Hamid & Zainaludin (2006), work-related income such as income from agriculture,

business, and pension as well as family support have been cited as the main sources of income for the elderly (Masud, Haron, & Gikonyo, 2008).

For some developing countries, migrant economic remittances play an important role in the growing source of foreign funds (Remittances Gateway, 2012). At the time the report was written, the flows of funds were more than double of the official aid received by developing countries (Remittances Gateway, 2012). With reference to this research, workers who have migrated would send money back to their families in Malaysia.

Looking into Malaysia, with a population of about 29,179,952 as of July 2012 estimates (CIA World Factbook, 2012), its 2010 estimated remittances were 1.576 billion, a 29.5 per cent increase relative to 2009 (Remittances Gateway, 2010).

Nonetheless, Malaysia is better known to be a platform to remit out rather than receiving remittances. The Malaysia-Indonesia Remittance Corridor basically shows the impact Malaysia has on Indonesia's economy, how remittances from Malaysia have helped improved lives (The World Bank, 2008).

2.5.7 Pocket Money from Children

According to the research done by Alavi, Sail, Idris, Abu Samah, and Omar (2011), thanks to modernization as well as urbanization in Malaysia, families in urban areas tend to depend on their children for care rather than from relatives. Subsequently, Aizan, Asnarulkhadi and Masilawati (2000) found that majority of the elderly Malays and Indians have support from their children, whereas the elderly Chinese are supported by their partners. These elderly parents are being cared for not only financially, but also in the form of

food preparation, purchase of daily necessities, housekeeping, doing laundry and transportation to visit relatives/hospital/clinic (Chor & DaVanzo, 1999).

The study by Masud *et al.* (2008) is also consistent with the source of income where much of the elderly parents' income, regardless of their gender is from their adult children. Another study that supports this source of income is done by Sulaiman and Masud (2012), where their findings showed that 68 per cent of the proportion of the elderly parents received monetary contribution from children and other family members (Alavi *et al.*, 2011).

The study by Rahimah Abdul Aziz and Fatimah Yusooff (2012) also showed that children in Malaysia were generally positive and responsible towards their elderly parents. This is in line with our Malaysian culture where it is important to have good and close relationships between generations, or in other words a sense of duty and filial piety. However, poverty as a result with the economic slowdown in Malaysia could impact the well-being of the elderly, especially in the rural areas. This could affect the transfer and support from children due to their own financial constraints (Abdul Aziz & Yusooff, 2012).

2.5.8 Pocket Money from Grandchildren

As mentioned in the study of Abdul Aziz (2007), grandparents-grandchildren relationships are rather sensitive to the influence of the parents. Subsequently, there are three different styles of grandparenting as identified by Cherlin and Furstenberg (1985). The first style states that grandparents may be 'detached' and have little contact with the grandchildren, and this normally happens when they are staying far apart. The second style states that the relationship could be 'passive', whereby even though there is regular contact it is somewhat superficial. The third and last style identified states that the

relationship is 'active' and the grandparents are involved in the lives of the grandchildren (Abdul Aziz, 2007). The study done showed that grandchildren played a small role in being a source of income to their grandparents (Masud *et al.*, 2008).

2.5.9 Relatives

From the study by Chan, Hamid, Masud, and Paim (2010), financial dependency of the respondents was measured using a single-measure item, "Sir/Madam, currently who is the main financial provider to you?". Possible answers include from relatives and results proved that relatives did play a role in helping the elderly financially (Chan *et al.*, 2010).

Rahimah Abdul Aziz and Fatimah Yusooff (2012) mentioned in their study that the changing lifestyle of Malaysians have directly or indirectly affected the quality and frequencies of the intergenerational relationship and communication. This in turn influences the types and level of support given by the family members, whether spouse, children, siblings, grandchildren, and other relatives to the elderly (Chan *et al.*, 2010).

2.5.10   Friends

Results from a study in 2010 it showed that relatives played a role in helping the elderly financially (Chan *et al.*, 2010).

According to Rahimah Abdul Aziz and Fatimah Yusooff (2012), if relationships between family members are detached and distant, it would be difficult for the elderly to get support and assistance even from their

immediate families. If that happens, they would then have to depend on other sources whether formal, which is the government or informal which includes friends and neighbours (Chan *et al.*, 2012).

2.5.11   Assets

Assets are defined as resources with economic value that an entity owns, which would benefit firms or have use of, to generate income (Investopedia, 2013). Assets are one of the most important sources of income with financial satisfaction. This is due to two reasons: first, assets will directly affect the amount of disposable money presently available. Second, individual probably will evaluate and affect his or her ability to meet future needs when individual assess their financial satisfaction (Thomas, Britt, Torjørn). Consequently, assets enhance the financial satisfaction to build up an economic security. However, according to Drentea (2000), lacks of assets may give a raise to the economic concerns for the future and thus destroying financial satisfaction.

Assets explains more of the variance in financial satisfaction than household income (Zimmermann, 2006) whereas Headey and colleagues (Headey, Muffels & Wooden, 2005; Headey & Wooden, 2004), found that self-reported household net worth (assets minus debts) is at least as important to financial satisfaction and global life satisfaction as disposable household income. On the other hands, perceptions of financial satisfaction among older people are also less dependent on wealth (George, 1993)

Nevertheless, the influence of assets on financial satisfaction is strong among the elderly. Elderly also concerned about future expenses as compared to non-elderly. Thus, studies from (Henry, 1991; Hermalin, Chang & Roan, 2002) showed that assets may represent substantial value in older age as a source of economic security and strengthen feelings of independence, autonomy, and

predictability. For instances, most elderly wish to leave bequests and provide financial support to younger generations (Hermalin *et al.*, 2002; Kopczuk & Lupton, 2007).

As a result, assets may influence on the nature of intergenerational exchanges, and so affecting their financial satisfaction. Besides, heritage is one of the forms of assets which are linked to income and financial satisfaction for the elderly (Hansen, Thomas; Slagsvold, Britt; Moum, Torjørn).

2.5.12   Insurance

Insurance is a promise of compensation for specific potential future losses in exchange for a periodic payment. It is designed to protect the financial well-being of an individual, company or entity in the case of unexpected loss (Insurance Regulatory Authority, 2013).

From the perspective of elderly, they are more concern on insurance because it is another alternative toward saving for them. It is also a way to protect themselves from being eliminated of earning capacity of human, capital and property resources. Furthermore, it is used to avoid the unexpected expenses that might diminish disposable income available for financial planning purpose including those who are retired. With an insurance policy, it can minimize and ensure unnecessary economic hardships during working and retirement life (Ong, 2001).

Health insurance is divided into two categories: medical care use and private health insurance. Income is an important factor so as to determine whether an individual has private health insurance. This is because income represents the ability of an individual to purchase private health insurance. As a result, there is a positive relation between income and insurance. According to de Lissovoy,

Kasper, Di Carlo & Gabel (1990), it is possible that a retired person may have private insurance through a prior employer. There is a positive relationship between the individual's employment and private health insurance among the elderly (Hu, Huang, Cartwright, 1988). Thus, if the elderly have the ability to pay, they will be more likely to have private health insurance (Wilcox-Gök & Rubin, 1994).

2.5.13   Migration

The Malaysian population can be said to be highly mobile. In other words, the tendency of Malaysians to migrate is pretty high. This is mostly due to the pull factors of economic opportunities in urban areas and the push factors of the traditional agricultural rural areas. These migrants are sensitive towards age and area, with those in the age group of 20-29 years having a greater tendency to move and settle in more urbanised and developed areas to escape the poverty of the rural and under developed areas. Females have become more prominent in internal migration since the 1970s. This is mostly related to the increasing level of education and growing employment opportunities for women.

Subsequently, the flows of internal migration will be affected by the success and pace of the states in restructuring their economies. Some parts of the country today, particularly the more developed and urbanised states are facing serious problems of meeting labour requirements. There seems to be an existence of special mismatching between sources of labour supply and demand. This shows that even though rural-to-urban migration should be encouraged, rural areas should not be forgotten altogether. Ultimate exhaustion of rural areas should not be encouraged.

Nonetheless, urbanisation has its benefits. It has helped stimulate modernisation and contribute to the fulfilment of the development objectives of the country. Economic changes due to urbanisation includes labour mobility, income, savings, and capital formation whereas socio-demographic changes include fertility, family size, quality of life, social stratification, and changing status of women in society (Country Report Population and Poverty in Malaysia, 2002).

2.6   Factors of income

2.6.1   Education

Education is one of the major factors affecting the degree of income inequality. Jo and Stephen (2004) stated that education provides greater economic opportunities, especially to the poor. It determines occupational choice and the level of salary. In the job market, it plays a vital role as a signal of ability and productivity. Education helps the unskilled workers to become skilled workers by shifting the composition of the labor force (Abdullah, Doucouliagos, & Manning, 2011).

Those who have better education will perceive and cope with technological and environmental changes better and so directly influences productivity levels. Thus, individuals with higher education are rewarded with higher payment for their productivity and ability (Knight & Sabot, 1990). This shows that higher education level of an individual is more likely to gain a better employment (Abdullah *et al.*, 2011).

Besides that, comprehensive education provides the individual with the financial knowledge necessary to create household budgets, initiate savings plans, manage debt, and make strategic investment decisions for their

retirement or children's education. Therefore, the elderly will be able to maximize their long term financial well-being by having these basic financial planning skills (Greenspan, 2002).

However, Bender and Heywood found that additional education resulted in lower job satisfaction (Bender & Heywood). This is because the more educated a person, the higher the expectations for financial and non-financial returns from their jobs and he or she may be more easily disappointed and dissatisfied (Clark, 1996). Thus, it would lead to lower income due to the poor performance of their job and lack of job satisfaction (Lin, Zhuang & Chen, 2011).

2.6.2 Working Experience

Working experience is a period of time in which a young person spends working in a particular place as a form of training. Nowadays, it has become one of the main qualifications to apply for a job because working experience is related to the education level. Likewise, education plays a key role in providing individuals with the knowledge, skills and competence needed to participate effectively in society and in the economy (OECD).

Furthermore, the average income is dependent on work experience available (US Census Bureau, 2004). A microeconomic model linking personal income, population age structure and GDP per capita is used to predict the mean income values in various age groups and their relative evolution in time. The value of work experience is where the mean income growth ends and it starts to drop exponentially with increasing age (Kitov, 2006).

Personal income is also a function of working experience. The personal income is the amount of money in various forms with which a person can

spend by her or his own decision. This also balances income and expenditures in the overall age group. The definition effectively considers all the population of a given age. When a person has more experiences in life, he or she would probably attain higher knowledge and wages or salaries and this would increase his or her income (Kitov, 2006).

For the elderly, educational levels correspond to different job opportunities and careers. The more highly educated are likely to have better retirement benefits and more personal savings from their working years' experience (Diane Rowland & Barbara Lyons, 1996).

2.6.3   Consumer Behaviour

Consumer behaviour is defined as the process and activities of people engaging when searching, selecting, purchasing, using, evaluating, and disposing goods and services in order to satisfy their needs and desires. Consumer behaviour is where an individual's attitude is directly proportional to his or her income or earnings per month. The consumer's behaviour will divide their limited income among different choices of goods and services that help attain their utility or satisfaction. Looking into the elderly, for those who are in the middle and lower income group, they would spend on necessary items rather than expensive and premium products which are being spent by the high income group (Secondary Data).

Besides that, consumer behaviour is understood as the aggregate of factors characterizing actions of consumers and their preferences. Higher income consumers are characterized by an active type of consumer behaviour, whereas the tolerant or traditional types of consumer are characterized as lower income consumers. The active type of consumer behaviour is the practice of the "credit consumption" based on the broad and easily accessible

system of credits and loans. The traditional type is attributable to societies with traditional value systems where the expenditure is equal to income. It is a passively-adaptive demand whereby it is based on the settled norms of consumer behavior. The tolerant or formative type is where the actively-adaptive demand is predominant (Krasko).

2.7   Economic Model

2.7.1 Economic Model

There are few models to establish the relationship between the income and financial satisfaction. Different models will have different implication between these two variables.

The first model:

Uit = U(Xit, Zi, GSit)

Where Uit is individual utility in time period t,

Xit is a set of observable exogenous variables such as income, unemployment rate, and marital status, which influence an individual's level of utility,

Zi is a set of individual's specific unobservable personality traits,

GSit is individual's general level of satisfaction with life and it

depends on an individual's satisfaction with different domains of life.

GSit is assumed to be a function of the individual to report the level of satisfaction with j different domains such as work, leisure, housing and finances and given by DSitj and Zi. (Van Praag, 2003)

GSit = GS (DSit1, DSit2, … , DSitj, Zi)   (2)

Each domain satisfaction measure is in turn determined by the set of exogenous variables (Xitj) which may vary across domains, and Zi.

DSitj = DS (Xitj, Zi)   (3)

There is a hypothesis to test the extent to which financial satisfaction is state dependent. As such testing hypothesis H1:

H1: Individual financial satisfaction is a persistent series.

This kind of persistence series can be dislodged by life changing shocks such as unemployment, ill health, demographic and socio-economic characteristics. Secondly, level of income is the vital role in determining the financial satisfaction. Therefore, hypothesis H2 is created as below:

H2: Individual's financial satisfaction has the positive relationship with his or her income, holding other variables constant.

2.7.2 The Empirical Specification

The model would be examined in equation (4) as below:

$$s_{it} = \alpha_0 + \alpha_1 s_{it-1} + \beta x_{it} + v_{it}; \quad i = 1, 2, \ldots, n \quad t = 1, 2, \ldots, T \qquad (4)$$

where s_{it} is to measure the level of individual's financial satisfaction;

s_{it-1} indicates elderly's level of financial satisfaction in the previous period;

x_{it} is income and other control variables;

v_{it} is random error terms

A lagged category of financial satisfaction the equation (4) is used to test HI. The v_{it} variables included in equation (4) is significantly positive and this concludes that it is a persistent series.

In equation (5), non-income related controls from the exogenous variable (x_{it}) is replaced with income (w_{it}) and explored with a number of different income specifications. Therefore, H2 is tested as equation below:

$$s_{it} = \alpha_0 + \alpha_1 s_{it-1} + \gamma_1 Y_{ht} + \gamma_2 Y2_{ht} + \beta w_{it} + v_{it} \qquad (5)$$

where Yh is income:

This indicates that γ1has positive relationship between income and level of financial satisfaction for individuals. Thus, higher levels of income will be associated with higher level of financial satisfaction. Non-linearity has occurred in this equation because of the presence of squared of income (Newman, Delaney & Nolan, 2008)

2.8 The Relationship between Income and Financial Satisfaction of the Elderly in Malaysia

2.8.1 Definition of the elderly

Aging is defined as the process of growing or maturing (Dictionary.com, 2013). The study of the elderly population is driven by a concern over its burdening of retirement systems, while the elderly population is measured by the increase in the percentage of elderly people of retirement ages. The definition of retirement ages may vary but a typical cutoff is 65 years, and nowadays a society is considered relatively old when the fraction of the population aged 65 and over exceeds 8-10 per cent (Buwan Ng Wika 2nd Year Trisha, 2010).

2.8.2 Population Distribution

The Malaysian population has increased more than two folds from 10.3 million in 1970 to 23.3 million in the year 2000. The increase had brought about an average annual growth rate of approximately 2.6 per cent per annum for the 1980-1991 periods and the 1991-2000 periods. Looking at population

density in Malaysia, it has increased from 31 persons per square kilometer in 1970 to 42 in 1980, 56 in 1991 and jumped further to 71 in 2000. Likewise, the level of urbanization in Malaysia is on the rise. The percentage of population living in the urban areas rose from 26.9 per cent in 1970 to 34.2 per cent in 1980 and 50.6 per cent in 1990. By the year 2000, more than two thirds of the population (61.8 per cent) resides in the urban areas of Malaysia (Country Report Population and Poverty in Malaysia, 2002).

2.8.3 Differential Age Distribution

Besides that, since the 1960s, Malaysia has and is going through a demographic transition stage whereby the mortality rate is reducing pretty rapidly. Similarly, the fertility rate is also declining but in a more steady pace (from 6.0 total fertility rate (TFR) in 1960 to 4.0 in 1980 and down to 3.2 in 2000). The age distribution was younger in the 1970's but became increasingly older in the 1990's.

Although Malaysia is not currently an aged society, the proportion of older people is estimated to reach 9.9 per cent by 2020 as provided by Ong (2007) on ageing in Malaysia.

2.8.4 Income and Financial Satisfaction among Older Adults in the United States

Can money buy happiness? This question has brought about numerous research regarding the relationship between money and subjective well-being (e.g., Diener & Biswas-Diner, 2002; George, 1992). There is a considerably large amount of evidence suggesting income as a significant correlate of subjective well-being (e.g., Fengler & Jensen, 1981; George, 1992; La

Barbera and Gürhan, 1997), and many subjective well-being studies have included income (e.g., Beck, 1982; Doyle & Forehand, 1984; Headey *et al.*, 1991).

George (1992) did a research on economic status and subjective well-being and found a positive bivariate relationship between income and subjective well-being and often substantial in magnitude. However, in a multivariate context, the relationship between income and subjective well-being become less evident. An example is shown in the research done by Elwell and Maltbie-Crannell (1981) who found that there is a significant direct effect between income and subjective well-being for elderly men but not for elderly women.

Subsequently, Diener *et al.* (2002) and George (1992) found that financial satisfaction may act as a mediator between income and subjective well-being. Thus, financial satisfaction affects income and subjective well-being. The effect of income on financial satisfaction would need to be assessed in order to fully understand the relationship between income and subjective well-being.

2.9 Conclusion

As a conclusion, the literature review has summarised the major contributions of the significant studies and articles. The relevant information which is collected from secondary data is gathered into the specific sections. From the literature, it is clear that the study on the relationship between income and financial satisfaction has widespread attention from the researchers. However, results of the empirical studies from different researchers are not very consistent so we would draw different perceptions in the continuous chapter. Besides that, the literature also explains the impact of each of the independent variable on the dependent variable in this research.

CHAPTER 3: METHODOLOGY

3.0   Introduction

Research Methodology is defined as "a careful investigation or inquiry specially through search for new facts in any branch of knowledge" (The Advanced Learner's Dictionary of Current English Oxford., 1952). It deals with how to find things out by research rather than discovering things by reading the literature. The study is aimed to identify the relationship between income and financial satisfaction among the elderly in Malaysia. Besides that, the factor and source of income as well as the financial satisfaction determinant will be examined. Meanwhile, relevant measurement has been developed for each variable to identify the dimensional result and test the proposed hypothesis. The overall research methodology comprises of research design, data collection analysis, sampling design, sample size, sample method, method of analysis, theoretical framework, and limitation.

3.1   Research Design

Research in basic terms means search for knowledge. It can also be defined as a scientific and systematic search for relevant information on a specific topic. According to the Oxford Advanced Learner's Dictionary, it defined research as "a careful study of a subject, especially in order to discover new facts or information about it". There are several types of research and these basic types of research braches out to several parts.

The first part talks about the difference between descriptive and analytical research. Descriptive research uses surveys and fact-finding enquiries of different kinds, including comparative and correlational methods. Its main purpose is to describe the

present state of affairs. On the other hand, in analytical research, available facts or information would be used by the researcher. It would then be analyzed before a critical evaluation of the material is made.

The second part talks about the difference between applied and fundamental research. Applied research aims at finding a solution for an immediate problem facing a society or an industrial/business organization, whereas basic research is mainly concerned with generalizations and with the formulation of a theory (C. R. Kothari, 2009). Examples of fundamental research include research concerning some natural phenomenon or relating to pure mathematics, as well as concerning generalizations about human behavior. Conversely, examples of applied research include finding a conclusion or a solution of a concrete social or business problem, research on how social, economic or political trends may affect a particular institution and marketing or evaluation research.

