Universiti Utara Malaysia

THE INFLUENCE OF FINANCIAL LITERACY, SELF-PROCRASTINATION AND FUTURE TIME-PERSPECTIVE ON EMPLOYEES' RETIREMENT SAVING BEHAVIOR IN KEDAH

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ABSTRACT

This study aims to investigate the factors affecting the saving behavior for retirement among workers in Kedah. This is because there is an issue where Malaysians workers having problem regarding their retirement savings that is not enough for retirement purposes. This study investigates the relationship between financial knowledge, self-suspension and future perspectives on saving behavior. Using a sample of 400 workers in the state of Kedah, the results showed that there is a direct significant relationship between the financial knowledge, self-suspension and perspective of the future with the saving attitude for retirement. The contribution of this study aimed to provide ideas and contributions to the government and the community in designing policy and future research presentations.

Keywords: *financial literacy, self-procrastination, future time perspective, retirement saving behavior*

ABSTRAK

Kajian ini bertujuan untuk menyiasat faktor yang mempengaruhi gelagat menabung untuk persaraan dqlqm kalangan pekerja di Kedah. Ini adalah kerana terdapat isu di mana rakyat Malaysia yang bekerja menghadapi masalah simpanan tabung persaraan yang tidak mencukupi untuk tujuan persaraan. Kajian ini menyelidik hubungan antara pengetahuan kewangan, penangguhan diri dan perspektif tentang masa hadapan terhadap gelagat menabung. Dengan menggunakan sampel 400 orang pekerja di negeri Kedah, hasil kajian menunjukkan bahawa terdapat hubungan langsung yang signifikasi di antara pengetahuan kewangan, penangguhan diri dan perspektif tentang masa hadapan dengan sikap menabung untuk persaraan. Sumbangan kajian ini bertujuan untuk memberikan idea dan sumbangan kepada kerajaan dan masyarakat untuk membuat dasar dan pembentangan penyelidikan pada masa hadapan.

Kata kunci: pengetahuan kewangan, penangguhan diri, perspektif tentang masa depan, sikap menabung untuk persaraan

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LIST OF ABBREVIATION

EPF	Employees Provident Fund
MDL	Malaysian Insolvency Department
SPSS	Statistical Package for the Social Sciences
BNM	Bank Negara Malaysia
PRS	Private Retirement Scheme
TMT	Temporal Motivation Theory

CHAPTER ONE

INTRODUCTION

1.1   Overview

According to Mansor, Hong, Abu and Shaari (2015), 'retirement' is defined as the act of leaving employment, career or occupation permanently. The measurement of retirement savings from a psychological perspective is to determine whether individuals believe they are saving enough to retire comfortably (Brucker & Leppel, 2013). Retirement savings is important because people are living longer, and the life span of Malaysians has increased to 75 years old according to the The Malay Mail, dated October 31, 2016. Retirement savings is one of the biggest issues and challenges faced by a retiree. As we grow older, we will become poorer as our source of income diminishes due to inflation. According to the Securities Commission of Malaysia, the Employees Provident Fund (EPF) has revised the quantum amount for basic savings, starting from RM196,800 to RM228,000 (minimum EPF target amount savings for 55 years and above). This is considered sufficient to support a member's basic retirement needs due to the rising cost of living, longer life expectancy and a higher inflation rate.

EPF is a scheme that provides retirement income to the retirees in Malaysia and was introduced in 1951. It is a contribution scheme funded by both the employee and the employer. It is a huge concern when the majority of Malaysian workers who are covered under the EPF scheme are private sector workers (EPF, 2015), because they

rely on EPF for future retirement. EPF is their source of funds for retirement, while civil servants can opt for this scheme after a compulsory contribution into the fund for three years. The issue of inadequate retirement savings has become a growing concern for Malaysians.

The Malaysian Insight dated November 29, 2017, reported that three out of four Malaysians were unable to raise RM1,000 in an emergency and they are also unable to contribute to their own savings after spending on their families. In Malaysia, there is little individual involvement in the process of saving for old age or retirement, especially when members depend only on EPF for their retirement. Malaysians have little confidence about preparing for retirement plans due to lack of financial illiteracy (Lusardi & Mitchell, 2011; 2014).

A study conducted by EPF, which appeared in the Star Online dated March 17, 2011, found that almost 70% of the members used up all of their savings within 10 years after withdrawal, and 41% of the Malaysian workers have inadequate retirement savings and did not start early to save their money (HSBC, 2015). A study by Hwee, Lin and Sellapan (2010) stated that only an estimated 34% (one third) of the final salary of individuals in Malaysia contribute towards plans in EPF after retirement and are able to be withdrawn from their pension pots at the age of 55 (The Star Online, 2016).

According to a study by Helman, Copeland and VanDerhei (2010), almost half of the American working population is not confident that they will be able to live

comfortably after retirement. Similarly, in the Netherlands, many workers believe that future pension income alone will not be sufficient to make ends meet (AFM, 2011). Retirement needs proper planning to ensure that retirees have enough to support themselves due to the rising cost of living in Malaysia. This is one of the reasons why employees need to plan early to have a strong financial backing for retirement.

Everyone in the workforce knows that it is important to save for retirement to cover the basic needs such as living cost, daily expenses, emergencies, medical costs and outstanding loans. However, they only start to save when they come nearer to retirement. This will lead to an alarming situation whereby the individual lacks a proper source of funds. (Martin, Guillemette, & Browning 2016). Therefore, this study intends to investigate the influence of financial literacy, self-procrastination and future time-perspective on retirement saving behavior.

1.2   Problem Statement

Nowadays, the insufficiency of retirement savings amongst individuals has become an important issue in Malaysia. Several newspaper articles such as the Star Online dated   March 17, 2011 and the Malaysian Insight dated November 29, 2017, mentioned that Malaysians are living longer but are not as well-prepared for their retirement, leading to a "growing old, growing poor" scenario among retirees in Malaysia (The Malay Mail, 2016).

Malaysia defines 'senior citizen' as someone who is above the age of 60. According to the Statistics Department, those above 65 years old make up 1.9 million, or 6% of the population. By 2030, the United Nations estimates that the elderly population will increase to 15%, officially turning Malaysia into an ageing country (Annink et al., 2016). Everyone ages and while retirement may be comforting, it is also nerve-racking. Retirees no longer enjoy the routine of drawing a monthly salary, meaning a heavy reliance on savings and pensions. The latest data suggests that Malaysians are living longer, beyond the national average.
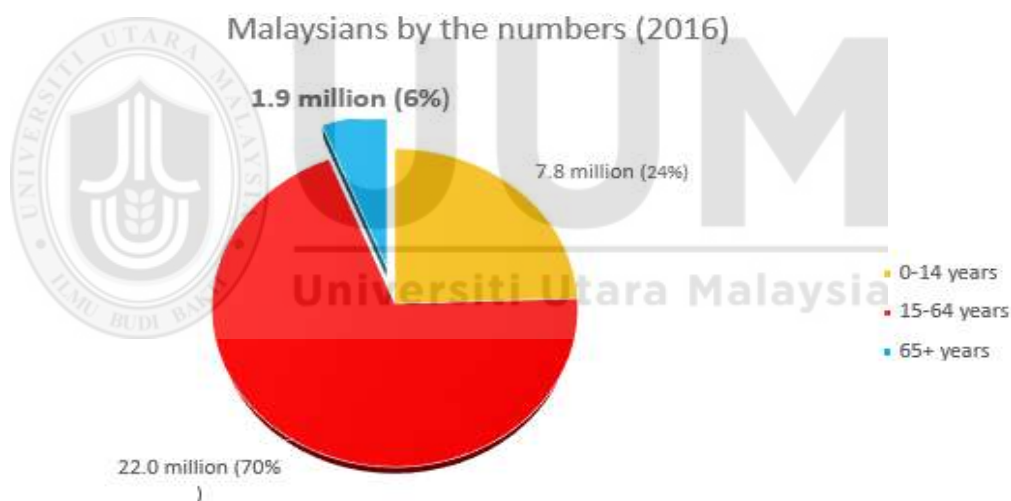
Figure 1.1
*Malaysians by the Numbers (2016)*
Source: Department of Statistics Malaysia

According to the Deputy Finance Minister, Chua Tee Yong, Malaysians can fully withdraw their retirement savings from EPF at 55 years old, but many people tend to spend all their savings within three to five years after a full withdrawal. This shows that many EPF contributors did not have enough savings when they reached 55 years

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old (Hassan, Ahmad, Rahim, Zainuddin, & Merican, 2015). According to the New Straits Time Online, it was reported that there are 6.7 million active contributors aged 54 years that contributed to EPF, but only 22 percent of them are able to retire with sufficient savings of RM196,800 or more to sustain themselves throughout retirement (2016). The other 78 percent of the contributors did not have the minimum recommended amount required for retirement. The issue of inadequate retirement wealth has a significant impact on the retirees in Malaysia.

EPF stated that contributors aged 54 who only have RM50,000 or less in their savings will only be able to sustain their lifestyle for five years with a monthly spending of RM800 before depleting their savings (Ismail, 2015). There are many findings by other researchers on the issue of retirement saving behavior in different contexts. However, comprehensive factors that are likely to have an impact on workers are scarce.

In Malaysia, the size of the elderly population is 1.4 million in 2010, and it is expected to rise to 4.4 million in 2040 due to increased life expectancy. The life span for Malaysian males and females on average are 71.7 years and 75 years, respectively. Furthermore, Ibrahim (2012) stated that the average lifespan increased in the year 2014 among Malaysians. The life span has increased in 2014 compared to 1970, from 68.2 years to 77.2 years for women and from 63.5 years to 72.5 years for men (Malaysian Department of Statistics, 2015).

The aging issue that Malaysians encounter is one of the main challenges, where they have to face inadequacy of savings upon retirement. The issue of retirement creates challenges among the ageing population in the long term due to the increased retirement age, rising cost of living, and insufficient savings (Annink et al., 2016). On the basis of the above considerations, a compelling case can be made for research that examines why individuals fail to adequately prepare for retirement.

Since there are not many known researches that investigate the influence of financial literacy, self-procrastination, and future time perspective on retirement saving behavior in a single framework, this study will thus be able to fulfill the research gap. It is important to understand the factors that influence the retirement saving behavior so that a proper financial strategy can be formulated to assist prospective retirees in terms of savings and investments.

1.3 Research Questions

i. Does financial literacy influence retirement saving behavior among workers in Kedah?

ii. Does self-procrastination influence retirement saving behavior among workers in Kedah?

iii. Does future time perspective influence retirement saving behavior among workers in Kedah?

1.4 Research Objectives

The idea behind the research is to investigate the influence of financial literacy, self-procrastination and future time perspective toward retirement saving behavior. The research objective is to find the relationship between procrastination, financial literacy, future time perspective and retirement saving behavior.

i. To investigate the relationship between financial literacy and retirement saving behavior among workers in Kedah.

ii. To investigate the relationship between self-procrastination and retirement saving behavior among workers in Kedah.

iii. To investigate the relationship between future time perspective and retirement saving behavior among workers in Kedah.

1.5 Significance of the Study

Several studies have already been conducted elsewhere, especially in western countries. The significance of the study can close the gap because there is an inadequate number of studies that have been conducted in the context of Malaysia. These findings are useful because they offer an insight into financial literacy, self-procrastination and future time perspective by giving awareness on financial behavior to financial planners and institutions. From a theoretical point of view, there are limited studies which had combined these three independent variables into one single framework. Even though there are studies which had been conducted in Malaysia, they looked into a combination of different variables. Much of the literature on retirement saving focused on the influence of demographic factors. This

line of work has shown that age (Bassett, Fleming & Rodrigues, 1998; Glass & Kilpatrick, 1998b), income (Bassett et al., 1998; Grable & Lytton, 1997; Mitchell & Moore,1998), educational level (DeVaney & Su, 1997; Yuh & Olson, 1997), marital status (Cohn,Lewellen, Lease & Schlarbaum, 1975; Glass & Kilpatrick, 1998a; Henkens, 1999), and gender (Behling, Kilty & Foster, 1983; Hurd & Wise, 1989; Quick & Moen, 1998) are all systematically related to retirement saving practices. Often overlooked, however, are psychological influences on planning and saving. Therefore, this study aims to contribute to the body of knowledge by investigating the influence of financial literacy, self-procrastination, and future time perspective on retirement saving behavior.

1.6 Definition of Keys Terms

Financial literacy

According to Remund (2010), financial literacy is a person's ability to understand and use financial matters. Huston (2010) considers financial literacy as including awareness, knowledge and the availability and application of financial instruments in business and personal life.

Self-procrastination

Procrastination represents the voluntary delay of an intended action and can be conceptualized as an avoidant coping strategy, which falls under the broader family of self-regulatory failures (Sirois & Pychyl, 2013).

