



## The effect of financial skills and strategies toward saving behavior among self-employed workers in retirement planning



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### ABSTRACT

#### Article History

Received: 5 April 2023

Revised: 1 August 2024

Accepted: 26 August 2024

Published: 19 September 2024

#### Keywords

Employees provident fund

Financial skills

Financial strategies

Retirement savings

Savings behavior

Self-employed.

This paper aimed to investigate essential factors of financial skills and financial strategies that influence retirement savings behavior among self-employed workers. Many retirement savings schemes are being introduced by regulatory bodies or financial institutions, especially for self-employed workers on a voluntary basis, but many people's efforts to save for retirement are stalled. However, the participation of self-employed workers in those schemes is still low as people have financial instability or lack of knowledge in matters. The quantitative approach is applied by distributing a systematic random sampling of 400 prospective respondents. The outcome was analyzed using Structural Equation Modelling (SEM) indicates that savings behavior financial skill, financial strategies, and demographics positively moderated relationship. This study adds to the existing knowledge on financial skills as well as financial strategies towards saving objectives for self-employed, with practical implications for promoting positive saving habits and improving financial well-being across all age groups. Policymakers might use the data to create targeted programs that specifically target self-employed workers and promote responsible saving and financial security across generations. The authorities should construct a comprehensive fixed retirement scheme for self-employed workers based on these characteristics so that self-employed workers have secure and stable financial security after retirement.

**Contribution/ Originality:** The research delves thoroughly into the critical elements influencing self-employed workers' saving behavior for retirement planning. Authorities such as the government or related agencies need to improve fundamental savings among the people by incorporating those critical variables, which are vital to contributing towards the core retirement savings attitudes.

### 1. INTRODUCTION

Retirement is a level at which an employee stops the current job or work because of the limited common standard retirement age, and most employees in Malaysia retire at the age of 60 or above (Kimiyaqahlam, Safari, & Mansori, 2019). Retirement savings behavior is a complicated conditional that can be influenced by different individuals in a variety of ways, including actions toward savings and attitudes toward the activity of investing or any financial activities related to saving money (Yusof & Sabri, 2017). Retirement savings can be referred to as an

accumulated amount of money or assets that an individual plans to use to sustain their life after they have stopped working (Foziah et al., 2018a).

Individual may choose to save or be required to do so for specific reasons, but for retirement purposes, it is essential to sustain life after retirement. People accumulate savings voluntarily, consciously, and free from any form of coercion, allocating some of their current expenses to improve their future spending. Savings that were required to accumulate because of job regulations, such as mandated pension contributions or mandatory employee pension programs, can guarantee income stability in the retirement period. Retirement savings can be built up as monetary revenue and physical assets, such as those used in business ventures (Bednarczyk, Skibińska-Fabrowska, & Szymańska, 2021).

According to the Employees Provident Fund (EPF) report, despite people's understanding of retirement savings, only 7 million out of 14 million EPF members had an active account for retirement contributions in 2018. Almost 18 percent of Malaysians have accounts in EPF, whereas the rest may be involved in self-employment. Lack of retirement savings can be a major factor in the shortage of money to retire and lead to a worse financial situation (Foziah et al., 2018b). If the issue continues, people will encounter poverty and shortages in the labor market with the increasing elderly population (Buchholz et al., 2011). The rising trend of self-employment, especially among young people, also presents a social risk to the nation because self-employed individuals are not protected by any retirement savings plans unless they actively participate in voluntary schemes.

There are numerous schemes offered by regulatory bodies or the private sector. People who work as farmers, fishermen, or small business owners are popular with the Private Retirement Scheme (PRS) that is available in the market. In 2012, PRS launched its first offering, an alternative retirement savings program that increases coverage and benefits by offering a minimum contribution.

The Malaysian Securities Commission monitored PRS, where eight Malaysian financial institutions participated in that program, including Rashid Hussain Bhd (RHB) Investment Management Sdn Bhd, AmInvestment Management Sdn Bhd, CIMB-Principal Asset Management Bhd, and many other commissions.

