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The Cognitive Determinants of Financial Planning for Retirement

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Abstract
Purpose: To determine the cognitive factors that influence the financial knowledge of the individual in preparing for retirement.
Design/methodology/approach: This is a conceptual paper and a systematic review is used as the methodology.
Findings: The findings of this study suggest that the cognitive dimension can become a component of a larger model in terms of the development of an elderly's financial well-being during retirement. At the end of this conceptual research, a model will be proposed for further research in the future.
Research limitations/implications: This study only focus on cognitive factors. Future studies can focus on other factors that relate to financial knowledge such as opportunity dimensions and readiness dimensions.
Practical implications: Cognitive factors are important elements to measure the financial knowledge of individuals and their readiness for retirement preparedness.
Originality/value: Even though there has been a significant amount of research on saving behaviour among the elderly, no studies have attempted to model and validate how Malaysian seniors save for retirement.

Keywords: Financial Planning, Retirement, Financial Knowledge, Financial Self-efficacy, Metacognition

Introduction

The aging population is a phenomenon that is happening in most of the country. Malaysia is a country that has been experiencing this situation at an unprecedented speed despite Malaysia being considered a young nation. This is due to advancements in health facilities provided by the government and higher levels of education among Malaysian. As the result, the life expectancy among its population increases.

Most retirees in Malaysia do not work and are fully dependent on retirement fund and family support to make end meets. The longer a person lives, the longer will be his or her retirement period thus he or she will need more pension money or financial support from family in order

to survive. According to Nurhisham Hussein as the Chief Strategy Officer of the Employer Provident Fund (EPF), the social protection fund in Malaysia discovered many members under the age of 55 years old have critically low EPF savings, resulting in only 3% of EPF contributors being able to retire with sufficient income (Bernama, 2021). Thus, raising the question of whether our social protection system can continue to protect all Malaysians, particularly retirees.

Malaysia currently has a variety of social protection programs, both contributory and non-contributory, that are designed primarily to serve as a social protection network for retirees. Furthermore, Malaysians' low level of financial literacy, as reported by Zakaria et al. (2017) and Teh et al. (2020), makes it difficult for them to make the right investment decisions, particularly while preparing for retirement. Nevertheless, government employees were the most fortunate because the government contributes to their monthly pensions. However, since they only receive an average monthly pension of RM2,100, which is extremely low and insufficient to support today's cost of living, their financial retirement is inadequately covered (Tai & Sapuan, 2018).

Despite the fact that working adults' saving habits have been extensively studied, the researcher has yet to discover evidence showing any research has attempted to model and assess the financial well-being of working adults in Malaysia for retirement. To attain retirement financial well-being, employees must have clear retirement goals during their careers, so the researcher needs to comprehend the variables relating to why people are planning for retirement.

The objectives of the present study are: i) to discover the theories used by the previous researchers to establish the theoretical basis for bigger studies in the future, ii) to discuss cognitive factors in determining the financial knowledge and other cognitive behaviour of the individual in preparing for retirement, and iii) to present the conceptual and theoretical framework for future study.

Literature Review

Theories Used in Previous Literature

A few pieces of research that share some similarities with the current study have been reviewed to capture the theories that were used in research on retirement planning. Ghadwan et al. (2022), for example, used Boyatzis' (2006) Intentional Change Theory (ICT) to investigate how individuals change their bad habits or behaviours into desired ones throughout their lives. ICT explains how an employee can improve his or her financial literacy before reaching retirement age. Topa et al. (2018) have put some modifications to this theory by merging with capacity, willingness, and opportunity variables by Hershey et al. (2012). Next, Abdul Kadir et al. (2022) applied the Life cycle model theory in their study, proposed by Franco Modigliani, which is based on individual and household savings decisions. On the other hand, Tomar et al. have drawn Beach's image theory (Beach, 1998; Beach & Mitchell, 1987) and Mowen's 3M Theory of Motivation and Personality (Mowen, 2000). Palaci et al. (2018) and Vo and Bogg (2015) used a theory of planned behaviour as the theoretical foundation of their study, which explains How the likelihood of current behaviour varies depending on one's intention to engage in a particular behaviour and their perceptions of control over it. In that sense, when a certain behaviour is not well-learned or is performed in an uncertain context, the person is more likely

to consciously continue or discontinue that behaviour. In other words, senior staff will be more effective at financial planning for retirement (FPR) because they have more financial resources than junior staff.

