

Relationship Among Financial Literacy, Attitude and Retirement Planning Awareness: A PLS-SEM Approach

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Abstract

Purpose: A retirement plan is designed to take care of post-retirement days and help retirees to enjoy a stress-free life. Having a good financial retirement plan facilitates individuals to live the lifestyle they desire as retirees. It is crucial for the young generation to be aware of retirement planning to appropriately plan for their retirement. However, university students have lack of awareness on the significance of early retirement planning and future savings planning due to limited knowledge and attitude. Thus, this study was carried out to identify the relationship between financial literacy and attitude towards retirement planning awareness among students in Universiti Teknologi MARA Negeri Sembilan.

Design/methodology/approach: Questionnaires were distributed to a total of 171 students from three campuses namely Kuala Pilah, Seremban, and Rembau responded to the questionnaires. Data was further analyzed using PLS-SEM analysis through measurement and structural analysis.

Findings: The study indicates that financial literacy and attitude have significant and positive effects on retirement planning awareness. This study provides students with valuable insights into the importance of financial literacy and positive attitudes towards retirement planning.

Research limitations/implications: The respondents of the study only comprised of small sample size; students from three campuses in UiTM Negeri Sembilan, thus limit the generalizability of the findings. Secondly, the usage of questionnaire in gathering data limits the information obtained for the analysis. Additionally, the number of contributing factors influencing retirement planning among university students were limited, thus might not reflect the overall factors of retirement planning. The study has significant implication that align with various Sustainable Development Goals (SDGs) by addressing financial literacy and retirement planning attitudes among university students, ultimately contributing to a more equitable, informed, and economically secure society.

Practical implications: Improved financial literacy and retirement planning attitudes could contribute to reducing the risk of future poverty among individuals, aligning with SDG 1 (No Poverty). The combination of financial literacy and a positive attitude towards retirement planning empowers individuals to make informed decisions, understand diverse investment strategies, manage debt responsibly, save effectively and adapt to changing of financial market and economic condition. Furthermore, highlighting the lack of financial literacy among



university students emphasizes the need for incorporating financial education into curriculum, promoting a holistic quality education that prepares students for real-world challenges which parallel to SDG 4. Thoughtful actions should be taken by policymakers to ensure the goals are achieved and students will be able to gain benefits from it.

Originality/value: This study quantifies evidence that students are aware on the importance of retirement planning. The outcomes of the research are useful to decision makers in providing awareness and programs that will help young generation to start saving for their future.

Keywords: Retirement planning; Financial literacy; Attitude; Retirees; PLS-SEM

Introduction

Retirement planning is a process of setting retirement income goals and taking all the possible actions and making decisions, which are essential to achieve those retirement goals. Retirement planning includes evaluating sources of income, estimating expenses, and setting up an investment plan or savings plan to achieve the retirement goals by managing the risks and assets. Having a good financial retirement plan eliminates stress and allows accomplishing objectives and life goals after retirement.

Taking early steps to develop retirement planning on track is an important step of financial wellness which is good for physical and emotional health. Financial stress causes physical illness for instance diabetes, heart disease, migraine and headaches (Kahn & Pearlin, 2006). More worrying condition is that money worries cause anxiety and depression, depriving the peace of mind of individuals to enjoy life (Richardson et al., 2017). Retirement planning is vital for maintaining the current lifestyle after retirement to live a quality and long healthy life, which denotes health care for individuals with a chronic illness or disability (Masran & Hassan, 2017). Nevertheless, people are often optimistic about their financial future, living with the faith that everything will be better in the years to come. Many retirees do not plan for retirement and do not have any retirement plans in place to help them maintain their current lifestyle during their retirement years (Kumaraguru & Geetha, 2021). Another important point that retirees need to understand is the implications of longevity covering health, financial decisions and employment (Scott, 2023).

It is important to realize that people indeed experience financial hardships in the future especially among younger generation. Only after people understand all the important aspects of life, responsibilities, and rights associated with retirement planning, they can properly plan and prepare for their retirement.