Moreover, schemes like insurance and takaful can provide a surge in wages in exchanges for a lump sum. To participate in this scheme, individuals must make a certain contribution amount, which can be a monthly payment or full payment during the accumulation period. Furthermore, the introduction of 1Malaysia Retirement Savings in 2010 specifically targeted self-employed workforces without any fixed income to save for retirement. The scheme aims to motivate individuals such as fishermen, farmers, or taxi drivers to establish retirement plans with minimal contributions that align with their income and daily consumption. Self-employed workers must try to save on retirement, as mandatory retirement schemes are unavailable to them. They must contribute independently to the retirement scheme offered by EPF and other private bodies.

Planning for retirement is a matter of personal preference. A person must make a conscious decision to allocate or set aside income to ensure financial security in retirement. But regrettably, not everyone is prepared to plan because they have either limited savings or insufficient resources to generate income. However, those schemes do not receive enough participation from self-employed people, so this research inquiry examines the elements that trigger saving actions for self-employed people in retirement planning.

In Malaysia, voluntary contributions apply to retirement schemes for self-employed workers, as mandatory schemes do not exist. As for self-employed, no specific retirement scheme benefits them for future consumption. Although there are numerous voluntary contributions available in the market and they are being advertised on many platforms and are easy to reach, the participation of self-employed workers in those schemes is still at an unsatisfactory level. This is because recognition is inadequate among self-employed workers, especially the young generation, who tend to ignore retirement savings as they feel that the older generations are not far behind. There is a lack of participants, considering people do not have any urgency and think the retirement age is far from them. This kind of mindset must be changed by spreading awareness about retirement, and this study proposes to

investigate important factors of saving behavior among self-employed workers in retirement planning. Thus, the aim of this study is to investigate essential factors that influence the saving behavior of self-employed workers in relation to retirement planning. Therefore, it would be beneficial to authorities such as the government or the relevant agencies to improve the fundamental savings among the public by integrating those important factors. It's critical to get a deeper understanding of the fundamental savings, which will be the guidance for Malaysia's future retirees.

## 2. LITERATURE REVIEW

The study of financial skills and financial strategies in relation to retirement savings behavior has gained great consideration from academicians and researchers. Notably among early studies are the works that have pointed out the significance of the Theory of Planned Behavior related to this retirement savings behavior among self-employed people.

### 2.1. Theory of Planned Behavioral

The theory of planned behavior attempts equivalent access to explain consumer decision-making (Ajzen & Fishbein, 1972). Instead of emphasizing the overall assessment or management of a product or service, this theory concentrates on the specific consumer behavior that stems from their interest or action. This behavior is primarily influenced by three cores mentioned earlier, which significantly impact individuals, particularly in their retirement savings decisions. Furthermore, human behavior is guided by the intention to perform a specific behavior or action (Ajzen, 1991). Three factors that influence the action of humans include behavioral beliefs or attitudes of people, normative beliefs, which mean beliefs about the expectations of other people that can be referred to as social attraction, and lastly, control beliefs, which include the control attraction that perceives a certain behavioral action (Jain, Khan, & Mishra, 2017). In a nutshell, the theory believes that subjective norms or social influences such as outlook from families and friends are necessary and mostly affect behavior of individuals. This study focuses on the saving behavior of self-employed toward retirement savings, and it implies a theoretical framework based on theories from past research.

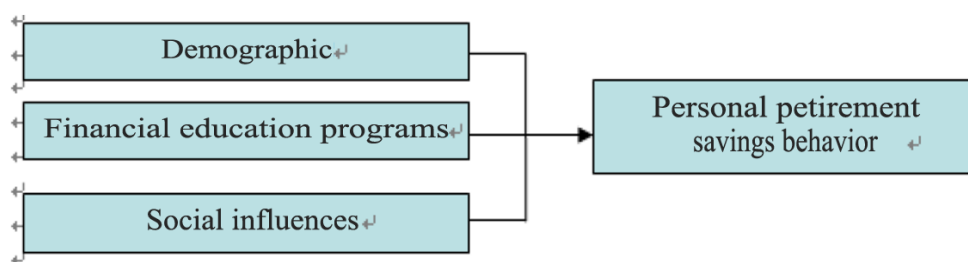


Figure 1. Theoretical framework.

