

Understanding The Role of Financial Literacy in Retirement Planning Among Youth in Sarawak, Malaysia: A Conceptual Framework

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ABSTRACT

Retirement planning has become a critical aspect of personal financial management, particularly as life expectancy increases, employment patterns evolve, and dependence on public pension systems declines. In Malaysia, despite sustained national initiatives to enhance financial literacy, many young people especially those in Sarawak remain inadequately prepared for retirement. Recent statistics are concerning: approximately 70 percent of EPF contributors in Sarawak have retirement savings of less than RM10,000, and 60 percent of young individuals are unable to meet an unexpected RM1,000 expense without borrowing. These figures underscore the growing urgency of improving financial preparedness among this group. This study seeks to investigate the determinants of personal retirement planning among Sarawakian youth aged 15 to 30. In particular, it focuses on the influence of financial knowledge, numerical and computational ability, exposure to financial education, and attitudes toward financial products. A cross-sectional survey methodology will be adopted, with data analyzed using Structural Equation Modelling to assess the magnitude and direction of relationships among the variables. The questionnaire comprises sections on respondents' socioeconomic characteristics as well as validated measurement scales for each construct. The anticipated findings are expected to shed light on the financial literacy levels, attitudes, and planning behaviors of youth in Sarawak, highlighting critical gaps and areas for improvement. For educators and practitioners, the results will offer practical insights for designing targeted financial literacy initiatives that align with the realities faced by young individuals. From a policy standpoint, the study supports the development of region-specific strategies that integrate financial education into broader socioeconomic planning. Overall, this research contributes to the expanding literature on fostering long-term financial resilience among youth in emerging economies.

Keywords: financial literacy, personal retirement planning, Sarawakian youth

INTRODUCTION

Financial literacy has increasingly been recognized worldwide as a key determinant of effective personal financial management, particularly in relation to retirement planning. Over recent decades, the transition from state-supported pension systems to greater individual responsibility for retirement security has heightened the importance of possessing sufficient financial knowledge and decision-making skills to ensure financial well-being in later life (Bardy, 2025). Although extensive research has explored the linkage between financial literacy and retirement planning in developed economies, empirical evidence from developing regions remains limited, especially within the Malaysian setting.

In Malaysia, youths are defined under the National Youth Development Policy as individuals aged between 15 and 30 years, comprising approximately 30.5 percent of the total population (Ng & Thomas, 2023). In Sarawak,

one of the country's largest states, concerns surrounding retirement readiness are becoming increasingly pronounced, particularly among individuals transitioning into mid-life and the early stages of pre-retirement. Despite the implementation of various financial education programs by governmental and non-governmental bodies, levels of financial literacy continue to vary considerably across regions and population segments.

Sarawak's unique demographic and economic context poses specific challenges to youth retirement planning. An estimated 42 percent of rural households lack access to formal banking facilities, while 52 percent of young people do not practice regular savings behavior (Lau, 2025), highlighting stark contrasts with the more advanced financial infrastructure found in Peninsular Malaysia. Furthermore, Malaysia's mandatory retirement savings scheme, the Employees Provident Fund (EPF), applies primarily to formal sector employees, leaving approximately 35 percent of Sarawakian youth engaged in informal employment without access to structured retirement savings mechanisms (EPF, 2024; The Edge Malaysia, 2021). Recent efforts such as Bank Negara Malaysia's Financial Education Network (FE Network) and PRS Pewaris youth-focused initiatives underscore increasing institutional awareness of these regional and demographic disparities (Sarawak Tribune, 2025; Idris, 2016).

Problem Statement

Despite Malaysia's classification as an upper-middle-income nation, youth in Sarawak are experiencing a significant shortfall in retirement readiness. Evidence indicates that 70 percent of EPF contributors in the state hold savings balances below RM10,000, an amount widely regarded as inadequate to meet even minimum retirement expenses (Lau, 2025; The Edge Malaysia, 2021). Financial literacy levels are also concerning, with only 27 percent of Sarawakian youth able to correctly understand compound interest calculations, a core indicator of financial capability (Lau, 2025). In addition, 60 percent of young individuals report being unable to meet an unexpected RM1,000 expense without relying on borrowing, highlighting widespread financial vulnerability (Lau, 2025).

These challenges persist despite findings from the DRC study, which affirm the importance of financial literacy in promoting effective retirement planning. This disparity suggests that context-specific factors in Sarawak may moderate or mediate the relationship between financial literacy and retirement preparedness (Leong, 2019).