Future-time perspective

Future time perspective (FTP) is a psychological trait that determines individuals'
tendency to think about future events (Koposko & Hershey, 2014) and the degree to
which they consider future states when making decisions about their lives (Van
Dalen et al., 2010).

Retirement saving behavior

The measure of retirement saving, from a psychological perspective, is to determine
whether individuals believe they are saving enough to retire comfortably (Brucker &
Leppel, 2013).

1.7   Organization of the Thesis

This thesis consists of five chapters. Chapter One presents the background to the
study, the statement of the problem, research questions and research objectives. It
also explains the significance of the study and the definition of keys terms. The
organizations of the thesis is also provided in Chapter One.

Chapter Two reviews previous studies that are related to the variables of financial
literacy, self-procrastination and future time perspective on retirement saving
behavior. The theories that have influenced the design and the progress of the study
are presented and discussed in detail in Chapter Two.

Chapter Three provides the proposed framework of the research, hypotheses
development, the design of research, measurable of variables, sampling and sampling

techniques. In addition to these issues, data collection procedures and the methods of data analysis are also provided in Chapter Three.

Chapter Four presents in detail the results of the data analysis. Chapter Four also discusses the findings of the study with reference to each research question and the findings reported by previous studies.

Chapter Five summarizes the key findings of research based on objectives as well as the significant theoretical implications and recommendations for future research. Lastly this chapter deals with the conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

The objective of this chapter is to discuss the impact of financial literacy, self-procrastination and the future effect of retirement saving behavior. The following literature review provides the foundation for the proposed study by providing an outline of the model of financial literacy, self-procrastination, future time perspective, and retirement saving behavior. The review begins with the discussion on the dependent and independent variables followed by an elaboration on the underpinning theory, research framework and hypotheses development.

2.2   Retirement Saving Behavior

Retirement was defined by Bonsang and Klein (2012) as a major life event that affects individual well-being in various ways namely in terms of economy, social and psychology. Retirement saving behavior issues are a known concern everywhere. For the individuals of the generation Y, retirement may still seem far in the future. However, there is a need to make plans ahead to ensure that the potential retiree possesses enough savings and are not in the risk of financial complications as their source of income would diminish. Therefore, it is of upmost importance to have a strong financial backup. It is much easier to implement healthy saving habits at a young age depending on personal choice (Hershey, Jacobs-Lawson & Austin, 2013). A proper retirement plan can provide a guideline in the usage of an individual's

earnings to achieve his/her retirement goal. A better financial plan can provide an individual with a peace of mind and ensures that future needs and resources are all in control.

Retirement planning requires an even longer period to develop when longevity is increased (Kesavayuth, 2015; Legutko, 2014). For instance, longevity could be foreseen among Malaysians where the average lifespan for men is 71.7 years and 75 years for women. Various issues amongst the society could arise as the effect of the failure to save for retirement. Employees in Malaysia face a challenging retirement complication due to improper preparation prior to retiring. According to a study by Tan and Lim (2011), a retirement saving plan is important for individuals to prepare financially for retirement, but not everyone is equipped with this plan. Several studies have found that there is a strong relationship between knowledge and behavior (Lusardi & Mitchell, 2011; Robb, Babiarz, & Woodyard, 2012).

In addition, the spending and saving attitude where consumers tend to spend first then save, or save first then spend, becomes a predicament in money management. Consumers tends to delay their involvement in financial planning which results in a behavior known as procrastination. Thus, the younger generation are encouraged to plan earlier and set a retirement fund as one of their priorities after graduation. In conjunction, it is desirable to instill the habit of saving at a young age and for it to be a continuous practice because the lack of discipline in financial management will cause overspending habits and the rise of bankruptcy among young Malaysians. These habits lead to the inability to pay financial loans and credit card loans. As

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reported by The Star Online (2013), 41 Malaysians are declared bankrupt every day with the majority of them being under the age of 44. The main reasons cited are the inability to pay off car loans, personal loans, and poor control of credit card usage.

2.3 Financial Literacy

One of the key determinants of retirement saving behavior is widely discussed in financial literacy. Lusardi (2015) quoted the definition by OECD (2014), whereby financial literacy is the knowledge and understanding of financial concepts and risks; the skills, motivation and confidence to apply such knowledge and understanding to make effective decisions across a range of financial contexts; to improve the financial well-being of individuals and society; and to enable participation in economic life. Studies also indicate that the saving behavior of the individual is influenced by financial literacy (Banks et al., 2009; Jappelli & Padula, 2011).

The main cause of poor retirement planning and insufficient savings for retirement is low financial literacy, which has become an alarming concern among Malaysians (Lusardi & Mitchell, 2011; 2014). According to Remund (2010), financial literacy assesses an individual's level of understanding of the basic concepts of finance, along with the capability and confidence to manage his or her own money. It has a significant impact on retirement saving decisions (Jacobs-Lawson & Hershey, 2005).

The impact of inflation could be minimized by saving at an early age, and one could also fully take advantage of the compounding effect. The study by Beckman (2013) found that financial literacy has a positive impact on household savings behavior in

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Romania. People who are financially literate tend to be more confident of their retirement preparation compared to those who are financially illiterate (Mullock & Turcotte, 2012). Those who are financially literate understand the importance of retirement planning and will hence accumulate wealth as preparation for retirement. In contrast, people who are financially illiterate tend to overestimate their savings and pension income (Alessie, Van Rooij & Lusardi, 2011).

According to a study by Resende and Zeidan (2015), financial knowledge would likely influence the ability to plan and save. Consumers with low financial literacy will tend to have less financial knowledge and are often confused with the range of financial and investment products compared to consumers with high financial literacy. The latter tends to choose a better fund to invest in order to achieve financial freedom. Hence, there is a relationship between financial literacy and saving (Friedman & Scholnick, 2014; Yang & Devaney, 2011; Bearden & Haws, 2012; Lynch, Netemeyer, Spiller & Zammit, 2010).

It is very important to educate the consumers. especially the younger generation of different ages. about the concept of financial literacy to ensure they reduce mistakes in financial planning and achieve financial freedom at the earliest possible stage of their lives (Balloch, 2014). A report by the Malaysian Insolvency Department (MDL) showed that there is an increase of 25% in bankruptcy rate among civil servants between 2005 to December 2010 (Berita Harian, 2012).

Sufficient knowledge in financial literacy enables people to decrease their chances of bankruptcy and poor consumer decision-making (Hayhoe, Leach, Turner, Bruin & Lawrence, 2000). Individuals today must take on greater responsibility for their financial decisions, such as investing in additional education, saving for a child's education, or planning for retirement. As such, it is not possible to navigate in today's world successfully without being financially literate.

Financial literacy is crucial in order to live a fair quality of life in this century. Numerous academic works support the notion that there is a positive relationship between financial knowledge or financial literacy and investment decisions. Ali (2015) defined financial literacy as measuring how well an individual can understand and use personal finance-related information (Huston, 2010). Atkinson and Messy (2011) explained further by defining financial literacy as a combination of awareness, knowledge, skills, attitude and behaviors necessary to make sound financial decisions and ultimately achieve individual financial well-being.

2.4 Self-Procrastination

Ferrari and Diaz-Morales (2014) defined procrastination as the behavior of a person who favors delay in making a decision that interrupts the task to start planning for their desired lifestyle during retirement. This situation occurs among the general population in their daily lives. On the other hand, Bauselas (2014) defined procrastination as a character trait which adversely affects saving by individuals. The term procrastination can be interpreted as excuses or a process where consumers

delay making decisions, which are called self-regulatory failure and delay retirement savings planning (Sirois, 2014).

Furthermore, the majority of Malaysians still practice the "wait and see" behavior and postpone retirement savings plans until they believe they are in a better position financially, which is also considered as an irrational delay of behavior that will lead to financial difficulties in future (Edererand & Essau, 2014). Therefore, procrastination is an unwanted personality trait in relation to retirement saving behavior in general (O' Donoghue & Rabin, 2001). Empirical research remains scant in the field of finance, but findings suggest that procrastinators are more likely to fail to plan for retirement than people who are more proactive (Ferrari, Barnes & Steel, 2009).

It is a norm for some people to fail to save for their retirement (Munnell, Webb & Golub-Sass, 2009). For example, a person should transfer his/her retirement savings from her current account to another fixed alternative that could yield higher interest, but since this transfer requires effort, the person may procrastinate. A study by Tanaka, Camerer and Nguyen (2010) shows that procrastination negatively predicts income. Procrastination is one of the character traits that may moderate the relationships between planning, saving predictors and outcomes (Brooks, 2013). This attitude and laid-back behavior will cause most Malaysian consumers to enter the job market again after running out of money during retired life to handle their retirement living expenses, resulting in socioeconomic problems in Malaysia.

Economists Akerlof (1991) and O'Donoghue and Rabin (1999) consider the relative lack of retirement saving behavior as a form of procrastination, where many began preparing for their later years far too late. From the reviews by Steel (2011), procrastination is associated with lower wealth, health and well-being. According to Tappolet (2010), people tend to procrastinate because they do not anticipate the consequences for their future, and will then have to deal with consequences of putting off work later. According to Yaakub (2000), procrastinators know that a good financial future begins with an early preparation to save for retirement, but they fail to take the necessary actions, resulting in their own effort being wasted or delayed, which would lead them to find excuses to reach their future goals (Ferrari & Díaz-Morales, 2007).

Similarly, there is a negative correlation between procrastinators with self-reported financial success (Mehrabian, 2000). Furthermore, procrastination can be interpreted as poor self-regulation from the study by Fogel and Nutter-Upha (2011). From a psychological point of view, procrastination is a dimension of conscientiousness according to Steel (2007), which considers itself as one of the "Big Five" personality traits in psychology literature. From an economical point of view, procrastination comes from biased preferences where the individual tends to postpone tasks until tomorrow and when tomorrow comes, the required action will be delayed again, as mentioned by George Akerlof (Ely Lecture, 1991). Those who wait until the last day or tomorrow can be labeled as "procrastinators" by Steel (2007).

Non-procrastinators will commence their retirement plans in advance to achieve their desired lifestyle compared to procrastinators. There would be times when some people procrastinate about spending less and saving more financially, which will result in a delay in saving for retirement. According to the study by Choi et al. (2011), procrastinators tend to postpone the action of taking an optimal savings plan. Statistics from surveys on procrastination showed that 40% of people have experienced financial loss due to procrastination (Gura, 2008), which supports the claim above.

The later consumers begin accumulating their retirement savings, the lower the amount of savings they will end up with when they retire due to the strong negative relationship between procrastination and financial well-being (Elliot, 2011). Furthermore, financial troubles will arise if one delays the practice of saving for retirement because retirement saving is a long-term goal as mentioned by Helman, Copeland and Vanderhei (2011).

2.5   Future Time Perspective

Future time perspective is classified as a psychological view where individuals focus on the future, rather than focus on the present or on the past (Koposko & Hershey, 2014). Gupta et al. (2012) stated that these types of people tend to procrastinate less, preferring to act immediately rather than delay planning for the future. Ellen, Wiener and Fitzgerald (2012) used a broad conceptualization of the future time perspective by asking participants to imagine how they might be in the future. The results showed that individuals who were asked to envision their end goals clearer became

more eager to save as it acts as a motivation to be more financially productive in the future (Van Dalen et al., 2010). This can be adapted to further measure future time perspective in more quantifiable constructs such as achievements, goal setting and individual well-being.

Future time perspective was initially viewed through a four-dimensional model, compromising of extension, density, coherence, and directionality by Trommsdorff (1983) and Kastenbaum (1961). Researchers further improved and proposed new theoretical conceptualizations in approaching the future time perspective. Currently, the main models used are the Consideration of Future Consequences by Strathman, Gleicher, Boninger and Edwards, (1994), Five Factors of Time Perspective by Zimbardo and Boyd (1999), and the Socioemotional Selectivity Theory by Cate and John (2007).

As modern interpretations unravel, future time perspective begins to evolve in its meaning. According to Koposko and Hershey (2014), it is a psychological variable of people who are more future oriented and are recognized as having a trait that predicts people's attitudes and behaviors due to their over-tendency to think about future events. Those possessing these characteristics will be more effective at planning and saving for retirement compared to those who lack it (Knoll, Tamborini & Whitman, 2012).

Other interpretations examined future time perspective from a different aspect. According to Zhang and Howell (2011), it factored in individual personality

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construct differences together with life satisfaction. The research showed that future time perspective plays an important role in a retirees' life during old age, especially on retirement saving behavior. Morton and Tom (2010) mentioned that many people fail to save what they need for retirement due to the lack of future time perspective, as the future orientation of individuals is related to the tendency to plan and save for future events. This includes behavior to save for retirement, showing that those with a future-oriented mindset will prepare early for their financial goals and retirement plan rather than being unprepared for it.