Source: Ibrahim (2012).

In this regard, Figure 1 indicates that demographic factors, which include age, level of education, and income, are important features that influence a person's actions, especially in retirement savings, as they determine most of their financial knowledge (Jonubi & Abad, 2013; Ng, Tay, Tan, & Lim, 2011; Potrich, Vieira, & Kirch, 2015). However, Jamal, Ramlan, Karim, and Osman (2015) argue that elements of income, education, and financial knowledge display crucial aspects of retirement savings as they affect the savings behavior of individuals.

The studies highlight the fact that people with higher incomes and top-level education are more likely to participate in retirement planning compared to people who have low planning literacy. Having a financial literacy helps people manage their income well, and people with more net financial as well as household wealth are mostly likely to save. They are most likely to invest their wages to add up the amount in their wages (Lusardi & Mitchell, 2011).

Based on Su, Kratzer, and Tech (1997) people who are older, married, and have higher incomes are likely to have the urge to save and have a large amount of retirement savings in the future. The study by Hira, Rock, and Loibl (2009) has major findings that demographic variables like gender, age, marital status, number of working members in families, and net income have influenced annual savings and were found to be the most influential predictors of saving behavior in a person. In conclusion, most studies agreed upon the factor of age and income group that may influence the savings behavior of people, including saving behavior for retirement ages. So, the above framework concluded that demographic factors influenced personal retirement saving behavior, as past studies confirmed that people, mostly men with higher incomes and higher-level education, tend to save for retirement.

Financial education programs also influence individuals' commitment to retirement planning. Individuals with insufficient knowledge of the retirement savings process are unlikely to make optimal retirement savings decisions. Accordingly, Rai and Gupta (2021) demonstrated the significant impact of financial literacy instruction on retirement planning, and literacy in financial planning proposes a strong commitment to retirement savings. This includes the fact that people with higher financial education will most likely save for retirement and have the urge to take risks to reach goals, like investing in stocks or other investments, because they were involved in financial education programs. More private bodies and regulatory associations are offering financial education programs to their employees, raising their awareness and contributing to their retirement plans.

Adequate knowledge of the retirement savings process will encourage individuals to make the best retirement savings decisions. People can gather information and make decisions while socializing with others. According to past theory, social influences like families and friends are crucial in determining savings behavior, as people tend to follow their friends. Also, highly social people are more likely to invest for future savings as they connect with more friends who can share the same interests. Having financial knowledge makes people fully utilize and control their wealth efficiently.

## 2.2. Saving Behavior

As past research suggested, demographics appeal to individual characteristics, where the background of people plays a crucial role in their habits. This includes individual's saving behavior. Savings can be defined as a residual amount from income aside from consumption and commitment (Foziah et al., 2019). It is a separate income that individual does not consume (Foziah, Afthanorhan, Ghazali, & Tajuddin, 2023) in particular, saving is a difficult decision-making process where individuals may encounter various situations that lead them to spend their income on necessities. Saving is mostly behavior motivated by the desire of the individual to accumulate funds for retirement (Jumena, Siaila, & Widokarti, 2022). Developing a savings habit is a crucial action for making wise spending selections. It proved that learning to save and spend properly can help individuals gain control over their spending habits as they prioritize basic needs before wants (Mahmud, Foziah, Ghazali, Rashid, & Yazid, 2019). Also, saving money during difficult times increases one's chances of survival in the future, as nowadays cost of living increases, making savings for retirement compulsory.