Research Objectives

The principal objective of this study is to investigate the determinants of personal retirement planning behaviour among youths in Sarawak within the specified age range. To achieve this aim, the study is guided by the following specific objectives:

1. To assess the level of Personal Retirement Planning (PRP) among individuals aged 15 to 30 residing in Sarawak.
2. To evaluate the levels of key financial literacy dimensions, namely Financial Knowledge (FN), Computation Capability (CP), exposure to Financial Education (FE), and Attitudes Toward Financial Products (ATFP) among Sarawakian youth aged 15 to 30.
3. To analyse the strength and nature of the relationships between each financial literacy component (FN, CP, FE, and ATFP) and Personal Retirement Planning (PRP).

LITERATURE REVIEW

Financial Literacy and Personal Retirement Planning

Retirement planning has increasingly shifted from being predominantly state- or employer-managed toward a model requiring greater individual responsibility, particularly in emerging economies where public pension coverage remains uneven (Bardy, 2025; Safari et al., 2021). Within this context, financial literacy has been consistently identified as a foundational determinant of individuals' capacity to engage in effective personal retirement planning. Financial literacy extends beyond basic financial knowledge to encompass cognitive skills, behavioural orientation, and attitudinal readiness that jointly influence long-term financial decision-making (Ying & Jamal, 2023).

While extensive research has examined the financial literacy–retirement planning nexus, the literature remains fragmented across conceptualizations, measurement approaches, and contextual focus. Much of the existing evidence is derived from developed or urban-centric settings, limiting its applicability to regions characterised by income volatility, informal employment, and uneven access to financial infrastructure—conditions that are particularly salient in Sarawak, Malaysia (Leong, 2019; Lau, 2025). Consequently, a multidimensional and context-sensitive synthesis of financial literacy constructs is required to advance understanding of retirement planning behaviour among youth in such environments.

THEORETICAL FRAMEWORK

This study is grounded in the Life Cycle Hypothesis (LCH), originally proposed by Modigliani in the 1950s, which explains individual saving and consumption behaviour as a function of expected lifetime income. The LCH posits that rational individuals seek to smooth consumption over their lifetime by accumulating savings during their working years and decumulating those assets during retirement. Within this framework, retirement planning is viewed as a deliberate and forward-looking financial process influenced by individuals' capacity to anticipate future needs and allocate present resources accordingly.

First, income is assumed to vary systematically over an individual's life course: earnings typically increase during the early stages of employment, reach a peak in mid-career, and decline following retirement. Second, individuals are assumed to prefer a stable level of consumption throughout their lifetime, using saving and borrowing mechanisms to maintain consistent living standards. Third, the theory assumes rational financial decision-making, whereby individuals plan optimally by anticipating future income streams, expenses, and retirement needs.

Within this framework, individuals accumulate assets during their working years (the accumulation phase) and gradually draw down these savings after retirement (the decumulation phase). The LCH therefore underscores the importance of early and sustained saving to support financial security in later life, when earned income decreases. The relevance of the Life Cycle Hypothesis to personal retirement planning lies in its emphasis on intertemporal decision-making. Retirement preparedness is not solely determined by income levels but by individuals' ability to forecast long-term financial requirements, evaluate trade-offs between present consumption and future security, and commit to sustained saving behaviour. Consequently, cognitive capabilities, financial awareness, and behavioural dispositions play a central role in shaping retirement planning outcomes.

However, findings from Safari et al.'s DRC study indicate structural limitations in the applicability of the Life Cycle Hypothesis within developing economies. The results revealed that only two of the four financial literacy components namely computation capability and financial knowledge had a significant influence on retirement planning behaviour (Leong, 2019). In contrast, participation in financial education programs showed no statistically significant effect, a finding attributed to persistently low baseline levels of financial literacy (Leong, 2019).

Personal Retirement Planning (PRP) as a Behavioural Outcome

Personal retirement planning (PRP) refers to a set of forward-looking financial behaviours including saving, investment, retirement goal-setting, and engagement with formal retirement instruments (Safari et al., 2021). Conceptually, PRP reflects both intention and action, shaped by individuals' expectations of future income, longevity, and post-retirement needs, consistent with the Life Cycle Hypothesis (Modigliani & Brumberg, 1954).