Ghadwan et al. (2022) investigated three factors influencing financial planning for retirement (FPR): employee financial literacy, financial risk tolerance, and cultural factors based on Hershey et al. (2012) Capacity, Willingness, and Opportunity (CWO) model, with culture serving as a mediating variable between independent variables and FPR. Meanwhile, Tomar et al. (2021) discovered the retirement planning of professional women in India was measured by cognitive and psychological elements namely financial literacy for the former and retirement goal clarity, future time perspective, attitude toward retirement, risk tolerance, and social group support for the latter. Likewise, Abdul Kadir et al. (2022) identified the impact of individual behaviours on retirement financial planning. These particular behaviours include goal clarity, personal attitude, financial literacy, and saving behaviour.

Conversely, Palaci et al. (2018), discovered new characteristics that influence individual FPR whereby they found age as a mediating factor that can influence the relationship between financial knowledge, retirement confidence, and economic well-being and FPR. Overall, it has been discovered that workers increase their participation in tax-advantaged savings accounts based on their age and income level, supporting the positive relationship between economic well-being and FPR.

Based on the discussion above, the present study will utilize Hershey's Capacity-Willingness-Opportunity Model as the spine theory. However, it only focuses on constructs under the capacity dimension.

Cognitive Factors Affecting Financial Planning for Retirement

According to Hershey et al. (2013), the term "cognitive elements" or "capacity dimension" refers to the intellectual qualities and abilities that an individual needs in order to prepare and save for retirement as well as those that set them apart from others. Thus, the capacity to plan and save would probably be influenced by the person's knowledge, abilities, fluid and crystallized intellect, and psychological biases. Recent interest in financial well-being (Ghadwan et al., 2022; Tomar et al., 2021; Palaci et al., 2018; Topa et al., 2018) arose largely from the literature examining financial knowledge and education, which denoted the indicators for cognitive. Financial literacy will eventually allow retirees to interpret economic data based on their financial knowledge, allowing them to make informed decisions about financial planning, saving initiatives, and asset growth. People's financial decisions may have an impact on their financial wellness depending on their level of financial literacy (Kamakia, et al., 2017). Planning for retirement and having a favorable relationship between wealth and portfolio allocations later in life are traits of people with strong financial literacy (Almenberg & Dreber, 2015; Lusardi & Mitchell, 2017; Teh & Sapuan, 2018).

i) Financial knowledge

According to She et al. (2022), financial behaviour and financial well-being are positively impacted by financial knowledge, financial attitude, and locus of control. That result is consistent with Achari and Oduro (2020) who discovered financial literacy is a goal worth striving for and financial knowledge characteristics are depending on the financial literacy level

of the respondents (Achari & Oduro, 2020; Kamakia et al. 2017). The definition of financial literacy can be divided into two main components. First and foremost, to be able to make good financial and/or economic decisions, a consumer needs to have financial knowledge. The second component, which concentrates on the application dimension, is concerned with the person's capacity and confidence in using the knowledge he or she has acquired to make financial and/or economic decisions. As a result, financial literacy should not be used interchangeably with financial knowledge because the two terms have different connotations.