Understanding the factors that influence saving behavior is crucial for fostering beneficial habits and predicting financial challenges (Dowling, Tim, & Hoiles, 2009). Effective money management is essential for all individuals, as it is a more difficult process than producing money. Individuals must understand how to manage their finances, particularly saving and investing (Ismail et al., 2020). Individuals who are enthusiastic and aware of saving will have plentiful amounts of savings, which may include retirement savings that benefit them through the age period. It can be concluded that social influence affects a person's savings behavior, but this is not the case for social economies. Nevertheless, both financial knowledge and literacy training are self-control mechanisms for people who are capable of social influence to proceed with saving behavior (Mpaata, Koskei, & Saina, 2020). This shows that self-employed who are consistent in their savings are likely to have a high sense of this behavior.

### 2.3. Financial Skills

Financial skills are known to people who have a high degree to literacy of financial literacy, which includes the ability to manage, read, and analyze financial materials or conditions. It is also defined as having a sufficient understanding of personal finance facts and terms for effective personal financial management: in other words, saving behavior is the combination of future need perceptions, a saving decision, and a saving action. People, on the other hand, are more likely to define saving as investing, depositing money in a bank account, and paying off mortgages (Lewis & Messy, 2012). The findings of Foziah, Ghazali, Ismail, Afthanorhan, and Wan Daud (2021) showed that financial skills have a significant influence on saving behavior, with individuals with low levels of financial literacy less likely to save and more likely to face financial problems in the future. Financial skills tend to have a connection with saving behavior, as people with high literacy tend to have enough savings for the future as they know well about financial management, and this knowledge may come from frequent involvement in financial education programs. The study (Gustina, Yenida, & Novadilastri, 2022) indicates that financial skills act significantly positively on the financial behavior of a person, and this includes the capacity to reduce issues or problems in financial crises and make wise choices. It indicates the capacity to make informed decisions and manage money effectively for both present and future needs. Financial literacy involves making informed decisions, planning for the future, spending sensibly, and dealing with life events including job loss, retirement savings, and college expenses. According to the OJK (Financial Services Authority) policy, financial literacy encompasses knowledge, skills, and beliefs that enhance decision-making and financial management, leading to success and deliberate full expenditure. Improving financial literacy can lead to better decision-making while managing finances. In this study, the aim was to determine whether financial skills influence the savings behavior of self-employed workers or not. The hypothesis is given below:

*Hypothesis 1 (H<sub>1</sub>). Financial skills have significant positive effects on retirement savings behavior.*

### 2.4. Financial Strategies

Financial strategy is known as a complicated long-term plan for organizing systemic activity to achieve financial goals through the formulation, allocation (actual location), and use of financial resources. Its objective is to maximize the value of the company by managing its financial resources as effectively and proactively as possible. The financial strategy mainly focuses on four areas, which include managing revenue, controlling costs, guaranteeing one's liquidity and financial security, and overseeing the financial department. Knowledge and comprehension of economic principles and systems are important in planning strategies. Financial strategies enable individuals to comprehend financial concepts and solve related challenges and involve managing money in various ways, following market trends, and making informed decisions for a "financially literate" society. Financial knowledge encompasses conceptual, procedural, and practical aspects (Gustina et al., 2022).

Having financial knowledge will lead to better financial plans, especially for self-employed workers who want to sustain themselves after they stop working. Meanwhile, the second hypothesis in this study is outlined below:

*Hypothesis 2 (H<sub>2</sub>). Financial strategies have significant positive effects on retirement savings behavior.*

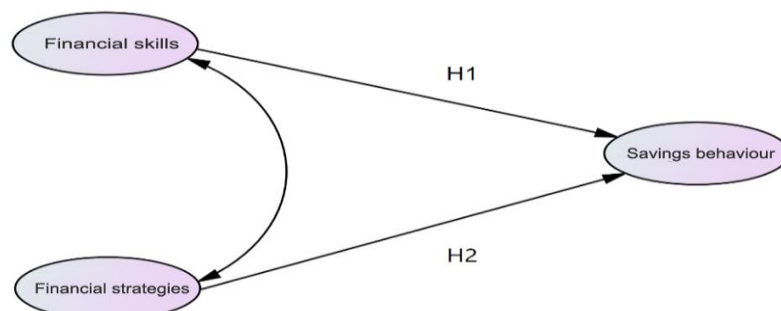


Figure 2. Proposed framework.