Among youth, retirement planning is often deprioritised due to competing consumption demands, limited financial capacity, and temporal distance from retirement (Sim et al., 2025). Nevertheless, early engagement in retirement-oriented financial behaviour is critical, as saving initiated during the early accumulation phase has a disproportionately large impact on long-term retirement adequacy. Empirical and conceptual studies suggest that youth retirement planning is especially sensitive to financial literacy-related factors, including cognitive competence, exposure to education, and perceptions of financial products (Rahayu et al., 2024; Safari et al., 2021).

At the national level, initiatives such as Malaysia’s Financial Education Network (2019–2023) have sought to embed financial literacy within school curricula to better equip young people to navigate increasingly complex financial environments. Nevertheless, region-specific evidence suggests that significant disparities persist in Sarawak, indicating that national programs may not fully address local needs (Financial Education Network, 2019; Prudential, 2023). Despite the presence of compulsory retirement savings mechanisms such as the Employees Provident Fund (EPF), a substantial proportion of young Sarawakians remain inadequately prepared for retirement, with nearly 70 percent holding balances below RM10,000 (Prudential, 2023).

Moreover, cultural norms and socioeconomic limitations further influence youth participation in PRP, often constraining long-term financial planning efforts (Sim et al., 2025). While recent initiatives targeting Sarawakian youth—such as workshops focused on budgeting and investment literacy—have demonstrated encouraging outcomes, their overall impact remains limited by scale and contextual adaptability (Prudential, 2023). Accordingly, future research should prioritize examining the long-term effectiveness of financial literacy interventions and the development of culturally responsive strategies aimed at strengthening retirement planning behaviours among youth in Sarawak.

In Sarawak, structural constraints—such as informal employment and limited penetration of formal retirement schemes—further complicate youth engagement in PRP, underscoring the need to examine retirement planning not merely as a function of income, but as an outcome of financial capability and behavioural readiness.

TABLE A DEPARTMENT OF STATISTICS MALAYSIA, EPF, THE EDGE ESTIMATES



Figure 1 – Savings of EPF Members (The Edge Malaysia, 2021)

Figure 1 illustrates the distribution of Employees Provident Fund (EPF) members by savings category as of December 2020, based on data from the Department of Statistics Malaysia, EPF, and estimates by The Edge. The figure offers important insights into the pattern of retirement savings among Malaysian workers who contribute to the EPF. One of the most notable findings is that the top 0.002 percent of contributors—amounting to just 248 individuals—each possess savings of at least RM10 million. This figure highlights a pronounced concentration of wealth among a very small segment of EPF members.

The accompanying table further details the distribution across different savings brackets. A majority of members, numbering 4,727,778, fall within the lowest savings category of RM5,000 or below, with an average balance of only RM1,665. Similarly, the RM5,001 to RM10,000 category includes 1,517,923 members, whose average savings stand at RM7,294. Taken together, these figures indicate that a substantial proportion of EPF contributors had very limited retirement savings as of the end of 2020.

As savings amounts increase, the number of members in each category declines sharply, while average and total balances rise significantly. For instance, 67,671 contributors in the RM1 million to RM10 million category recorded average savings exceeding RM1.6 million. At the highest level, the small group of 248 members with savings of RM10 million or more collectively held over RM4.3 billion, translating to an average balance of more than RM17.5 million per individual.

From the perspective of financial literacy and retirement preparedness, these figures are highly revealing. The large concentration of members with minimal balances may reflect limitations related to financial knowledge, budgeting skills, irregular contributions, or income constraints that restrict saving capacity. The stark contrast between the lowest and highest savings categories underscores significant inequalities in retirement readiness. Overall, the infographic provides compelling evidence of the scale of the retirement savings challenge faced by a sizeable portion of the population, reinforcing concerns about the effectiveness of existing financial education initiatives and retirement security policies.

Financial Knowledge (FN)

Financial knowledge (FN) refers to an individual's comprehension of fundamental financial concepts, including interest rates, inflation, risk diversification, and investment decision-making (Ying & Jamal, 2023). Within the Life Cycle framework, financial knowledge enhances individuals' ability to anticipate lifetime income trajectories and evaluate future financial needs, thereby enabling informed saving and investment decisions.