The third part talks about the difference between quantitative and qualitative research. Quantitative research measures through quantity or amount. It is used in situations that expresses in terms of quantity. On the contrary, qualitative research is used in situations relating to or involving quality. It is especially important in terms of behavioral sciences to discover the underlying motives of human behavior. Through such research, various factors which stimulate people to behave in a particular manner or which make people like or dislike something can be analyzed.

The fourth part talks about the difference between conceptual and empirical research. Conceptual research relates to some abstract idea(s) or theory. Philosophers and thinkers normally use this to develop new concepts or to reinterpret existing ones. Alternatively, empirical research, also known as experimental type of research, relies on experience or observation, and is usually without regards towards the system and theory. It is a data-based research, and comes up with conclusions based on observation or experiment.

In this research project, some of the variations of the few approaches stated above are used. Firstly, descriptive research is used with regards to surveys and fact-finding enquiries to get first-hand information from the respondents. With regards to the second part, fundamental research is used because this topic is related to human behavior, i.e. financial satisfaction of the elderly in Malaysia. Even though new ideas are not solely generated by fundamental research, it does help to support new ideas by means of redirecting back to the principles which they could have started off from. Another reason is because fundamental research would help to make this topic and data more accurate, reliable, and valid for other researchers to depend on.

Looking into the third part, qualitative research is used. This research project basically deals with behavioral sciences to find out the underlying motives of human behavior. Accordingly, the relation between income and financial satisfaction of the elderly in Malaysia deals with behavioral science. With respect to the last part, empirical research is used instead of conceptual research. This is because this research is an experimental type, and it is a data-based research, with conclusions based on experiment.

3.2   Data Collection Methods

According to Badarulzaman (2007), data collection analysis is a key component in research design and is a systematic data collection that provides valid and reliable data. She wrote that data collection methods includes the use of available information, through observation, interview (face-to-face), written questionnaires, focusing on group discussions, projecting techniques, mapping, and scaling, and others.

Data can be obtained from primary or secondary resources or both. Primary data is defined as data that has not been previously published, i.e. the data is derived from a new or original research study and collected at the source, e.g., in marketing, it is information that is obtained directly from first-hand sources by means of surveys,

observation or experimentation. On the other hand, secondary data is defined as data that have been already collected by and readily available from other sources such as statistics or articles from books, government publications, census data, annual reports. Such data are cheaper and more quickly obtainable than the primary data and also may be available when primary data cannot be obtained at all.

In this research project, both primary and secondary data are used. Primary data is collected through the survey questionnaires distributed to the elderly in Malaysia whereas secondary data is collected from articles, journals, and websites written by scholars from Malaysia as well as other countries.

3.3   Sampling Design

Decision about sampling design is regarding the objectives of the study and research questions. Hence, sampling design covers all aspects of how the samples in the study are specified and selected. Sampling design in the important parts in research methodology that decide how accurate and least errors during samples collection. Meanwhile, sampling design also brings time and costs saving as the direction of the samples are defined. This chapter will later covers target population, sampling frame and sampling location, sampling elements, sampling technique and sampling size.

3.3.1 Target Population

According to Easton and McColl (2012), the target is the entire group a researcher is interested in; the group about which researcher wishes to draw conclusions. Hence, the target population is a subgroup of population that will be focused under research project and the population would consist of different kind of characteristics such as gender, race, religion, education level and so on. Therefore, identification at the early stage of target population in

this study could lead to clear direction of the samples to be collected to avoid ineffectiveness. The target population in this research constitute all the urban elderly aged 50 and above in the state of Selangor, Malaysia.

3.3.2 Sampling Frame and Sampling Location

In statistics, sampling frame is defined as the source material or device from which a sample is drawn (Sarndal, Swensson & Wretman, 2003). It is a list of all those within a population who can be sampled, and may include individuals, households or institutions (Sarndal *et al.*, 2003). Sampling location is the location the samples being collected.

The target sample in this research was those elderly aged 50 and above who stay in the urban area in Selangor, Malaysia. The questionnaires were conducted in the total of nine districts that have been selected from the Census of Malaysia 2010. The areas included were Cheras, Gombak, Kuala Langat, Kuala Selangor, Ulu Langat, Seri Kembangan, Serdang, Belakong and etc.

3.3.3 Sampling Elements

The elements are the objects that possess the information desired by researchers and are usually referring to the respondents. In this research, the respondents are the elderly aged 50 and above who reside in the rural areas in Selangor area.

3.3.4 Sampling Technique

Sampling Technique is a method that is used to draw samples from a population usually in such a manner that the sample will facilitate determination of some hypothesis concerning the population (Farlex). Stratified random sampling is used in this research. It involves classifying the population into strata or group before a sample is randomly chosen from each strata. Strata have been identified according to the nine districts in Selangor and the size of each strata is proportionate to the size of the districts in Selangor. The similarities of each strata in this research are elderly aged at 50 and above who live in the urban areas of Selangor. Meanwhile, each strata is different according to the districts in Selangor.

3.3.5 Sampling Size

Sample size is the number of observations to calculate the estimates for a population. Nevertheless, sample sizes in the qualitative research should not be too large because it is difficult to focus on the targeted group and areas. Sandelowski stated that the sample should not be too small. This is because it is difficult to achieve data saturation, (Flick, 1998; Morse, 1995), theoretical saturation (Strauss & Corbin, 1990), or informational redundancy (Lincoln & Guba, 1985).

In this research analysis, the sample is the residential areas in the state of Selangor, Malaysia. The targeted districts are namely Gombak, Kuala Langat, Klang, Kuala Selangor, Petaling, Sabak Bernam, Sepang, Ulu Selangor and Ulu Langat. Apart from that, the targeted interviewers are elderly who are 50 years old and above. 754 samples are involved in this research.

3.4   Research Instrument

The present research applies both qualitative and quantitative approaches through questionnaire or survey.   The questionnaires that are used are interviewer-administrated questionnaires. It is a face to face method to interview with each of the respondents or by telephone. The data collected from this kind of questionnaire is detailed because open ended question can be used. It also includes participation of illiterate people, clarification of ambiguities and gets the quick answers from the respondents.

3.4.1 Questionnaire Design

The questionnaire was created using closed-ended questions and opened-ended questions. The closed-ended questions allow only a limited number of answers while the open-ended questions are open to the respondents without restricting the answer. Looking into the closed-ended questions, they are easier to be recalled by respondents and to make analysis compared to the open-ended questions. The full range of possible answers is able to capture using the open-ended questions since it would gather more information.

 In the questionnaire for the research, the respondents are required to answer three sections which are illustrated as below.

Section I
This section describes the demographic background for each of the respondents. It comprises of ordinal scale of the measurement in the question of income in the last 12 months and health problem. Furthermore, most of the scale of measurement used for this research is in nominal scales such as gender, ethnic group, religion, present marital status, education level, ownership of living quarters and so on.

Section II

In this section, it is regarding the issue of financial satisfaction of the respondents. The scale of measurement for this section is very obvious with ordinal scale of measurement. The questions are related to whether the respondents are satisfied with their current financial satisfaction, whether they are satisfied with current money saved, whether they are satisfied with their current amount of money owed, whether they are satisfied with their current preparedness to meet emergencies, whether they are satisfied with their current financial management skills or whether they are comfortable and well-off with their financial status. These kinds of the scale of measurement are considered in the Likert scales. Likert scales are developed by Dr. Rensis Likert. It is defined as a psychometric response scale used to obtain the respondent's preferences or degree of agreement with a set of statements in the questionnaires. Hence, the respondents are asked to indicate their level of agreement with a given statement in term of ordinal scale (Likert Scales- Dane Bertram).

Table 3.1 : Likert Scaling from Very Unsatisfactory to Very Satisfactory

1	Very unsatisfactory
2	Unsatisfactory
3	Fairly unsatisfactory
4	Neither unsatisfactory nor satisfactory
5	Fairly satisfactory
6	Satisfactory
7	Very satisfactory

Source: Developed for the research

Section III

In the last section of this research, it evaluates the financial status of the respondents. It is divided into five categories in this section. The first category is regarding the

sources of income of the respondents during the past year. There are numerous sources of income in this questionnaire such as salary, pension fund, provident fund/ KWSP, rental, saving and fixed deposit (FD), dividend and others investment returns, remittances, pocket money from children, pocket money from grandchildren, relatives and friends.

The next category is the ownership of personal assets from the respondents. The listed assets are house, land, motorcar, van and lorry, motorcycle, jewellery, cash in bank & fixed deposit (FD) in Malaysia and overseas, Unit Trust such as ASN, ASB, ASW, Public Mutual and lastly company shares.

In addition, the monthly household expenditure on average is used using open-ended questions. A blank is placed for the respondents to fill in. Subsequently, it involves ratio scales for the average monthly contribution to household expenditure. The percentage may vary from zero to a hundred per cent.

The last category is on the spending on some of the items in terms of average per month. The items are rentals/ house loan instalment, car instalment/ transportation, water and electricity bills, foods, medical, telephone/ hand phone/ internet bills, books/ magazines and newspaper, entertainment such as cafe and clothing/ footwear and personal items. In this category, open-ended questions are also used.

3.5 Constructs Measurements (Score and Operational Definitions)

Measurement is the basic fundamental of any psychological research. Measurement is referred to the acts of measuring something by assigning symbols or numbers to something based on a specific set of rules. Scales of the measurement will allow a wide range of graphical methods and statistical analyses to be applied. It is important

because it leads to the interpretation of the data from the variables. Besides that, it also ensures the types of the statistical analysis are appropriate to use for the research. There are four basic scales of measurement.

3.5.1 Nominal Scale

It is also known as categorical scale. No order is implied to categories of individuals, companies, products or other entities into these groups. It includes the simple count on frequency which is assigned to different classes of cases. Furthermore, it only focuses on the requirement a respondent to provide some type of descriptor as a raw response. There is no inherent quantitative difference among the categories. For instance, the nominal scale of measurement is this research is gender, age, religion, marital status and others.

3.5.2 Ordinal Scale

Ordinal scales are used to designate the items depending on the criteria of subjective and objective but the distance cannot be quantified. In short, it is in the rank-order observations. Respondents are allowed to express "relative magnitude" between the raw responses to a question in this measurement. In this research, subjects can be ordered in the form of high to low. However, the ranks do not indicate how much the subjects differ. In order to measure the amount of difference among subjects, interval scale and ratio scale are used for the next measurement. The examples of subject of using this scale in this research are levels of financial satisfaction and income.

3.5.3 Interval Scale

It is also called cardinal scale. It is a scale which equal units of measurement so as to interpret the order of intervals and the distance between them. In other words, it is used to measure the differences between the ranks or scale point. Nevertheless, the distance between scale points is not a true zero because the zero point on an interval scale is arbitrary. It can be in the form of numeric or semantic. However, this measurement is not applied to this research because it is not use in the questionnaire survey.

3.5.4 Ratio scales

It is the highest level of measurement. Ratio scales allow identification of the absolute differences between each scale point, and absolute comparisons between raw responses. It has the property of equal intervals with a true zero point. No number exists below zero. In this research, examples of this scale are age, income level and monthly household expenditure.

3.6 Data Processing

Data processing is the process of the generating and organizing the data collected and seeks answer to the research questions that have been proposed in Chapter 1 (Sianova, 2010). It is also used as a series of actions to ensure the data collected conveys into useful information. According to Malhotra & Peterson (2006), the data processing begins with the process of checking, followed by data editing, data coding, data transcribing, data cleaning and data analysis before analysis of the data.

3.6.1 Questionnaire Checking

It is the first step in the data processing. It is also known as the review of the completeness and interviewing quality. According to Malhotra (2007), it is the process of screening the data in which unacceptable questionnaires are identified and eliminated. This will be checked after the first set of the questionnaires are returned in order to detect any problems and make the corrective action before conducting the research (Malhotra *et al.*, 2006). Any mistake found is carried forward in the data editing process.

3.6.2 Data Editing

Data editing is the process of reviewing the raw data during data collection activities in order to enhance the accuracy and precision of the data (Hair, Bush, & Ortinau, 2006). Data is being checked for any missing or typing error mutually after the data entry is done. Besides that, in order to get the better data, assigning missing value is acquired to discard unsatisfactory responses.

3.6.3 Data Coding

Data coding is the process that involves assignment of a code to represent a specific response to a specific question. It is used for the purpose to facilitate data processing and ensure the whole process is in sequence management. Numerical codes will be used in the questionnaires as it is quick and easy for data entry purposes (Malhotra *et al.*, 2006). In this study, the questionnaires are more towards the closed-ended questions thus the codes need to be pre-coded.

3.6.4 Data Transcription

Data transcription is a process that transfers the coded data from questionnaires into computers by keypunching (Malhotra, 2007). In this study, the type of the Data Transcription method is used to determine the type of interviewing method in conducting the survey and availability of the equipment.

3.6.5 Data Cleaning

Data Cleaning is the process whereby the data is reviewed and checked while treatment of missing responses will be carried out consistently (Malhotra, 2007). In this study, some of the missing responses are clarified into the missing value in the data because it is the variable that is unknown due to the problem of unambiguous answers from the respondents to the question.

3.7   Data Analysis

Data analysis is the process that combines and arranges data before making inference based on the number. Analysis methods should be considerate and decided after the data collection of the study to meet the accuracy and reliability of the study. Inappropriate choosing of analysis method will lose the function of data through the information transmitter. Different kinds of considerations need to be taken care of when choosing analysis methods in this research study nalemy descriptive statistics, probability, random variables, probability distributions, statistical inference, Chi-square test, regression analysis, correlation analysis and analysis of covariance (Chin, L. C., 2003). In this study, regression analysis, descriptive analysis and reliability test are chosen.

3.7.1 Regression Analysis

Regression analysis is a statistical tool for the investigation of relationships between variables (Sykes). To be more detailed, regression analysis is concerned with the study of the dependence of one variable, which is the dependent variable and is explained by one or more other variables, which are the independent variables. Although regression analysis involves dependence of one variable on other variables, it does not necessarily imply causation. This is because causation must come from outside the statistics, ultimately from some theory or other (Kendall & Stuart, 1961). Regression analysis is relatively different with correlation analysis as regression analysis is focused on the relationship of one dependent variable to one or more independent variables. On the other hand, correlation explains the strength of association among two variables.

$$Y = a + bX + e \qquad \qquad \text{Equation 3.4.1}$$
$$Y = a + b_1 X_1 + b_2 X_2 + \ldots + b_k X_k + e \qquad \qquad \text{Equation 3.4.2}$$

There are two kinds of regression, which are two-variable regression analysis and multiple regression analysis. Two-variable regression is the regression in which the dependent variable in explained by a single independent variable. Normally, t-test is used in the two-variable regression. Equation 3.4.1 is the example of two–variable regression equation. On the other hand, multiple regressions are the regression in which the regression is explained by two or more independent variables. Analysis of variance models (ANOVA) is used as the method to examine the test of multiple regressions. Equation 3.4.2 is an example of multiple regression equation.

3.7.2 Descriptive Analysis

Descriptive Analysis is the process of transforming raw data into comprehensive information which includes collecting, summarizing, presenting and analyzing the data. A brief idea about the study will be created in descriptive analysis. Normally graphs, tables, pie charts and etc. are used to represent the descriptive results. Besides that, descriptive analysis is able to examine the "central gravity" of the data which includes the mean, median and the mode. (William, 2005). Measurement of dispersion and variability can be identified using descriptive analysis which comprises of range, standard deviations, coefficient of variation, variance and standard error.

3.7.3 Reliability Test

Measurement of reliability refers to the consistency of a measure (Remler & Ryzin, 2011). If the test takes little noise, it means that only a few random errors exist when measurement is taken. Hence, it will be a consistent measurement and taken as good reliability of the data. In contrast, if the test consist a lot of noise, it means that the data is full of random errors, and hence shows bad reliability of the test. Other than proving the reliability of the data, reliability test also used to calculate the average value on certain groups or data, estimating relationship within groups and classifying individuals (Remler *et al.* 2011).

There are three types of reliability test which consists of Inter-rater Reliability, Reliability of Scales and Parallel Forms Reliability (Remler *et al.*, 2011).

Inter-rater Reliability is the test to determine the measurement on the same person or object without depending on any particular views, personalities or habit of the research workers. For instance, four student raters from different

states are asked to appraise academic achievement of some twenty students in a particular school. The reliability is generated on the data as the four student raters are not close to each other.

Reliability of Scales is the test carried out when the scale or index are composed of multiple indicators, such as the SF-36 health scale (Remler *et al.*, 2011). There are two ways to measure Reliability of Scale namely split-half reliability and Cronbach's alpha. Spit-half reliability is the method that splits the items into two halves, and subsequently tests on the relationship among them. Ranging from 0-1, higher value shows higher internal reliable scores and vice versa. Cronbach's alpha meanwhile provides a more complicated but more convenient measurement of internal reliability. All possible split-half correlations are examined to measure the relationship among them. Ranging from 0-1, higher value shows higher internal reliability.

Parallel Form Reliability is two tests which are parallel or equal in what they measure. Hence, the test will change automatically when affected by the changes of the other test in which both tests are parallel to each other.

3.8   Conclusion

Research methodologies were used in collecting, analyzing, and interpreting data. Computer software as well as SPSS software was used to assist in analysis and interpretation of the data.

In this chapter, research design and data collection methods are explained to collect and analyze the data. Besides that, target population, sampling frame and location, sampling elements, sampling techniques and sample size were discussed before the research instrument. Then, data processing such as checking, editing, coding and transcribing are carried out after the data collection.

The data will be analysed by descriptive analysis, reliability test and multiple linear regression analysis in this research. Descriptive analysis is used to show the respondent's demographic background while reliability test is to determine the reliability of the variables of the scale. The relationship between the independent variables and dependent variable can be proved by using multiple regression analysis.

The result and interpretation of the analysis in detailed will be explained in the next chapter.

CHAPTER 4: DATA ANALYSIS

4.0   Introduction

The data used in this research were collected based on the survey done in the year of 2011. This survey covered a sample size of 754 of the elderly aged 50 and above. However, the focus in this research was only in the state of Selangor in Malaysia. This chapter presents the results of the estimated regression coefficients for the relationship between income and financial satisfaction amongst the urban elderly in Selangor, Malaysia.

The first section of this chapter is to provide the overall demographic background for this research. The second section will be discussion on the data analysis for the present research which is done quantitatively with the use of descriptive statistics. The third section summarizes the test on reliability factors. Lastly, section four reports the Pearson Correlation Coefficients while the fifth section reports the multiple regression tests used to test on the relationship between income variables and financial satisfaction for the urban elderly in Selangor, Malaysia.