Thus, [Figure 2](#) represents the proposed framework of this study, which includes three variables and two hypotheses. Hypotheses H1 and H2 consist of factors related to the saving behavior of self-employed in retirement planning, which are financial skills and financial strategies.

### 3. METHODOLOGY

This research is explicitly focused on two main financial knowledge points, which are financial skills and financial strategies of self-employed workers that have an impact on savings behavior in retirement planning; hence, it differs from past studies. SEM (Structural Equation Modeling) is used in this study using SPSS (Statistical Package for the Social Sciences) software, whereby SPSS AMOS (Analysis of Moment Structures) is chosen to probe covariance between variables. SEM explains multiple statistical links through visualization and validation, and this technique allows for easy discussion of complex models ([Dash & Paul, 2021](#)). SEM can be classified into two types, which are covariance-based (CB-SEM) and partial least squares (PLS-SEM). We confirm that CB-SEM excels in theory testing and confirmation, whereas PLS-SEM excels in prediction and theory formulation. Precisely, CB-SEM is adopted within this research as it is suitable for testing theories and hypotheses with large samples and normal data.

Previous studies have investigated the financial awareness of self-employed youth in retirement preparedness, which used ANOVA and multiple regression as a method because the data simply revolved around behavior of youth who are self-employed ([Alam & Chen, 2021](#)). Moreover, the research by [Harahap, Thoyib, Sumiati, and Djazuli \(2022\)](#) explores financial literacy in retirement with risk tolerance as mediation toward entrepreneurs in Indonesia using PLS-SEM, as the data is more complex and maximizes the explained variance of the endogenous latent construct.

#### 3.1. Sample Size and Measure

Sample size refers to a subset of a population that provides enough information to draw conclusions and results for certain studies. A study's sample size refers to the number of participants or observations from an enormous number of populations. To estimate an adequate sample size, numerous criteria must be considered, as in this study, the respondent criteria must be self-employed and working in Klang Valley. Factors to consider include research technique, analytical method, number of variables or model complexity, time and resources, completion rate, research supervisor, sample size for similar studies, and data analysis program. A survey was carried out to convey information from 400 respondents from Klang, as it stated most of the self-employed majored there ([Schaper, 2020](#)).

Many self-employed workers were identified, and this study used a random sampling approach for self-employed workers around Klang Valley in respective places like shopping malls, shopping complexes, and marketplaces, where most of the self-employed do business as well as e-hailing services. This study will use simple random selection without replacement, choosing 400 participants from a population of 755,300 self-employed in Klang Valley. We select the random sampling approach as a systematic method within a probability sampling strategy, ensuring that every unit has an equal chance of selection. The survey was fulfilled by a questionnaire and links for online access for other respondents. Using the Hair method, the number of respondents satisfied the minimal criteria of sample size. The number of variables in a model can be used to calculate the sample size, and according to [Hair, Hollingsworth, Randolph, and Chong \(2017\)](#) to determine the sample size, the 10-times rule is applied.

In addition to the rules of thumb, there are other criteria for choosing sample size. According to [Afthanorhan, Mamun, Zainol, Foziah, and Awang \(2020\)](#) it is suggested that a minimum sample size of  $N \geq 50 + m$  (where  $m$  is the number of predictors) should be estimated based on the margin of error for the survey's most essential items.



Researchers would receive a variety of sample sizes, including small numbers for scaled or continuous variables and larger sizes for categorical or dichotomous variables. It is recommended to use a sample size of 400-500 respondents to identify the optimal variables.

### 3.2. Data Analysis Method

Data is assessed using Structural Equation Models (SEM), which are commonly used by statistical techniques investigating behavioral sciences. The popularity of this statistical technique stems from its ability to measure both direct and indirect causal links using a single model and can account for measurement mistakes as well as connect observed variable correlations (Ajayi & Adebayo, 2021).