The younger generation has limited knowledge on retirement planning due to lack of exposure and thinking that it is too early to be involved in proper planning for future life after retirement. According to Bongini and Cucinelli (2019), the younger generation, particularly those in university, are generally unaware of the pension system's function and significance. Some students believed that early retirement planning was unnecessary because their pensions would be sufficient to maintain a retirement standard of living. Additionally, lack of financial literacy affects the retirement planning among the young generation and hampers their interest to secure the necessary funds for their retirement years (Subramaniam at al., 2021).

A worrying fact that must be concerned is most Malaysians lack long-term financial planning, and only 40% of them are financially prepared and ready to face life after retirement (Bank Negara Malaysia, 2017). A more worrying fact that only 12% of Malaysians are on track for



early retirement, with 55% of them uncertain of how to be capable to achieve financial independence to retire early. Meanwhile, only 3% of EPF contributors can afford retirement, noting that Covid-related withdrawals, namely i-Sinar, i-Lestari and i-Citra, over the past two years have had a huge effect on the savings of contributors. It is mentioned that EPF savings of many members below age 55 are reaching critically low levels (EPF, 2021).

Consequently, it is crucial for individuals to be aware of retirement planning while they are in university to ensure that they are ready for early and proper preparation of retirement planning when they begin working life (Kimiyaghalam et al., 2019). However, lack of awareness among Malaysians, particularly the younger generation, about the importance of planning for retirement prevents them from living a quality, healthy life and enjoying life after retirement. The lack of financial knowledge and negative attitude toward retirement years that take a long time to achieve leads to a lack of awareness among young generation, which must be stimulated beginning in high school (Zandi et al., 2021).

The issue of retirement awareness is critical and must be addressed, particularly among young generation. This study is expected to contribute insights for university students regarding retirement planning since limited studies have been focusing on the younger generation. Most studies on the relationship between financial literacy and attitude towards retirement planning and awareness focused on respondents other than students, for example, employees (Safari et al., 2021), adult (Zulfaka & Kassim, 2021), academics (Ming et al., 2009) and household (Koenen & Lusardi, 2011). Therefore, the objective of this study is to examine the relationship between financial literacy, attitude and retirement planning awareness among university students. An adequate knowledge of financial planning is crucial for as a preparation at an early stage to have a proper and happy life in future.

Literature Review

Financial Literacy and Financial Planning Awareness

Growing evidence has been discussing the relationship of retirement awareness and financial literacy (Sekita, 2015; Folk et al., 2012 and Lusardi et al., 2011). Financial literacy and knowledge are essential for individuals, especially the younger generation. It is generally renowned that most people will be confronted with managing various financial commitments and complexity of financial decision-making. Therefore, it is significant for university students to know that financial literacy is crucial for effective retirement planning. Ntalianis and Wise (2011) investigate the effect of financial education on retirement planning awareness. The result revealed that governments unable to provide enough pension funds in many countries, and financial education have a positive and significant effect on retirement planning awareness. Individuals are encouraged to have efforts to find and discover financial education for better retirement planning. Methods used for effective delivery of financial education are such as attending seminars, receiving written communications and online information. Harvey and Urban (2023) revealed that financial education such as budgeting, long-term debt and credit should be prioritized as early as 18-year-olds students. Folk et al. (2012) examine the effect of financial education on retirement financial planning awareness. The study used a sample of 404 individuals reveal that financial education has a significant effect on financial retirement planning. It was found that individuals who attend financial education are more concerned in preparing their financial for future retirement well-being.

Anderson et al. (2017) state the relationship between precautionary savings, retirement preparedness and misperceptions of financial literacy. The finding can be concluded that



financial literacy and retirement planning awareness were found to be positively correlated. Individuals who have a good command in computation are more likely to plan for their future retirement. The study examines the case of public sector employees selected from Linkedin. Sekita (2015) explored that financial literacy is a root of successful retirement planning. Another study done by Lusardi et al. (2011) shows similar results that individuals with high scores of financial literacies are the ones who are aware and plans for retirement. A study of Bongini and Cucinelli (2019) on Italian university students suggested a positive significant impact of financial literacy on investment of pension funds. Based on these studies, the hypothesis for this study was posited.

H1 Financial literacy is positively associated with retirement planning awareness.