Future time perspective, financial knowledge, and financial risk tolerance are all important variables that correlates to the individuals' retirement saving practices (Jacobs-Lawson & Hershey, 2005). Hershey, Jacobs-Lawson and Austin (2013) noted that future time perspective has a direct relationship with retirement savings in the financial domain. Knoll, Tamborini, and Whitman (2012) discussed the importance of taking a long-term perspective on retirement savings, showing that those who prepare earlier have a better grasp of their situation.

For the purposes of this investigation, the future time perspective scale by Hershey and Mowen (2000) will be used. Desmyter and De Raedt (2012) examined that time perspective has a positive relationship with well-being in a survey in Belgium among senior-aged respondents. A study by Adams and Rau (2011) showed that financial knowledge, retirement goal clarity, and future time perspective were closely linked to effective retirement planning and saving behavior. Hershey and Mowen (2000) found that among individuals aged 35–88 years, future time perspective is positively

associated with saving for retirement. Jacobs, Lawson and Hershey (2005) found a similar three-way interaction between financial knowledge, future time perspective and risk tolerance that predicted perceived financial savings adequacy.

2.6 Underpinning Theory

The theory used in this study is the Temporal Motivation Theory (TMT), developed by Piers Steel and Cornelius J. König (2006). This is an integrative motivational theory, placing time as a critical, motivational factor that can be applied to human behavior, procrastination and goal setting. This theory integrates primary principles of multiple major theories, including the expectancy theory, hyperbolic discounting, need theory and cumulative prospect theory. Besides that, Schmidt, Dolis and Tolli (2009) mentioned that using this theory may help to develop an understanding of the impact of time and deadlines on dynamic attention allocation. According to Lord, Diefenforff, Schmidt and Hall (2010), TMT represents a unique model which argues that the perceived utility of a given activity increases tremendously as the deadline approaches. These theories cover the pervasive notion of procrastination.

2.7 Theoretical Framework

The theoretical framework is based on the literature reviews and research problems. The focal point of this study is to test the relationship between the financial literacy, self-procrastination and future time perspective as independent variables and how it affects retirement saving behavior as the dependent variable.

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Independent variable   **Dependent variable**

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┌─────────────────────────────┐
│     FINANCIAL LITERACY      │──────┐
└─────────────────────────────┘      │
                                       │        ┌──────────────────────────┐
┌─────────────────────────────┐      ├───────▶│   RETIREMENT SAVING       │
│    SELF-PROCRASTINATION     │──────┤        │      BEHAVIOR             │
└─────────────────────────────┘      │        └──────────────────────────┘
                                       │
┌─────────────────────────────┐      │
│   FUTURE TIME PERSPECTIVE    │──────┘
└─────────────────────────────┘
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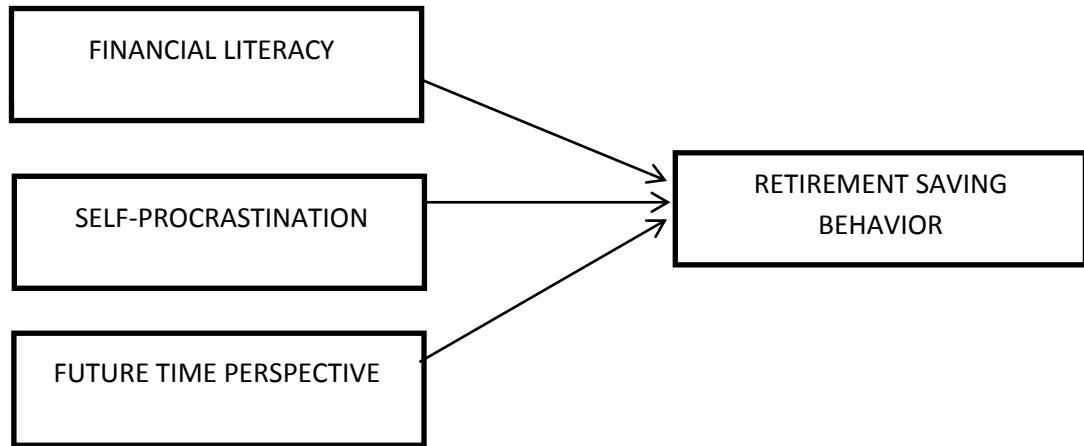
Figure 2.1
Theoretical Framework
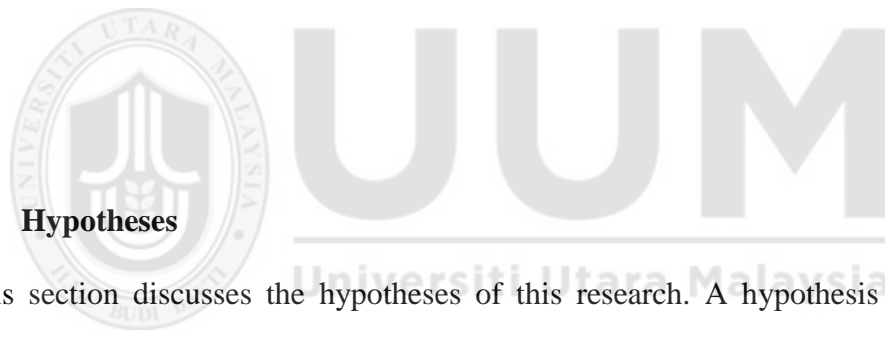
2.8 Hypotheses

This section discusses the hypotheses of this research. A hypothesis is a relation statement between two or more variables which represent the expected relationship between the independent variables and dependent variables. Based on previous literature review and the research objectives as outlined in Chapter Two, three hypotheses have been developed. The proposed hypotheses of this study are as follows:

The study by Delafrooz et al. (2011) included financial literacy as the key determinant of saving behavior in their study. Previous research also showed an interaction of financial literacy as having a positive link between financial

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knowledge and financial behavior through the document of Hilgert, Hogarth, and Beverly (2003). People who are financially literate tend to be more confident of their retirement preparation compared to those who are financially illiterate (Mullock & Turcotte, 2012). Those who are exposed to more financial knowledge are considered more likely to make retirement saving contributions (Hershey et al., 2007). There is a correlation between financial literacy and savings behavior as specified in the proposed framework supported by the study of Sabri et al. (2008), which concluded that financial literacy is an important factor in determining saving behavior. Hence, there is a relationship between financial literacy and saving (Friedman & Scholnick, 2014; Yang & Devaney, 2011; Bearden & Haws, 2012; Lynch, Netemeyer, Spiller, & Zammit, 2010). Therefore, the following hypothesis is proposed:

H1: There is a relationship between financial literacy and saving behavior among workers in Kedah.

Procrastination can be interpreted as excuses or the process where people delay making decisions, which are called self-regulatory failure and delaying tasks such as saving for retirement (Sirois, 2014). According to Yaakub (2000), procrastinators know what they should do and know how a confident financial future begins with an early preparation to save for retirement. However, in the end, they fail to take the necessary actions and finally delay their own efforts. From the reviews by Steel (2011), procrastination is associated with lower wealth, health and well-being. Bauselas (2014) showed that procrastination as a character trait adversely affects saving by individuals. Furthermore, Edererand and Essau (2014) stated that the

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majority of Malaysians still apply a "wait and see" behavior and delay the process to save for retirement until they are in a better position financially, which is also considered as an irrational delay behavior which may lead to financial trouble in the future. Therefore, the following hypothesis is proposed:

H2: There is a relationship between procrastination and retirement saving behavior among workers in Kedah.

According from the study Earl et al. (2015), the relationship between time orientation and saving for retirement is well established. It is demonstrated that those who have a future orientation are more prone to save for their retirement (Van Dalen et al., 2010). In the finance domain, future time perspective has consistently been shown to have a direct correlation with amount saved for retirement. People with high imagination will be able to visualize their future retirement, and thus will be more involved in financial planning activities for retirement from the point of conceptualization. (Ellen, Wiener & Fitzgerald, 2012). It is demonstrated that those who have a future orientation are more prone to save for their retirement (Van Dalen et al., 2010). These findings convincingly reveal that one's future orientation is likely to have a significant impact on saving behaviors. Therefore, the following hypothesis is proposed:

H3: There is a relationship between future time perspective and retirement saving behavior among workers in Kedah.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter highlights the research method used in this study. All researchers need to identify the most suitable methodology to organize the data collected. This chapter covers the research design, measurement, data collection procedure, data analysis techniques and others. According Sekaran (2003), the research method is the technique to conduct research and to collect, analyse and evaluate the accuracy of the data in the research.

3.1 Research Design

According to Zikmud (2011), there is no perfect research methodology in a study. The approach adopted depends on the research questions and research objectives that enable researchers to seek for an answer. Furthermore, the decision to adopt any research methodology is always a compromise between options or choices (Zikmud, 2011). The choices to be adopted are also frequently influenced by the availability of resources and skills possessed by the researcher themselves.

The main objective of this study is to investigate the retirement saving behavior among workers in Kedah. There are several other factors that influence retirement saving behavior. In order to build a deep understanding, this study conducted an

initial research in literature on factors impacting financial literacy, self-procrastination and future time perspective after reviewing theories which had focused on similar areas of study. This research adopted the questionnaire approach, where the respondents are asked to complete a self-administered questionnaire.

There are three types of traditional research designs which are exploratory design, descriptive design and causal design. Descriptive research is used to describe answers to questions of who, what, where, when and how. The descriptive research is desirable to project a study's findings to a larger population if the study's sample is representative of where the sample is randomly selected. To evaluate the efficacy of the model presented in the theoretical framework, a descriptive quantitative research design is clearly appropriate to measure how financial literacy, self-procrastination and future time perspective (independent variables) influence retirement saving behavior (dependable variable).

The basic question–response formats will use a labeled scaled-response which is the 5-point Likert scale. The format of a typical five-level Likert item is 'Strongly Disagree', 'Disagree', 'Neither Agree nor Disagree', 'Agree', and 'Strongly Agree', which allows respondents to express the degree/intensity of feelings. Besides that, this rating scale is simple to administer and code, and the researchers and respondents can relate to the scale. The 5-point Likert scale is simple to construct, likely to produce a highly reliable scale and easy to read and complete for the participants.

The questionnaire is a popular way of gathering information and is easy to understand, as all respondents are presented with the same questions. It can save time in a number of ways where respondents can complete a questionnaire in their own time and place without rushing and can relax while responding, which makes it easier for a researcher to collect information from a number of respondents at once.

This type of survey is a way for respondents to remain anonymous and there is no interview-evaluation apprehension. The absence of an interviewer provides greater anonymity for the respondent. This is especially helpful when the survey deals with sensitive issues such as questions about involvement in a gang, because respondents are more likely to respond to sensitive questions when they are not face-to-face with an interviewer which can elicit more insightful information from the respondents. The advantage of using self-administered surveys is that it enables researchers to save cost through interviewing devices such as a computer program.

3.2   Population

The target population for this study consist of workers in Kedah, and the population is 910,900 workers.

3.3   Sample and Sampling Design

The respondents for this survey come from Alor Setar and Sungai Petani. Four hundred and fifty (450) questionnaires have been distributed to employees in Alor Setar and Sungai Petani. The sampling involves a selection of elements, following prescribed rules from a defined population (Czaja & Blair, 1996). The questionnaire

was distributed by selecting the respondents based on the n-th person until the minimum sample requirement was achieved.

The process of sampling involves using n'th number of items. For every n'th respondent, the 3rd, 6th, 9th and following person will be approached to make conclusions about the entire population and its purpose. This is to enable one to estimate the unknown characteristics of the population (Zikmund, 2000).

Table 3.1
Table for Sample Size

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

Source: Sekaran (2000)

Referring to Sekaran's (2000) sample size table, three hundred and eighty-one (381) respondents were selected to participate in the study as the sample. However, for the purpose of this study, 450 questionnaires were distributed. The larger the random sample, the more accurate it is, which means that there would be less sample error.

3.4 Unit of Analysis

The unit of analysis for this study is individual. Workers from government and private companies were asked fill in the questionnaires adapted from previous studies (Cadogan & Veloutsou, 2015).

3.5 Questionnaire Design

In this study, the questions were principally based and adapted from a number of items found by prominent scholars. The questions were based on and adapted from a few noted studies that have been carried out successfully. Gorard (2001) assured that the advantages of using such previous instruments and questions are considered because the instruments used have been piloted, used previously, are mature and ready to be used, probably on a far larger scale than the researcher could envisage. This can carry some extra authority for the readers of this study.