A lack of financial knowledge can further disadvantage the economically vulnerable group. According to Kiso and Hershey (2017), individuals with higher levels of perceived financial knowledge are less likely to report perceived cognitive difficulties in the process of retirement planning. Financial education is one method of imparting financial knowledge. The implementation of financial education can take place in both on-the-job training and tertiary education. Lusardi and Mitchell (2017) and Safari et al. (2021) explored the influence of financial literacy on retirement preparation and discovered that financial knowledge obtained in college before joining the labour market has a beneficial effect on retirement preparation. Financial education is supposed to help improve financial literacy, which influences a person's financial well-being. Savings are an essential component of financial resiliency. As a result, insufficient savings may result in financial stress, because many people live month to month, within their means of subsistence, with nothing extra.

ii) Financial Self-Efficacy

Financial self-efficacy is one of the cognitive determinants that is antecedent for retirement financial well-being. The study by Peter and Ambilikumar (2021) discovered that retirement self-efficacy can be used to predict the level of financial preparedness for retirement. According to the findings, retirement self-efficacy can predict 85.2 percent of the total variation in financial preparedness for retirement.

Financial planners and advisors can help people resist the temptation to spend by cultivating financial self-efficacy in their employees, and promoting long-term development toward specific financial goals (Asebedo & Seay, 2017). Similarly, people with high financial self-efficacy believe they can handle failures in a way that makes them less vulnerable to stress, anxiety, and depression (Asebedo & Seay, 2017; Ismail et al. 2017). Higher levels of self-efficacy beliefs may assist individuals in better managing financial-related stress as a result of failures and difficulties that occur naturally during retirement financial planning. Asandimitra & Kautsar (2019) opined that self-efficacy is confidence in one own self and will result in a better or more responsible person in managing their finance. Medium to high levels of self-efficacy will be one source of motivation for a person to save money for the future and prevent themselves from overspending and that is the reason for the importance of enhancing self-efficacy for middle- and low-income individuals as this may encourage saving for these vulnerable groups. (Lown et al., 2015).

The employees' level of perceived financial self-efficacy can be another driver that will influence the level to which they prepared for retirement. Asebedo (2016) in her dissertation considers financial self-efficacy as a psychological characteristic that shape saving behaviour. Financial self-efficacy is the outcome that adults possibly have when they have a stock of knowledge about finance. Farrel et al. (2016) stated that managing one's finances, will take more than financial knowledge and literacy, hence one must equip themselves with financial

self-efficacy. Financial self-efficacy can be seen as self-assuredness, or "self-belief" in their capabilities to make a wise financial decision. Some scholars have discussed financial literacy, and the characterization of financially literate people appears to be similar to financial self-efficacy, which is the ability and confidence to apply or use knowledge related to personal finance concepts and products. Sarpong-Danquah et al. (2018) suggested that financial literacy is one of the key elements of the growth of individuals and managers because they rely on it to make efficient and effective use of resources and to make sound and objective financial decisions that can help sustain businesses. Customers with high levels of perceived financial self-efficacy are confident in their abilities to gather data and information to make financial decisions (Sabri, et al. 2020), optimistic about their ability to make good decisions (Sarpong-Danquah et al.,2018; Sabri, et al. 2020), and self-controlled with money.

5Achari and Oduro (2020) discovered that financial literacy has a significant impact on retirement planning; as a result, they advised businesses to consider ways to increase employee financial literacy through on-the-job training or seminars to ensure that their employees are prepared before entering the retirement phase of their lives. Kimiyagahlam et al. (2019) also found the same result in their study however affirmed that saving attitude mediates the relationship between financial literacy and retirement planning. Financial self-efficacy is a driving factor of personal initiative for retirement, but the relationship is reinforced when finance management competencies are acquired (Nansubuga, 2018). Without a positive saving attitude, even a financially literate person will not be able to plan for their retirement. Adam, Frimpong, and Boadu (2017) emphasized the importance of having a positive cash flow because low-income people tend to overlook the importance of financial literacy in retirement planning and financial behaviour.

iii) Metacognition

Metacognition has been studied since 1979 by Flavell (1979). However, the research on its relationship with financial retirement planning has been quite limited. Most of the studies about metacognition focus on learning strategies in education. Metacognition refers to thoughts about one's thinking or intentional thinking about one's thoughts or learning. Antonietti et al. (2016) described metacognition as a human process that monitors and controls one's cognitive processes and individual's ability to know how well he or she is performing in financial activities. Moreover, metacognition can help people improve their ability to recognize the relevant approaches to use in a given situation and to self-regulate their behaviour to manage the three thinking systems (deliberation, intuition, and heuristic) flexibly and make effective financial decisions. According to Bietz (1996) who studied metacognition among nursing students, when students lack metacognition skills, they may probably be ignorant of gaps in knowledge, which may impair their ability to make correct decisions. Putting that definition in a retirement context, employees with inadequate metacognition may be unaware that they are not on track to accumulating savings for retirement and may involve in financing activities that do not have any value to their retirement preparation.