4.1   Descriptive Analyses

4.1.1 Respondent Demographic Profile

Figure 4.1: Percentage of Gender

Gender

Male, 46.9%

Female, 53.1%
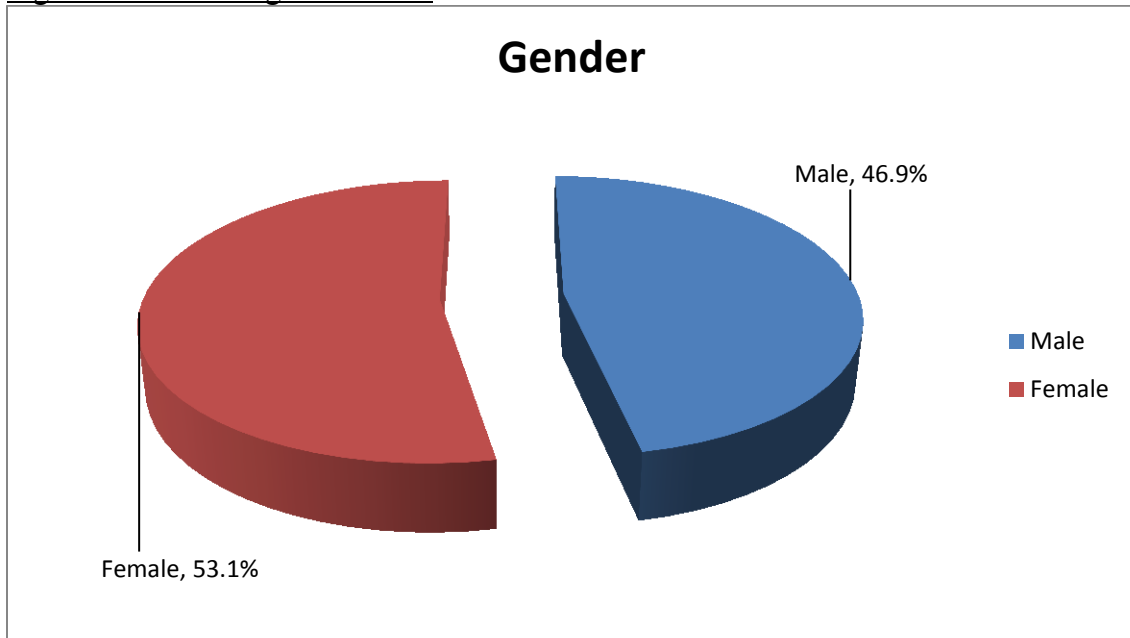
- Male
- Female

Figure 4.2: Percentage of Ethnic Group

Ethnic group

Indians, 22.1%

Malays, 37.1%

Chinese, 40.7%

- Malays
- Chinese
- Indians
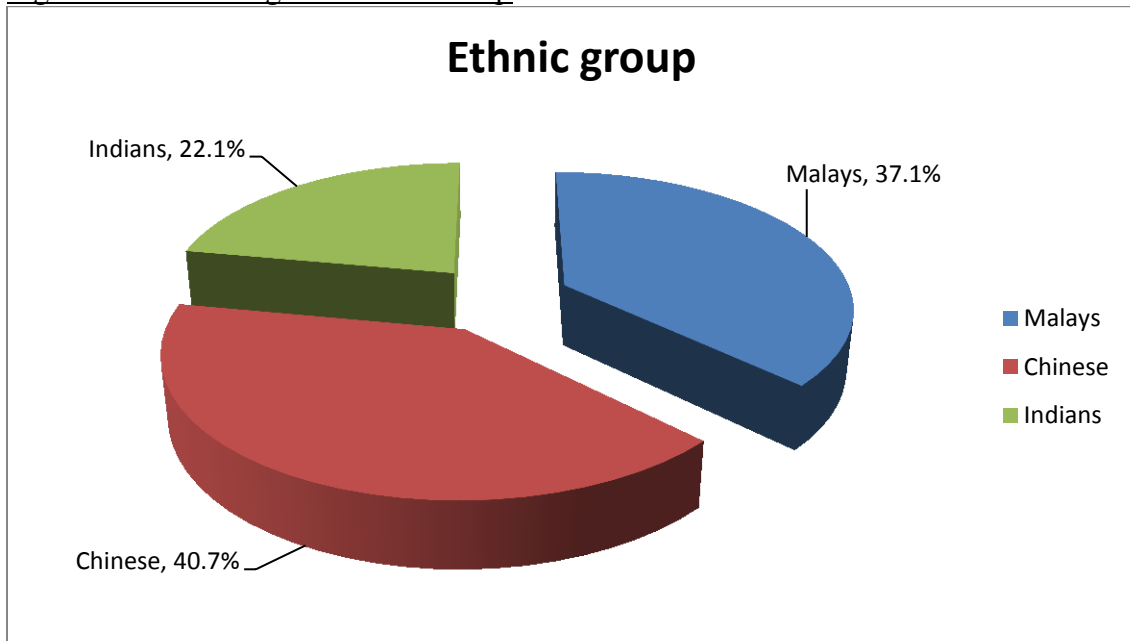
Figure 4.3: Percentage of Age Group

Age group

- 70 and above, 14.1%
- 60-69, 29.3%
- 50-59, 56.6%

Legend:
- 50-59
- 60-69
- 70 and above
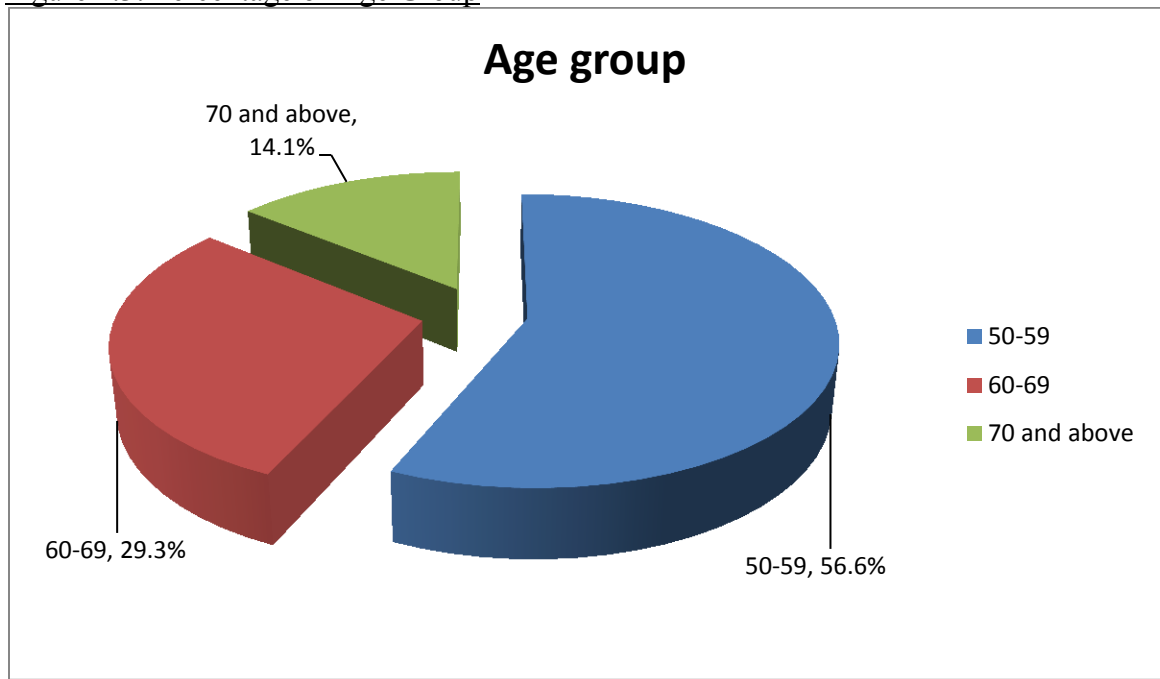
Source: Developed for the research

From Figure 4.1 above, this survey consists of 354 male respondents and 400 female respondents who take up 46.9 per cent and 53.1 per cent of the total respondents respectively. Then, in Figure 4.2, it shows that majority of the respondents are Chinese with 307 numbers of respondents, followed by 280 Malays and 167 Indians. Looking at Figure 4.3, their age group starts from 50 years and above. This is in line with the focus of this research which is on the elderly. By dividing the age group into 3 categories, results show that 427 of the total respondents are in the 50-59 category, 221 in the 60-69 category and 106 in the 70 and above category. This shows that majority of them may still be working as the minimum retirement age in Malaysia is 60 years old (Laws of Malaysia, 2012). Moreover, majority of the respondents were born in the baby boomers era which comprises of babies born from 1946-1964 (49 to 67 years old) while the rest who were born from 1925-1945 (68 years old and above) are categorised as traditionalists (Traditionalists, Baby Boomers, Generation X, Generation Y (and Generation Z) Working Together).

Figure 4.4: Percentage of Type of Living Quarters

Type of living quarters

- Shophouse, 2.4%
- Semi-detached/Bungalow house, 7.7%
- Attap/Kg house, 8.1%
- Apartment/Condominium, 8.6%
- Flat, 12.7%
- Terrace house, 60.5%

Legend:
- Shophouse
- Semi-detached/Bungalow house
- Attap/Kg house
- Apartment/Condominium
- Flat
- Terrace house
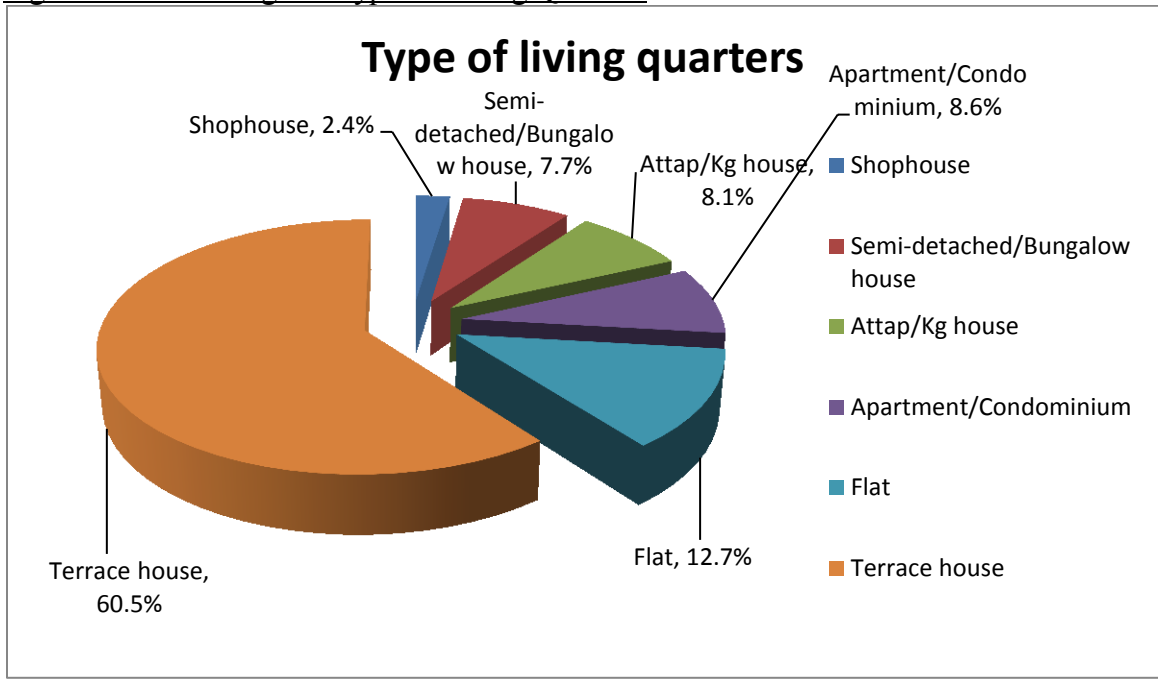
Source: Developed for the research

Besides that, based on Figure 4.4 which shows the percentage of the type of living quarters of the respondents, majority of them are from the middle-income background. This is shown from the bulk of the respondents or more specifically 60.5 per cent of them who live in terrace houses. On the other hand, the minority respondents, taking up only 2.4 per cent, stay in shophouses. According to CIA World Factbook, the percentage of the total population living in urban areas in Malaysia is 72 per cent as of 2010 (Index Mundi, 2013). From here, we can see that urbanization has not only changed but improved the lifestyle of people.

64

Figure 4.5: Percentage of Ownership of Living Quarters

Ownership of living quarters

Parent, 0.4%
Relative, 1.7%
Employer, 2%
Child/Grandchild, 18.2%
Rented, 7%
Own, 52.1%
Spouse, 18.6%

Legend:
- Parent
- Relative
- Employer
- Rented
- Child/Grandchild
- Spouse
- Own
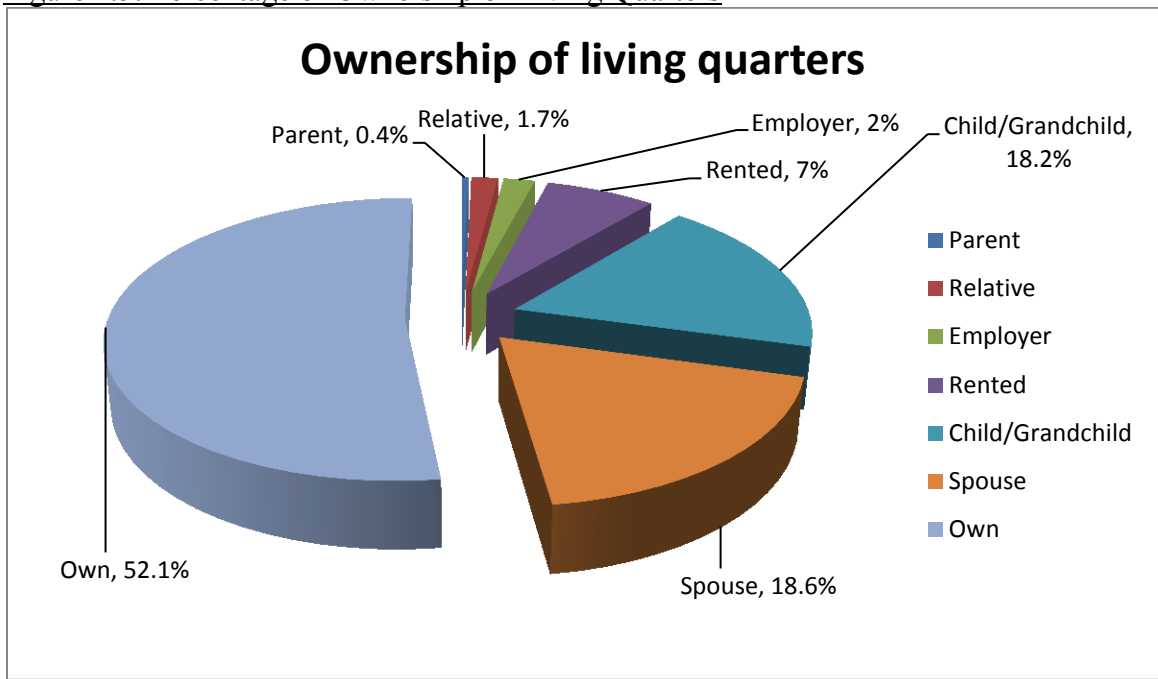
Source: Developed for the research

Furthermore, Figure 4.5 shows that out of the 754 respondents in this survey, 52.1 per cent have ownership of their living quarters. This big margin implies that the respondents are rather independent as they take the initiative to work for a living in order to own an asset. Subsequently, 18.6 per cent claim that ownership of the living quarters are of their spouse. This would come from housewives who care for the home while their husbands work to support the family.

From this survey, it is also indicated that 18.2 per cent of the respondents stay in living quarters belonging to their child or grandchild and 1.7 per cent stay with their relatives. It can be deduced that second to their spouses, the respondents are closer to their child or grandchild compared to their relatives, thus the difference in percentage. It can also be seen that the child or grandchild are responsible in their duty to take care of their parents or grandparents. They could have easily opted to send the respondents to a home care but they chose not to.

65

Those staying in their parents' living quarters take up the least percentage in this survey, which is only 0.4 per cent. This may be due to the fact that the respondents' parents have already passed down the asset to them through bequest, thus the ownership of the living quarters have been transferred to them. Other than that, 7 per cent stay in rented homes while 2 per cent stay in living quarters owned by their employer. Those that stay in their employer's living quarters would include factory workers and civil servants like soldiers, policemen, firemen, and immigration customs.

Figure 4.6: Percentage of Education Level
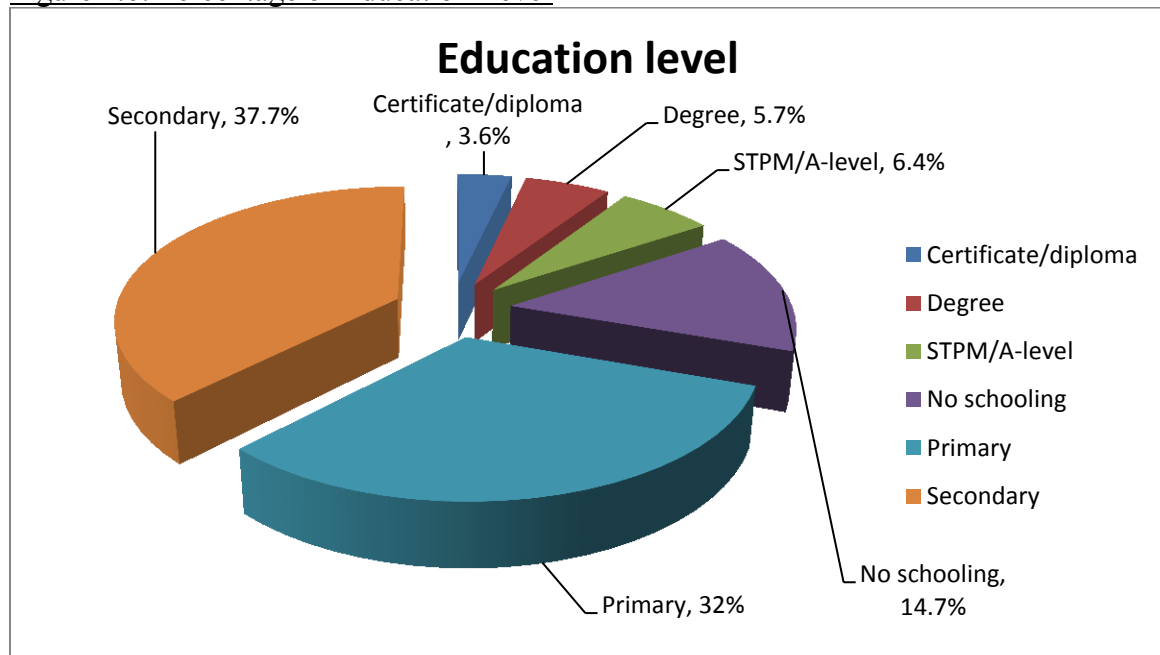
Source: Developed for the research

Next, looking at the education level of the respondents shown in Figure 4.6, only a small amount furthered their studies and obtained a certificate/diploma or degree, which is 3.6 per cent and 5.7 per cent respectively. In addition, only 6.4 per cent of the respondents make up the amount of STPM/A-level graduates. This result is credible as majority of the respondents come from the baby boomers era where the education standard was higher and a high school graduate could easily get a decent job. Likewise, Tankersley (2012) from The Atlantic wrote that those born in the baby boomers era needed less education

to obtain a job with a decent salary compared to their children, and the cost of college education was cheaper during their time.

The rest, taking up 32 per cent and 37.7 per cent for those who had primary and secondary education respectively shows that the bulk of the respondents have at least had basic education background. Nonetheless, there are also quite a number of respondents who did not have any schooling, representing 14.7 per cent of the total number of respondents.