This significantly reduces measuring mistakes, and the researchers can identify which elements are having problems. SEM excels at performing comprehensive frameworks for analyses simultaneously, such as multiple regression and factor analysis, discriminant analysis, and route analysis, to answer numerous research questions. We also use structural equation modeling to establish connections between observable and latent variables. Data collection measures observable variables, while latent variables connect to observed variables but are not directly assessable (Ghanbar & Rezvani, 2023).

The most important components in Covariance-based structural equation modeling (CB-SEM) are validated using confirmatory factor analysis, or CFA, to support the Exploratory Factor Analysis (EFA) which is used to test results with model fit and visualization. CB-SEM is a complicated model that shows progress through both graphic and numerical outputs that imply the validity of the result. Confirmatory Factor Analysis (CFA) was used to confirm the core factors that are important in the study, such as the Fit Index Value (CFI), or Tucker Lewis Index (TLI). Previous research orientations and substantial literature reviews establish the next steps.

This study investigates the core variable phases of CFA in CB-SEM. Following CFA, the empirical data was used to assess the final structural model between the latent variables. The CFA confirms the structure of observed variables and tests the hypothesis that there is a connection between observable variables and latent constructs (Dash & Paul, 2021).

It may calculate the fit between observed data and a theoretically grounded model, identifying causal relationships between latent factors and observable variables. CFA provides statistical evidence to support or refute theories based on observed facts and assesses how effectively the measured variables represent the number of constructs.

This study uses CFA results, which can identify key components in data and tie measured variables to latent variables, confirming or rejecting measurement theories, as well as identify the number of factors and their relationship to the measured variable (Mia, Majri, & Rahman, 2019).

## 4. FINDINGS

### 4.1. Descriptive Statistics

Table 1 shows the demographic background of respondents, where the data were analyzed using SPSS software to separate the frequency and percent of each group. The most common respondents were Malay males, and most of them are married.

Data shows that young people aged 21-30 have an income of less than RM2500, they are mostly self-employed and work on household services and handmade goods. The highest-level education of respondents is SPM, and they had no dependents while working for almost 5 years.

Table 1. Descriptive analysis.

Variables	Groups	Frequency	Percent (%)
Gender	Male	207	51.7
	Female	193	48.3
Marital status	Single	168	42.0
	Married	218	54.5
	Divorced	14	3.5
Age group	Below 20	17	4.3
	21 – 30	185	46.3
	31 - 40	73	18.3
	41 and above	125	31.3
Race	Malay	341	85.3
	Chinese	26	6.5
	Indian	29	7.2
	Other	4	1.0
Education level	MCE (Malaysian certificate of education) and below	173	43.3
	MHSC (Malaysian higher school certificate)/MHRC (Malaysian higher religious certificate)/Diploma	115	28.7
	Bachelor	97	24.3
	Master	9	2.3
	PhD	2	0.5
	Other	4	1.0
Income level	Less than RM2,500	219	54.8
	RM 2,501 – RM 4,849	125	31.3
	RM 4,850 – RM 7,099	35	8.8
	RM 7,110 – RM 10,959	10	2.5
	Above RM 10,959	11	2.8
Working period	Below 1 year	93	23.3
	1 – 5 years	146	36.5
	Above 5 years	161	40.3
No of dependents	No dependent	187	46.8
	Less than 3 persons	98	24.5
	3 – 5 persons	87	21.8
	More than 5 persons	28	7.0
Job category	Household services & handmade good	46	11.5
	Transportation-based service	44	11.0
	Freelancer	50	12.5
	Entrepreneur	162	40.5
	Agriculture	8	2.0
	Fishery	2	0.5
	Other	88	22.0