The questions were translated to Bahasa Malaysia to enable participants to understand the questions clearly and to suit the context of the study. The data was then analyzed using SPSS. The measuring instrument used in this research was divided into two sections and the data was collected by means of a structured questionnaire, as attached in Appendix . The questionnaire consisted of two sections,

namely Section A (demography) and Section B (construct measurement). The questionnaire for retirement saving behavior (dependable variable) consists of financial literacy, self-procrastination and future time perspective (independent variable) and was accompanied by a cover letter. The cover letter introduced the research and ensured that the respondents were knowledgeable about the purpose of the research.

3.6   Measurement Item

Section A included ten demographic questions in variables on which the overall measures analyzed age, gender, race, position, salary range, marital status, education level, saving products, when the respondents began saving and working sector. In this section, the respondents were requested to select an option by making a cross opposite to their selected option. Section B was the construct measurement and is explained in the following.

3.6.1   Retirement Saving Behavior

The retirement saving behavior is measured by adapting five items from the study by Neukam and Hershey (2002) using a 5-point Likert scale. The table below shows the measurement item for retirement saving behavior.

Table 3.2
Retirement Saving Behavior

Code	Items
RS1	I have made meaningful contributions to a voluntary retirement savings plan
RS2	I have saved a great deal for retirement compare to my friends.
RS3	I have accumulated substantial savings for retirement.
RS4	I have made an effort to save for retirement.
RS5	I have saved accordingly based on how I plan to live my life in retirement.

3.6.2 Financial Literacy

The questionnaire consists of six items for financial literacy, which have been adapted from past studies (Hershey & Mowen, 2000; Mowen, Hershey & Jacobs-Lawson, 2000) to assess an individual's general knowledge of the topic regarding retirement saving. The table below shows the measurement item for financial literacy.

Table 3.3
Financial Literacy

Code	Items
FL1	I am very knowledgeable about financial planning for retirement
FL2	I know more than most people about retirement planning.
FL3	I am very confident in my ability to do retirement planning.
FL4	When I have a need for financial services, I know exactly where to obtain information on what to do.

FL5	I am knowledgeable about how EPF works.
FL6	I am knowledgeable about how private investment plans work.

3.6.3 Self-Procrastination

The questionnaire consists of 12 items to measure self-procrastination. The items were adapted from Escala de Procrastination General y Academica (Busko, 1998) to assess individual saving behavior regarding retirement. Table 3.4 shows the measurement item for self-procrastination.

Table 3.4
Self-Procrastination

Code	Items
SP1	When I have a deadline to do something, I wait until the last minute to do it.
SP2	I find excuses not to do what I had to do on retirement saving.
SP3	I tend to waste a lot of time on retirement saving.
SP4	I postpone making hard decisions on retirement saving plan.
SP5	I arrive at my seminar on retirement saving almost always on time.
SP6	I tend to postpone my planning for retirement saving if I get bored.
SP7	I dislike following guidelines about retirement saving.
SP8	Without having a more important purpose I postpone my retirement saving.

SP9	I cannot change my habit of wasting time when dealing with retirement saving.
SP10	I tend to neglect retirement saving if that are too hard for me to save.
SP11	I get distracted with ease when I try to concentrate on topic regarding retirement saving.
SP12	When I make a decision regarding retirement saving, I keep it.

3.6.4 Future Time Perspective

The future time perspective consists of six items. The scale was adapted from the construct developed by Hershey and Mowen (2000) to assess the extent individuals enjoy thinking about and planning for the future regarding retirement. Table 3.5 shows the measurement item for future time perspective.

Table 3.5
Future Time Perspective

Code	Items
FTP1	I follow the advice to save for a rainy day.
FTP2	I enjoy thinking about how I will live years from now in the future.
FTP3	The distant future is too uncertain for me to plan for.
FTP4	The future seems very vague to me.
FTP5	I pretty much live on a day-to-day basis.
FTP6	I enjoy living for the moment and not knowing what tomorrow will bring.

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3.7 Pretest and Pilot Test

3.7.1 Pretest

A pretest is a test conducted to check the validity of the survey, improve the wording and get comments and feedback from the respondents regarding their understanding of the survey questions before developing the final version of the survey (Synodinos, 2003). Lanphear (2001) stated that a pretest reflects the experimental process for testing a new instructional model or techniques before conducting a large-scale research design.

In a pre-test, a small group of respondents is selected to answer the questionnaire to test the appropriateness of the questions. Moreover, a pretest is used to rectify errors before distributing the questionnaire to respondents and reduce bias (Sekaran & Bougie, 2009). In this study, the pretest involved the workers. The pretest was done to ensure that the individuals could follow the instructions and identify items that were poorly written or ambiguous. After the pretest, a minor revision was undertaken on the questionnaire. It is important that the sample for a pilot be representative of the target study population based on Thabane et al. (2010).

3.7.2 Pilot Test

In this study, a pilot test was conducted in the middle of October 2017. The questionnaire was distributed to 30 employees. Data was collected in Ukir Mall. There were no changes required to the questionnaire. The Cronbach's alphas were computed for reliability testing. The accepted range of Cronbach α value in the

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reliability test ranged from 0.7 to 0.9 for all items of each construct. The result is more accurate if the alphas are closer to 1 (Hair et al., 1995).

Some researchers such as Kline (1998) stated that if thes α value is above 0.50, it is considered reliable. Based on Nunally (1967) and George and Mallery (2003), the results for the reliability tests for the study are highly reliable if the items for each construct in the questionnaire have internal consistency.

3.8   Data Screening

Date screening is a step to check for raw data, identify outliers and check for missing data. Date screening was performed to ensure that all the data collected from the questionnaires were ready and clean for further analysis. This is a very important step for all studies to make sure all the data collected are valid and reliable to test the causal theory. Screening, editing and preparation of initial data are essential steps before any further analysis. In addition, preliminary data examination enables the researcher to gain a deeper understanding of the data collected. Therefore, missing data and normality are checked and treated accordingly.

3.9   Data Collection Method

The purpose of this study was to explore the relationship between financial literacy, self-procrastination and future time perspective influence on retirement saving behavior. Data collection was conducted in Ukir Mall and UTC where workers from nearby companies gather to eat breakfast and lunch, and this is the most effective way to meet the research objectives.

For the purpose of this study, 450 questionnaires were distributed among the respondents who come to have breakfast and lunch at Ukir Mall Alor Setar and Wisma Persekutuan, UTC Sungai Petani from 8am to 2pm. For every n'th respondent in this situation, the 3rd, 6th, 9th and following person was approached and the questionnaire was distributed to the respondents using this method.

The data was collected back immediately after the respondents finished answering the survey, and pens were given as a gift. In order to avoid bias, a random selection of participants was adopted to ensure precision of information. The time frame for the survey was around one month and was divided into two weeks in Alor Setar and two weeks in Sungai Petani.

3.10 Data Analysis

Descriptive and inferential statistics such as mean, standard deviation, t-values, and F-values were used to test the regressions. The quantitative data was collected and analyzed using the Statistical Package for the Social Sciences (SPSS) software to provide answers to the research objectives and research questions. Reliability analysis, descriptive analysis and regression analysis were used as statistical tools in this study. Descriptive analysis was used to analyze the demographic variables stated in Section A of the questionnaire. Reliability analysis was used to measure the consistency of all the variables in the study.

CHAPTER FOUR

RESULT AND DISCUSSION

4.1 Introduction

This chapter presents the analysis from the questionnaires distributed to the respondents. All the data was analyzed using Statistical Package for the Social Sciences (SPSS) version 23. The results are presented in five (5) sections. The sections start with the reliability analysis, descriptive analysis, mean score analysis, correlation analysis and hypotheses testing on the variables.

4.2 Response Rate

In total, 450 sets of questionnaires were distributed in Ukir Mall, Wisma Persekutuan Alor Setar and UTC Sungai Petani. Only 400 questionnaires were completed. Therefore, the response rate was only 88.90% of respondents. Most of the questionnaires received were answered completely. According to Sekaran (2010), if the questionnaire has more than 25% unanswered items, the questionnaire is subject to be rejected from the analysis. The summary of the respondents' responses in this study is detailed in Table 4.1 below.

Table 4.1
Respondent Rate

Questionnaire response	Rate (%)
Number of questionnaire distributed	450
Returned questionnaires	400
Response rate	400/450

4.3 Data Screening

Date screening was performed to ensure that all the data collected from the questionnaires are ready and clean for further analysis. The data was screened for missing values and the result showed no missing data identified and no outliers.

4.4 Background of Respondents

Descriptive analysis was conducted to explain the frequency and demographic factors in the study such as gender, age, level of education, college, race, nationality and religion. A total of 450 respondents had participated in this study. However, only 400 sets of questionnaires were returned to run the analysis. The first part of the demographic section was gender. The respondents in this study encompasses two genders, which are male and female. The male respondents involved in this study were 65.80% and the female respondents were 34.30%. In addition, the ages of the respondents were divided into four categories. The summary of the respondents according to gender is shown in Table 4.2.

The majority of the participants in this study are from the age group of 18-29 years old at 24.80%, followed by the age group of 30-39 years old at 41.30%. The age group of 40-49 years old was 19.80%, and lastly, the age group of 50-59 years old was 14.20%. The summary of the respondents according to age group is shown in Table 4.2. Furthermore, the respondents in the study were divided into three categories of races. The respondents were mostly Malay at 81.50%, followed by the Chinese at 15.00% and Indian at 3.50%. The summary of the respondents according to race is shown in Table 4.2. Besides that, there were three categories of marital

status in this study which were from the 'single' category at 24.00%, 'married' category at 74.00%, and divorced/separated//widowed category at 2.00%.

There were five categories of level of education level in this study. Firstly, the respondents from SPM/STPM category was 21.80%. Secondly, the respondents from certificate category was 14.20%. Thirdly, the respondents from the diploma category was 30.00%, followed by the bachelor degree category at 29.00% and the master category was 5.00%. The summary of the respondents according to level of education is shown in Table 4.2. In total, there were three positions/designations provided in the questionnaire. The participation of respondents at manager level was 8.00%, executive level was 20.30% and non-executive level was 16.30%.

The summary of the respondents according to colleges is shown in Table 4.2. There were four types of salary ranges in this study. The respondents who earned less than RM1000 was 4.30%, the salary of RM 1000-RM1999 was 22.50%, followed by RM2000-RM2999 at 27.50% and lastly the employee salary above RM3000 was 45.80%. Additionally, 33.30% of respondents had saving products, 22.50% had ASB products, 28.70% had Tabung Haji products and 15.50% had other products. Employees who had started save from less than one year was 8.30%, followed by employees who started to save between 2-5 years at 22.50% and the employees who started to save after 5 years was 69.30%. The last part of the demographics of the questionnaire was working sector. There were two categories of working sectors in the study. 50.50% of the respondents were from the private sector and 49.50% were from the government sector.

Table 4.2
Summary of Demographic Profile of Respondents (N=400)

Demographic Profile of	Frequency	Percent (%)
1.Age		
18years-29years	99	24.8
30years-39years	165	41.3
40years-49years	79	19.8
50years-59years	57	14.2
Total	400	100.0
2.Gender		
Male	263	65.8
Female	137	34.3
Total	400	100.0
3.Race		
Malay	326	81.5
Chinese	60	15.0
Indian	14	3.5
Total	400	100.0
4.Marital Status		
Single	96	24.0
Married	296	74.0
Divorced/Separated//Widowed	8	2.0
Total	400	100.0
5.Education		
SPM/STPM	87	21.8
Certificate/Sijil	57	14.2
Diploma	120	30.0
Degree/Ijazah	116	29.0
Master/Sarjana	20	5.0
Total	400	100.0

6.Position/Designation

Manager	32	8.0
Executive	81	20.3
Non-Executive	222	55.5
Others	65	16.3
Total	400	100.0

7.Salary Range

Less than RM 1000	17	4.3
Between RM 1000-RM1999	90	22.5
Between RM2000-RM2999	110	27.5
RM3000 and above	183	45.8
Total	400	100.0

8.Saving Products

Savings Accounts	133	33.3
ASB	90	22.5
Tabung Haji	115	28.7
Others	62	15.5
Total	400	100.0

9.Start Saving

Less than 1 year	33	8.3
2- 5 years	90	22.5
More than 5years	277	69.3
Total	400	100.0

10.Working Sectors

Private	202	50.5
Government	198	49.5
Total	400	100.0

4.5   Pretest

The pretest was conducted after giving two employees and two lecturers a brief introduction to the topic. According to the feedback from the four participants, they had difficulty in understanding some of the questions and pointed out some of the mistakes in the Malay translation. Thus, some corrections were made on the questionnaires after the pretest.

4.6   Pilot Test

The purpose of conducting a pilot test is to check the reliability of the item. Reliability analysis is to measure the consistency of the instrument to measure the concept and help access goodness of measure (Cavana et al., 2001). Basically, an alpha coefficient of 0.60 is considered poor but acceptable; those in the range of 0.70 are moderate and those over 0.80 are considered good (Cavana et al., 2000).