Figure 4.7: Percentage of Employment Status
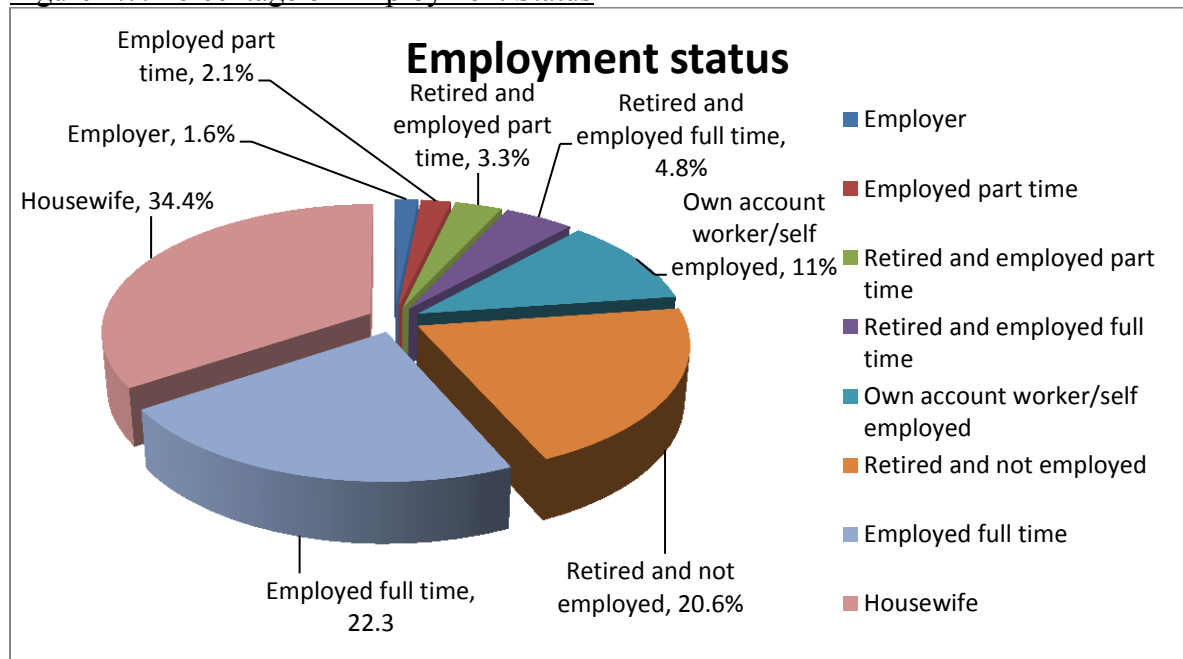
Source: Developed for the research

Subsequently, the respondents' employment statuses are more or less directly affected by their age. With regards to Figure 4.7, results from the survey shows that about a quarter of the total respondents are retired. From there, it can be broken down into three sub-categories, namely those retired and employed part time taking up 3.3 per cent, those retired and employed full time taking up 4.8 per cent and those retired and not employed taking up 20.6 per cent. There are also quite a number of housewives, representing 34.4 per cent of the total respondents, more than half of the female respondents.

However, it is not shown whether they have been in the workforce before or if they are full time housewives. Even so, excluding the respondents who are housewives, it is proven that majority are still in the working force, even though they may be retired.

Figure 4.8: Percentage of Income in the Last 12 Months
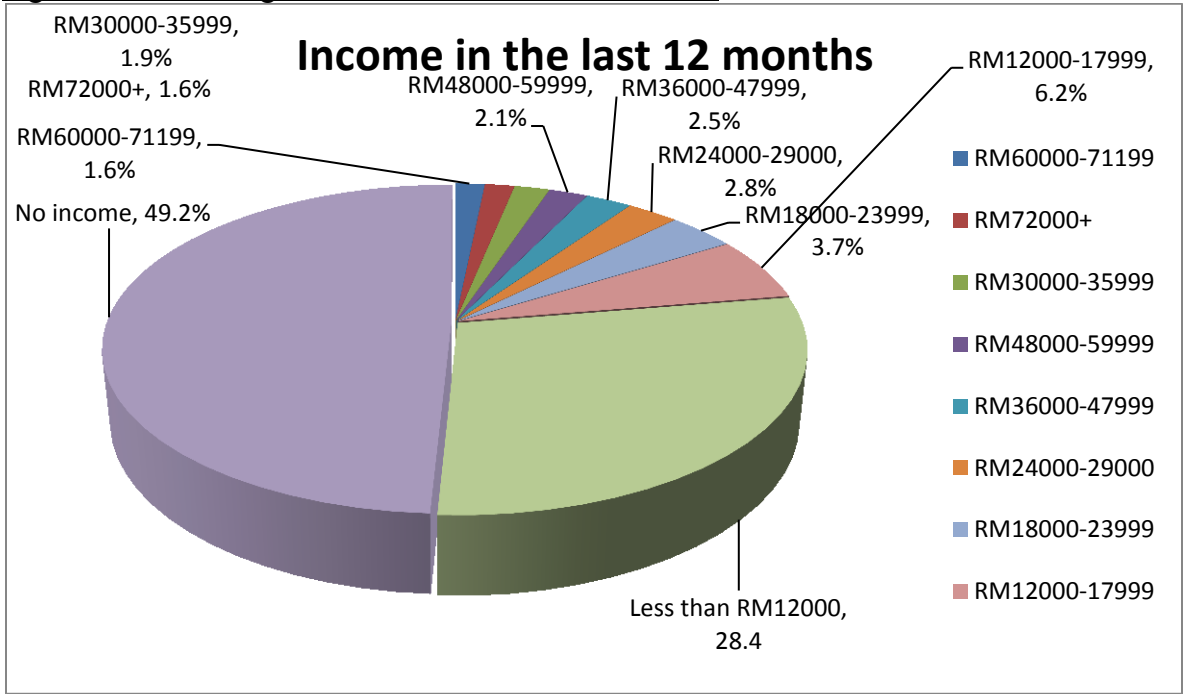
The results of this survey are slightly vague when looking at the income of the respondents in the last 12 months. This is because the nature of job of the respondents is unknown, and there are those who have retired and are depending on other sources of income. From Figure 4.8 above, 28.4 per cent of the respondents earned less than RM12000 in the last twelve months, whereas only 1.6 per cent of the respondents earned RM72000 and above. In addition, almost half of the respondents, taking up 49.2 per cent have no income. This would come from retirees as well as housewives.

Figure 4.9: Percentage of Overall Health Perceived

Overall health perceived

- Very poor, 1.3%
- Neither poor nor good, 6.6%
- Poor, 8.1%
- Very good, 9.7%
- Good, 30.2%
- Fairly poor, 16.2%
- Fairly good, 27.9%

Legend:
- Very poor
- Neither poor nor good
- Poor
- Very good
- Fairly poor
- Fairly good
- Good
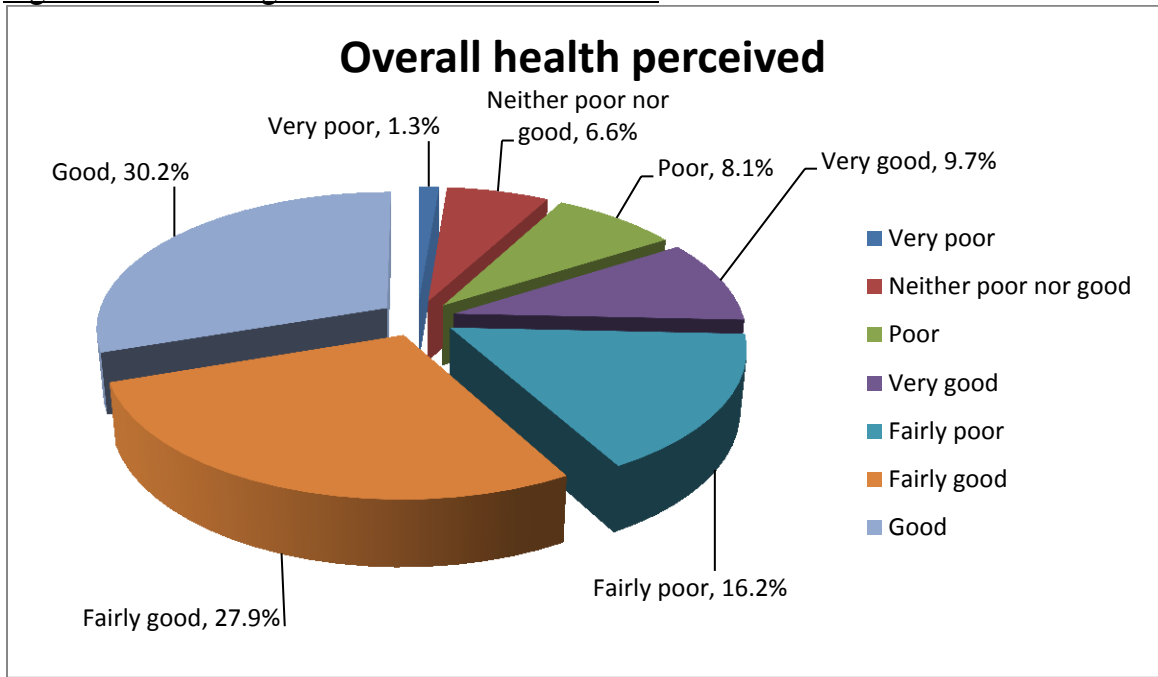
Source: Developed for the research

As a consequence of an aging population, longevity risk and health risk are the two main risks that will be faced by the elderly (Peijnenburg, Nijman & Werker, 2011). Basically, the elderly who are healthy would have more financial satisfaction. On the other hand, with current high medical costs specifically in private hospitals and clinics, unhealthy elderly are more likely to deplete their savings faster as they would visit the hospitals or clinics more often. Thus, it would cause a negative impact to their financial satisfaction.

From Figure 4.9, it can be seen that the bulk of the respondents rated their health status in the good category. This category can be further broken down into 3 subcategories, which are very good, good, and fairly good with 9.7 per cent, 30.2 per cent, and 27.9 per cent respectively. The minority who rated their health status as poor can also be broken down into 3 subcategories, namely very poor, poor, and fairly poor with 1.3 per cent, 8.1 per cent, and 16.2 per cent correspondingly. With those statistics, the respondents are presumed to be the health conscious type as most of them are still healthy with regards to their age.

Figure 4.10: Percentage of Places to Seek Treatment for Illness

Places to seek treatment for illness

Traditional healer, 1.9%

Private clinic, 13.8%

Government hospital, 28.6%

Private hospital, 7.3%

Government clinic, 13.1%

- Government hospital
- Government clinic
- Private hospital
- Private clinic
- Traditional healer
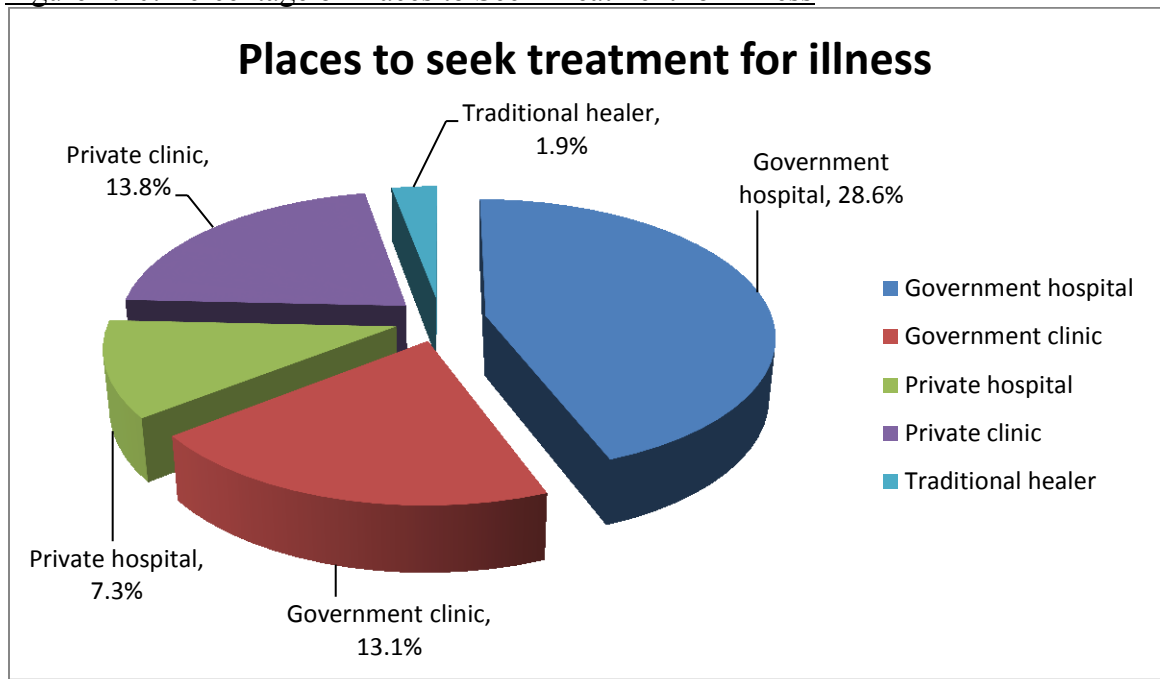
Source: Developed for the research

In addition, even though most of the respondents are of middle-income background, results from this survey shows that they would choose to go to government hospital or clinic over private to seek treatment for illnesses. Looking at Figure 4.10 above, 28.6 per cent and 13.1 per cent of the respondents would go to government-owned hospital and clinic respectively while only 7.3 per cent and 13.8 per cent would prefer to go to private hospital and clinic respectively. Bernama (2011) published an article online on 'Public or Private Hospitals?' in 2011 and one of the reasons people would choose to go to a public healthcare institution is because of the difference in price. Private hospitals and clinics are a lot more expensive. Another reason is the free medical treatment provided to civil servants, their family, and its staff who have retired. Excellent service and professionalism carried out by staffs in government hospitals or clinics is also a plus point (Bernama, 2011).

4.1.2 Central Tendencies Measurement of Constructs

Table 4.1: Central Tendencies of Variables

		Financial Satisfaction		
		Mean	Standard Deviation	n
Gender	Male	4.63	1.25	354
	Female	4.36	1.37	400
Categories of Age	50-59	4.51	1.26	427
	60-69	4.58	1.34	221
	70 and above	4.19	1.49	106
Ethnic Group	Malays	4.38	1.26	280
	Chinese	4.74	1.25	307
	Indians	4.20	1.47	167
Religion	Islam	4.39	1.26	285
	Christianity	4.66	1.27	30
	Hinduism	4.14	1.49	150
	Buddhism	4.63	1.26	225
	Taoism	5.13	1.18	64
Marital Status	Never married	4.50	1.13	16
	Currently married	4.57	1.27	554
	Widowed/ Divorced/ Separated	4.23	1.45	184
Educational Level	No Schooling	4.00	1.44	111
	Primary	4.22	1.28	241
	Secondary	4.62	1.29	284
	STPM/ A-Levels	5.07	1.13	48

| | Certificate/ Diploma | 5.17 | .99 | 27 |
| | Degree | 5.26 | 1.03 | 43 |

<u>Source</u>: Developed for the research

From Table 4.1, it shows that male has a higher mean of 4.63 against financial satisfaction compared to female with a mean of 4.36. Moreover, male has a lower standard deviation of 1.25. This means that male has more significance towards financial satisfaction. Then, looking at the categories of age against financial satisfaction, 2 categories are identified as significant, namely the 50-59 group with 4.51 mean and standard deviation of 1.26, and the 60-69 group with 4.58 mean and standard deviation of 1.34.

Subsequently, based on ethnic group, Chinese are more significant towards financial satisfaction in this study. With a mean of 4.74 and standard deviation of 1.25, this also shows that there are more Chinese respondents in this research and can be further proven by comparing the total number of Chinese with the other ethnic groups. Moving on to analyze further on the respondents' religion against financial satisfaction, Christianity, Buddhism and Taoisim are significant with an average of 4.66 (s=1.27), 4.63(s=1.26), and 5.13 (s=1.18) respectively. This is in line with results from the ethnic group as Chinese practices these three religions.

Moving on to marital status, respondents who are either never married or currently married are both significant in this study. Finally, looking at educational level, both degree and certificate/diploma holders are significant against financial satisfaction with an average of 5.26 (s=1.03) and 5.17 (s=0.99) correspondingly.

Table 4.2: Central Tendencies for Sources of Income

Sources of Income	Mean (%)	Standard Deviation	n
Pocket money from child	58	.494	754
Salary	46	.499	754
Saving & FD	33	.470	754
KWSP	21	.410	754
Pension fund	14	.342	754
Dividend & investment returns	13	.332	754
Rental	11	.410	754
Remittances	9	.287	754
Pocket money from grandchild	3	.176	754
Relatives	5	.219	754
Friends	1	.089	754
Valid N (listwise)			754

Source: Developed for the research

Table 4.3: Central Tendencies for Personal Assets

Personal Assets	Mean (%)	Standard Deviation	n
House	66	.474	754
Motorcar	47	.499	754
Cash in bank & FD	46	.499	754
Jewellery	37	.484	754
Motorcycle	23	.424	754
Land	19	.391	754
Unit trust	13	.336	754
Company shares	07	.251	754
Van, lorry	06	.242	754
Valid N (listwise)			754

Source: Developed for the research

Table 4.4: Central Tendecies for dependent and independent variables

	Mean	Standard Deviation	n	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Financial Satisfaction	4.49	1.32	755	-.354	.089	-.628	.178
Sources of Income	2.13	1.27	754	1.123	.089	1.403	.178
Assets	2.65	1.89	754	.518	.089	-.297	.178
Monthly household expenditure	1914.79	1392.07	754	1.920	.089	5.865	.178
Average monthly contribution to household expenditure in %	69.44	34.95	754	-.855	.089	-.648	.178
Valid N (listwise)			754				

Source: Developed for the research

Looking at Table 4.4, under sources of income, pocket money from child and salary are two factors which are very significant in this study. Pocket money contributes 58 per cent of the respondents' sources of income, while salary contributes 46 per cent. On the other hand, looking at personal assets, house is the most significant, followed by motorcar and cash in bank and fixed deposit (FD). House contributes 66 per cent of the respondents' personal asset, motorcar contributes 47 per cent, and cash in bank and fixed deposit contributes 46 per cent. The average monthly household expenditure is RM1914.79 while the average monthly contribution to household expenditure is 69.44 per cent.

According to Julie Pallant (2011), skewness value shows the symmetry of the distribution whereas kurtosis gives information on the 'peakness' of the distribution. If the distribution is perfectly normal, the skewness and kurtosis

value would be 0, but it rarely occurs in the social sciences. From Table , under skewness, only financial satisfaction and the average monthly contribution to household expenditure in percentage have negative values. This indicates that the scores cluster at the high end (right-hand side of a graph).

On the other hand, under kurtosis, sources of income, monthly household expenditure, those who have qualifications of at least a diploma and above have positive values. This indicate that the distribution is clustered in the centre (rather peaked), with long thin tails.

4.2 Scale Measurement

Table 4.5: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.893	.892	6

Source: Developed for the research

Cronbach's alpha test is carried out to show how much the project is accepted or preferred. It is acceptable when the value is above 0.7 whereas it is preferable when the value is above 0.8. In this project analysis, the Cronbah's alpha is 0.893 with the six numbers of items. It also showed that it has reasonable internal consistency reliability amongst the variables. As a result, this analysis is considered acceptable.

Table 4.6: Item-Total Statistics of Reliability test

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
How satisfied are you with your current financial satuation	.764	.867
How satisfied are you with your current money saved	.797	.862
How satisfied are you with your current amount of money owed	.405	.918
How satisfied are you with your current preparedness to meet emergencies	.819	.858
How satisfied are you with your current financial management skills	.728	.872
How comfortable and well-off are you financially	.790	.862

Source: Developed for the research

Besides that, the corrected item-total correlation values means the degree to which each items correlates with the total score showed in the item-total statistics table. The item measures something different from the scale as a whole when the low values of Cronbah's alpha are less than 0.3. From the data analysis, the items in the column of corrected item-total correlation are more than 0.3 which showed that the items are correlated from the scale as a whole.

However, some of the items from the scale may need to be removed with the condition if the values in the Cronbach's Alpha if Item Deleted are higher than the final alpha value. This is because the column headed Alpha if Item Deleted means the impact of removing each item from the scale is given. Since the analysis data is less than 0.893 in the Cronbach's Alpha if Item Deleted column, removing items with low item-total correlation is not considered in this analysis. Nevertheless, in terms of the satisfaction of the current amount of money owed, the Cronbach's Alpha if Item Deleted is 0.918 which is more than the Cronbach's Alpha with 0.893. The removing item is not considered since it is only a slightly different of 0.0025 between them.

