

Financial Planning of Malaysian Military Households: The Mediating Role of Retirement Awareness

Mohd Yusof Ahmad¹, Hafizah Mat Nawi^{2*}, Mohammad Noor Abdullah³, Zailin Zainal Ariffin⁴

^{1,2,3,4}National Defence University of Malaysia

*Corresponding Author Email: hafizah.matnawi@upnm.edu.my

DOI Link: <http://dx.doi.org/10.6007/IJARBS/v15-i10/26777>

Published Date: 27 October 2025

Abstract

Military households face unique financial pressures due to unpredictable service conditions, mandatory early retirement, and limited post-service income continuity. Despite stable government remuneration and pension schemes, many Malaysian Armed Forces (MAF) personnel exhibit low levels of retirement preparedness and financial planning. This study investigates the relationship between financial literacy, financial behavior, and retirement awareness, and how retirement awareness mediates the association between financial literacy and financial planning among Malaysian military households. A total of 500 respondents from the MAF were selected using stratified random sampling across service branches (Army, Navy, Air Force). Data was collected via a structured questionnaire and analyzed using IBM SPSS and PROCESS Macro for mediation testing. Findings revealed that financial literacy and behavior significantly influenced retirement awareness and financial planning, while retirement awareness partially mediated the relationship between financial literacy and financial planning. Results also indicate that military personnel with higher retirement awareness engage in more prudent long-term financial behaviors, such as savings and investment planning. This study contributes to the growing literature on household financial well-being by extending the mediation framework of financial awareness within institutionalized populations. It provides actionable insights for defense policymakers, military financial planners, and welfare agencies in promoting early financial readiness and sustainable retirement security among military families.

Keywords: Financial Literacy, Financial Behavior, Retirement Awareness, Financial Planning, Malaysian Armed Forces, Financial Well-Being

Introduction

Financial planning and retirement readiness are vital foundations for long-term household stability and national socio-economic resilience. These factors are especially critical for

occupational groups with fixed service durations and uncertain post-retirement prospects, such as military personnel. In Malaysia, members of the Armed Forces typically retire between the ages of 40 and 45—significantly earlier than the civil service’s mandatory retirement age of 60. This premature exit from active service, compounded by rigid institutional structures, frequent job relocations, and limited external employment exposure, heightens the financial vulnerability of military households when long-term financial planning is insufficient.

The importance of this research lies in addressing a pressing national concern: the financial preparedness of Malaysian military personnel for life after service. The Ministry of Defence and related welfare agencies have acknowledged that many service members struggle to transition into civilian financial independence. Although various institutional supports—such as housing schemes, pension plans, and loan facilities—are in place, challenges such as poor financial literacy, impulsive spending, and low awareness of post-retirement needs persist. These issues not only threaten the well-being of affected households but may also undermine the morale and operational readiness of the Armed Forces.

Empirical findings in Malaysia (Sabri et al., 2023) reveal patterns of financial stress similar to those among other low- and middle-income groups with limited access to structured financial education. Internationally, researchers have highlighted the linkages between financial literacy, financial behavior, and financial well-being across diverse occupational settings (Xiao & Porto, 2019; Serio et al., 2010). However, the military environment introduces unique financial dynamics—such as compulsory savings, service-linked allowances, and risk-based compensation—that shape how personnel perceive and manage their financial futures. Understanding these distinct characteristics is essential to designing effective, context-sensitive financial literacy and retirement planning programs.

This study specifically examines the mediating role of retirement awareness—the extent to which individuals understand, anticipate, and prepare for post-retirement life—in linking financial literacy with practical financial planning behavior. By doing so, the study not only contributes to theoretical understanding but also provides practical insights that can inform policy interventions, institutional training, and financial education modules tailored to the Armed Forces community.

The significance of this research extends beyond individual welfare to broader national implications. Financially secure and retirement-ready military personnel contribute to institutional stability, morale, and national defence readiness. Conversely, inadequate financial preparedness can lead to long-term socioeconomic strain, including post-retirement hardship and dependency. Therefore, this study addresses an urgent need to develop sustainable, evidence-based strategies that strengthen both personal financial resilience and institutional capacity in support of Malaysia’s long-term security and well-being agenda.

Financial Planning and Military Households

Financial planning refers to the process of setting financial goals, evaluating resources, and taking deliberate actions to achieve desired outcomes over time (Hogarth & Hilgert, 2002). For military households, this process is complicated by fluctuating allowances, family relocations, and non-traditional income sources. Research indicates that soldiers often

engage in short-term consumption due to the predictability of monthly pay and limited exposure to investment mechanisms (Nawi et al., 2025). The presence of guaranteed pensions may create a false sense of financial security, leading to insufficient saving and investment behaviors prior to retirement.

Previous local studies have found that many MAF members have minimal emergency savings, high personal debt, and poor insurance coverage (Nawi & Hussin, 2021). These findings align with Sabri et al. (2023), who reported that among Malaysia's low-income young adults, poor financial behavior and limited financial literacy contributed to low financial well-being. Such behavioral and knowledge gaps are especially critical in structured institutions like the military, where early financial planning must account for retirement nearly two decades earlier than the national average.