Reliability analysis was performed on the data obtained from the actual study to measure the reliability and internal consistency of the scales that were used. The data in this study was collected from 30 respondents, and the reliability analysis was performed based on the dimension and variables of the study. The result of the reliability analysis was in the range of 0.61 to 0.83 as shown in Table 4.3. The Cronbach's alpha value for the independent variable of financial literacy is 0.853, self-procrastination is 0.567, and future time perspective is 0.636.

Furthermore, the Cronbach's alpha value for the dependent variable of retirement saving behavior is .786. The Cronbach's alphas were computed for reliability testing.

According to Hair et al. (1995), acceptable ranges of reliability of most instruments are from 0.7 to 0.9. The closer the alpha to 1, the better the instruments.

Kline (1998) suggested that α value of above 0.50 is considered reliable. Based on the pre-testing exercise, all the items for each construct of the study possessed Cronbach's α value above 0.70. Based on Nunally (1967) and George and Mallery (2003), the items for each construct in the questionnaire are reliable and have internal consistency. The results for the reliability test for this study are highly reliable.

Table 4.3
Reliability Analysis

Variable	Number of items	Cronbach's Alpha
Retirement Saving Behavior	5	0.786
Financial Literacy	6	0.853
Self-Procrastination	12	0.567
Future time perspective	6	0.636

4.7 Normality Analysis

The normality analysis was used to determine the normality of the data distributed in this study. In order to test the normality of data, skewness and kurtosis values for each variable was examined. According Chua (2012), the value of zero (0) for skewness and kurtosis will show 100% normal distribution of the data. Positive skewness value shows that the graph has a positive slant whereas a negative

skewness value shows that the graph has a negative slant. Kurtosis indicate the degree in the peak of the graph.

According to Munro (2005), skewness and kurtosis analysis can determine whether the questionnaires are distributed normally. The data is considered normally distributed if the value of the skewness and kurtosis is between -1.96 and +1.96 at *p<0.05* significant level (Hair et al., 2007).

There are different schools of thought for the value of skewness and kurtosis which considers a questionnaire to be distributed normally. According to George and Mallery (2010), the criteria for normal distribution is when the skewness and kurtosis value is within -2 and 2. Additionally, following a similar argument, Kline (2011) stated that the absolute value of skewness that is greater than 3 and a kurtosis value greater than 10 may indicate a problem. Values above 20 may indicate a more serious problem. Based on this recommendation, the absolute values of the skewness and kurtosis of all the items in this study are within the acceptable range of < 2 and < 7, respectively. The result for the normality test based on the value of skewness and kurtosis of each variable in this study is shown in Table 4.4 below:

Table 4.4
Normality Test of the Variables

Variables	N	Skewness	Kurtosis
Retirement Saving Behavior	400	-0.709	1.994
Financial Literacy	400	-0.171	0.420
Self-Procrastination	400	-0.379	0.456
Future time perspective	400	0.068	-0.234

4.7   Regression Analysis

Regression analysis was performed to identify the predictors of retirement saving behavior. Table 4.5 shows the result of regression analysis among all variables in the study.

Overall, the result for regression analysis was significant at $p<0.05$. The purpose of this study was to establish the relationship financial literacy, self-procrastination and future time perspective and retirement saving behavior.

Table 4.5
Summary of Hypothesis Testing Results

Model		Unstandardized Coefficients		Standardized Coefficients			
		B	Std. Error	Beta		t	Sig.
1	(Constant)	1.959	0.309			6.343	0.000
	TFL	0.564	0.041	0.549		13.823	0.000
	TSP	-0.286	0.076	-0.148		-3.776	0.000
	FTP	0.178	0.044	0.159		4.001	0.000

Table 4.6
Table summary of finding

Hypothesis	Relationship	Beta	T value	Research
H1	Financial literacy and Retirement Saving Behavior	0.549	13.823	Support
H2	Self-Procrastination and Retirement Saving Behavior	-0.148	-3.776	Support
H3	Future Time Perspective Retirement Saving Behavior	0.159	4.001	Support

According to the results, financial literacy has a positive relationship on retirement saving behavior with the t-value = 13.823 and $p < 0.05$. Therefore, H1 is supported. Self-procrastination was found to have a negative relationship with retirement saving behavior with the t-value = -3.776 and $p < 0.05$. Therefore, H2 is supported. Lastly, the future time perspective has a positive relationship with retirement saving behavior with the t-value = 4.001 and $p < 0.05$. Therefore, H3 is supported.

4.9 Summary

This chapter presents the findings of research after the data analysis using SPSS. In particular, the response rate, respondents' profile, and assessment of measurement model including validity and Cronbach's alpha were discussed, followed by the assessment of the structural model to test the direct and indirect effect of the hypotheses.
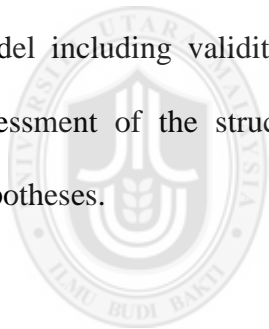
CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1   Introduction

This chapter starts with a discussion on the findings of the study by comparing it with previous studies and existing theories. The purpose of this study was to understand how financial literacy, self-procrastination and future time perspective are associated with retirement saving behavior among workers in Kedah. The research hypotheses were tested with a field survey of 450 respondents. The discussions in this chapter have provided some recommendations on how to improve the behavior to save for retirement among workers. In addition, these recommendations might also be useful for others researching similar topics.

5.2   The Difference of Respondents' Demographics

According to the data collected from the respondents, there were 41.30% respondents from the age range of 30-39 years old. According to the study by Adams and Rau (2011), there is a correlation between age and retirement planning practices. The study by Adams and Rau (2011) showed that men tend to have higher incomes compared to women, and this study had 65.80% male respondents. The education level among the respondents also showed that diploma and degree holders were 30% and 29% higher compared to others. This potentially shows that individuals with a higher education level will tend to have more financial knowledge and form positive behavior regarding retirement because higher levels of education lead to high

intelligence and the likelihood to have better jobs and higher incomes compared to those who are less educated (Lee & Law, 2004).

Respondents who started to save after five years was due to high commitments such as high living costs and debt among the married respondents (74.00%), which caused procrastination and delay to save for retirement. This finding is supported by the research from Reed (2011), who stated that the amount of debt is increasing prior to beginning work. The Malay respondents showed the highest at 81.50% because the population in Kedah is a Malay majority, followed by Chinese and Indians.

5.2.1 Financial Literacy, Self-Procrastination and Future Time Perspective on Retirement Saving Behavior

Based on Table 4.6, H1 is supported as there is a positive relationship between financial literacy and retirement saving behavior. According to the study conducted by Lusardi (2007a), people will not plan for their retirement if they lack financial knowledge. With more financial knowledge and financial management skills, the retirement crisis can be avoided, and people will tend to develop a realistic savings plan and build financial stability. Those who are exposed to more financial knowledge are considered more likely to make retirement savings contributions (Hershey et al., 2007). As a result, people with good knowledge of financial planning are more likely to be prepared for retirement with more savings and investments. People with good financial literacy tend to plan early because they know the importance of the time needed to save for future retirement or for any unexpected problems.

There is a correlation between financial literacy and saving behavior as specified in the proposed framework supported by the study of Sabri et al. (2008), which concluded that financial literacy is an important factor in determining saving behavior. Other researchers (Delafrooz et al., 2011) included financial literacy as the key determinant of saving behavior in their respective studies. In this regard, our evidence is also in line with previous research which showed a positive correlation between financial literacy and financial behavior as stated in the document of Hilgert, Hogarth and Beverly (2003). Furthermore Jacobs-Lawson and Hershey (2005) showed that financial knowledge is positively related to saving for retirement. Thus, the hypothesis proposed in Chapter 2 that there is a relationship between financial literacy and retirement savings behavior is acceptable.

Self-procrastination and retirement saving behavior displayed a negative correlation as shown in Table 4.6. Hence, H2 is supported where there is a negative correlation between self-procrastination and retirement saving behavior. A previous study conducted by Bauselas (2014) showed procrastination as a character trait which adversely affects saving by individuals. Simply put, the term 'procrastination' can be interpreted as excuses or a process where people delay making decisions, which in this context is otherwise called self-regulatory failure and delay of tasks such as saving for retirement (Sirois, 2014). Thus, it is important to prove that procrastination will very likely cause problems during retirement associated with lower wealth and well-being.

Furthermore, these findings were similar and proven by Edererand and Essau (2014) who stated that the majority of Malaysians still apply a "wait and see" behavior and delay the process of saving for retirement until they are in a better financial position. This is considered as an irrational delay behavior, which may lead to financial trouble in the future. This procrastination attitude and laidback behavior will result in many Malaysians re-entering the job market after running out of money after retirement. This adds to the socioeconomic problems in Malaysia. Thus, the hypothesis proposed in Chapter 2 that there is a correlation between self-procrastination and retirement saving behavior is accepted.

As shown in Table 4.6, H3 is supported as there is a positive correlation between future time perspective and retirement saving behavior. A number of studies by researchers such as Jacobs-Lawson and Hershey (2005), Hershey et al. (2008) and Earl et al. (2015) found that the correlation between time orientation and saving for retirement is well established. In the finance domain, future time perspective has consistently been shown to have a direct correlation with the amount saved for retirement.

People with high imagination will be able to visualize their future after retirement, thus will undertake more financial planning activities for retirement from the point of conceptualization (Ellen, Wiener & Fitzgerald, 2012). It was discovered that those who have a future orientation are more prone to save for their retirement (Van Dalen et al., 2010).

Therefore, there is a positive correlation between future time perspective and tendency to save for retirement as stated by Hersey and Moven (2000). Considering all the past studies (Hershey & Mowen, 2000; Lusardi, 1999; Bernheim, Skinner & Weinberg, 1997; Burtless, 1999), these findings convincingly reveal that one's future orientation is likely to have a significant impact on saving behavior. Thus, the hypothesis proposed in Chapter 2 that there is a relationship between future time perspective and retirement saving behavior is accepted.

5.3   Implications

5.3.1 Theoretical Contribution

Based on a comprehensive review of the existing literature on knowledge sharing as presented in previous chapters, the hypotheses predicting various effects of retirement saving behavior were investigated. Empirical data was then collected to test the hypotheses. These findings are useful because they offer an insight into financial literacy in terms of self-procrastination and future time perspective on financial behavior. From a theoretical point of view, there are studies which had combined these three independent variables into one single framework in the context of workers. Thus, the empirical evidence from this study contributes to the body of knowledge in the context of retirement saving behavior among workers in Kedah.

5.3.2   Practical Contribution

This research examines the factors on retirement saving behavior. Malaysian employees should be educated on the importance of retirement saving besides the compulsory employer contributions, otherwise, they may run out of money within a

few years after receiving the lump sum amount upon retirement. Furthermore, as the results indicate that financial management contributes most to retirement confidence, the inclusion of financial management education into retirement planning seminars is relevant (Russell & Stramoski, 2011).

Financial management education increases pre-retirees' awareness of retirement planning. Apart from that, the government can also work in cooperation with the banking sectors to introduce retirement saving plans suitable for the working population. The banking sector has continued to increase their retirement benefit policies to help the retiree such as ASB, Tabung Haji, fixed deposits, rental properties, insurance contracts, and investment plans to help individuals prepare for retirement.

Furthermore, the level of education received by individuals will influence their level of financial literacy. A lower education would mean lower involvement in personal financial planning. Hassan and Lawrance (2007) stated that financial education plays a key role in helping individuals manage their financial well-being and investments.

Professional financial planners such as financial advisors, financial consultants, and wealth advisors should communicate effectively and educate their clients according to various financial literacy levels when delivering their services to clients. This good practice will help spread effective financial saving habits in the country and stimulate economic growth as mentioned by Tang (2010) and subsequently minimize social problems arising from poverty and criminal activities.

The findings of the study are also important for policy makers to maintain an effective saving behavior because this will enable the employees to manage their money effectively. As most researches have emphasized, saving for retirement is a smart idea and financial education programs are the best way to enhance an employee's financial knowledge and skills, thus improve their personal financial attitude (Remund, 2010).

Therefore, it is important for policy makers to develop effective financial education programs and organize seminars or workshops to create awareness on financial management matters among workers in Malaysia. One of the research implications suggests that Bank Negara Malaysia (BNM) works closely with AKPK and collaborate with the Ministry of Education to implement a financial planning module into all private and public companies. The module should contain basic financial issues based on each stage of the personal financial life cycle in order to meet different necessities.