Table 4.7: Summary Item Statistics of Reliability Test

	Mean	Minimum	Maximum	N of Items
Inter-Item Correlations	.579	.318	.804	6

Source: Developed for research

From the summary item statistics table, it is difficult to get a decent Cronbach's alpha value and may consider reporting the mean inter-item correlation value with the small number of items such as less than 10. In this case, the mean inter-item correlation is 0.579 with the values ranging from 0.318 to 0.804. Therefore, it is indicated that it has a strong relationship among the 6 items.

4.3 Inferential Analyses

Multiple regressions are one of the statistical techniques to explore the relationship between a continuous dependent variable and a number of independent variables. The assumptions for the multiple regressions are not violated with the condition of larger sample size, absence of multicollinearity and singularity, and the presence of the normality, linearity, homoscedasticity and independence residuals.

Table 4.8 : Coefficients[a] of Multiple Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	3.421	.138		24.710	.000	3.149	3.693
SOI	.109	.044	.102	2.497	.013	.023	.194
Asset	.066	.031	.092	2.133	.033	.005	.127
Monthly household expenditure	.00021	.00004	.200	5.545	.000	.000	.000
Average monthly contribution to household expenditure in %	.003	.001	.087	2.449	.015	.001	.006
Qualification of at least a diploma and above	.435	.170	.091	2.555	.011	.101	.769

 Source: Developed for research

In the output box labeled coefficient, standardized coefficients are used to compare the different variables. "Standardised" is defined as the values for each of the variables that are needed to be converted into the same scale in order to make the comparison. In contrast, the unstandardised coefficient value is used to construct a regression equation. It also describes the relationship between dependent variable and independent variable in terms of some measurements such as years and percentages of the variables.

In this research project, the negative signs of the beta values must be ignored. Looking at unstandardized coefficients, it showed that with every additional one unit of sources of income, the level of the financial satisfaction for the elderly increased by 0.109 units, holding other variables constant. For assets, with every additional one unit of assets possessed by the elderly, the level of financial satisfaction increased with 0.066 units, controlling the other independent variables in the equation. An

78

increase of 0.00021 units of the financial satisfaction can be explained with every additional unit of the monthly household expenditure for the elderly, holding other independent variables constant. Besides that, with every additional one per cent of the average monthly contribution to household expenditure, the level of the financial satisfaction increased by 0.003 units, controlling other variables constant. Next, for every additional level of education, the level of financial satisfaction increased by 0.435 units, holding other variables constant.

Apart from that, in the standardized coefficient column, the largest beta coefficient is 0.200 which is for monthly household expenditure. This indicates that the monthly household expenditure variable makes up the strongest unique contribution to explain the dependent variable of financial satisfaction when the variable explained by other variables is controlled in the model. Adversely, the beta of the average monthly contribution to household expenditure in parentages is lowest with 0.087. This means that it makes up the weakest unique contribution to explain the dependent variables.

The values in the Sign in the coefficients table will indicate whether this variable is able to make a statistically significant unique contribution to the model. It is dependent on the variables which are included in the model and the amount of overlapping among the independent variables. The variable is made up of significant unique contribution to the prediction of dependent variables if the significant value is less than 0.5 and vice versa. Inversely, problem of overlapping with other independent variables in the model will cause the significant value to be greater than 0.5.

In this research analysis data, the variables of sources of income, asset, monthly household expenditure, average monthly contribution to household expenditure in percentages and diploma above are made in unique and are statistically significant with significant value of 0.013, 0.033, 0.000, 0.015 and 0.011 respectively, which contributes to the prediction of dependent variable, namely financial satisfaction.

Figure 4.11: Histogram of the Regression Standardized Residual

Histogram
Dependent Variable: FS

Mean = 0.00
Std. Dev. = 0.996
N = 754
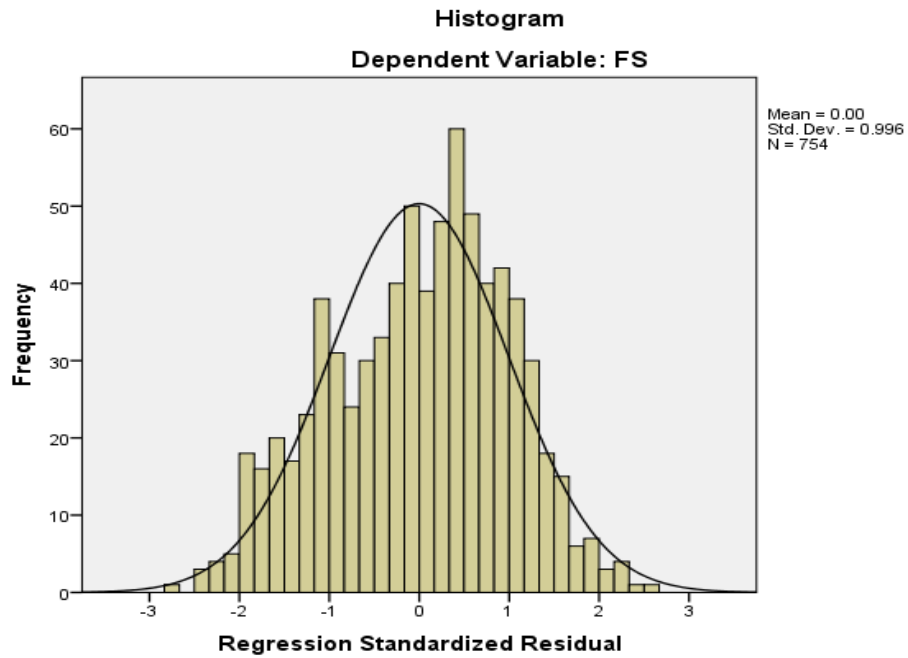
Source: Developed for research

The histogram above is reasonable to be considered as normally distributed whereby the skewness of the distributed is asymmetric.

Figure 4.12: Normal P-P Plot of Regression Standardized Residual
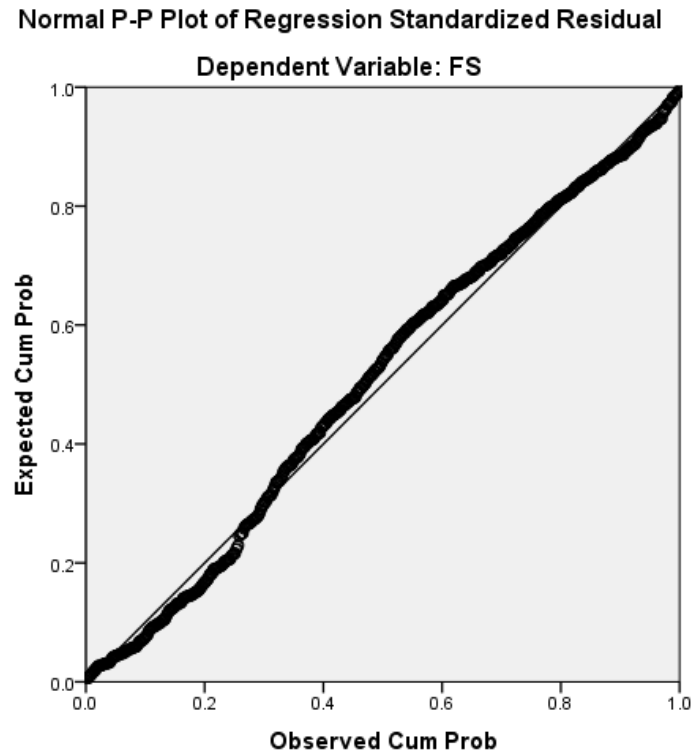
Source: Developed for research

Other than that, normal probability plot (P-P) of the regression standardized residual and scatterplot can determine the appropriation of the assumption of normality of the random errors. The result of normal probability plot (P-P) should lie in the reasonably straight diagonal line from the bottom left to top right. Thus, there is no major deviation from normality.

According to the project data, the normal probability plot (P-P) of the regression standardized residual is lie from the bottom left to top right which indicated the positive correlation. It is also not too far from a straight line even though the line is not convincing entirely. Therefore, it can be seems that the normality assumption is satisfied which is most closely best fit with the data. In addition, there is no major deviation from the normality.

Figure 4.13: Scatterplot of Regression Standardized Predicted Value
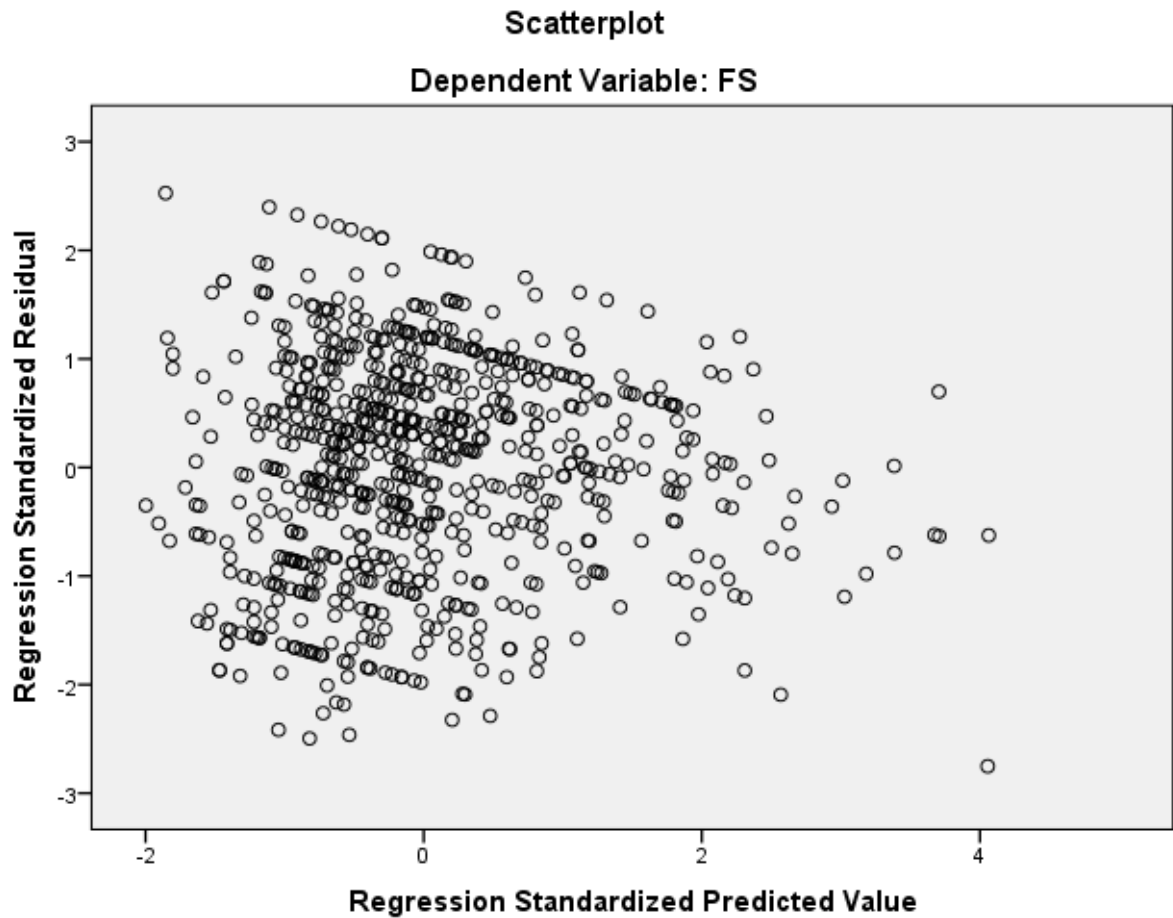
Source: Developed for research

In the scatterplot of standardized residuals, it is to determine the presence of outliers which have a standardized residual. The residuals would be roughly rectangular distributed and most of the values would concentrate in the centre where it is along 0 point in the scatterplot. Violation of the assumption is created whereby there is a clear or systematic pattern to the residuals.

For the scatterplot in the research analysis, the pattern is not clear and unsystematic to the residuals. Most of the scores or values in the scatterplot are crowded in the centre. Hence, there is no violation of the heteroscedastic assumptions. Moreover, it is common to have some of the outlying residuals in the scatterplot because the sample

size is large with the amount of 754. Nevertheless, it is not necessary to take any actions to overcome the residuals.

Table 4.9: Model Summary[b] of Multiple Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.334[a]	.111	.105	1.25245

Source: Developed for research

Table 4.10: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	146.929	5	29.386	18.733	.000[b]
	Residual	1173.345	748	1.569		
	Total	1320.274	753			

Source: Developed for research

In the model summary box, the value of the R square needs to be checked. It will indicate how much of the variance in the dependent variable is explained by the model. The value in this research project is 0.111 which is expressed as a percentage of 11.1 per cent. Hence, the model explains 11.1 per cent of the variance in financial satisfaction.

According to Tabachnick & Fidell (2007), the adjusted R square in the small sample size will provide a better estimation of the true value in the population. The value of adjusted R square will consider to be reported instead of R square with the condition of small sample size. In this research, value of the R square will be considered rather than adjusted R square since the 754 of larger sample size.

Other than that, the ANOVAs table is to assess the statistical significance of the result. The null hypothesis test is multiple R is equal to 0 in the population. In the analysis data, the statistical significance of the model is 0.000 which is less than the par value of 0.0005.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATION

5.0   Introduction

This Chapter is conducted to recap the statistical analysis, major findings, recommendations, and generate conclusion based on the analysis of the results of the research project on Income and Financial Satisfaction among Elderly in Malaysia. In addition, limitation and implication of the study are discussed in this chapter to show the limitations encountered during research project, and the practical implication for policy makers and practitioners respectively. Statistical analysis provides a summary of descriptive and inferential analysis result which was done in the previous chapter. Major findings discussion is conducted to prove and ensure that the hypothesis and objectives in Chapter 1 are achieved. Besides that, recommendations are made to remedy the limitations in the research project and thereafter, a final conclusion is provided throughout the whole research project.

5.1   Summary of Statistical Analyses

5.1.1   Descriptive Analysis

In description analysis, based on the demographic components, there are 46.9 per cent in male and 53.1 per cent in female from the respondent of 754 urban elderly in Selangor, Malaysia. Most of the respondents are Chinese with 40.7 per cent, followed by the Malays with 37.1 per cent and Indians with 22.1 per cent. Besides that, most of them are categorised in the age group of 50-59 with 56.6 per cent, 60-69 with 29.3 per cent, 70-79 with 12.3 per cent, 80-89 with 1.6 per cent and 90 and above with 0.1 per cent. In terms of education level,

only 3.6 per cent, 5.7 per cent and 6.4 per cent of the urban elderly respondents educated to certificate/ diploma, degree and STPM/ A-level respectively. Urban elderly respondents who went to the primary level comprised of 32 per cent while those who have attended the secondary level consisted of 37.7 per cent. For those who never went to school took up 14.7 per cent.

In addition, terrace house is the most preferred in terms of living quarters for the respondents in Selangor with the highest percentage of 60.5 per cent, whereas the least preferred is shophouse with only 2.4 per cent. Nonetheless, some of them also prefer to stay in attap/ Kg house and apartment/ condominium which consist of 8.1 per cent and 8.6 per cent respectively. For those who stay in semi-detached/ bungalow house, they consist of 7.7 per cent from the data collected. Moreover, based on the ownership of living quarters, 52.1 per cent of the respondents have own their living quarters. It is also indicated that 18.2 per cent and 18.6 per cent have ownership of living quarters from their child/ grandchild and spouse respectively. Subsequently, the ownerships of the living quarters are 7.0 per cent from rented, 2.0 per cent from employer, 1.7 per cent from relative and the least of 0.4 per cent form parent.

Apart from that, according to the data collected, most of the respondents, taking up 34.4 per cent are housewives, 22.3 per cent are employed full time while 20.6 per cent are retired and not employed. Only 11.0 per cent of the respondents are self-employed/ own account worker. In contrast, some of them are retired and employed full time, taking up 4.8 per cent, retired and employed part time taking up 3.3 per cent, employed part time taking up 2.1 per cent and finally are an employer themselves taking up 1.6 per cent. Furthermore, for the income in last 12 months, the highest income in the last 12 months takes up 49.2 per cent in terms of missing value while 28.4 per cent are in the range of less than RM12000. In the range of RM 12000-RM 17999

and RM 18000-23999, it takes up 6.2 per cent and 3.7 per cent respectively. The rest takes up 2.8 per cent in the range of RM 24000-29000, 2.5 per cent in the range of RM 36000-47999 and 2.1 per cent of RM 48000-59999. Only 1.6 per cent is taken up for both of the range of RM 60000-71199 and above RM 72000.

Next, looking at the overall health perceived for the urban elderly, it is divided into 7 subcategories namely good, fairly good, fairly poor, very good, poor, neither poor nor good and very poor with 30.2 per cent, 27.9 per cent, 16.2 per cent, 9.7 per cent, 8.1 per cent, 6.6 per cent and 1.3 per cent respectively. Furthermore, most of the urban elderly prefer to seek treatment for illness at government hospitals, taking up 28.6 per cent followed by private clinics taking up 13.8 per cent whereas the traditional healer is the least favourite with only 1.9 per cent. Government clinics and private hospitals are considered as moderate ranking with 13.1 per cent and 7.3 per cent respectively in the demographic places for the respondents to seek treatment for illness.

5.1.2 Inferential Analysis

Based on the correlation analysis results, all the variables are positively correlated. This is because the correlation coefficient values are all positive. However, even though there is relationship among them, the relationship is considered weak as all the variables fall under the small strength category with $r = .10$ to $.29$. Next, the variables took turns to be replaced as the dependent variable. Overall, it can be seen that only a few variables have quite big overlapping between them. This is seen by the percentage of shared variance for the particular two variables. One more thing that was considered was the significance level of the variables based on the statistical significance level of $p < .05$. All the results are significant except for two which is the

average monthly contribution to household expenditure and those who have qualifications of at least a diploma and above.

5.2 Discussion of Major Findings

To answer the hypothesis testing in Chapter 1, the results are summarized in Table 5.1

Table 5.1: Summary of the Hypothesis and the Results Obtained

Research Questions	Hypothesis	Conclusion
What is the relationship between sources of income and financial satisfaction of the urban elderly in Malaysia?	H_0: There is no significant relationship between sources of income and financial satisfaction of the urban elderly in Malaysia.	H_0: Not Supported
	H_1: There is a significant relationship between sources of income and financial satisfaction of the urban elderly in Malaysia.	H_1: Supported (at 0.05 level)
What is the relationship between personal assets and financial satisfaction of the urban elderly in Malaysia?	H_0: There is no significant relationship between personal assets and financial satisfaction of the urban elderly in Malaysia.	H_0: Not Supported
	H_1: There is a significant relationship between personal assets and financial satisfaction of the urban elderly in Malaysia.	H_1: Supported (at 0.05 level)
What is the relationship between monthly household expenditure and financial satisfaction	H_0: There is no significant relationship between monthly household expenditure and financial satisfaction of the urban elderly in	H_0: Not Supported

of the urban elderly in Malaysia?	Malaysia.	
	H_1: There is a significant relationship between monthly household expenditure and financial satisfaction of the urban elderly in Malaysia.	H_1: Support (at 0.05 level)
What is the relationship between average monthly contribution to household expenditure (percentages) and financial satisfaction of the urban elderly in Malaysia?	H_0: There is no significant relationship between average monthly contribution to household expenditure (percentages) and financial satisfaction of the urban elderly in Malaysia.	H_0: Not Supported
	H_1: There is a significant relationship between average monthly contribution to household expenditure (percentages) and financial satisfaction of the urban elderly in Malaysia.	H_1: Support (at 0.05 level)
What is the relationship between education level and financial satisfaction of the urban elderly in Malaysia?	H_0: There is no significant relationship between education level and financial satisfaction of the urban elderly in Malaysia.	H_0: Not Supported
	H_1: There is a significant relationship between education level and financial satisfaction of the urban elderly in Malaysia.	H_1: Support (at 0.05 level)

Source: Developed for the research

As a result, based on the hypothesis testing shown above, it can be concluded there is a relationship amongst sources of income, personal assets, monthly household

expenditure, average monthly contribution to household expenditure (percentages) and education level with diploma above and financial satisfaction among the urban elderly in Malaysia.