Prior studies consistently link higher levels of financial knowledge to improved saving behaviour and greater retirement preparedness (Sim et al., 2025; Sabri et al., 2024). However, scholars increasingly caution that knowledge alone may be insufficient to generate sustained behavioural change, particularly in environments where institutional access and financial products are limited (Leong, 2019). However, structural challenges persist. Socioeconomic disparities, rural–urban inequalities, and limited access to digital financial resources continue to hinder financial knowledge acquisition, particularly among rural youth in Sarawak (Rahayu et al., 2024). Gender-based differences have also been observed, with male youths generally reporting higher confidence levels in financial knowledge, although saving behaviours appear largely similar across genders (Sabri et al., 2024).

Among youth in Sarawak, Malaysia, financial knowledge plays a pivotal role in promoting effective retirement planning and ensuring long-term financial stability. Despite national initiatives such as Malaysia's National Strategy for Financial Literacy 2019–2023, which incorporates financial education into formal school curricula, a significant proportion of young people continue to experience financial difficulties. As of 2023, approximately 73 percent of youths were affected by issues related to debt, inadequate savings, and the absence of emergency funds (Prudential Malaysia, 2023).

In addition, the growing influence of social media and consumer-driven lifestyles further complicates financial decision-making among young individuals. While gradual improvements in financial awareness are evident, addressing these ongoing challenges requires tailored, practical, and context-specific financial literacy interventions. Future research should focus on examining how financial knowledge is translated into sustained retirement planning behaviours over time, as well as exploring the role of psychological factors in shaping financial literacy outcomes among Sarawakian youth.

Computation Capability (CP)

Financial computation capability (CP), commonly referred to as numeracy skills, represents a crucial dimension of financial literacy that significantly influences retirement planning among youth in Sarawak, Malaysia. CP reflects an individual's ability to perform basic mathematical calculations necessary for informed financial decision-making, such as evaluating interest rates, inflation, and investment returns (Sunderaraman et al., 2022). From a conceptual standpoint, computation capability is especially relevant in semi-formal or informal financial settings, where individuals rely less on professional financial advice and more on personal judgement. As such, numeracy serves as a critical determinant of retirement planning readiness in developing and peripheral regions.

Empirical studies conducted between 2019 and 2024 indicate that many young adults in Sarawak exhibit limited proficiency in essential financial computations, particularly in areas involving compound interest and the real effects of inflation—both of which are fundamental to effective retirement planning (Sim et al., 2023).

For instance, findings reveal that only 58 percent of youths were able to correctly answer questions related to inflation-adjusted savings growth, highlighting substantial gaps in their computational skills (Sim et al., 2023). Such deficiencies restrict their capacity to make sound decisions regarding savings, investments, and debt management, ultimately undermining long-term financial security. In response, the Malaysian government has introduced various initiatives—such as Bank Negara Malaysia’s School Adoption Programme and the integration of financial education into the national curriculum—to strengthen financial competencies, including computation skills, among young people (Bank Negara Malaysia, 2024).

Despite these efforts, significant disparities remain, particularly among rural youth in Sarawak, largely due to limited access to financial information, institutional support, and digital financial tools (MEITD Sarawak, 2023). Moreover, the 2024 Financial Capability and Inclusion Survey reported stagnant levels of financial literacy nationwide, reinforcing the need for targeted interventions that specifically address computational skills to enhance youths’ preparedness for retirement planning (Bank Negara Malaysia, 2024).

Financial Education (FE)

Financial education refers to both formal and informal learning processes that equip individuals with knowledge and skills related to financial management (Lim & Jamal, 2023). At a conceptual level, financial education functions as both a capacity-building and behavioural socialisation mechanism, shaping long-term financial attitudes and habits. Such education may be obtained through academic programs, workplace-based training, or broader public awareness initiatives (Rahim et al., 2023). In Sarawak, Malaysia, financial literacy and retirement planning among youth have emerged as particularly important areas of inquiry, given the rapid expansion of the gig economy and the limited availability of institutional retirement coverage for self-employed workers.

Empirical evidence suggests that financial education plays a meaningful role in shaping retirement preparedness. For instance, Alam and Chen (2021) found a positive relationship between financial awareness and retirement readiness among self-employed Malaysian youth, although notable gaps persisted in their understanding of financial products and appropriate savings targets. Similarly, Kaiser et al. (2019) demonstrated that financial education significantly improves financial literacy and behaviour, with enduring effects on retirement planning outcomes. Fernandes et al. (2022) further emphasized the role of financial education in reducing reliance on high-cost credit and strengthening long-term financial resilience.