Financial Attitude Toward Retirement

Financial attitude can be defined as a person's personal aspiration toward financial matters as well as their ability to plan ahead and keep a noteworthy savings account (Rai et al., 2019). A Study by Galeno et al., (2022), Zulfaka and Kassim (2021), Willows (2020), Rameli and Marimuthu (2018); Shariff and Isah (2019) found that individual philosophy influences financial attitude toward retirement in a variety of ways, ranging from retirement readiness to individual behaviour in the face of retirement. Pre-retiring employees' attitudes toward pre-retirement planning and pre-retirement planning practises were found to be significantly correlated in one of the Philippine government agencies (Galeno et al., 2022). It showed that pre-retiring employees' positive attitudes were related to their behavior, resulting in a significant use of pre-retirement planning practices to avoid expected unpleasant retirement outcomes in the future.

According to Sheriff and Isah's (2019) survey of 200 Malaysians, the majority of respondents agreed that retirement does not make them feel useless, and they are even looking forward to their retirement days. This is because they often replicate the behavior of those in their social circles, and it is likely that if someone is raised in a frugal environment, they will be able to save money in the future. This is consistent with the findings of a study conducted by Kadir et al. (2020), in which samples were gathered from workers in the Klang Valley aged 18 to 41 years old and older. The study discovered that one of the main factors influencing retirement planning behaviour in Malaysia is personal attitude. It also revealed that personal attitude serves as a good indicator for fostering stronger retirement confidence. This demonstrates that those who prioritize financial planning decisions and work toward a successful retirement will be well-prepared with the essential knowledge and will behave honorably after they retire. Whereas Willows (2020) found that retirement planning has a positive effect on an individual's financial attitude. It shows that, the individual will place a higher priority on determining how much to save for retirement. Increased focus on assisting individuals to try figure out how much to save for retirement is necessitated. Further emphasis on developing a plan and sticking to that plan is even more beneficial.

In contrast, Safari et al. (2021) discovered that attitudes about financial products had no significant impact on personal retirement planning in Bukavu, the capital of the Democratic Republic of the Congo (DRC), a Sub-Saharan country with an inadequate social security and pension system. As a consequence, the study recommended that the DRC government increase public awareness of individual retirement planning by including financial education initiatives into its socioeconomic development goals for the benefit of its citizens.



According to the previous findings, financial attitude is a significant determinant of retirement planning. Based on the findings, the hypothesis for this study was developed to describe the association between financial attitude and retirement planning awareness.

H2 Attitude is positively associated with retirement planning awareness.

Method

Sample and Measures

This study was conducted as a cross-sectional study where data were collected only once from the respondents. A total of 171 students from few faculties in UiTM Negeri Sembilan have participated as the respondents to examine their awareness towards retirement planning (Table 1). This quantitative method of the study employed an online questionnaire survey to collect primary data. The questionnaire was distributed to the respondents through a google form. The questionnaire consists of four parts: Part A for demographic information, Part B for financial literacy, Part C for attitude, and Part D for awareness. A 5-point Likert scale ranging from "1 = strongly disagree" to "5= strongly agree" was used to record the responses from the respondents. All measurement scales were adapted from a combination of existing scales from the literature. Five items were used to measure the awareness element and six items measured the financial literacy and attitude. The measurement for financial literacy, attitude, and awareness were adapted from Lai, Lai, and Lau (2009) and Zulfaka and Kassim (2021). The data were analyzed using the software of IBM SPSS Statistics Version 28 and SmartPLS 4.0.

Table 1: Respondents Profile

Respondents'		Frequency	Percentage
characteristics			(%)
Gender	Male	28	16.4
	Female	143	83.6
Programme	Science	62	36.3
	Science Social	109	63.7
Campus	Kuala Pilah	63	37
	Seremban	48	28
	Rembau	60	35
Programme level	Diploma	134	78.4
	Degree	37	21.6
Attended seminar	Yes	12	7
	No	159	93
Sources of information	Family	47	27.5
	Friends	3	1.8
	Media Social	78	45.6
	Government	6	3.5