Since pre-retirement planning is more effective if it begins at an early age, therefore, it is important to educate adults who plan to accumulate their future wealth. This is best incorporated as a life-cycle approach. Kail and Cavanaugh (2010) noted that from a life span perspective, aging is a lifelong process of growing up and growing mature. The findings of this study should be a wake-up call to all working individuals to prepare for their retirement early. Everyone needs financial planning to hedge against inflation, create better retirement funds, accumulate wealth and fulfill financial needs.

The findings of the present study have practical implications for financial advisors, educators, retirement counselors, and financial professionals who will be in a better position to motivate individuals to plan and save for old age. It can help them better understand the factors affecting retirement saving behavior to improve their clients' attitudes towards retirement and inculcate the "save first before spend" habit.

According to Disney, Gathergood and Weber (2015), coaching provided by a financial advisor in the area of financial planning could help individuals better understand their personal tendency to put off tasks and start retirement saving. Policy makers can actively organize financial campaigns or talks for companies or government sectors to encourage communication of financial matters between employees to mitigate bad financial habits and overcome personal bankruptcy in Malaysia (The Star, 2013).

The Department of Education should be the leader in providing the opportunities for pre-retirement education to create awareness for young people to change their own personal money habits so that they can plan and save early when they enter the workforce after graduating. If they plan early and start saving for their retirement early, then very likely they will not face financial issues in the future, especially after retiring. They are more willing to approach financial institutions which offers personal financial management and embark on saving for retirement.

This study also suggests that individuals' savings and personal behavior need to be examined closely. Discussions with financial advisors to get professional advice for

proper financial planning and behavior is important to avoid the delaying behavior to plan for the future, which can result in a lack of financial independence later in life (Azkune, Almeida, Lopez & Chen, 2015; Lv, Guo, Liu, Zhang & Jocshi, 2015).

This study also provides opportunities for the eight providers of the private retirement scheme in Malaysia such as AIA, Am Invest, CIMB, HWANG Investment, Kenanga, Manualife, Public Mutual, and RHB to develop a financial program to increase the level of savings into pension schemes such as the Private Retirement Scheme (PRS), which is one of the voluntary long-term investment schemes designed to help employees accumulate savings for retirement. This scheme is aimed at offering all employed or self-employed Malaysians the choice to voluntarily supplement their retirement savings under a regulated retirement scheme and is tailor-made based on their investment objectives, investment needs and risk appetites.
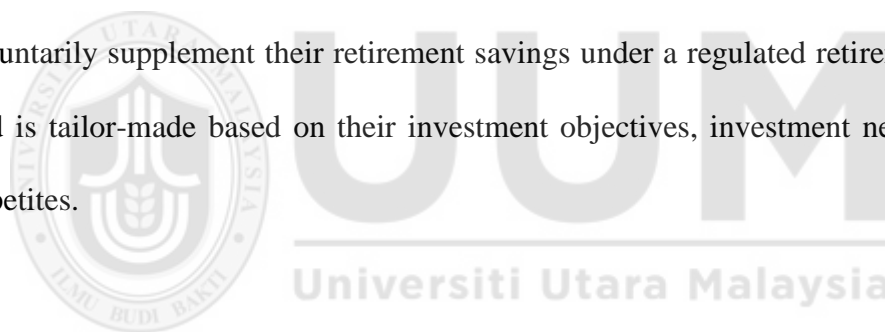
Furthermore, the findings from the investigation of future time perspective can predict proactive planning behaviors which is important for professionals who work in the applied arena to advise the individuals they serve to be future-oriented in their thinking. For example, a financial advisor might review information with clients in which they list specific activities they picture themselves doing during their retirement years, and then have them set specific savings goals to make those activities possible.

5.4   Recommendations for Future Research

In future studies, it is recommended to include financial literacy that links actual financial knowledge which contributes to financial preparation for retirement. It is also recommended to include knowledge about retirement planning in future studies that links actual preparation, not only financially but in all perspectives regarding retirement. Based on the limitations listed, some recommendations for improvement for future studies are as follows.

Firstly, further studies are suggested to be carried out nationwide. This is to ensure that future studies will obtain better and more thorough results on Malaysians' retirement saving behavior and the factors affecting them. The accuracy level of the data obtained can be increased with the balance distribution of questionnaires to people in a wider geographical area with a bigger sample size and various age groups, which may provide findings that could improve this study based on working individuals in the private sector and across the public sector.

Besides that, for future research, it is recommended to investigate age differences in investigating the relationships between financial literacy, self-procrastination and future time perspective with retirement saving behavior by dividing individuals into young, middle aged, and older aged groups. The same analysis will then be run separately for each group. Future research can also be conducted by examining the working individuals within the same industry on their retirement savings behavior like engineers, accountants and lawyers. This might contribute to better findings that could further explain professionals' retirement saving behavior.

Lastly, this research should be conducted for at least four subsequent years to take the respondents' changes of behavior into account. Changes can occur for a short period of time and will affect the answers given by the respondents. Thus, a continuous survey for four subsequent years at most should be carried out to avoid restrictions on the data obtained which might cause inaccuracies and inconsistencies of the results. However, the research conducted for four subsequent years should consider the costs available too.

5.5   Conclusion

In a nutshell, this research project has successfully reached the objective to investigate the retirement saving behavior among employees in Kedah. Based on the outcome, three direct correlation hypotheses were formulated and tested to achieve this research objective. For the first research objective, the research aimed to test the correlation between financial literacy and retirement saving behavior. The result of this study supported this direct correlation. For the second research objective, the research aimed to test the correlation between self-procrastination and retirement saving behavior. The result of this study supported this relationship. Lastly, the third research objective aimed to test the correlation between future time perspective and retirement saving behavior. The result of this study supported this correlation.

REFERENCES

Adams, G.A. & Rau, B.L. (2011). Putting Off Tomorrow to Do What You Want Today. *American Psychologist, 66*(3), 180-192.

AFM, Netherlands Authority of the Financial Markets (2011). AFM Consumentenmonitor Najaar 2011 Pensioen (AFM Consumer Monitor Autumn 2011 Pension) (in Dutch).

Akerlof, G. A. (1991). Procrastination and obedience. *American Economic Review, 81*(2), 1-19.

Annink, A., Den Dulk, L., & Steijn, A. J. (2016). Work-To-Family Conflict Among Employees And The Self-Employed Across Europe. *Social Indicators Research*, *126*, 571–593.

Atkinson Adele and Messy Flore-Anne (2011). Assessing financial literacy in 12 countries: An OECD Pilot Exercise", Centre for Research on Pensions and Welfare Policies, OECD,WP No 115/11

Azkune, G., Almeida, A., Lopez, D., Chen, L. (2015). Latest Trends in Human Activity Modeling. *DYNA, 90*(4). 356.

Bauselas, E. (2014). Executive function: Unity-diversity and developmental trajectories. 11(1), 35-44.

Bearden, W. O., & Haws, K. L. (2012). How Low Spending Control Harms Consumers. *Journal of the Academy of Marketing* Science, 40(1), 181–193

Beckmann, Elisabeth (2013). Financial Literacy and Household Savings in Romania. *Numeracy, 6*(2), 9-20.

Bernheim, B. D., Skinner, J., & Weinberg, S. (1997). What accounts for the variation in retirement wealth among U.S. households? National Bureau of Economic Research Working Paper Series, Working Paper #6227.

Bonsang, E., & Klein, T. J. (2012). Retirement and subjective well-being. *Journal of Economic Behavior and Organization, 83*(3), 311-329.

Brooks, G. (2013). *A Retirement Planning Model With Procrastination Considered*. Proceedings of the Allied Academies' Internet Conference, 15 (2), 1-6.

Brucker, E. And Leppel, K. (2013). Retirement plans: Planners and nonplanners. *Educational Gerontology, 39*(1), 1-11.

Burtless, G. (1999). An economic view of retirement. In H. J. Aaron (Ed.), *Behavioral dimensions of retirement* (pp. 7–42). Washington, D.C.: Brookings Institution Press.

Busko, D. A. (1998). *Causes and consequences of perfectionism and procrastination:A structural equation model*. Tesis de maestrá no publicada. Guelph, Ontario: University of Guelph.

Cate, R.A., & John, O.P. (2007). Testing Models of the Structure and Development of Future Time Perspective: Maintaining a Focus on Opportunities in Middle Age. *Psychology and Aging, 22*(1), 186–201.

Cavana, R.Y., Delahaye, B.L. & Sekaran, U. (2001). *Applied Business Research: Qualitative and Quantitative Methods*. Singapore: John Wiley & Sons.

Choi et al., 2011 J.J. Choi, D. Laibson, B.C. Madrian $100 bills on the sidewalk: Suboptimal investment in 401 (k) plans Rev. *Econ. Stat., 93*(3), 748-763.

Christelis, Dimitris, Dimitris Georgarakos, and Annamaria Lusardi. (2015). The Impact of Bank Account Ownership on Adolescents' Financial Literacy. Work in Progress. Global Financial Literacy Excellence Center, Washington, DC.

Christodoulides, G., Cadogan, J. W., & Veloutsou, C. (2015) Consumer- based brand equity measurement: lessons learned from an international study. *International Marketing Review, 32*(3/4), 307-328.

Chua Yan Piaw (2012). *Asas statistic penyelidikan* (2nd ed.). Kuala Lumpur: Mc Graw Hill Education.

Czaja, R., & Blair. J. (1996). *Designing surveys: a guide to decisions and procedures*. Thousand Oaks, California: Pine Forge.

Delafrooz, N. & Laily (2011). Determinants of saving behavior and financial

Destmyter, F., & De Raedt, R. (2012). The relationship between time perspective and subjective well-being of older adults. *Psychologia Belgica, 52*, 19-38.

Disney, R., Gathergood, J., & Weber, J. (2015). Credit counseling: A substitute for consumer financial literacy? *Journal of Pension Economics and Finance, 14*(4), 466–491.

Earl, Joanne K., Bednall, T.C., & Muratore, A. M. (2015). A Matter of Time: Why Some People Plan for Retirement and Others Do Not. *Work, Aging and Retirement,* doi:10.1093/workar/wau005.

Ellen, P. S., Wiener, J. L., & Fitzgerald, M. P. (2012). Encouraging people to save for their future: Augmenting current efforts with positive visions of the future. *Journal of Public Policy & Marketing, 31*, 58-72.

Factors Associated With Retirement Planning: A study of employees in Malaysian health sectors. *Asian Social Science, 11*(13), 108.

Ferrari, J. R., Barnes, K. L., & Steel, P. (2009). Life Regrets by Avoidant and Arousal Procrastinators: Why Put Off Today What You Will Regret Tomorrow? *Journal of Individual Differences, 30*(3), 163-168.

Ferrari, J. R., Díaz-Morales, J. F., O'Callaghan, J., Díaz, K., & Argumedo, D. (2007). Frequent behavioral delay tendencies by adults: International prevalence rates of chronic procrastination. *Journal of Cross-Cultural Psychology, 38,* 458–464.

Ferrari, JR, Díaz-Morales, JF (2014) Procrastination and mental health coping: A brief report related to students. *Individual Differences Research, 12(*1), 8–11.

Friedline, Terri, William Elliot, and Ilsung Nam. 2011. Predicting Savings in Young Adulthood: The Role of Adolescent Savings. *Journal of the Society for Social Work and Research, 2*(1), 1–22.

Friedman, S. L., & Scholnick, E. K. (2014). The developmental psychology of planning: Why,how, and when do we plan?. *Psychology Press* function. *Journal of Clinical and Experimental Neuropsychology, 33*, 344–357.

George, D. & Mallery, M. (2010). *Using SPSS for Windows step by step: a simple guide and reference.* Boston, MA: Allyn & Bacon.

Gorard, S. (2001). *Quantitative Methods in Educational Research: The Role of Numbers Made Easy*. London:Continuum.

Gupta, R., Hershey, D. A., & Gaur, J. (2012*).* Time perspective and procrastination in the workplace: An empirical investigation. *Current Psychology, 31*(2), 195-211.

Gura, S., (2008). Industrial livestock production and its impact on smallholders in developing countries. Consultancy Report to the League for Pastoral Peoples and Endogenous Livestock Development, Germany, pp: 65. http://www.pastoralpeoples.org/docs/gura_ind_livestock_prod.pdf.

Habib, S. (2007). Counting on the nest egg. Retrieved February 24, 2010, fromhttp://thestar.com.my/news/story.asp?file=/2007/5/27/nation/17754089 &s

Hassan, F. A., Rahim, R. A.., & Zainuddin, T. N.(2015). *A Review of Malaysia's Private Sector Services Retirement and Pension System*. The GAI International Academic Conferences, 2015ec=nation

Hayhoe, C. R., Leach, L. J., Turner, P. R., Bruin, M. J., & Lawrence, F. C. (2000). Differences in spending habits and credit use of college students. *Journal of Consumer Affairs, 34*(1),113-133.