5.3 Implications of the Study

5.3.1 Managerial Implications

From the statistical result in the prior chapter, education level, source of income, possession of assets and monthly expenditure have impacts on the financial satisfaction among urban elderly. Throughout the research project, there are some practical implications which are conducted for policy makers and practitioners. Due to medical advancement and low birth rate, aging group may contribute as the major part of the total population in Malaysia in future. Hence, government and private sectors play an important role to generate the welfare, product and services to the elderly.

Social security is a set of governmental practices or programs of public provision for economic security and social welfare of the individual and his or her family members (Merriam-Webster, n.d.). Social security is considered vital and essential for every elderly after their retirement, although some of them are still working. It provides social insurance and assistance to elderly at their retirement age.

 In Malaysia, there are two types of social security which are Social Security Organization (SOCSO) and Employment Provident Fund (EPF) ("Social Security," n.d.). Both SOCSO and EPF provide different functions. SOCSO is the system that provides financial assistance to employees or their family members who suffer any death, disability, illness or occupational disease after the event of accident ("Social Security," n.d.). Meanwhile, EPF is a kind of

saving fund contributed by employee and employer, and also a retirement fund for employee at their retirement age ("Social Security," n.d.).

Every employee in the formal sector is eligible to contribute parts of their income into SOCSO and EPF funds. Employees are able to partially or wholly withdraw their money from EPF fund at the retirement age. Besides that, the government of Malaysia also provides pension schemes to civil servants with the amount of pension paid monthly. Hence, social security in Malaysia only covers formal sector including employees and civil servants. Informal sectors such as farmers and part-time workers while non-EPF workers such as those self-employed or businessmen have been ignored and those elderly from informal sector should have their own saving or investment plan to assure their life at the retirement age.

For those elderly from informal sector, they are forced to continue their working life or live in poverty at their retirement age if they do not have any pension plan during their working age. This is most likely to happen on farmers or part-time workers who do not have sufficient financial knowledge to plan their retirement pension scheme. Besides that, pension scheme in Malaysia only covers civil servants, and yet employees in formal private sector are required to contribute part of their income to EPF fund as a saving or retirement purposes in the future.

Regarding social security system in Malaysia, pension scheme from the government only covers civil servant, and employees either from formal or informal sector is required to plan for their own retirement scheme. Unlike social security in Malaysia, European countries provide pension fund for their entire elderly citizen. In order to achieve high income and become a developed nation in 2020, the welfare and social security in Malaysia for elderly should be underlined.

From the statistical result, pension fund and EPF, as part of source of income, it has a significant positive relationship with financial satisfaction. In the effort to improve the financial satisfaction of elderly in the future, the Malaysian government should provide pension schemes not only for the civil servants, but also inclusive of other elderly citizen as they are also part of Malaysia citizen. Although application of pension scheme for the all the elderly may burden the government expenditure as they would have to allocate more funds into social security, but in the long run, it may benefit and protect the welfare and financially satisfy the elderly population.

For instance, US government has contributed 21% of the GDP into Social Security expenditure in financial year of 2012 (USBudgetAlert, n.d.). In the economic perspective, the poverty rate among elderly citizen can be reduced and the welfare of elderly is highlighted when the pension scheme is applicable to all of the elderly citizens. This may also increase the domestic consumption whereby the fund assigned to elderly will encourage them to spend more. On the other hand, in the society perspective, the inclusion of pension schemes to the elderly in a nation may reduce the burden of their children and family members. Elderly are able to live better with the funds given without over relying on their children.

There is a recent pension plan, Private Pension Funds (PPF) launched by the current Prime Minister, Datuk Seri Najib Razak under Economic Transformation Programme in 2012 (Pemandu, n.d.). The PPF was launched to offer non-EPF and self-employed people to put part of their income as a saving plan for retirement. Although there is an intention to protect non-EPF and self-employed people to supplement public pension, but the PPF for retirement still need contribution from parts of their income. Hence, the intention to implement full-coverage pension scheme to all the elderly in Malaysia is not there. Overall, social security is one of the important tools for

government to protect welfare and enhance the financial satisfaction of elderly, and it is also a sign of prosperity of a nation.

Health and health financing are always a concern for the elderly as their age gets older and older (Economist Intelligence Unit, 2009). As the aging population are increasing in the future, the demand for healthcare especially the elderly has become important. Healthcare in Malaysia is mainly under the obligation of the Ministry of Health. Malaysian government has put a lot of effort in the aspect of healthcare by subsidizing the medical cost and built lots of public hospitals. Elderly are able to enjoy free or low-cost medical treatment and operation in the public hospital. This would help to reduce the burden of the elderly that may cause them to fall into high medical cost without any subsidy from the government.

Besides that, under Economic Transformation Programme, Clinic 1Malaysia policy was implemented by Prime Minister, Datuk Seri Najib Razak in 2010 (S., Retnanathan, 2010). Under the policy, Clinics 1 Malaysia was broadly built at most in the residential place to benefit the citizen especially the elderly. Citizens are entitled to pay only RM1 after medical treatment is being received. This also facilitates the elderly to receive any illness treatment at Clinic 1Malaysia without heading to public hospital which may be quite far from their living place.

As the number of elderly grows annually, their demand for healthcare also relatively increases. Hence, in the future, Malaysia government should build more hospitals and clinics especially in the rural area to cater the huge healthcare demand from the elderly. On the other hand, Malaysian government should allocate more funds toward healthcare expenditure in the future as the population of elderly gradually becomes bigger. Healthcare subsidization should be sustained to reduce the burden of the poor elderly and avoid them to suffer high medical cost.

Lesser healthcare expenditure by elderly will allow them to have more money to spend on other necessities like food and clothing or save part of their money for emergency or future usage. This would indirectly increase the financial satisfaction of elderly as their burden and expenditures toward medical cost have been reduced. In addition, government should establish more medical school to cultivate more doctors and nurse to meet the demand of elderly in the future. Government should also provide scholarship and subsidy for medical students in the way to encourage more students to participate in medical field.

From the demographic statistic shown above, almost 50 per cent of the elderly are in the low education or never went to school. Meanwhile, statistical result shows that there is a positive relationship between financial satisfaction and education. Hence, education is vital for elderly to manage their money and their personal portfolio. Results from the previous chapter show that, higher education like diploma or degree holder will have a higher financial satisfaction as compare to those who have low or no education. Educated elderly seem more capable in managing and planning for their financial portfolio as well as retirement funds. It may become a serious issue if most of the elderly are unable to manage their money in an appropriate way.

The solution is Malaysian government should establish a government-linked institution body to provide education and professional advice to the elderly. Training and education regarding money management should be offered to them at a reasonable price. Besides that, campaigns should be organized by the institution body to raise awareness and importance of money management among the elderly. The policy is trying to generate the opportunity for elderly to learn and to have a proper financial management.

Furthermore, private sector could take the business opportunity to provide financial assistance and advice to the elderly. Financial products such as

saving plan, insurance plan, and investment plan should be created specifically for the elderly. For the saving plan, a higher interest rate of saving plan should be offered to elderly to encourage them to invest in a safer way. Special insurance plan should also being promoted to them as life guarantee and consolation compensation to their family member when they pass away. In addition, Mutual Fund Company should also take this opportunity to offer a low risk investment plan to the elderly. The low risk investment plan consists of fixed dividends and blue chip company investment that provide a stable and certain investment portfolio to the elderly.

Longevity in life expectancy implies an increase in the optimal retirement age (Bethecourt & Perera-Tallo, 2011). According to Zainal, who was the MTUC (Malaysian Trades Union Congress) president, said the life expectancy of Malaysians is longer where the life expectancy for men was 78 and women was 75. (Bernama, 2012). The longer life expectancy will encourage elderly nowadays to work longer and retire at the older age. This could assure life of the elderly after they reach their retirement age.

The recent amendment did by the Human Resources Ministry of Malaysia, where they have adjusted The Minimum Retirement Age Act by extending the retirement age for both public and private to 60 years old (The Malaysian Insider, 2012). There are two reasons of having this policy. Firstly, this is to allow the elderly from both sectors to work for another 5 more years as to earn extra income for future expenditure at their retirement age. According to Index Mundi (2012), Malaysia's birth rate is declining from year 2000 to 2012 and this shows that the younger generation is getting lesser and the aging population has become bigger. If this situation continues in the future, labor market in Malaysia may lack of labor force in the future. Hence, the extension of retirement age maybe the temporarily solution for labor market shrinkage. In the future, according to Bethecourt *et al.* (2011), the longer the elderly life expectancy, the retirement age should be adjusted and increased to an optimal

and desired level. Hence, Malaysia government should adjust The Minimum Retirement Act based on the life expectancy of elderly in Malaysia.

From statistical result at the prior chapter, elderly averagely spends RM1914.79 for their household expenditures and they are also contributing 70 per cent of their income to household expenditures. This shows that urban elderly in Selangor, Malaysia has strong purchasing power and high consumption level of their monthly household expenditure. The concern is that elderly's income is falling at the retirement age as they may only depend on the money from their children and pension fund.

In the effort to reduce the expenditure and burdens among the elderly in Selangor, Malaysia government should offer social privilege especially for the elderly. Social privilege for elderly is considered a right, advantage, or immunity granted to or enjoyed by elderly person beyond the common advantage of all others. Hence, the social privilege gives out benefits, discounts and special allowances to the elderly.

Malaysia government is recommended to introduce elderly privilege card that give out discounts for certain types of expenditures such as transportation, medical, professionals' services and assistance, and etc. For instance, elderly will be benefited to discount for any usage of public transport like bus, train, taxis, air flight and etc. Besides that, Malaysia government should also provide express lanes for elderly citizen in all commercial and government establishments. The social privilege stated as above does help elderly to reduce their expenditure, which increase their financial satisfaction as they have more money for saving, invest or other usages.

5.4 Limitations of the Study

The research project has successfully reached its objectives with significant statistical results, and yet, there are some inevitable limitations and shortcomings encountered throughout the study. The main limitation of the study is the research project merely focusing on the urban elderly by ignoring the elderly who are living in the rural area. There is a living style and income level discrepancies between rural and urban elderly, whereby urban elderly will have a better living standards and higher income received as compared to rural elderly. The inclusive of rural elderly in the study may lead to a change of the result whereby rural elderly may have a lower financial satisfaction due to low income and living standards. Besides that, the study is concerning about the urban elderly who are living in Selangor, and ignoring urban elderly from other states in Malaysia such as Penang, Johor, Malacca and etc. Cultural and locational differences among urban elderly from different states may have a slightly differences in income and financial satisfaction. For instance, there is an income and financial satisfaction differences between Selangor and Penang as Selangor has locational advantages where it is nearby the main cities of Malaysia, Kuala Lumpur.

The subsequent limitation encountered in the research project is the number of sample sizes being collected. Throughout the study on the urban elderly, 754 of questionnaires were being collected indicating there are 754 of elderly respondents being interviewed. 754 of questionnaires are considered a huge sample size and it actually takes a longer time and higher cost to collect the data. Besides that, it also takes time when it comes to data processing likes data code-in, data validation, statistical analysis and etc.

Throughout the research project, the study is concerning about the three main races of urban elderly in Malaysia which are Chinese, India and Malays. Questionnaire of the study was being created in English form and problems found when data was collected. Some urban elderly regardless of Chinese, India or Malays, were found in difficulties to receive and understand the question given in the questionnaire. This can be

explained by statistical analysis in the previous chapter, 14.7% of the elderly were never went to school while 32% of the elderly were partially or fully finished their primary study. Demographic results show that almost half of urban elderly may not fully understand or misunderstand the questions according to the questionnaire. Sometimes, interviewer may provide misunderstanding information regarding the questions to the elderly respondent. Interviewer may mistranslate the actual meaning of questions into other languages that preferred by elderly respondents.

The statistical results of the study would only represent the current financial satisfaction of the elderly based on the income level. Due to the change of economic, political, society and technologies changes, it would affect and change the mind set and behavior of the elderly. Hence, after some times, it would affect the income level and financial satisfaction due to the mentality and physical changes. For instance, elderly in future will have a higher financial satisfaction due the economy boost up and monthly pension fund given by the government. Therefore, the statistical result of the study would only explain the current financial satisfaction among elderly in Malaysia, and it may only last for 5 years or more than that, depending to the changes of economic, politic, society and technology.

5.5 Recommendations for Future Research

This chapter is formed to remedy the limitations encountered throughout the research project. Recommendations will be given regarding the limitations mentioned at above to avoid same limitations to be occurred in future research.

Firstly, the study is recommended to include the rural elderly while also the elderly from other states in Malaysia if the study is focusing on the elderly in Malaysia. This is inappropriate if the study is merely focusing on urban elderly in Selangor while the living standards, welfare and financial satisfaction of elderly from other states as well as rural area were being abandoned. Elderly in rural area and other states in Malaysia should be concerned and it is more appropriate to read and interpret the financial

satisfaction of elderly in Malaysia. This is more applicable for policy makers or researcher to implement new policies regarding the financial satisfaction for all the categories of the elderly.

Subsequently, collection of huge sample size is time consuming and incurs higher cost to the study. Hence, if the budget set for the research project is low, it is more appropriate to reduce the sample size of the study. The drawback is lower sample size may lead to higher sampling error which may causes insignificant statistical result and higher standard deviation. Unless there is a higher budget being allocated to collect the huge sample size of the research project, if not, it is not recommended to collect huge sample size for the research project.

Translation of interviewer and single language, English of questionnaire may lead to misunderstanding of respondents during data collection. Taking these steps to remedy the situation, it is more appropriate by assigning interviewer to pick their own races respondents during data collection. For instance, Chinese interviewers are assigned to collect data from Chinese elderly respondents while same condition applied to India and Malays elderly respondents. This may lead to mistranslate and misunderstanding during data collection. Besides that, it is more suitable to generate a dual-language questionnaire according to races of the elderly respondents. For instance, English-Chinese questionnaire was created for Chinese respondents, English-Malays questionnaire was created for Malay respondents and English-Tamil questionnaire was created for Indian respondents. The condition of misunderstanding regarding the questions could be minimized or eliminated by taking these steps.

By solving the limitation that statistical result on financial satisfaction of elderly in Malaysia will not last longer due to economic, politic, society and technologies changes, a new research project need to be conducted for every five years. Current statistical result of the study is valid to represent the current financial satisfaction of the elderly in Malaysia, and yet, may not appropriate to represent in the next five years.

5.6 Conclusion

In conclusion, the objectives and hypotheses in chapter one has been fulfilled through statistical analysis in chapter four. The results of the research project has been summarized in this chapter as well as all independent variables likes education level, source of income, assets holding, monthly expenditure have a significant positive relationship with financial satisfaction. Meanwhile, limitations and recommendation of our research project has been listed out for future study. Throughout the study upon financial satisfaction of elderly in Malaysia, this gives some implications for the policy makers and private sector to act on behalf of the result. They may come out some new policies or financial products to meet the growing demand of the elderly. Last but not the least, this research project may not the best study to read the financial behavior and satisfaction of the elderly, but it may be used as a reference for other researchers who are interested in studying aging group.

REFERENCES

Abdul Aziz, R. (2007). Grandparents-Grandchildren Relationships. *Grandparenting: Issues and Challengers* , 110.

Abdul Aziz, R., & Yusooff, F. (2012). *Intergenerational Relationships and Communication among the Rural Aged in Malaysia* , 186, 195.

Abdullah, A. J., Doucouliagos, H., & Manning, E. (2011, September). *Education and Income Inequality: A Meta- Regression Analysis,* 3. Retrieved from http://www.hendrix.edu/uploadedFiles/Departments_and_Programs/Business_ and_Economics/AMAES/Education%20and%20Inequality%20Meta%20Anal ysis%20JABBAR.pdf

Ackerman, N. M., & Paolucci, B. (1983). Objective and subjective income adequacy. *Social Indicators Research,* 12, (pp. 25-48).

Aizan, T., Asnarulkhadi, & Masilawati (2000). Study on older person perceptions, problems and needs in Johor. *Kajian perspesi masalah dan keperluan warga tua Johor.* Universiti Putra Malaysia dan Yayasan Pembangunan Kerajaan Johor

Alavi, K., M. Sail, R., Idris, K., Abu Samah, A., & Omar, M. (2011). Introduction. *Living Arrangement Preference and Family Relationship Expectation of Elderly Parents* , 66

Angeles, L. (2009). *Adaptation and anticipation effects to life events in the United Kingdom.* Discussion paper 2009-08. Department of Economics, University of Glasgow.

Angner, E. (2008). The philosophical foundations of subjective measures of well-being. *Capabilities and Happiness*, 286-298.

Badarulzaman, N. (2007, May 24). *Data Collection and Analysis*. Retrieved March 15, 2012, from http://www.hbp.usm.my/pgs/Drnurwati.pdf

101

Bae, M., S. Hanna and S. Lindamood, (1993). Patterns of overspending in US households. *Financial Counseling and Planning*, 4(1), (pp. l-30).

Bailey, W. C., Woodiel, D. K., Turner, J., & Young, J. (1998). The relationship of financial stress to overall stress and satisfaction. *Personal Finances and Worker Productivity*, 2(2), (pp.198-206).

Bajtelsmit, V. L., Bernasek, A., & Jianakoplos, N. A. (1999). Gender differences in defined contribution pension decisions. *Financial Services Review*, *8*, (pp. 1–10).

Beck, S. H. (1982). Adjustment to and satisfaction with retirement. *Journal of Gerontology,* 37, (pp. 616-624).

Bender, K. A. & Heywood, J. (n.d.). *Job satisfaction of the highly educated: the role of gender, academic tenure and comparison income.* Retrieved March, 7, 2013, from https://docs.google.com/viewer?a=v&q=cache:l6IeWl_DUn4J:citeseerx.ist.ps u.edu/viewdoc/download%3Fdoi%3D10.1.1.198.9447%26rep%3Drep1%26ty pe%3Dpdf+&hl=en&gl=my&pid=bl&srcid=ADGEESj4dC-E7mCE_9g1Jtgp-9JcHVWvqvyONPGeTnnqirXtHD4xSk2tz8IW8uhRYVCH_v_gokIbuB3EkR oMi5i2sBABZ94iqIWcwQp6xtlWM5GlfmozdPyAc22AGggee4glKr2u-5vX&sig=AHIEtbTeB7dDDm9ak5rmt_3rdWvfzfBNwQ

Bernama. (2011, February 28). *Public or Private Hospitals?* Retrieved March 31, 2013, from Malaysiandigest.com: http://www.malaysiandigest.com/features/17848-public-or-private-hospitals.html

Bernama. (2012, December 8). 60-year retirement age limit too late. *New Straits Times.* Retrieved from http://www.nst.com.my/latest/60-year-retirement-age-limit-too-late-1.183172

Bernheim, B.D., & Scholz, J.K. (1993). Private saving and public policy. *Tax Policy and the Economy, 7*, (pp.73-110).

Bethecourt, C. & Perera-Tallo, F. (2011). *Optimal Retirement Age and Aging Population.* Universidad de La Laguna, CAERP*, 1.*

102

Bettis, R. (1981). Performance differences in related and unrelated diversified firms. *Strategic Management Journal, 2* (4), (pp. 379-393).

Bromiley, P., & Curley, S. P. (1992). Individual differences in risk taking. In J. F. Yates (Ed.), *Risk-taking behavior* (pp. 87–132). New York: John Wiley & Sons.

Bunting, D. (1991). Savings and the distribution of income. *Journal of Post Keynesian Economics*, 14(1), (pp. 3-22).