Results and Discussion

PLS-Sem Measurement Model

The present study used the Partial Least Square-Structural Equation Modeling (PLS-SEM). In the PLS-SEM approach, all hypothesized relationships in the research model are assessed through measurement model and structural model. The analysis starts with a measurement model to assess the quality of the constructs including reliability and validity. The assessment was done by obtaining the value of outer loadings, indicator reliability, internal consistency, convergent validity, and discriminant validity. Figure 1 and Table 2 shows the results for the



measurement model. The indicator's outer loading for each variable should be 0.708 or higher to obtain a value that equals to 0.50 through the squared loading (0.708)2. From the results, the outer loadings for indicators coded FL6 and AT5 were less than 0.708. However, the indicators were not removed because the composite reliability and the average variance extracted (AVE) already met the threshold value of 0.7 and higher than 0.50 respectively. The value of AVE is proposed to reach 0.50 or higher in order for the indicators to achieve convergent validity (Fornell & Larcker, 1981). Heterotrait-monotrait ratio (HTMT) was applied to measure the discriminant validity for the research model. As shown in Table 3, the HTMT values obtained for constructs in the measurement model are less than 0.85 based on the HTMT .85. This indicates that the indicators represent their construct and at the same time differ from the other constructs. Overall, the reliability and validity of the constructs in the model were satisfactory.

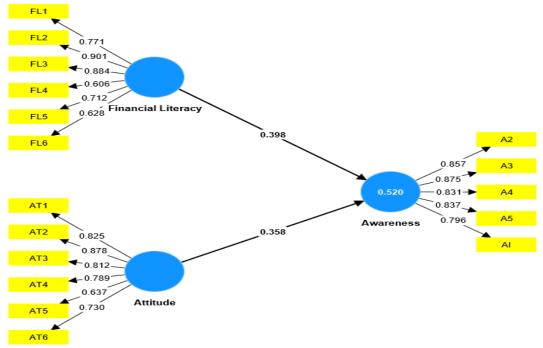


Figure 1 Measurement Model Assessment

Table 2. Construct for reliability and validity

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Constructs	Constructs Composite		Cronbach's
	Reliability (CR)	Extracted (AVE)	Alpha
Financial Literacy	0.894	0.576	0.848
Attitude	0.880	0.612	0.871
Awareness	0.896	0.705	0.895



Table 3. Discriminant Validity (Heterotrait-Monotrait (Htmt)

Constructs	Financial Literacy	Attitude	Awareness
Financial Literacy			
Attitude	0.888		
Awareness	0.775	0.759	

PLS-Sem Structural Model

In the structural model assessment, the validity of the structural model is assessed using the coefficient of determination (R)2 and path coefficients. The (R2) indicates the amount of variance in dependent variables that is explained by the independent variables. The result obtained for the R2 value in this study is 52.0.%. This indicates the variance in the awareness constructs that was explained by the combination of financial literacy and attitude were considered as moderate (Cohen, 1992). To estimate the significance of the path coefficients, the bootstrapping procedure with a resampling of 1,000 was used (Chin 1998). The structural model assessment was presented in Figure 2. Table 4 summarizes the path coefficients, t-values and result for hypotheses for each path relationship. The bootstrapping results indicate that the path coefficients (β) of financial literacy (0.358, p < 0.05) and attitude (0.398, p < 0.05) have a statistically significant contribution to the model, hence support H1 and H2. Attitude appears to be the strongest predictor construct influencing awareness with the path coefficient values of 0.398, followed by financial literacy with the path coefficient values of 0.358.

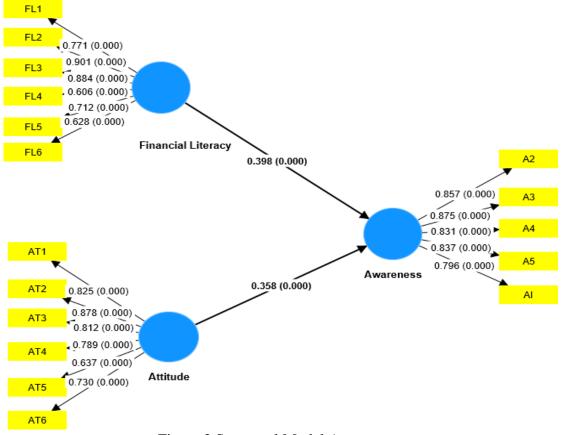


Figure 2 Structural Model Assessment



Table 4. Results of the significance and relevance of the structural model relationships

Hypotheses	Path Coefficients	T Statistics ^a	P Values	Results
H1	0.358	4.074	0.001	Supported
H2	0.398	3.970	0.000	Supported