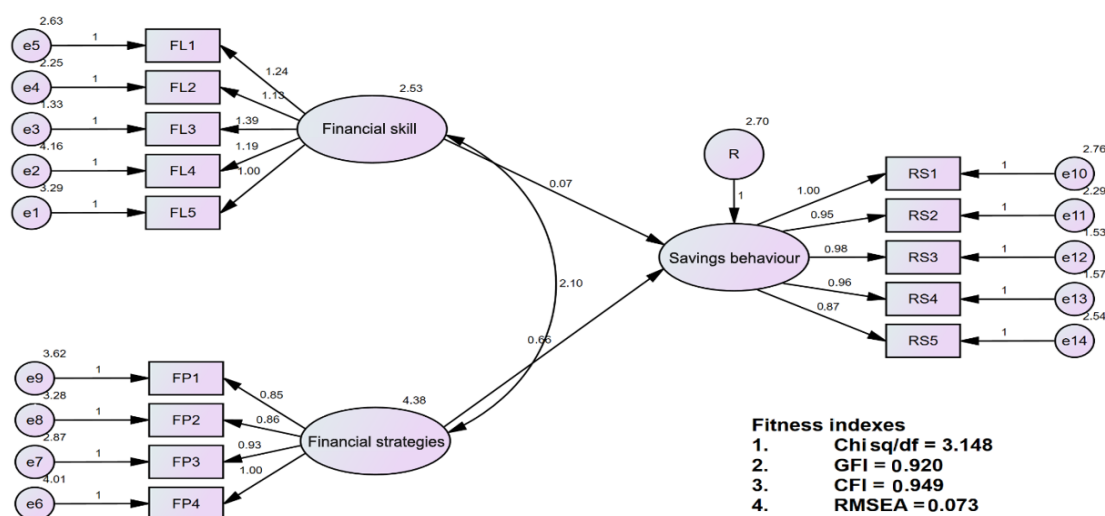




Figure 3 shows the CFA result, in which Saving Behavior serves as the central or endogenous construct, while Financial Skill and Financial Strategies are regarded as exogenous constructs. Each of these constructs is evaluated through multiple items: Financial Skill is assessed by 5 items, Financial Strategies by 4 items, and Saving Behavior by 5 items. These items likely measure various aspects or dimensions of each construct, allowing for a comprehensive assessment. The result suggests that the model demonstrates compatibility with the available data, implying that it provides a satisfactory representation of the relationships between the constructs under investigation.

According to Byrne (2013) the method, which involves assessing the heterogeneity test (chi-square difference) for metric in variance before testing the moderating effect, was employed in the research to evaluate measurement in variance. Because chi-square/df, CFI (Comparative Fit Index), and RMSEA (VRoot Mean Square Error Approximation) met the recommended values in two distinct groups (gender, age, income, status, and education), the configuration variance is established. The chi-square values from the confined (chi-square = 954.686, df = 879) and unconstrained (chi-square = 922.276, df = 848) models can be used to implement the metric in variance technique.

These models produced a chi-square difference of 32.41 and a p-value of 0.397, both of which are higher than the suggested threshold of 0.05, indicating that the model shows partial measurement in variance.

Table 2. Analysis of confirmatory factor analysis (CFA).

Factor	Items	Factor loading	Cronbach alpha	Significance value			CR	AVE
Financial skill	FL1	0.77	0.907	***			0.869	0.573
	FL2	0.77		***				
	FL3	0.89		***				
	FL4	0.68		***				
	FL5	0.66		***				
Financial strategies	FP1	0.68	0.793	***			0.808	0.513
	FP2	0.71		***				
	FP3	0.75		***				
	FP4	0.72		***				
Savings behavior	RS1	0.80	0.911		Financial skill	0.456	0.912	0.674
	RS2	0.81		***				
	RS3	0.87		***	Financial strategies	***		
	RS4	0.86		***				
	RS5	0.77		***				

Note: \*\*\* p < 0.01.