Innovative instructional approaches, such as experiential learning and virtual financial simulations, have also been shown to effectively bridge the gap between theoretical knowledge and real-world financial decision-making, particularly within increasingly digital financial environments (Sutter et al., 2024). Despite strong global evidence supporting the benefits of financial education, challenges remain in tailoring educational content to varied socioeconomic and cultural contexts—an issue especially relevant in Sarawak.

To address these gaps, local initiatives such as the 2024 Sarawak Graduate Financial Convention organized by Bank Negara Malaysia have introduced targeted workshops focusing on budgeting, savings, and debt management. Nevertheless, research examining the effectiveness of financial education programs specifically among Malaysian youth remains limited. Future studies should therefore emphasize the development and evaluation of localized financial education interventions to better assess their impact within Sarawak’s distinct cultural and institutional landscape (Alam & Chen, 2021).

Attitudes Toward Financial Products (ATFP)

Attitudes toward financial products refer to individuals’ perceptions, beliefs, and inclinations regarding the use of financial instruments such as savings accounts, insurance policies, credit cards, and investment vehicles (Ying & Jamal, 2023). Behavioural finance theory suggests that attitudes play a mediating role between knowledge and action, shaping whether individuals are willing to engage with formal financial systems.

Existing literature on attitudes toward financial products (ATFP) among youth in Sarawak, Malaysia, suggests that financial literacy plays a crucial role in shaping young adults' financial behaviours and their approaches to retirement planning. Numerous studies have explored how financial education and awareness influence youths' attitudes toward various financial products, including savings, insurance, and credit facilities.

For example, Lim and Jamal (2023) found that while Malaysian youth generally possess adequate knowledge of basic financial products such as savings accounts and insurance, they often demonstrate limited understanding of appropriate credit card usage. This shortfall in financial knowledge contributes to differing attitudes toward financial planning, with higher levels of awareness being associated with more positive perceptions of products such as life insurance for long-term family protection (Ying & Jamal, 2023). Moreover, Tulpule and Chougule (2020) observed a notable cultural shift among Malaysian youth from saving-oriented behaviour toward increased consumption, underscoring the need for strengthened financial education to promote responsible credit use and long-term financial planning.

Further evidence from Plata-Gómez and Caballero-Márquez (2023) indicates that structured financial education programs are effective in improving young individuals' financial behaviours, particularly with respect to savings accumulation and retirement preparation. In addition, Rahim et al. (2023) argue that financial attitudes are shaped not only by formal education but also by social influences, reinforcing the importance of targeted and context-specific educational interventions in fostering informed financial decision-making among youth.

Key Financial Literacy Challenges Faced by Youth in Sarawak

Youth in Sarawak face a range of financial literacy challenges shaped by a combination of geographical constraints, cultural norms, and structural limitations.

Structural Barriers to Financial Access

One of the most significant challenges confronting Sarawakian youth is limited access to formal financial services, largely due to geographical isolation and a persistent digital divide. Sarawak's vast and rugged terrain has contributed to unequal infrastructure development, resulting in approximately 42 percent of rural households lacking access to basic banking facilities. Consequently, many young people rely on informal financial practices such as cash savings or barter systems, which restrict their exposure to formal financial instruments and services (Lau, 2025; Lu et al., 2024).

This issue is further exacerbated by disparities in internet connectivity. While urban areas in Sarawak report internet coverage rates of up to 95 percent, only about 68 percent of rural households have reliable internet access. This uneven digital access limits rural youth's ability to utilize online banking platforms and participate in digital financial education initiatives, thereby widening the financial inclusion gap (Lau, 2025; Lu et al., 2024).

Educational Gaps in Financial Literacy

Deficiencies within the education system, particularly in rural areas, present another major barrier to improving financial literacy among youth. Many rural schools in Sarawak do not incorporate structured financial literacy education into their curricula. This shortfall is reflected in academic outcomes, as approximately 35 percent of students score below average in numeracy which is an essential skill for tasks such as budgeting, saving, and understanding interest calculations (Lau, 2025; Lu et al., 2024).

Moreover, comprehension of more advanced financial concepts remains limited. Only 27 percent of Sarawakian youth demonstrate an understanding of compound interest, a foundational concept for long-term financial planning. At the national level, financial literacy challenges are similarly pronounced, with 62 percent of Malaysian youth exhibiting low financial literacy, significantly constraining their capacity for effective debt management and retirement planning (Lau, 2025; Suhaimi, 2024).