The significant results of financial literacy effects on awareness of retirement planning agree with other studies on university students conducted by Bongini et. al (2019) and Zulfaka and Kassim (2021). Similarly, the significant relationship between financial literacy and retirement planning awareness are in line with Lusardi et al. (2011), Folk et al. (2012) and Safari et al. (2021). Individuals with high financial knowledge have a high awareness and probability to plan for retirement. Importantly, financial literacy serves as a basis for financial decisionmaking especially in this challenging economic situation. Financial literacy helps individuals to understand interest compounding and inflation which in turn gives them knowledge on how to invest their money, how much to invest, diversification risks, and long-term financial planning. Youngsters with inadequate financial information might have difficulties in planning for retirement effectively, managing money and an inability to make optimal retirement saving decisions (Garg & Singh, 2017). Hence, early retirement plans must be cultivated among students by providing them with seminars or courses to help them gain knowledge about investment decisions, asset accumulation, and risk management, simultaneously helping them in preparing a future financial well-being. The government and pension agencies should play their role by providing information on the characteristics of pensions and retirement savings plans so that the individual understands what actions he needs to take with respect to each of the options.

The significant relationship between attitude and awareness of retirement planning are in line with Bongini et. al (2019) and Willows (2020). Their attitude and perspective on the importance of saving for retirement helps them to plan and manage the financial matters, such as saving more, spending less and being aware of the risk of the financial decision they made (Garg & Singh, 2017). Positive financial attitude among younger generations helps them to feel more confident and comfortable to plan for their future retirement planning to achieve adequate retirement savings and enjoying their retirement phase.

Conclusion

The results suggest that financial literacy and attitude are significant factors on the retirement planning awareness among university students. Students understand the importance of financial knowledge and positive attitude to enjoy their retirement phase that requires adequate savings to maintain their lifestyle, dealing with medical emergencies, fulfilling life aspirations such as to travel the world, less depending on children as well as continuing contribute to the family even during retirement. Early retirement planning is crucial for young generations because it commits continuous and long-term planning, thus students must seek for knowledge and skills to make decisions on investment selections, asset accumulation, and risk management, which can help them prepare for difficult retirement years. To gain knowledge and to increase the retirement planning awareness, one can attend seminars on financial planning, long-term care planning seminars and courses conducted by the government and other agencies to get a bigger picture on issues such as work-life, academic and family life transitions following the retirement. This study contributes to the existing literature by



highlighting the importance of retirement planning awareness among the younger generation, where lack of prior research studies on the topic. Universities, institution, and educators should provide educational program and courses to provide them exposure and knowledge on the financial retirement, basic financial planning and other related financial issues which in turn can help younger generations to understand the impact of saving sooner to enjoy the retirement phase later.

Research Limitation and Implication

The respondents of the study only comprised of small sample size; students from three campuses in UiTM Negeri Sembilan, thus limit the generalizability of the findings. For the future research, it is recommended that the study can be done with a bigger sample size because it would be more representative of Malaysia's general population of university students. Secondly, the usage of questionnaire in gathering data limits the information obtained for the analysis. Therefore, it is recommended to apply both interviews and questionnaires in gathering data relating to retirement planning awareness in the future. Additionally, the number of contributing factors influencing retirement planning among university students were limited, thus might not reflect the overall factors of retirement planning. The number of contributing factors influencing retirement planning should be expanded to improve accuracy.

The study has significant implication that align with various Sustainable Development Goals (SDGs) by addressing financial literacy and retirement planning attitudes among university students, ultimately contributing to a more equitable, informed, and economically secure society. First, improved financial literacy and retirement planning attitudes could contribute to reducing the risk of future poverty among individuals, aligning with SDG 1 (No Poverty) the goal of eradicating poverty. The combination of financial literacy and a positive attitude towards retirement planning empowers individuals to make informed decisions, understand diverse investment strategies, manage debt responsibly, save effectively and adapt to changing of financial market and economic condition. Second, highlighting the lack of financial literacy among university students emphasizes the need for incorporating financial education into curriculum, promoting a holistic quality education that prepares students for real-world challenges. This is parallel to SDG 4 which aims for Quality Education. Therefore, thoughtful actions should be taken by policymakers to ensure the goals are achieved and students will be able to gain benefits from it.

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