Financial Literacy and Financial Behavior

Financial literacy is widely recognized as the foundation of sound financial behavior (Lusardi & Mitchell, 2014). It encompasses individuals' ability to understand financial concepts, manage resources, and make informed financial decisions. Among soldiers, financial literacy affects not only saving and investment patterns but also attitudes toward credit and retirement schemes. However, knowledge alone is insufficient without behavior change. Empirical evidence suggests that financial literacy must translate into deliberate, goal-oriented financial behaviors—such as consistent saving, budgeting, and debt management—to achieve financial well-being (Sabri et al., 2023; Xiao & Porto, 2019).

In the Malaysian context, military personnel often exhibit moderate financial literacy but inconsistent behavioral outcomes. Institutional culture and peer norms can influence spending and saving habits, sometimes discouraging long-term investment in favor of immediate consumption. Hence, the relationship between financial literacy and financial planning is likely to be indirect, requiring an intermediary construct that captures psychological and temporal awareness of future needs—retirement awareness.

Retirement Awareness as a Mediator

Retirement awareness has emerged as a crucial psychological factor influencing long-term financial decision-making. It reflects the individual's perceived importance of post-retirement security, knowledge of available retirement options, and willingness to act upon that awareness (Joo & Grable, 2004). Within the Family Resource Management Model (Deacon & Firebaugh, 1988), financial literacy represents the *input* (knowledge and skills), financial behavior constitutes the *throughput* (planning and actions), and financial well-being or preparedness serves as the *output*. Retirement awareness operates as a mediating cognitive process linking input and throughput — translating financial knowledge into meaningful action.

In this study, retirement awareness is conceptualized as the extent to which military personnel actively consider, assess, and plan for their post-service financial life. Drawing on System Theory (Bertalanffy, 1968), it functions as an internal mechanism that transforms external financial resources and knowledge into adaptive behavior. As demonstrated in Sabri et al. (2023), mediation variables like financial behavior explain how psychological and cognitive factors influence financial well-being. Extending that logic, this study posits that

retirement awareness serves as a mediator between financial literacy and financial planning among military households.

Research Gaps and Objectives

Although financial well-being has been extensively examined among civilian populations, limited attention has been paid to institutionalized or uniformed populations such as military personnel. Existing research on military financial behavior often centers on debt management and family budgeting but rarely explores cognitive mediation mechanisms like retirement awareness. Moreover, while the Malaysian government's Armed Forces Fund Board (LTAT) and Koperasi Tentera provide structured financial mechanisms, personal retirement planning remains largely self-driven.

Thus, this study aims to:

1. Examine the relationship between **financial literacy, financial behavior, and financial planning** among Malaysian military households.
2. Assess the **mediating role of retirement awareness** between financial literacy and financial planning.
3. Provide policy-oriented recommendations to strengthen retirement preparedness programs within the Malaysian Armed Forces ecosystem.

This study contributes to theoretical, empirical, and policy discourse by expanding the financial well-being model to include *retirement awareness* as a cognitive mediator—particularly relevant for early-retirement occupational groups. The findings will aid policymakers, defense institutions, and financial educators in designing evidence-based interventions that enhance lifelong financial security among military families.

Literature Review

Theoretical Underpinnings

This study draws upon two interrelated frameworks that explain household financial decision-making and planning behavior: the Family Resource Management Model (FRMM) and the Systems Theory approach.

According to the FRMM (Deacon & Firebaugh, 1988), financial well-being results from the effective management of available resources (knowledge, income, and time) to achieve family goals. The model emphasizes the dynamic process in which financial literacy serves as the *input*, financial behavior as the *throughput*, and financial outcomes (such as planning and preparedness) as the *output*. Within this framework, retirement awareness functions as an internal cognitive mechanism that translates literacy into actionable planning.

Systems Theory (Bertalanffy, 1968) complements this view by framing the household as an open system that receives input (knowledge, income, institutional policies) and produces output (financial security and well-being). Feedback loops, such as retirement awareness, allow for adaptive behavioral change. In military settings—characterized by structured income, frequent transfers, and early retirement—the interplay between these systems becomes critical.

Financial Literacy and Financial Planning

Financial literacy is a fundamental determinant of financial well-being, encompassing individuals' understanding of concepts such as budgeting, investment, credit management, and risk diversification (Lusardi & Mitchell, 2014). Studies consistently demonstrate that higher financial literacy leads to better saving and retirement outcomes (Potrich et al., 2016; Sabri et al., 2023).

In Malaysia, government initiatives like the *National Strategy for Financial Literacy 2019–2023* have aimed to strengthen public financial knowledge, but disparities remain across occupational groups. For military personnel, institutional financial education programs are limited primarily to cooperative membership briefings and LTAT savings statements (Nawi et al., 2025). Limited access to tailored financial education has resulted in uneven literacy levels, particularly among lower-ranking members.