Helman, R., Copeland, C., & VanDerhei, J. (2010). The 2010 Retirement Confidence Survey: Confidence Stabilizing, But Preparations Continue to Erode. Employee Benefit Research Institute Issue Brief, no. 340 (March)

Helman, R., Copeland, C., & VanDerhei, J. (2011). The 2011 retirement confidence survey: Confidence drops to record lows, reflecting the new normal. EBRI Issue Brief, No. 355, Washington, DC: Employee Benefit Research Institute.

Hershey D. A., Jacobs-Lawson J. M., Austin J. T. (2013). Effective financial planning for retirement, in The Oxford Handbook of Retirement, ed Wang M., editor. (Oxford, NY: Oxford University Press), 402–430.

Hershey, D. A., & Mowen, J .C. (2000). Psychological determinants of financial preparedness for retirement. *The Gerontologist*, *40*, 687– 697.

Hershey, D. A., Jacobs-Lawson, J. M., & Neukam, K. A. (2002). Influences of age andgender on workers' goals for retirement. *International Journal of Aging and HumanDevelopment, 55,* 163–179.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Fed. Res. Bull., 89*, 309.

Howell, R. T., & Zhang, J. W. (2011). Do time perspectives predict unique variance in life satisfaction beyond personality traits? *Personality and Individual Differences, 50*, 1261-1266.

Hunt, L. (2009). *Malaysians less confident about preparing retirement.* Retrieved February 24, 2010 from https://www.thestar.com.my/business/business-news/2009/08/22/malaysians-less-confident-about-preparing-for-retirement/

Huston, S. J. (2010). Measuring Financial Literacy. *Journal of Consumer Affairs*, *44*(Summer), 296-316

Hwee JK, Lin LH, & Sellapan RD (2010) Financial planning and youth: Implications in educating generation Y. *The 4E Journal*, pp. 18 - 20.

Ibrahim, R.I (2012). Impact of increasing retirement afe on longevity factor: An empirical study for government pensioners in Malaysia. *Jurnal Ekonomi Malaysia, 46*(2), 29-35

Jacobs-Lawson, J. M., & Hershey, D. A. (2005). Influence of future time perspective, financial knowledge, and financial risk tolerance on retirement savings behaviors. *Financial Services Review, 14*, 331–344.

Kail, R. V. and Cavanaugh, J. C., 2010. *Human development: A life-span view* (5th ed.). Belmont, CA: Wadsworth.

Kastenbaun, R.J. (1961). The dimensions of future time perspective, an experimental analysis. *The Journal of Geperal Psychology, 65*, 203-218.

Kesavayuth, D.; Rosenman, R. E. And Zikos, V. (2015). *Retirement, personality, and well-being.* [Online] Retrieved at March 2, 2018, from http://ses.wsu.edu/wp-content/uploads/2015/05/WP 2015-3.pdf

Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling* (5th ed.). New York: The Guilford Press.

Knoll, M. A., Tamborini, C. R., & Whitman, K. (2012). I do…want to save: Marriage and retirement savings in young households. *Journal of Marriage and Family, 74*, 86–100.

Koposko J. L., Hershey D. A. (2014). Parental and early influences on expectations of financial planning for retirement. *J. Personal Finance, 13*, 17–27. onlineat:http://www.iarfc.org/docs/journal/Vol13%20Issue2pfautomlinson.pdf

Legutko, J. (2014). *Finding happiness in retirement.* Actuarial Society of South Africa's 2014 Convention 22–23 October 2014, Cape Town International Convention Centre.

Lusardi, A. (2003). *Planning and Saving for Retirement*.

Retrieved from Lusardi, A., & Mitchell, O. S. (2007). Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth." *Journal of Monetary Economics 54*(1), 205–24.

Lusardi, Annamaria, and Olivia S. Mitchell. (2009). How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness. National Bureau of Economic Research Working Paper 15350

Lynch, J. G., Netemeyer, R. G., Spiller, S. A., & Zammit, A. (2010). A generalizable scale of propensity to plan: the long and the short of planning for time and for money. *Journal of Consumer Research, 37*(1), 108-128.

Malaysian Department of Statistics (2015). Life Expectancy At Birth, Retrieved from https://www.statistics.gov.my/#

Malaysian Insight (2017). More than 50% of Malaysians not financially ready for retirement. Retrieved at April 2, 2018 from https://www.themalaysianinsight.com/s/25093/ *Management Review, 31*(4), 889-913.

Mansor, M. F., Hong, C. C., Abu, N. H., & Shaari, M. S. (2015). Demographic

Martin, T. K., Guillemette, M. A. and Browning, C. M. (2016). Do retirement planning strategies alter the effect of time preference on retirement wealth? Applied Economics Letters, Forthcoming.

Mehrabian, A. (2000). Beyond IQ: Broad-based measurement of individual success potential or "emotional intelligence". *Genetic, Social, and General Psychology Monographs, 126*, 133–239.

Mowen, J. C., Hershey, D. A., & Jacobs-Lawson, J. M. (2000). *Psychological determinants of retirement planning activities*. Poster presented at the Annual Meeting of the Gerontological Society of America,Washington, D.C

Munnell, A. H., Webb, A., Golub-Sass, J., & Muldoon, D. (2009). *Long-Term Care Costs And The National Retirement Risk Index*. (Center for Retirement Research Brief No. 9-7). Boston: Boston College.

Noriszura, Ismail & Alaudin, Ros Idayuwati & Isa, Zaidi. (2015). *Determinants of Retirement Wealth Adequacy*: A Case Study in Malaysia. *Institutions and Economies. 9*, 81-98.

O Donoghue, T. and M. Rabin. 2001. Choice and Procrastination. *Quarterly Journal of Economics, 116*, 121-160.

O'Donoghue, T., & Matthew R. (1999). Doing It Now or Later. *American Economic Review, 89(*1), 103-124.

Özer, B., O'Callaghan, J., Bokszczanin, A., Ederer, E., & Essau, C. (2014). Dynamic Interplay Of Depression, Perfectionism And Self-Regulation On Procrastination. *British Journal Of Guidance & Counselling*, *42*(3), 309-319.

Rabin, L. A., Fogel, J., & Nutter-Upham, K. E. (2011). Academic procrastination in college students: The role of self-reported executive

Remund, D. L. (2010). Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy. *Journal of Consumer Affairs*, *44*, 276-295

Resende, M., & Zeidan, R. (2015). Psychological biases and economic expectations: Evidence on industry experts. *Journal of Neuroscience, Psychology, and Economics, 8*(3), 160.

Robb, C., Babiarz, P. & Woodyard, A. (2012). The demand for financial professionals' advice: The role of financial knowledge, satisfaction, and confidence. *Financial Services Review 21*(4).

Russell, K., & Stramoski, S. (2011). Financial management practices and attitudes of dental hygienists: A descriptive study. *American Dental Hygienists Association, 85*(4), 340-347.

Sekaran, U. (2000). *Research Methods for Business: A Skill Business Approach*. John Wiley & Sons, New York.

Sekaran, U. (2003) *Research Methods for Business: A Skill-Building Approach*. 4th Edition, John Wiley & Sons, New York.

Sirois, F., & Pychyl, T. (2013). Procrastination and the Priority of Short-Term Mood Regulation:Consequences for Future Self. *Social and Personality Psychology Compass, 7*(2), 115-127.

Sirois, F.M. (2014) Out of sight, out of time? A Meta-Analytic Investigation Of Procrastination And Time Perspective. *European Journal of Personality*, 28 (5). 511 - 520.

Steel, P. (2007). The Nature Of Procrastination: A Meta-Analytic And Theoretical Review Of Quintessential Self regulatory Failure. *Psychological bulletin, 133*(1), 65 – 94.

Steel, P. (2011). *The Procrastination Equation: How to Stop Putting Things Off and Start Getting Stuff Done*. Edinburg Gate, Harlow: Pearson Educated Limited.

Steel, P., & König, C. J. (2006). Integrating theories of motivation. *Academy of*

Strathman, A., Gleicher, F., Boninger, D., & Edwards, C. (1994). The consideration of future consequences: Weighing immediate and distant outcomes of behavior. *Journal of Personality and Social Psychology*, *66*(4), 742-752.

Tanaka, T., Colin F. C., & Nguyen Q. (2010). Risk and Time Preferences: Linking Experimental and Household Survey Data from Vietnam. *American Economic Review,* 100(1), 557-571.

Tang, L., & Liu, H. (2010). Community detection and mining in social media. Synthesis Lectures on Data Mining and Knowledge Discovery.

Tappolet, S. (2010). Procrastination and personal identity. In C. Andreou, & M. D. White (Eds.), *The thief of time: philosophical essays on procrastination* (pp. 115–129). New York:Oxford University Press.

The Malay Mail (2016).Malaysians' life expectancy at 74.7 years in 2016, Statistics Dept says. Retrieved at Feb 1, 2018 fromhttp://www.themalaymailonline.com/malaysia/article/malaysians

The Star Online (2011). Median salary for employees in Malaysia increased by 7.7% in 2017. Retrieved at March 1, 2018 from http://biz.thestar.com.my/news/story.asp?file=/2009/8/22/business/4523024 &sec=business

Trommsdorff, G. (1983). Future orientation. and socialization. *International Journal of Psycbglggy, 18*, 381-406.

Van Dalen HP, Henkens K and Schippers J (2010). Productivity Of Older Workers: Perceptions Of Employers And Employees. *Population And Development Review, 36*(2): 309-330

Yaakub, N. F. (2000). Procrastination among students in institutes of higher learning: Challenges for K-economy. The School of Languages and Scientific Thinking, University Utara Malaysia. Retrieved from: http://www.mahdzan.com/papers/procrastinate/.

Yang, T. Y., & Devaney, S. A. (2011). Intrinsic rewards of work, future time perspective, the economy in the future and retirement planning. *Journal of Consumer Affairs, 45*(3), 419-444.

Zikmund, W. G. (2011). *Marketing research,* (2nd ed.). South Melbourne, Vic: Cengage Learning

Zimbardo & Boyd (1999). Putting time in perspective: A valid, reliable individualdifference metric. *Journal of Personality and Social Psychology, 77*(6), 1271–1288.

APPENDIX A: QUESTIONNAIRE DESIGN

OTHMAN YEOP ABDULLAH GRADUATE SCHOOL OF BUSINESS

Dear Participants,

This questionnaire is designed to study the financial literacy, self-procrastination and future time perspective on retirement saving behavior among workers in Kedah. Your response will be kept strictly confidential. Only members of the research team will have access to the information you gave. Thank you very much for your time and cooperation. I greatly appreciate your help in furthering this research endeavor.

Cordially,

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Section A : Demographic Data

 1. Please state your age
    18years - 29years [   ]   30years - 39years[   ]
    40years - 49years [   ]   50years - 59years [   ]

2. Gender
    Male [   ]   Female [   ]

3. Race
    Malay [   ]   Chinese [   ]   Indian [   ]   Others [   ]

4. Marital Status
    Single [   ]   Married [   ]   Divorced/ Separated/ Widowed [   ]

5. Education Level
    SPM/STPM   [   ]   Certificate / Sijil [   ]   Diploma   [   ]
    Degree/ Ijazah [   ]   Master/ Sarjana [   ]   PhD /Doktor Falsafah [   ]

6. Position/Designation
    Manager [   ]   Executive [   ]   Non-Executive [   ]   Others [   ]

7. What is your salary range?
    1- Less than RM 1000   [   ] 2- Between RM 1000-RM1999 [   ]
    3- Between RM2000-RM2999 [   ]   4- RM3000 and above   [   ]

8. What type of saving products do you currently engaged?
    Savings Accounts [   ]   ASB   [   ]
    Tabung Haji   [   ]   Others [   ]

9.When you start saving?
    Less than 1 year [   ]   2- 5 years [   ]   More than 5years [   ]

10 Please state your working sector ?
    Private [   ]   Government [   ]

SECTION B: Please indicate the extent to which you **AGREE (5 = STRONGLY AGREE) or DISAGREE (1= STRONGLY DISAGREE)** with the following statements

STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
1	2	3	4	5

		1	2	3	4	5
RS1.	I have made meaningful contributions to a voluntary retirement savings plan. *Saya membuat caruman ke atas pelan simpanan persaraan secara sukarela.*					
RS2.	I have saved a great deal for retirement compare to my friends. *Saya telah menabung sejumlah wang besar untuk persaraan berbanding rakan-rakan saya.*					
RS3.	I have accumulated substantial savings for retirement. *Saya telah menabung sejumlah wang yang mencukupi untuk persaraan.*					
RS4.	I have made an effort to save for retirement. *Saya berusaha untuk menabung bagi tujuan persaraan.*					
RS5.	I have saved accordingly based on how I plan to live my life in retirement. *Saya menabung berdasarkan perancangan kehidupan persaraan pada masa depan.*					