Cultural and Economic Influences

Cultural traditions and economic conditions further shape financial behaviours among Sarawakian youth. Major cultural celebrations, such as Gawai and Hari Raya, involve substantial financial outlays that, while socially

significant, often place pressure on household finances and reduce the ability to allocate resources toward long-term savings (Lau, 2025).

From an economic standpoint, an estimated 35 percent of young people in Sarawak are employed in the informal sector. These individuals typically do not participate in structured retirement savings schemes such as the Employees Provident Fund (EPF), increasing their vulnerability to financial insecurity in later life (Lau, 2025; Seng, 2024). In addition, many young entrepreneurs face challenges related to basic financial management and bookkeeping skills, which can limit business growth opportunities and restrict access to formal financing (Seng, 2024).

Financial Vulnerability

These factors contribute to significant financial vulnerability among Sarawakian youth. A high percentage of Malaysian youth, specifically 73%, report facing debt challenges. The rise of easily accessible credit options, such as predatory Buy Now, Pay Later (BNPL) schemes, is exacerbating this issue and increasing overall indebtedness (Suhaimi, 2024). The lack of emergency preparedness is also stark: 60% of youth cannot cover an unexpected RM1,000 expense without needing to borrow funds. Furthermore, a concerning 70% of EPF contributors in Sarawak have account balances below RM10,000, an amount widely considered insufficient for a comfortable retirement (Lau, 2025; Sim et al., 2023). These statistics paint a concerning picture of financial fragility among Sarawakian youth, underscoring the urgent need for targeted financial literacy interventions, responsible credit education, and long-term savings strategies to build a more resilient and financially secure younger generation.

Policy and Systemic Gaps

Persistent policy and systemic shortcomings continue to reinforce the financial literacy challenges faced by Sarawakian youth. Many existing initiatives, including those implemented by national institutions such as Bank Negara Malaysia's Financial Education Network (FE Network), remain largely urban-focused. As a result, their outreach in rural and remote communities is limited, and program content often lacks dialect-sensitive or culturally adapted materials that reflect the diversity of Sarawak's population (Lau, 2025; Lu et al., 2024). Furthermore, financial literacy levels differ notably across ethnic groups, influenced by variations in parental financial socialization, cultural norms, and differential access to financial resources (Wee & Goy, 2022).

Collectively, the structural, educational, cultural, economic, and systemic challenges discussed earlier perpetuate cycles of financial vulnerability and instability among Sarawakian youth. Addressing these deeply rooted issues requires integrated and context-specific solutions. Such approaches should include improvements in digital infrastructure, the incorporation of culturally relevant financial education into formal schooling, and the formulation of policies explicitly designed to reduce persistent urban-rural disparities (Lau, 2025; Lu et al., 2024).

Empirical Gaps in Existing Research

Beyond the practical challenges faced by Sarawakian youth, significant deficiencies remain within the academic literature on financial literacy and retirement planning. Identifying these empirical gaps is essential to advancing research agendas and informing effective policy interventions.

Geographical Bias

One of the most pronounced limitations in existing research is its geographical concentration. Globally, approximately 78 percent of financial literacy studies focus on OECD countries, whereas only about 12 percent examine Southeast Asian contexts, resulting in a limited understanding of region-specific financial behaviours and constraints (Leong, 2019). In Malaysia, despite the Employees Provident Fund (EPF) overseeing assets totaling RM1.01 trillion as of 2024, there is a notable absence of Structural Equation Modeling (SEM)-based studies examining financial literacy among Malaysian youth. Such methodologies could offer more nuanced insights into the complex interrelationships shaping financial behaviour (EPF, 2024).

Measurement Inconsistencies

Another significant research gap lies in the lack of standardized definitions and measurement frameworks for financial literacy. For instance, Safari et al. applied a multi-dimensional model incorporating financial knowledge, computation capability, financial education, and attitudes toward financial products (Leong, 2019). In contrast, Nur Baiti et al.'s study in Malacca (2018), as cited by Shafee et al. (2018), identified financial intention, rather than literacy itself as the sole significant predictor of financial behaviour. Such inconsistencies impede meaningful comparison across studies and hinder the development of cohesive theoretical models. More recently, emerging discussions have emphasized digital literacy as a critical but frequently overlooked dimension of financial capability, particularly in rapidly digitizing financial environments (Sarawak Tribune, 2025; Lau, 2025).