Burholt, V. & Windle, G. (2006). *The material resources and well-being of older people.* (Bangor, Wales: Joseph Rowntree Foundation)

Buwan Ng Wika 2nd Year Trisha. (2010, August). Retrieved from http://www.studymode.com/essays/Buwan-Ng-Wika-2Nd-Year-Trisha-387654.html

Byrnes, J. P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk taking: a meta-analysis. *Psychological Bulletin*, 125, (pp. 367–383).

C. R. Kothari (2009). Method & Techniques (2nd ed). *Research Methodology* (pp. 31-39). New Age International.

Camfield, L., Streuli, N., & Woodhead, M. (2010). Children's Well-being in Developing Countries: A Conceptual and Methodological Review. *European Journal of Development Research, 22*(3),(pp. 398-416).

Carney, S. & Gale, W. (2001). Asset accumulation among low-income households. In T. Shapiro and E. Wolff (Ed.), *Asset for the poor: The benefits of spreading asset ownership* (pp. 165-205). New York: Russell Sage Foundation.

Chan, Y. F., Hamid, T. A., Masud, J., & Paim, L. (2010). Abstract. *Predictors of Financial Dependency in Old Age in Peninsular Malaysia: An Ethnicity Comparison*

103

Cherlin, A. and Furstenberg, F. F. Jr. 1985. Styles and strategies of grandparenting. In V. L. Bengston and J. F. Robertson (eds.). *Grandparenthood*. (pp. 97-116). Beverly Hills: Sage

Chin, L. C. (2003). Statistical Methods of Analysis. *World Scientific Books*. Retrieved from http://www.worldscibooks.com/mathematics/5224.html

Chong, S. C., Sia, B. K., Ng, K. K., Lim, C. S., & Ooi, B. C.(2012). Financial Satisfaction and Intergenerational ResourceTransfers among Urban Older Malaysians. *American Journal of Scientific Research, © EuroJournals Publishing,* 34.

Chor S. N. & DaVanzo, J. (1999). Parentchild co-residence and quasi co-residence in Peninsular Malaysia. *Southeast Asian Journal of Social Science*, 27(2), (pp.43-64).

CIA World Factbook. (2013, February 21). *Malaysia Urbanization*. Retrieved March 29, 2013, from Index Mundi: http://www.indexmundi.com/malaysia/urbanization.html

Clark, A. E. & Georgellis, Y. (2010). Back to baseline in Britain: Adaptation in the BHPS. *Paris School of Economics working paper* No. 2010-02.

Clark, A., Diener, E., Georgellis, Y., & Lucas, R. (2008). Lags and leads in life satisfaction: A test of the baseline hypothesis. *Economic Journal*, 118, F222-F239.

Clark. A. E. (1996). Satisfaction and comparison income. *Journal of Public Economics* , 359-381.

Country Report Population and Poverty in Malaysia (2002). Retrieved March 28, 2012, from https://docs.google.com/viewer?a=v&q=cache:qrlq3eFhwRcJ:www.unescap.org/esid/psis/population/5appc/doc/Malaysia_country_report.doc+country+report+population+and+poverty+in+malaysia&hl=en&gl=my&pid=bl&srcid=ADGEESjyTltHhhHQE33vNirgFsrU71dO3GM6Rgn85N5kZpsVqLhi-O_vAMgv_e_3jnUwNlhLPL5pAp8M5lWtB1SNp9A62zGH3NvINU1Tug4G

104

JwqJhRPnJX2EOONpRe807QTFLkuY4ppD&sig=AHIEtbTlej0tS6vqA9OYu
GBq4B6c5ssQmw

Danes, S. M. (1998). Multiple roles, balance between work and leisure, and satisfaction with level of living. *Family and Consumer Sciences Research Journal*, 26, (pp.401-424).

Davis, E. P., & Schumm, W. R. (1987a). Family financial satisfaction: The impact of reference point. *Home Economics Research Journal,* 14, (pp.123-131).

Davis, E.P. & Schumm, W.R. (1987b). Savings behavior and satisfaction with savings: A comparison of low- and highincome groups. Home Economics Research Journal, 15(4),(pp. 247-256).

Deaton, A. (2007). *Income, aging, health and wellbeing around the world: Evidence from the Gallup World Poll.* NBER Working Paper No. 13317. National Bureau of Economic Research, Inc.

De Lissovoy, G., Kasper, J. D., Di Carlo, S., & Gabel, J. (1990). *Changes in Retiree Health Benefits: Results of a National Survey,* 27(3), 289-293. Retrieved from http://www.jstor.org/discover/10.2307/29772142?uid=3738672&uid=2&uid=4&sid=21102182522047

Department of Statistics, Malaysia. (n.d.). *Distribution of Population (Number & Percemtage) And Average Annual Population Growth Rate by States, 1980-2010.* Retrieved March 25, 2012, from http://www.statistics.gov.my/portal/images/stories/files/LatestReleases/banci/jadual1.pdf

Department of Statistics, Malaysia. (2010). *Population and Housing Census.* Retrieved from http://www.statistics.gov.my/portal/index.php?option=com_content&view=article&id=1215%3Apopulation-distribution-and-basic-demographic-characteristic-report-population-and-housing-census-malaysia-2010-updated-2972011&catid=130%3Apopulation-distribution-and-basic-demographic-characteristic-report-population-and-housing-census-malaysia-2010&lang=en

DeVaney, S. A., & Lytton, R. T. (1995). Household insolvency: A review of household debt repayment, delinquency and bankruptcy, 4(2), pp. 137-156. Retrieved from http://www2.stetson.edu/fsr/abstracts2/v4-2a6.pdf

Diane Rowland, Sc. D., & Barbara Lyons (1996). Medicare, Medicaid, and the Elderly Poor. Health Care Financing Review, 62. Retrieved from http://www.socialsecurity.gov/history/pdf/RowlandandLyons.pdf

Dictionary.com. (2013). *Aging*. Retrieved March 28, 2013, from http://dictionary.reference.com/browse/aging

Dictionary.com. (2013). *Remittance*. Retrieved March 8, 2013, from http://dictionary.reference.com/browse/remittance

Diener, E. & Biswas-Diener, R. (2002). 'Will money increase subjective well-being? A Literature Review and Guide to Needed Research', *Social Indicators Research*, 57, (pp.119-169).

Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: Revising the adaptation theory of well-being. *American Psychologist*, 61(4), (pp. 305-314).

Diener, E., Diener, M., & Diener, C.L.(1995). Factors predicting the subjective well-being of nations. *Journal of Personality and social psychology*, 69, (pp. 851-864).

Doyle, D. P., and Forehand, M. J. (1984). Life satisfaction and old age: A reexamination. Research on Aging, 6, (pp.432-448).

Draughn, P.S., Leboeuf, R.C., Wozniak, P. S., Lawrence, F.C., & Welch, L. R. (1994). Divorcee's economic well-being and financial adequacy as related to interfamily grants. *Journal of Divorce and Remarriage,* 22, 23-35.

Drentea, P., & Lavrakas, P. J. (2000). Over the limit: The association among health, race and debt. *Social Science & Medicine*, 50, (pp.517–529).

Easterlin, R.A., (1974). Does economic growth improve the human lot? Some empirical evidence. In: P.A. David and M.W. Reder (eds.). *Nations and Households in Economic Growth. Essays in Honor of Moses*, 89-125. Abramowitz. Academic Press, NY.

Easterlin, R. A., (1995). Will Raising the Incomes of All Increase the Happiness of All? *Journal of Economic Behavior and Organization*, 27 (1), (pp. 35-47).

Easterlin, R.A., (2001). Income and happiness: Towards a unified theory. *The Economic Journal*, 111, (pp.465-484).

Easterlin, R. A. (2006). Life cycle happiness and its sources: Intersections of psychology, economics, and demography. *Journal of Economic Psychology*, 27, (pp.463-482).

Easton, V., J. & McColl. (2012). *Statistics Glossary*. Retrieved April 5, 2013, from http://www.stats.gla.ac.uk/steps/glossary/sampling.html

Economist IntelligenceUnit. (2009). Healthcare strategies for ageing society. *The Economist,* 12.

Elwell, F. & A. D. Maltbie-Crannell (1981). The impact of role loss upon coping resources and life satisfaction of the elderly. *Journal of Gerontology* 36, (pp. 223-232).

Farlex. (n.d.). Sampling Techiniques. *The Free Dictionary*. Retrieved April 10, 2013, from http://encyclopedia2.thefreedictionary.com/sampling+techniques

Fengler, A.P. & Jensen, L. (1981). Perceived and objective conditions as predictors of the life satisfaction of urban and non-urban elderly. *Journal of Gerontology* 36, (pp.750-752).

Ferrer-i-Carbonell, A., (2002). Subjective Questions to Measure Welfare and Well-Being. *A survey, Tinbergen Institute Discussion paper,* TI 2002-020/3, The Netherlands

Ferring, D. & Filipp, S. H. (1997). *Subjektives wohlbefinden im alder: struktur- und stabilitätsanalysen. Psychologische Beiträge*, 39, (pp.236-258).

Fisher, N. I., & Hall, G. (1969). Risk and corporate rates of return, quarterly. *Journal of Economics*, *83*, (pp.79-92).

Fletcher, C. & Lorenz, F. (1985). Structural influences in the relationship between objective and subjective indicators of economic well-being. *Social Indicators Research*, 16, (pp.333-345).

Flick, U. (1998). *An introduction to qualitative research: Theory, method and applications.* Retrieved from http://books.google.com.my/books?id=sFv1oWX2DoEC&pg=PA4&lpg=PA4 &dq=An+introduction+to+qualitative+research:+Theory,+method+and+appli cations&source=bl&ots=oys0xZOeDK&sig=KbHAE5vE3RKhneZvDc01thPl g8Q&hl=en&sa=X&ei=nQh2UfaUFMrXrQfQ5oGoCw&sqi=2&ved=0CDQ Q6AEwAA#v=onepage&q&f=false

Francoeur, R. B. (2002). Use of an income-equivalence scale to understand age-related changes in financial strain. *Research on Aging*, 24, (pp.445-472).

Freeman, C., Carlson, J., & Sperry, L. (1993). Adlerian marital therapy strategies with middle income couples facing financial stress. *The American Journal of Family Therapy*, 21, (pp.324-332).

Frey, B.S. & Stutzer, A. (2002). *Happiness & economics. How the economy and institutions affect well-being.* Retrieved from http://books.google.com.my/books?id=Fa-3gjzdhDcC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=one page&q&f=false

George, L. K. (1992). Economic status and subjective well-being: A review of the literature and an agenda for future research. In N. E. Cutler, D. W. Gregg & M. P. Lawton (Eds.), *Aging, money, and life satisfaction: Aspects of financial gerontology,* (pp. 69-99). New York: Springer.

George, L. K. (1993). Financial security in later life: the subjective side. *Minimum Retirement Age Act 2012*. Kuala Lumpur: Percetakan Nasional Malaysia Berhad.

Godwin, D. D., & Carroll, D. D. (1986). Financial management attitudes and behaviour of husbands and wives. *Journal of Consumer Studies and Home Economics*, 10, (pp.77-96).

Godwin, D. D. (1994). Antecedents and consequences of newlyweds' cash flow management. *Financial Counseling and Planning*, 5, (pp.161-190).

Grable, J. E., & Joo, S. (1997). Determinants of risk preference: implications for family and consumer sciences professionals. *Family Economics and Resource Management Biennial*, *2*, (pp.19–24).

Grable, J. E., & Lytton, R. H. (1997). Determinants of retirement savings plan participation: a discriminant analysis. *Personal Finances and Worker Productivity*, 1, (pp.184 –189).

Greenley, J. R., Greenberg, J. S., & Brown, R. (1997). Measuring quality of life: A new and practical survey instrument. *Social Work*, 42, (pp.244-254).

Greenspan, A. (2002). Information, Expectations, and Savings for Retirement, .*Behavioral Dimensions of Retirement Economics*. Washington: Brookings Institution and Russell Sage Foundation, 81-115.

Hair, J. F., Bush, R. P., & Ortinau, D. J. (2006). *Marketing research: Within a changing information environment* (3rd ed.). New York: McGraw-Hill.

Hariharan, G., Chapman, K. S., & Domian, D. L. (2000). Risk tolerance and asset allocation for investors nearing retirement. *Financial Services Review*, 9, (pp.159–170).

Hayhoe, C.R., & Wilhelm, M.S. (1998). Modeling perceive economic well-being in a family setting: A gender perspective. *Financial Counselling and Planning,* 9(1), (pp.21-34.)

Hazelrigg, L. E. & Hardy, M. A. (1997). Perceived income adequacy among older adults: Issues of conceptualization and measurement, with an analysis of data. *Research on Aging*, 19, (pp. 69-107)

Heady, B., R, Beehoven & A. Wearing (1991). Top-down versus bottom-up theories of subjective well-being. *Social Indicators Research,* 24, (pp. 81-100)

Heady, B., & Wooden, M. (2004). *The Effects of Wealth and Income on Subjective Well-Being and I'll- Being.* Retrieved from http://ideas.repec.org/p/iza/izadps/dp1032.html

Headey, B., Muffels, R. & Wooden, M. (2005). Money doesn't buy happiness. Or does it? A reconsideration based on the combined effects of wealth, income and consumption. Schmollers Jahrbuch, 125, (pp. 131-144)

Henry, M. E. (1991). The relationship of life satisfaction to patterns of past employment and homemaking responsibility for older women. *Journal of Woman and Aging*, 3, (pp. 5-31)

Hermalin, A. I., Chang, M. C. & Roan, C. (2002). Economic well-being: Insights from multiple measures of income and assets. (In A. I. Hermalin (Ed.), *The well-being of the elderly in Asia: A four-country comparative study* (pp. 295-360). Ann Arbor: University of Michigan Press.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin, 89*(7), (pp.309-322).

Hira, T. K., & Mugenda, O. (1999a). Do men and women differ in their financial beliefs and behavior? In K. Kitt (Ed.), *Proceedings of Eastern Family Economics Resource Management Association,* 1-8

Hira, T.K., & Mugenda, O. M. (1999b). The relationships between self-worth and financial beliefs, behavior, and satisfaction. *Journal of Family and Consumer Sciences,* 91(4), (pp. 76-82).

Hira, T.K., (1987). Money management practices influencing household asset ownership. *Journal of Consumer Studies & Home Economics*, 11(2), (pp.183-194).

Hong, G., & Swanson, P. M. (1995). Comparison of financial well-being of older woman: 1977 and 1989. *Financial Counseling and Planning,* 6, (pp.129-138).

Hsieh, C. M. (2001). Correlates of financial satisfaction. *International Journal of Aging and Human Development*, 52, (pp.135-153).

Hsieh, C. M. (2002). Trends in financial satisfaction: Does poverty make a difference? *International Journal of Aging and Human Development*, 54, (pp.15-30).

Hsieh, C. M. (2003). Income, age and financial satisfaction. *International Journal of Aging and Human Development*, 56, (pp.89-112).

Hu, T.W., Huang, L.F., Cartwright, W. S. (1988). *Supplemental Health Insurance Enrollment, Premium Payment, and the Effects of Insurance on Health Care Expenditures Among the Elderly.* Unpublished manuscript, 1988.

Hubbard, R.G., Skinner, J., & Zeldes, S.P. (1994). The importance of precautionary motives in explaining individual and aggregate saving. *Carnegie-Rochester Conference Series on Public Policy,* 40, (pp.59-125).

Index Mundi. (2012). *Malaysia Birth Rate.* Retrieved from http://www.indexmundi.com/g/g.aspx?c=my&v=25

Inglehart, R.F. (1990). *Culture shift in advanced industrial society*. Princeton U.P., Princeton, N.J.

Insurance Regulatory Authority. (2013). *Consumer Education.* Retrieved from http://www.ira.go.ke/index.php?option=com_content&view=article&id=73&Itemid=539

Investopedia. (2013). *Asset*. Retrieved March 20, 2013, from Investopedia: http://www.investopedia.com/terms/a/asset.asp

111

Investopedia. (2013). *Remittance*. Retrieved March 5, 2013, from Investopedia: http://www.investopedia.com/terms/r/remittance.asp#axzz2Fnf80t9e

Iyengar, P. (2013). Financial Satisfaction- How much is enough ? *Moneycontrol.com.* Retrieved from http://www.moneycontrol.com/news/mf-experts/financial-satisfaction-how-much-is-enough_545555.html

Jo, B. & Stephen, M. (2004). Educational Inequality and the Expansion of UK Higher Education. *Scottish Journal Of Political Economy,* 51(2), (pp.230-249).

Johnson, R.W. & Neumark D. (1996). Wage Declines Among Older Men. *The Review of Economics and Statistics*. LXXCIII(3), 740-748

Johnson, W. & Krueger, R. F. (2006). How money buys happiness: Genetic and environmental processes linking finances and life satisfaction. *Journal of Personality and Social Psychology*, 90, (pp.680-691).

Joo, S. (1998). *Personal financial wellness and worker job productivity.* Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg.

Joo, S., & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, 25, (pp.25-50).

Kaur, G. (2006*). Income Under the Head Salaries-I.* Retrieved from http://www.du.ac.in/fileadmin/DU/Academics/course_material/TM_04.pdf

Kendall, M. G. & Stuart, A. (1961). *The advanced Theory of Statistics*. New York: Charles Griffin Publishers

Kitov, I. (2006). Abstract. *Modelling the Average Income Dependence on Work Experience in the USA from 1967 to2002* . Retreived from http://arxiv.org/ftp/arxiv/papers/0811/0811.0489.pdf

Knight, J. B. and Sabot, R. H.,1983, Educational Expansion and the Kuznets Effect. *American Economic Review,. Education, Productivity, and Inequality: The East African Natural Experiment.* 73(5), (pp.1132-1136) New York: Oxford University Press.

Krasko, V. (n.d.). Consumer behavior and its Types. *Income as a Factor of Consumer Behavior of Latvian Inhabitants in Economics and Tourism* , 2.

Laws of Malaysia. (2012). Retrieved from http://www.federalgazette.agc.gov.my/outputaktap/20120209_A1420_BI_JW 001763%20Act%20A1420-BI.pdf

La Barbera, P. A. & Gurhan, Z. (1997). The Role of Materialism, Religiosity, and Demographics in Subjective Well-being. *Psychology & Marketing,* 14, (pp.71-97).

Laerd Statistics (n.d.). *Pearson Product-Moment Correlation*. Retrieved March 28, 2012, from https://statistics.laerd.com/statistical-guides/pearson-correlation-coefficient-statistical-guide.php

Lee, S., M.H. Park & C.P. Montalto, (2000). The effect of family life cycle and financial management practices on household saving patterns. *Journal of Korean Home Economics Association English Edition*: 1(1).

Likert, Rensis. (n.d.). "A Technique for the Measurement of Attitudes." *Archives of Psychology,* 140 (1932), (pp.1-55).

Lin. J., Gao. C., Zhuang. R. & Chen. N.(n.d.). *Emploring Correlation between Education Level, Income Level and Job Satisfaction in Gippsland*. Retrieved March 20, 2012 from http://agribusinessgippsland.com.au/doc/AGIUoM_Report.pdf

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Malhotra, N. K. (2007). *Marketing research: An applied orientation* (5th ed.). Upper Saddle River, NJ: Prentice Hall

Malhotra, N. K., & Peterson, M. (2006). *Basic marketing research: A decision making approach* (2nd ed.). New Jersey: Prentice Hall.

Masud, J., Haron, S. A., Hamid, T. A., & Zainaludin, Z. (2006). Economic wellbeing of the elderly: Gender differences. *Consumer Interest Annual*, 56, (pp.426-431).

Masud, J., Haron, S. A., & Gikonyo, L. W. (2008). *Gender Differences in Income Sources of the Elderly in Penindular Malaysia*, 625,629 & 631.