Topa et al. (2018) conducted the most recent study on metacognition and retirement planning, stating that positive and negative beliefs about one's retirement worries, as well as cognitive trust and self-attention, could play important roles in the relationships between cognitive factors and retirement financial wellness. To achieve retirement financial wellness, an individual must engage in extensive financial planning. There is empirical evidence supporting the combined influence of metacognitions and worry in the development of anxiety in contexts

other than retirement planning (Ryum et al., 2017). Because of the complexities of retirement financial wellness and the fears associated with planning for it, investigating the role of metacognitions is promising (Kiso and Hershey, 2017).

Furthermore, Paris and Winograd (1990) identify two essential aspects of metacognition: a) self-assessment of cognition and b) self-management of cognition. Schraw (1998) also discussed two distinct components of metacognition: (a) knowledge of one's own cognition and (b) cognitive process regulation. Despite different terminologies being used, the explanation from both pieces of literature is identical. Paris and Winograd (1990) defined self-appraisal as a person's reflections on their knowledge and cognitive capacities, as well as their affective states toward their knowledge, abilities, motivation, and learner traits. Even if those cognitive components were for the education sector, they might also be applied to workers planning their retirement since tasks like risk analysis, evaluation, and performance monitoring are crucial for saving and investing. Such analyses provide answers to the following questions: what financial concepts you are familiar with; how do you save money; and when and why should you employ financial knowledge techniques. Contrarily, metacognition in action is referred to as self-management or metacognitive regulatory skills (Eleonora, 2003). Mental processes contribute to the composition of problem-solving activities such as the plans that an employee makes before selecting a retirement savings instrument, the adjustments they make as they carry out their financial planning, and the evaluation of their ongoing financial performance.

Achieving Financial Wellbeing for Retirement

The literature still contains inconsistencies and lacks a universally accepted definition and measurement of subjective financial well-being (Brüggen et al., 2017). According to Brüggen et al. (2017), financial well-being is defined as the perception of being able to maintain present and future living standards as well as financial freedom. Furthermore, Sivaramakrishnan and Srivastava (2019) described financial well-being as being financially healthy, cheerful, and worry-free. This is consistent with the study by Mahdzan et al, (2020) where financial well-being can be pronounced as a sense of fulfilment with one's current financial situation, being certain of covering daily living expenditures and emergency expenses, having the financial freedom to pursue one's interests, and having confidence in one's future retirement.

Financial well-being can be affected by financial attitudes along with financial behaviour. Kasman, et al. (2018) confirmed that there is an association between financial attitudes and financial literacy among youth. Meanwhile, according to Yoong et al. (2012), financial learning is significantly associated with better financial management practices and economic well-being, but financial literacy has only a moderating effect on these relationships. Meanwhile, Osman et al. (2018) revealed poor financial well-being can have a detrimental impact on physical, mental, and social well-being, which can lead to a drop in job performance, incorrect short-term decision-making, a reduced capacity to focus, absenteeism, and lower productivity. That evidence is consistent with the findings from Sabri and Juen (2014), who confirmed that a lack of personal financial knowledge limits personal financial practices and thus may cause financial distress, which leads to lower financial well-being. but will also have an indirect impact on a country's economic health and financial systems. Furthermore, Adam et al. (2017) discovered that financial literacy, retirement planning, and family support all have a positive impact on the financial well-being of retirees. They also emphasized that family support and

retirement planning have a greater impact on retirees' financial well-being than financial literacy.
Financial well-being, according to Adam et al. (2017), consists of four components: 1) feeling one's financial health is under control, 2) being capable of adapting to a financial crisis, 3) being on track to achieve financial goals, and 4) being sufficiently flexible to make choices that allow pleasure in life. As a result, Boddy et al. (2015) discovered among Americans that achieving financial well-being in retirement requires a certain level of financial knowledge, which many Americans still lack, potentially jeopardizing one's financial well-being.