Policy–Research Disconnect

A final gap concerns the misalignment between policy implementation and empirical evaluation. Although major initiatives such as the Financial Education Network have been operational since 2016 (Idris, 2016), there is a lack of comprehensive baseline or longitudinal impact assessments associated with their implementation, particularly leading up to recent program expansions. This absence of empirical evaluation limits the ability to assess program effectiveness. Similarly, tools such as EPF's Belanjawanku 2024/25 offer valuable budgeting guidance but implicitly assume uniform access to financial infrastructure across Malaysia, overlooking substantial urban–rural differences (EPF, 2024). These limitations highlight the need for empirically grounded research that can critically inform financial policy design and implementation.

Conceptual Framework

Collectively, the literature suggests that personal retirement planning is best understood as the outcome of interacting dimensions of financial literacy, rather than a single construct. Financial knowledge provides informational awareness, computation capability enables practical evaluation, financial education facilitates skill acquisition, and attitudes toward financial products shape behavioural engagement. Importantly, their effects are highly context-dependent, particularly in settings characterised by structural constraints and uneven financial inclusion.

Despite growing interest in youth financial behaviour, conceptual integration of these dimensions within developing and semi-rural contexts remains limited. This gap is especially pronounced in Sarawak, where demographic, economic, and institutional conditions diverge significantly from those examined in mainstream financial literacy research. Accordingly, a multidimensional conceptual framework grounded in the Life Cycle Hypothesis provides a suitable basis for advancing understanding of retirement planning behaviour among Sarawakian youth.

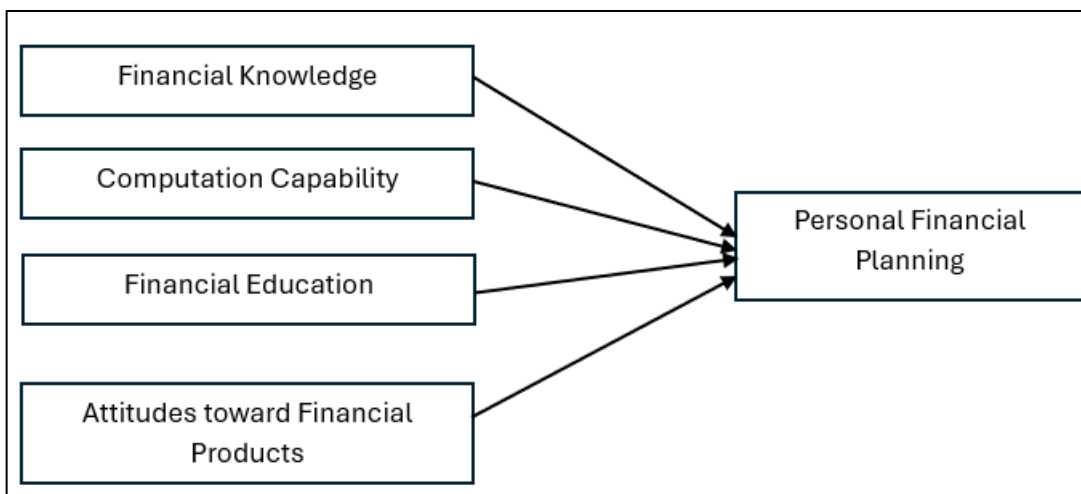


Figure 2. The Proposed Conceptual Framework (Adopted from Safari et al., 2021)

The proposed conceptual framework depicts the relationships between four principal independent variables and the dependent variable, Personal Financial Planning. Its purpose is to examine how different dimensions of financial literacy and financial behaviour shape individuals' ability and willingness to engage in effective personal financial planning. The framework proposes that individuals possessing higher levels of financial knowledge are more capable of making informed financial decisions, which in turn enhances their overall financial planning practices. It further assumes that strong computational capability enables individuals to evaluate financial alternatives, budgets, and investment returns more accurately, thereby supporting more informed and strategic planning outcomes. Exposure to financial education is expected to have a positive effect on personal financial planning by providing individuals with relevant knowledge, skills, and tools to manage their financial resources effectively. Additionally, positive attitudes toward financial products are hypothesised to encourage greater engagement with formal financial instruments, a critical element of comprehensive and sustainable financial planning.

A summary of the study's hypotheses is presented below.

H1: Financial Knowledge (FN) is positively related to Personal Retirement Planning (PRP).

H2: Computation Capability (CP) is positively related to Personal Retirement Planning (PRP).

H3: Exposure to Financial Education (FE) is positively related to Personal Retirement Planning (PRP).