		1	2	3	4	5
FL1.	I am very knowledgeable about financial planning for retirement. *Saya berpengetahuan luas tentang perancangan kewangan untuk persaraan.*					
FL2.	I know more than most people about retirement planning. *Saya lebih berpengetahuan daripada kebanyakan orang mengenai perancangan persaraan.*					
FL3.	I am very confident in my ability to do retirement planning. *Saya sangat yakin dengan keupayaan saya melakukan perancangan persaraan .*					
FL4.	When I have a need for financial services, I know exactly where to obtain information on what to do. *Saya tahu di mana untuk mendapatkan maklumat mengenai perkhidmatan kewangan apabila memerlukan perkhidmatan tersebut.*					
FL5.	I have saved accordingly based on how I plan to live my life in retirement. *Saya menabung berdasarkan perancangan kehidupan persaraan pada masa depan.*					

		1	2	3	4	5
FL6.	I am knowledgeable about how EPF works. *Saya berpengetahuan tentang bagaimana KWSP berfungsi.*					
		1	2	3	4	5
SP1.	When I have a deadline to do something, I wait until the last minute to do it. *Apabila saya mempunyai tarikh akhir untuk melakukan sesuatu, saya menunggu sehingga saat terakhir.*					
SP2.	I find excuses not to do what I had to do on retirement saving. *Saya mencari alasan untuk tidak melakukan apa yang saya perlu lakukan untuk simpanan persaraan.*					
SP3.	I tend to waste a lot of time on retirement saving. *Saya cenderung membazir banyak masa ke atas simpanan persaraan.*					
SP4.	I postpone making hard decisions on retirement saving plan. *Saya sukar untuk membuat keputusan dan suka menangguh tentang pelan simpanan persaraan.*					
SP5.	I arrive at my seminar on retirement saving almost always on time. *Saya tiba di seminar berkaitan simpanan untuk persaraan tepat pada masanya.*					
SP6.	I tend to postpone my planning for retirement saving if I get bored. **Saya akan menangguhkan perancangan untuk persaraan jika berasa tindakan tersebut membosankan.**					
SP7.	I dislike following guidelines about retirement saving. *Saya tidak suka mengikut garis panduan tentang simpanan persaraan.*					
SP8.	Without having a more important purpose I postpone my retirement saving. *Saya akan menangguhkan simpanan persaraan jika tidak mumpunyai tujuan penting.*					
SP9.	I cannot change my habit of wasting time when dealing with retirement saving. *Saya tidak boleh mengubah tabiat saya membuang masa dalam perkara berkaitan tabungan persaraan.*					
SP10.	I tend to neglect retirement saving if that are too hard for me to save. *Saya cenderung untuk mengabaikan simpanan persaraan jika saya merasa susah untuk menabung.*					
SP11.	I get distracted with ease when I try to concentrate on topic regarding retirement saving. *Saya mudah terganggu apabila saya cuba menumpukan perhatian pada topik simpanan untuk persaraan.*					
SP12.	When I make a decision regarding retirement saving, I keep it. *Saya akan meneruskan usaha untuk menabung apabila sudah membuat keputusan.*					
		1	2	3	4	5
FTP1.	I follow the advice to save for a rainy day. *Saya mengikuti nasihat untuk menabung untuk kecemasan.*					

FTP2.	I enjoy thinking about how I will live years from now in the future. ***Saya suka berfikir tentang bagaimana saya akan menghabiskan masa tua saya.***					
FTP3.	The distant future is too uncertain for me to plan for. ***Saya tidak dapat merancang untuk masa depan yang tidak pasti.***					
FTP4.	The future seems very vague to me. ***Masa depan nampaknya sangat samar kepada saya.***					
FTP5.	I pretty much live on a day-to-day basis. ***Simpanan saya kais pagi makan pagi, kais petang makan petang.***					
FTP6.	I enjoy living for the moment and not knowing what tomorrow will bring. ***Saya menikmati hidup untuk masa kini dan tidak mengambil tahu apa yang akan berlaku esok.***					

-THE END-
THANK YOU VERY MUCH FOR YOUR COOPERATION

APPENDIX B: SPSS RESULTS

Descriptive Analysis

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18years-29years	99	24.8	24.8	24.8
	30years-39years	165	41.3	41.3	66.0
	40years-49years	79	19.8	19.8	85.8
	50years-59years	57	14.2	14.2	100.0
	Total	400	100.0	100.0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	263	65.8	65.8	65.8
	Female	137	34.3	34.3	100.0
	Total	400	100.0	100.0	

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	326	81.5	81.5	81.5
	Chinese	60	15.0	15.0	96.5
	Indian	14	3.5	3.5	100.0
	Total	400	100.0	100.0	

Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	96	24.0	24.0	24.0
	Married	296	74.0	74.0	98.0
	Divorced/Separated//Widowed	8	2.0	2.0	100.0
	Total	400	100.0	100.0	

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Spm/Stpm	87	21.8	21.8	21.8
	Certificate/Sijil	57	14.2	14.2	36.0
	Diploma	120	30.0	30.0	66.0
	Degree/Ijazah	116	29.0	29.0	95.0
	Master/Sarjana	20	5.0	5.0	100.0
	Total	400	100.0	100.0	

Position/Designation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manager	32	8.0	8.0	8.0
	Executive	81	20.3	20.3	28.2
	Non-Executive	222	55.5	55.5	83.8
	Others	65	16.3	16.3	100.0
	Total	400	100.0	100.0	

Salary Range

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than RM 1000	17	4.3	4.3	4.3
	Between RM 1000-RM1999	90	22.5	22.5	26.8
	Between RM2000-RM2999	110	27.5	27.5	54.3
	RM3000 and above	183	45.8	45.8	100.0
	Total	400	100.0	100.0	

Saving Products

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Savings Accounts	133	33.3	33.3	33.3
	ASB	90	22.5	22.5	55.8
	Tabung Haji	115	28.7	28.7	84.5
	Others	62	15.5	15.5	100.0
	Total	400	100.0	100.0	

Start Saving

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	33	8.3	8.3	8.3
	2- 5 years	90	22.5	22.5	30.8
	More than 5years	277	69.3	69.3	100.0
	Total	400	100.0	100.0	

Working Sector

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Private	202	50.5	50.5	50.5
	Government	198	49.5	49.5	100.0
	Total	400	100.0	100.0	

RETIREMENT SAVING BEHAVIOR

Reliability Statistics

Cronbach's Alpha	N of Items
.786	5

FINANCIAL LITERACY

Reliability Statistics

Cronbach's Alpha	N of Items
.853	6

SELF-PROCRASTINATION

Reliability Statistics

Cronbach's Alpha	N of Items
.636	12

FUTURE TIME PERSPECTIVE

Reliability Statistics

Cronbach's Alpha	N of Items
.567	6

Normality Analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
NTFL	400	1.00	5.00	3.5221	.62202	-.171	.122	.420	.243
NSPR2	400	1.17	4.25	2.9088	.49753	-.379	.122	.456	.243
RFTP	400	2.00	5.00	3.5167	.56921	.068	.122	-.234	.243
NTRS	400	1.00	5.00	3.7375	.63845	-.709	.122	1.994	.243
Valid N (listwise)	400								

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	FTP, TSP, TFL[b]	.	Enter

a. Dependent Variable: TRS

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.631[a]	.399	.394	.49697

a. Predictors: (Constant), FTP, TSP, TFL

b. Dependent Variable: TRS

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.835	3	21.612	87.504	.000[b]
	Residual	97.803	396	.247		
	Total	162.637	399			

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a. Dependent Variable: TRS

b. Predictors: (Constant), FTP, TSP, TFL

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.959	.309		6.343	.000
	TFL	.564	.041	.549	13.823	.000
	TSP	-.286	.076	-.148	-3.776	.000
	FTP	.178	.044	.159	4.001	.000

a. Dependent Variable: TRS

APPENDIX C : Adapted Items and Original Items

Retirement Saving Behavior

Adapted Items	Original Items	Source
I have made meaningful contributions to a voluntary retirement savings plan.	1.Made meaningful contributions to a voluntary retirement savings plan.	(Neukam & Hershey, 2002)
I have saved a great deal for retirement compare to my friends.	2.Relative to my peers, I have saved a great deal for retirement.	(Neukam & Hershey, 2002)
I have accumulated substantial savings for retirement.	3.Accumulated substantial savings for retirement.	(Neukam & Hershey, 2002)
I have made an effort to save for retirement.	4.Made a conscious effort to save for retirement.	(Neukam & Hershey, 2002)
I have saved accordingly based on how I plan to live my life in retirement.	5. Based on how I plan to live my life in retirement, I have saved accordingly.	(Neukam & Hershey, 2002)

Financial Literacy

Adapted Items	Original Items	Source
1. I am very knowledgeable about financial planning for retirement.	1. I am very knowledgeable about financial planning for retirement.	(Hershey & Mowen, 2000; Mowen,Hershey & Jacobs-Lawson, 2000)
2.I know more than most people about retirement planning	2. I know more than most people about retirement planning.	(Hershey & Mowen, 2000; Mowen,Hershey & Jacobs-Lawson, 2000)
3. I am very confident in my ability to do retirement planning.	3. I am very confident in my ability to do retirement planning.	(Hershey & Mowen, 2000; Mowen,Hershey & Jacobs-Lawson, 2000)
4. When I have a need for financial services, I know exactly where to obtain information on what to do.	4. When I have a need for financial services, I know exactly where to obtain information on what to do.	(Hershey & Mowen, 2000; Mowen,Hershey & Jacobs-Lawson, 2000)
5. I am knowledgeable about how EPF works.	5. I am knowledgeable about how Social Security works.	(Hershey & Mowen, 2000; Mowen,Hershey & Jacobs-Lawson, 2000)
6. I am knowledgeable about how private investment plans work.	6. I am knowledgeable about how private investment plans work.	(Hershey & Mowen, 2000; Mowen,Hershey & Jacobs-Lawson, 2000)

Self-Procrastination

Adapted Items	Original Items	Source
1. When I have a deadline to do something, I wait until the last minute to do it.	1. When I have a deadline to do something, I wait until the last minute to do it.	Escala de Procrastination General y Academica (Busko1998)
2. I find excuses not to do what I had to do on retirement saving.	2.I find excuses to not do what I had to do	Escala de Procrastination General y Academica (Busko1998)
3. I tend to waste a lot of time on retirement saving.	3. I tend to waste a lot of time.	Escala de Procrastination General y Academica (Busko1998)
4. I postpone making hard decisions on retirement saving plan.	4. I postpone making hard decisions.	Escala de Procrastination General y Academica (Busko1998)
5. I arrive at my seminar on retirement saving almost always on time.	5.I arrive at my meeting almost always on time	Escala de Procrastination General y Academica (Busko1998)
6. I tend to postpone my planning for retirement saving if I get bored.	6. When I get bored of doing an assignment I tend to postpone it.	Escala de Procrastination General y Academica (Busko1998)
7. I dislike following guidelines about retirement saving.	7. I dislike following strict guidelines	Escala de Procrastination General y Academica (Busko1998)
8. Without having a more important purpose I postpone my retirement saving.	8. Without a having a more important assignment I postpone an assignment.	Escala de Procrastination General y Academica (Busko1998)
9. I cannot change my habit of wasting time when dealing with retirement saving.	9. I cannot change my habit of wasting time	Escala de Procrastination General y Academica (Busko1998)
10. I tend to neglect retirement saving if that is too hard for me to save.	10. I tend to neglect assignments that are too hard.	Escala de Procrastination General y Academica (Busko1998)
11. I get distracted with ease when I try to concentrate on topic regarding retirement saving.	11. I get distracted with ease when I try to concentrate on something.	Escala de Procrastination General y Academica (Busko1998)
12. When I make a decision regarding retirement saving, I keep it.	12. When I make a decision, I keep it.	Escala de Procrastination General y Academica (Busko1998)

Future time perspective

Adapted Items	Original Items	Source
1.I follow the advice to save for a rainy day.	1. I follow the advice to save for a rainy day	Hershey and Mowen(2000)
2.I enjoy thinking about how I will live years from now in the future.	2. I enjoy thinking about how I will live years from now in the future.	Hershey and Mowen(2000)
3.The distant future is too uncertain for me to plan for.	3. The distant future is too uncertain to plan for. (R)	Hershey and Mowen(2000)
4.The future seems very vague to me.	4.The future seems very vague and uncertain to me. (R)	Hershey and Mowen(2000)
5.I pretty much live on a day-to-day basis.	5. I pretty much live on a day-to-day basis. (R)	Hershey and Mowen(2000)
6.I enjoy living for the moment and not knowing what tomorrow will bring.	6. I enjoy living for the moment and not knowing what tomorrow will bring. (R)	Hershey and Mowen(2000)