Table 2 demonstrates that each variable's internal validity (Cronbach alpha value) ranges from 0.793 to 0.911. This criterion must meet the given conditions, with a value of  $\geq 0.70$ , where the items are reliable in this research. The Construct Validity (CR) value ranges from 0.808 to 0.912, meeting the condition of  $\geq 0.60$ , while the Average Variance Extracted (AVE) value ranges from 0.513 to 0.674, meeting the criteria of  $\geq 0.50$  (Awang, 2012). To properly interpret p-values, it must consider the study design, sample size, group comparability, and statistical tests used (Majumder, 2023). The table above shows that p-values are at an acceptable significance level, indicating the degree of data conformity with the null hypothesis.

The significance level determines the likelihood of rejecting the null hypothesis, assuming it is true, and this statistical technique for determining the importance of data was established in the early 20th century (Di Leo & Sardanelli, 2020). Overall, the confirmatory factor analysis satisfies the established requirements.

## 5. RESULT AND DISCUSSION

Table 3 demonstrates that the results of the study support the hypotheses of the study. It is deemed that several important factors affect saving behavior in retirement planning of self-employed toward the golden age. The framework suggests that factors such as financial skills and strategies have a significant impact on their financial planning behavior. Having improvements in financial knowledge, such as attending a financial education program, is a factor that can attract people to savings as the knowledge can be applied in financial planning. Besides, planning strategies such as seeking specialist advice or gathering financial records improved people's ability to keep track of their finances.

Table 3. Summary of hypotheses testing.

No	Hypothesis	Results
1	Financial skills have significant positive effects on retirement savings behavior	Supported
2	Financial strategies have significant positive effects on retirement savings behavior	Supported

By far, there was not much difference between self-employed and employed workers in terms of indulging financial knowledge toward retirement planning, but as for financial preparation, self-employed workers are not as active as they may be due to long-term investments or household budgets that need to be covered (Rostamkalaei, Nitani, & Riding, 2022). However, according to Struckell, Patel, Ojha, and Oghazi (2022) the data shows a higher prevalence of financial literacy among self-employed, especially women, compared to typically employed workers. Self-employed individuals may require additional financial literacy skills, such as formal education or business experience, as they face higher problems managing their funds compared to employed individuals. This finding robustly displayed that having financial skills and strategies is significant for retirement preparation for self-employed, which diverges from other studies.

In conclusion, the factors that are important in this issue can be referred to as financial skills, financial strategies positively influence the savings behavior of self-employed workers. The expected outcome of this paper is to enhance awareness of saving for retirement among self-employed workers and help the individual identify many aspects and be aware of the factors that will help overcome problems in the future.

## 6. CONCLUSION

When it comes to retirement savings, Malaysian employees' awareness level can still be considered low. In summary, there is a significant lack of retirement knowledge among Malaysian employees. Thus, the awareness of the significance of retirement savings must be enhanced within individuals so that the issue can be solved. According to the above result, two important factors, which are financial skills and financial strategies, positively affect self-employed people in terms of savings behavior for retirement purposes. Another area that can be developed more, whether in social influence or socioeconomic conditions, for self-employed people can be a mediator effect toward savings behavior. To effectively address the challenges of the lack of awareness of retirement savings, it is crucial to strengthen government activities through platforms, forums, blueprints, and collaborative efforts among agencies. Malaysians should receive early education on saving and financial planning for retirement. The Malaysian government should enhance the marketing of retirement savings through the authorities' programs like PRS or voluntary contributions proposed by EPF or any financing bodies. However, this study focuses only on financial skills and strategies for promoting behavioral retirement savings among self-employed. It would be better for future research to consider the impacts of household debt in this matter.

**Funding:** This research is supported by the Fundamental Research Grant Scheme of the Ministry of Higher Education (Grant number: FRGS/1/2021/SS01/UNISZA/02/1).

**Institutional Review Board Statement:** The Ethical Committee of Faculty of Business and Management, Universiti Sultan Zainal Abidin, Malaysia has granted approval for this study on 27 January 2024 (Ref. No. UniSZA.600-1/2/5 (63)).

**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

**Data Availability Statement:** Upon a reasonable request, the supporting data of this study can be provided by the corresponding author.

**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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