H4: Attitudes Toward Financial Products (ATFP) are positively related to Personal Retirement Planning (PRP).

Research Design and Methodology

This study adopts a cross-sectional, survey-based research design to examine financial literacy levels and personal retirement planning behaviours among youth in Sarawak at a single point in time. This design is appropriate for identifying patterns and relationships between key variables within the target population. The empirical framework is adapted from prior research by Safari et al. (2021) and focuses on core constructs relevant to this investigation. Specifically, the model assesses the relationships between Personal Retirement Planning (PRP) as the dependent variable and four hypothesised predictors: Financial Knowledge (FN), Computation Capability (CP), Financial Education (FE), and Attitudes Toward Financial Products (ATFP).

Data will be collected using a structured questionnaire divided into two main sections. The first section gathers respondents' socioeconomic information, including age, gender, income level, and educational background, to provide a demographic profile of the sample. The second section consists of validated measurement items designed to assess the four financial literacy components (FN, CP, FE, ATFP) and the dependent variable, PRP. Participants will be recruited from a wide range of sectors across Sarawak, including public and private organizations, to ensure diversity and broader representativeness of the sample.

Prior to data collection, ethical approval will be obtained from the Research Ethics Committee of Universiti Teknologi MARA. The submission will include the research proposal, survey questionnaire, informed consent forms, and procedures for safeguarding participant data. This step ensures compliance with institutional and national ethical guidelines, particularly in protecting participants' rights, confidentiality, and privacy.

Measurement of Variables

Personal Retirement Planning (PRP) will be measured using Likert-scale items capturing respondents' engagement in retirement-related savings, investments, and forward-looking financial decisions. Financial Knowledge (FN) will be assessed through questions evaluating respondents' understanding of fundamental financial concepts such as budgeting, interest rates, and inflation. Computation Capability (CP) will be measured by items assessing numerical proficiency and the ability to perform basic financial calculations. Financial Education (FE) will be operationalised based on respondents' exposure to formal financial education programs or structured financial learning experiences. Finally, Attitudes Toward Financial Products (ATFP) will be measured through items examining respondents' perceptions and willingness to engage with financial instruments such as pension schemes and insurance products.

ANALYSIS OF FINDINGS

Following data collection, descriptive statistics will be used to summarise the socioeconomic characteristics of the respondents, including distributions by age, gender, education level, and income category. These analyses will provide contextual background for interpreting subsequent findings.

Descriptive analyses will also be conducted for all study variables to provide an overview of respondents' financial literacy levels and typical personal retirement planning behaviours. The primary analytical approach will involve Structural Equation Modelling (SEM), which will be used to test the hypothesised relationships between the financial literacy constructs (FN, CP, FE, ATFP) and Personal Retirement Planning (PRP). Reliability and internal consistency will be assessed using indicators such as Cronbach's alpha and composite reliability. Additionally, convergent and discriminant validity tests will be performed to ensure that the constructs reliably measure distinct concepts within the model.

The final stage of analysis will involve evaluating the predictive power and overall fit of the model. Model fit will be assessed using appropriate goodness-of-fit indices, while predictive relevance will determine how effectively the combined financial literacy constructs explain variations in personal retirement planning behaviour among respondents.

CONCLUSION AND RECOMMENDATIONS

Based on the empirical findings, the study will draw key conclusions regarding the influence of financial literacy on retirement planning among Sarawakian youth aged 15 to 30. The results will identify which specific dimensions—Financial Knowledge, Computation Capability, Financial Education, and Attitudes Toward Financial Products—exert a significant impact on individuals' engagement in Personal Retirement Planning.

These findings will have important practical implications. Policy-oriented recommendations will be proposed for both state-level authorities in Sarawak and federal policymakers in Malaysia, emphasising the need to strengthen and refine financial literacy initiatives targeting youths. Particular focus will be placed on the 15–30 age group, given their proximity to critical long-term financial decisions and the observed gaps in retirement preparedness. The study will also suggest opportunities for collaboration between public and private sector stakeholders to enhance access to effective retirement planning tools and financial education resources tailored to this demographic.

The study acknowledges several limitations, including constraints related to sample size and the cross-sectional nature of the research, which limit causal inference and the ability to observe behavioural changes over time. In light of these limitations, directions for future research are proposed. These include the adoption of longitudinal research designs to track financial behaviour across life stages and the exploration of additional factors—such as psychological, cultural, or institutional influences—that may further explain retirement planning behaviour among Malaysian youth.

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