Mat, R. & Taha, H.M. (2003). Socio-economic characteristics of elderly in Malaysia. *Department of Statistic,Malaysia.*

McCubbin, H. I., & Patterson, J. M. (1983a). Family stress and adaptation to crises: A Double ABCX Model of family behavior. In D. H. Olson & R. C. Miller (Eds.), *Family studies review yearbook*, 1 (pp. 87–106). Beverly Hills, CA: Sage.

McCubbin, H. I., & Patterson, J. M. (1983b). The family stress process: The Double ABCX Model of family adjustment and adaptation. In H. I. McCubbin, M. Sussman, & J. M. Patterson (Eds.), *Social stress and the family: Advances and developments in family stress theory and research* (pp. 7–37). New York: Haworth

Mehta, K. (1997) *Social Security and Economic Well-being of Older Persons in ASEAN: The Singapore Scenario in Proceedings 1996 Celebrations: National Day for the Elderly.*

Merriam-Webster. (n.d.). *Social Security.* Retrieved April 4, 2013, from http://www.merriam-webster.com/dictionary/social%20security

Merriam, S.B., & Mohamad, M. (2000). *How cultural values shape learning in older 123 adulthood: The case of Malaysia. Adult Education Quarterly*, 51(1), (pp.45-64).

Mirowsky, J. & Ross, C. E. (1999). Economic hardship declines with age: Reply to Hardy & Hazelrigg. *American Sociological Review*, 64, (pp.577-584).

Morgan, J. N. (1992). Health, work, economic status, and happiness. In N. E. Culter, D. W. Gregg & Lawton, M. P. (Eds.), *Aging, money, and life satisfaction: Aspects of financial gerontology* (pp. 101-133). New York: Springer.

Morse, J. M. (1995). The significance of saturation. *Qualitative Health Research*, 5, (pp.147-149).

Mugenda, O. M., Hira, T. K., & Fanslow, A. M. (1990). Assessing the causal relationship among communication, money management practices, satisfaction with financial status, and satisfaction with quality of life. *Lifestyles: Family and Economic Issues*, 11, (pp.343-360).

Newman, C., Delaney, L. & Nolan, B. (2008). *A Dynamic Model of the Relationship Between Income and Financial Satisfaction: Evidence from Ireland. The Economic and Social Review*, (pp. 109-111).

Non-probability sampling explained (2012). Retrieved from http://dissertation.laerd.com/articles/non-probability-sampling-explained.php

OECD. (n.d.). Education. *Better Life Index*. Retrieved from http://www.oecdbetterlifeindex.org/topics/education/

Ong F. S. (2001,May). *Ageing in Malaysia: policy and future direction,* p.1.

Olsen, D. A. (1994). Gender differences in dimensionality of social support. *Journal of Applied Psychology*, 24, (pp.1221-1232).

Olson, G. I. & Schober, B. I. (1993). The satisfied poor. *Social Indicators Research*, 28, (pp.173-193).

Pallant, J. (2011). *A Step by step guide to data analysis using SPSS.* (4th ed.). SPSS Survival Manual, 57. Retrieved from

http://cikguamirul.files.wordpress.com/2011/10/spss-survival-manual-4th-edition.pdf

Parker, S. W. (1999). The Determinants of Adult and Elderly Health, Productivity and Labor Supply: Previous Literature. *Elderly Health and Salaries in the Mexican Labor Market* , 7

Peijnenburg, K., Nijman, T., & J.M. Werker, B. (2011). Introduction. *Health Cost Risk: A Potential Solution to the Anuity Puzzle*, 1.

Pemandu. (n.d.). Financial Services- EPP 6 : Accelerating Growth of the Private Pension Industry. *Economic Transformation Programme.* Retrieved April 4, 2013, from http://etp.pemandu.gov.my/Financial_Services-@-Financial_Services_-_EPP_6-;_Accelerating_growth_of_the_private_pension_industry.aspx

Porter, N.M. (1990) Testing a conceptual model of financial well-being. *Financial Counselling and Planning*, 4, (pp.135–164).

Praag, B. & Ferrer-i-Carbonell, A. (2004). *Happiness quantified: A satisfaction calculus approach.* Oxford: Oxford University Press

Primary Data Definition. (n.d.). Retrieved March 14, 2012, from VentureLine: http://www.ventureline.com/accounting-glossary/P/primary-data-definition

Questionnaire design. (n.d.). *Foodborne Disease Outbreaks. Guidelines for Investigation and Control.* 107-108

Remler, D. K., & Ryzin, G. G. (2011). Reliability. In *Research Methods in Practice* (p. 118-123). London: Sage Publication.

RemittancesGateway.org. (2010). *Malaysia.* Retrieved March 10, 2013, from http://www.remittancesgateway.org/index.php/country-information/asia-and-oceania/620-malaysia

Research Methodology: An Introduction (n.d.). Retrieved March 27,2012 from http://www.newagepublishers.com/samplechapter/000896.pdf

Ross, S. A. (1973). The economic theory of agency: The principal's problem. *American Economic Review*, 63, (pp.134-139).

Roszkowski, M. J. (1999). Risk tolerance in financial decisions. In: Cordell, D. M., editor. *Readings in financial planning* (pp. 281–328). Bryn Mawr, PA: The American College

S., Retnanathan. (2010, January 21). Kilinik 1Malaysia Mendapat Sambutan Luar Dugaan. *Bernama.com*. Retrieved from http://www.bernama.com/bernama/v3/bm/news_lite.php?id=470020

Sarndal C., Swensson, B. & Wretman, J., (2003). Model Assisted Survey Sampling. *Sringer,* 9-12.

Schieman, S., Van Gundy, K. & Taylor, J. (2001). Status, role, and resource explanations for age patterns in psychological distress. *Journal of Health and Social Behavior*, 42, (pp. 80-96).

Secondary Data. (n.d.). Retrieved March 14, 2012, from Management Study Guide: http://www.managementstudyguide.com/secondary_data.htm

Seghieri, C., Desantis, G. & Tanturri, M. L. (2006). The richer, the happier? An empirical investigation in selected European countries. Social Indicators Research, 79, (pp.455-476).

Shin, D., & Johnson, D. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research, 5*(1), (pp. 475-492).

Sianova, P. (2010*). Internal marketing Implementation from Leaders and Employees Perspective: Qualitative and Quantitative Approach*. Retrieved from http://lontar.ui.ac.id/file?file=digital/130548-T%2027241-Internal%20marketing-Analisis.pdf

Slagsvold, B. (1985). Inadequate living conditions and yet satisfied in old age. *Ageing -living conditions and quality of life*, NGI report. Oslo: Norsk Gerontologisk Institutt.

Social Security and Welfare Benefits in Malaysia. (n.d.). Retrieved April 4, 2013, from http://kualalumpur.angloinfo.com/information/money/social-security/

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage.

Sulaiman, H., & Masud, J. (2011). Descriptive Analysis. *Determinants of Security of Older Persons in Peninsular Malaysia* , 244.

Sunden, A. E., & Surette, B. J. (1998). Gender differences in the allocation of assets in retirement savings plans. *The American Economic Review*, *88*, (pp.207–211).

Sung, J. & Hanna, S. (1996). Factors Related To Risk Tolerance, *Financial Counseling and Planning*, 7, (pp.11-19).

Sykes, A. O. (n.d.). *An introduction to Regression Analysis.* Retrieved March 27, 2012, from http://www.law.uchicago.edu/files/files/20.Sykes_.Regression.pdf

Tabachnick, B.G. & Fidell, L.S. (2007). *Using multivariate statistics* (5th edn). Boston: Pearson Education.

Tankersley, J. (2012, October 5). *Who Destroyed the Economy? The Case Against the Baby Boomers*. Retrieved March 30, 2013, from The Atlantic: http://www.theatlantic.com/business/archive/2012/10/who-destroyed-the-economy-the-case-against-the-baby-boomers/263291/

The Advanced Learner's Dictionary of Current English, Oxford. (1952), 106.

The Free Dictionary By Farlex (n.d.). *Generalisation.* Retrieved March 27, 2012 from http://www.thefreedictionary.com/generalisation

The Malaysian Insider. (2012, December7). *Minimum Retirement Age Act will be implemented from July 1.* Retrieved from http://www.themalaysianinsider.com/malaysia/article/minimum-retirement-age-act-will-be-implemented-from-july-1

The World Bank. (2008). *The Malaysia-Indonesia Remittance Corridor.* Washington: The International Bank for Reconstruction and Development/ The World Bank.

Thomas, H., Britt, S. & Torjørn, M. (n.d.). Assets and Debts as Determinants of Financial Satisfaction: Theory and Findings. *Financial Satisfaction in Old Age: A Satisfaction Paradox or a Result of Accumulated Wealth?* , 7-8.

Trading Economics. (2012). *Malaysia Inflation Rate.* Retrieved from http://www.tradingeconomics.com/malaysia/inflation-cpi

Understanding Mutual Funds.(n.d.). Retrieved March 24, 2012, from http://www.ici.org/pdf/bro_understanding_mfs_p.pdf

UNICEF. (n.d.). *Malaysia-Statistics.* Retrieved March 24, 2012, from http://www.unicef.org/infobycountry/malaysia_statistics.html

UNDP. (2012). *Remittances.* UNDP. Retrieve from http://www.undp.org/content/dam/undp/library/Poverty%20Reduction/Inclusive%20development/Towards%20Human%20Resilience/Towards_Sustaining MDGProgress_Ch4.pdf

United Nations. (n.d.). Malaysia. *World Population Aging 1950-2050.* Retrieved March 24, 2012, from http://www.un.org/esa/population/publications/worldageing19502050/pdf/135 malay.pdf

United Nations New York. (2007). Development in an Ageing World. *World Economic and Social Survey.* 89-91

USBudgetAlert. (n.d.). *The $3.6 Trillion Federal Budget in FY 2012.* Retrieved April 4, 2013, from http://usbudgetalert.com/spending.php

U.S. Census Bureau. (2004). Historical Income Tables - People. *Age-People (All Races) by Mean Income and Sex: 1967 to 2001*. Retrieved from http://www.census.gov/hhes/income/histinc/p09.html

Vera-Toscano, E., Ateca-Amestoy, V., & Serrano-Del-Rosal, R. (2006). Introduction. *Building Financial Satisfaction* , 2-3.

Wilcox-Gök, V., & Rubin, J. (1994, June). *Health Insurance Coverage Among the Elderly.* Retrieved March 20, 2013, from http://www.sciencedirect.com/science/article/pii/0277953694901147

Wilkinson, W. (2007). Old age, modest income and financial satisfaction. *The Journal of the American Enterprise Institute*. Retrieved 12 October 2010, from http://www.american.com/archive/2007/june-0607/old-age-modest-income2014and-financialsatisfaction

William, N., (2005). Research Method, *Your Research Project.* (pp. 302). London: Sage Publication.

Wolff, E.N. (1998). Recent trends in wealth ownership, from 1983 to 1998. In T. M. Shapiro & E.N. Wolff (Eds.), *Assets for the poor: Benefits and mechanisms of spreading asset ownership* (pp. 34-73). New York: Russell Sage Foundation.

Xiao, J. J. (2008). A Conceptual Framework of Personal Financial Wellness. *Handbook of Consumer Finance Research* , 31

Xiao, J., Tang, C., & Shim, S. (2009). Acting for happiness: Financial behavior and life satisfaction of college students. *Social Indicators Research, 92*(1), 53-68.

Zimmermann, A. C. (2006, July). Financial satisfaction over the life cycle: The influence of assets and liabilities. Retrieved from http://www-bcf.usc.edu/~easterl/CV_AnkeZimmermann.pdf

APPENDICES

APPENDIX A

<u>Section I: Respondent's Background</u>

A1   Gender: 1. Male   2. Female

A2   Age: _____ years old

A3   Ethnic group:
- 1. Malays
- 2. Chinese
- 3. Indians
- 4. Others, please specify_____

A4   Religion:
- 1. Islam
- 2. Christianity
- 3. Hinduism
- 4. Buddhism
- 5. Taoism
- 6. Others, please specify _____

A5   Present marital status:
- 1. Never married
- 2. Currently married
- 3. Windowed
- 4. Divorced/ Separated
- 5. Others, please specify _____

A6   Educational level:
- 0. No schooling
- 1. Primary
- 2. Secondary
- 3. Pre-university/ Form six/ A level
- 4. Certificate/ Disploma
- 5. Degree
- 6. Others, specify _____

A7   Type of living quarters:
- 1. Attap/ Kampung house
- 2. Terrace House
- 3. Shophouse
- 4. Apartment/ Condominium
- 5. Flat
- 6. Semi-derached/ Bungalow House
- 7. Others, specify _____

A8   Ownership of living quarters:
- 1. Own
- 2. Spouse
- 3. Children/ Grandchildren
- 4. Rented
- 5. Provided by employer
- 6. Others, specify_____

121

| A9 | Have you ever worked? | 0. No (Go to A14) | 1. Yes |

| A10 | Did you work for money for the last 12 months? | 0. No (Go to A13) | 1. Yes |

A11 What is your current emploment status?
1. Employed full time
2. Employed art time
3. Retired & employed full time
4. Retired & employed part time
5. Retired and not employed
6. Employer
7. Own account worker/ self-employed
8. Unpaid family worker
9. Housewife
10. Other, specify_____

A12 Income in the last 12 months:
1. Less than RM 12,000
2. RM 12,000-17,999
3. RM 18,000-23,99
4. RM 24,000-29,999
5. RM 30,000-35,999
6. RM 36,000-47,999
7. RM 48,000-59,999
8. RM 60,000-71,199
9. RM 72,000 and above

A13 What was your employment status?
1. Employee (private)
2. Employee (government)
3. Employer
4. Unpaid family worker
5. Self-employed
6. Housewife
7. Retired
8. Other, specify _____

A14 How doyou perceive your overall health?
1. Very poor
2. Poor
3. Fairly poor
4. Neither poor nor good
5. Fairly good
6. Good
7. Very good

A15 Do you have any chronic health problem?
0. No
1. Yes, please specify _____

A16　Have you been ill during the last six (6) months?
　　　0. No　　　　　　　　1. Yes

A17　Did you seek treatment for this (last) illness?
　　　0. No　　　　　　　　1. Yes

A18　Where did you seek treatment for the (last) illness? (Multiple Answers)
　　　1. Government
　　　hospital　　　　　　2. Government clinic　　　3. Private hospital
　　　4. Private clinic　　　5. Traditional healer　　　6. Others, specify _____

　　　In general, would you say your eyesight or hearing
A19　is
　　　Eyesight:　　0　　　　　　　　1 Very bad　　　2. Bad　　　　　　3. Average
　　　　　　　　　4.
　　　　　　　　　Good　　　　　　5. Very good
　　　Hearing　　　0　　　　　　　　1 Very bad　　　2. Bad　　　　　　3. Average
　　　　　　　　　4.
　　　　　　　　　Good　　　　　　5. Very good
　　　Remark　　　0. respondent is blind/deaf

Section II : Financial Satisfaction of Respondents
B4. How satisfied are you with the following statements? Please circle the most appropriate number. The meaning of the scale:

Section III : Financial Status of Respondents
C1. In the past year, what were your other sources of income? Please tick (√)
　　　(i.)　　　Salary　　　　　　　　　　　　　　　(　　　)

1 Very unsatisfactory	2 Unsatisfactory	3 Fairly unsatisfactory	4 Neither unsatisfactory nor satisfactory	5 Fairly satisfactory	6 Satisfactory			7 Very satisfactory		
i.	How satisfied are you with your current financial satisfaction?					1	2	3	4 5	6 7
ii.	How satisfied are you with your current money saved?					1	2	3	4 5	6 7
iii.	How satisfied are you with your current amount of money owed?					1	2	3	4 5	6 7
iv.	How satisfied are you with your current preparedness to meet emergencies?					1	2	3	4 5	6 7
v.	How satisfied are you with your current financial management skills?					1	2	3	4 5	6 7
vi.	How comfortable and well-off are you financially?					1	2	3	4 5	6 7

(ii.)	Pension fund	(	)
(iii.)	Provident fund/KWSP	(	)
(iv.)	Rental	(	)
(v.)	Saving and fixed deposit	(	)
(vi.)	Dividend and other investment returns	(	)
(vii.)	Remittances (e.g. migrant husband)	(	)
(viii.)	Pocket money from children	(	)
(ix.)	Pocket money from grandchildren	(	)
(x.)	Relatives	(	)
(xi.)	Friends	(	)
(xii.)	Other income, specify	(	)

C2. What personal assets do you own? Please tick (√)
List of assets

i.	House	(	)
ii.	Land	(	)
iii.	Motorcar	(	)
iv.	Van, Lorry	(	)
v.	Motorcycle	(	)
vi.	Jewellery	(	)
vii.	Cash in bank & fixed deposit (FD) in Malaysia and overseas	(	)
viii.	Unit trust (such as ASN, ASB, ASW, Public Mutual,…)	(	)
ix.	Company shares	(	)

C3. On average, how much is your monthly household expenditure?
RM_____ per month

C4. What is your monthly contribution to household expenditure? Please CIRCLE
0%   10%   20%   30%   40%   50%   60%   70%   80%   90%   100%

C5. On average, how much do you spend on the following items per month?

No	Items	RM/month
i.	Rental / House loan instalment	( )
ii.	Car instalment / Transportation	( )
iii.	Water and electricity bills	( )
iv.	Foods	( )
v.	Medical	( )
vi.	Telephone, hand phone, internet bills	( )
vii.	Books, magazines and newspaper	( )
viii.	Entertainment (Café and others)	( )
ix.	Clothing, Footwear & Personal Items	( )
x.	Other specify,_____	

Table 1: Demographic Profile of Elderly in Selangor, Malaysia

Characteristics	%	N	Characteristics	%	N
Gender			**Ethnic Group**		
Male	46.9	354	Malays	37.1	280
Female	53.1	400	Chinese	40.7	307
			Indians	22.1	167
Age Group			**Education Level**		
50-59	56.6	427	Certificate/Diploma	3.6	27
60-69	29.3	221	Degree	5.7	43
70 and above	14.1	106	STPM/A-level	6.4	48
			No schooling	14.7	111
			Primary	32.0	241
			Secondary	37.7	284
Type of Living Quarters			**Ownership of Living Quarters**		
Shophouse	2.4	18	Parent	.4	3
Semi-detached/Bungalow house	7.7	58	Relative	1.7	13
Attap/Kg house	8.1	61	Employer	2.0	15
Apartment/Condominium	8.6	65	Rented	7.0	53
Flat	12.7	96	Child/Grandchild	18.2	137
Terrace house	60.5	456	Spouse	18.6	140
			Own	52.1	393
Employment Status			**Income in the Last 12 months**		
Employer	1.6	12	RM60000-71199	1.6	12
Employed part time	2.1	16	RM72000+	1.6	12
Retired and employed part time	3.3	25	RM30000-35999	1.9	14
Retired and employed full time	4.8	36	RM48000-59999	2.1	16
Own account worker/self employed	11.0	83	RM36000-47999	2.5	19
Retired and not employed	20.6	155	RM24000-29000	2.8	21
Employed full time	22.3	168	RM18000-23999	3.7	28
Housewife	34.4	259	RM12000-17999	6.2	47
			Less than RM12000	28.4	214
			No income	49.2	371

Overall Health Perceived					
Very poor	1.3	10	**Places to seek Treatment for Illness**		
Neither poor nor good	6.6	50	Government hospital	28.6	216
Poor	8.1	61	Government clinic	13.1	99
Very good	9.7	73	Private hospital	7.3	55
Fairly poor	16.2	122	Private clinic	13.8	104
Fairly good	27.9	210	Traditional healer	1.9	14
Good	30.2	228			