Brüggen et al. (2017) and Netemeyer et al. (2018) suggested that to understand financial well-being, one has to consider the current and future related dimensions of financial well-being. Financial well-being will be influenced by first, current money stress management and second, future expectations of financial stability. The former involves sentiments of being anxious about one's current financial condition, and whether they were able to manage funds to satisfy their financial commitments. The latter, on the other hand, includes perceptions of having a financially secure future and reaching future financial goals. For instance, people who believe they are yet to reach their financial goal will perceive that their financial well-being is not in the good shape.

The past literature used the terms financial wellness, financial well-being, and economic well-being interchangeably due to the grey area between these concepts. The terms financial wellness and financial well-being are interchangeable because understanding financial wellness requires the use of other related terms such as economic well-being, financial well-being, and material well-being (Joo, 2008). Financial well-being has been used more frequently in existing literature than financial wellness. . However, the conceptualization of both concepts is acceptably similar. As for this study, the researcher will take financial retirement wellness as the second name of financial well-being as proposed by Delafrooz and Paim (2011) that economic well-being and financial well-being can be proxies of financial retirement wellness.

Figure 1 illustrates the research framework showing the interaction between cognitive variables and financial retirement wellness.

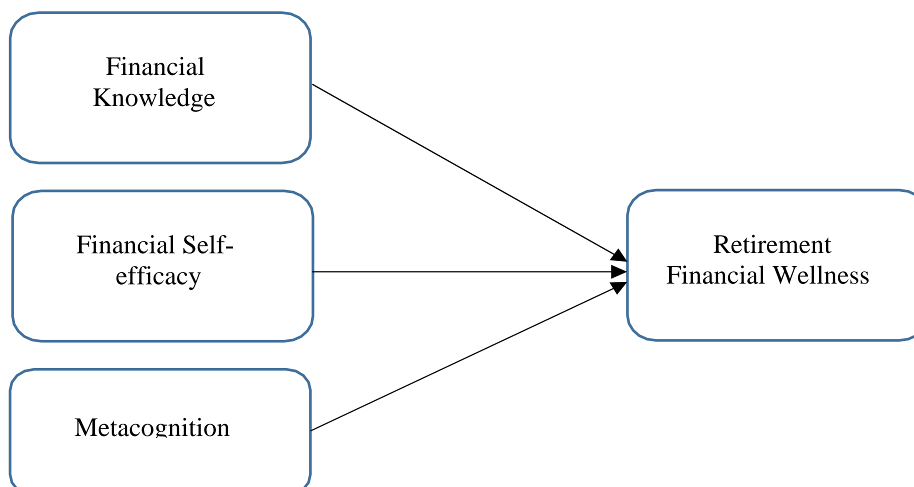

Figure 1: Research Framework

CONCLUSION AND RECOMMENDATION

Even though this study does not provide empirical evidence on the impact of the cognitive variable on FPR, this conceptual research enriches the understanding of retirement planning and financial wellness and how its development can be influenced by these cognitive determinants - financial knowledge, financial self-efficacy, and metacognition. Overall, the literature review indicated that financial knowledge, financial self-efficacy, and metacognition serve as cognitive antecedents in affecting retirement financial wellness. Understanding cognitive factors affecting FPR will help the policymakers to design more effective policies that can encourage employees to rebuild their retirement saving especially post the Covid-19 pandemic.

Furthermore, the cognitive factor is only one of the determinants that will influence retirement financial wellness. More research needs to be done on other aspects such as psychological factors, environmental support factors, and technological factors because taking into account many factors can help the researcher estimate FPR more effectively. It is suggested that in the future, a retirement financial wellness model be developed that captures financial well-being indicators to ensure that people have enough money to retire safely and freely.

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