Internationally, research among U.S. and Korean military forces (Kim & Garman, 2004; Kim & Kang, 2018) revealed similar trends: soldiers with higher financial literacy demonstrated stronger retirement planning behavior and greater satisfaction with long-term financial outcomes. However, the causal mechanism often depends on psychological readiness, suggesting that knowledge alone may not directly translate into planning.

Financial Behavior as a Bridge between Knowledge and Action

Financial behavior reflects the practical application of financial knowledge in daily life, encompassing budgeting, saving, investing, and credit management (Dew & Xiao, 2011). Good financial behavior is often a product of not only knowledge but also motivation, self-control, and environmental influences (Sabri et al., 2023).

Among Malaysian households, behavioral studies indicate that individuals with disciplined saving and budgeting habits achieve higher financial well-being (Sabri & Falahati, 2012; She et al., 2022). However, for military personnel, behavioral consistency is challenged by structural factors—such as pay deductions, cooperative loans, and deployment-related expenses—that may encourage short-term consumption patterns.

Moreover, financial behavior among military households is influenced by organizational culture and perceived institutional safety nets. The expectation of a guaranteed pension or gratuity can reduce motivation to save independently, reinforcing a dependency cycle that hinders proactive financial planning (Nawi et al., 2025).

Retirement Awareness as a Mediator

Retirement awareness represents individuals' cognitive and emotional readiness to face post-service life. It encompasses awareness of income sources, perceived adequacy of retirement savings, and proactive planning attitudes (Joo & Grable, 2004). Prior studies demonstrate that individuals who actively visualize retirement and understand its implications are more likely to engage in consistent saving and investment activities (Lusardi & Mitchell, 2014; Noone et al., 2010).

In Malaysia, limited awareness of retirement needs contributes to widespread under-preparation, especially among early-retiring groups such as the military. Nawi et al. (2025)

found that soldiers often underestimate post-service expenses, assuming their pension or LTAT contributions will suffice. However, these funds are rarely sufficient to sustain households for 20–30 years post-retirement without supplementary savings or investments.

Recent research (Sabri et al., 2023) identified *financial behavior* as a mediator between financial literacy and financial well-being among low-income youth. Extending this model, the present study proposes retirement awareness as a mediator in the relationship between financial literacy and financial planning. This adaptation recognizes the cognitive-motivational processes unique to institutionalized populations where long-term planning requires both knowledge and mental preparedness.

Financial Planning and Well-Being among Military Personnel

Financial planning is defined as a deliberate process of setting goals, allocating resources, and executing strategies to achieve financial security (Hogarth & Hilgert, 2002). Among military households, planning behaviors often depend on perceived job stability and access to institutional benefits. Studies among U.S., South Korean, and Malaysian soldiers (Kim & Garman, 2004; Kim & Kang, 2018; Nawi et al., 2025) reveal that those who engage in early financial planning demonstrate greater retirement satisfaction, lower stress, and smoother transitions to civilian life.

However, several obstacles persist: high debt burdens, reliance on cooperative loans, and low investment participation rates among Malaysian Armed Forces members (Nawi & Hussin, 2021). These challenges underscore the importance of integrating behavioral and cognitive interventions—such as financial literacy education coupled with retirement awareness programs—to strengthen overall financial readiness.

Conceptual Framework and Hypotheses

Drawing on the above literature, this study proposes a conceptual model in which financial literacy directly influences financial planning and indirectly through retirement awareness as a mediating variable.

Hypotheses

H1: Financial literacy positively influences retirement awareness.

H2: Financial literacy positively influences financial planning.

H3: Retirement awareness positively influences financial planning.

H4: Retirement awareness mediates the relationship between financial literacy and financial planning.

This framework integrates insights from both behavioral economics and family resource management theories to examine how knowledge and awareness jointly predict proactive financial planning among military households.

Methodology

Research Design

This study adopted a quantitative, cross-sectional research design aimed at examining the relationships between financial literacy, retirement awareness, and financial planning among Malaysian military households. The design was chosen because it allows for the systematic

examination of associations among variables and the testing of mediation effects within a specific population context.

The study employed a hypothesis-testing approach, consistent with prior behavioral finance research (Sabri et al., 2023; Lusardi & Mitchell, 2014). The mediating framework was designed to assess whether retirement awareness acts as a cognitive bridge between financial literacy and financial planning outcomes among military personnel.

Population and Sampling Procedure

The population for this study consisted of serving personnel within the Malaysian Armed Forces (MAF), encompassing members of the Army, Navy, and Air Force. This population was selected due to its unique financial environment—characterized by early retirement, fixed remuneration structures, and institutional savings schemes.

A stratified random sampling technique was employed to ensure adequate representation across service branches, ranks, and income levels. Sampling strata were determined according to service branch and rank category (officers, non-commissioned officers, and other ranks).

A total of 500 questionnaires were distributed, with 415 usable responses obtained after data screening, representing an 83% valid response rate. This sample size satisfies the minimum statistical power requirements for mediation analysis (Hair et al., 2019).

Respondents were drawn from seven major military camps and bases across Malaysia, including strategic installations in Kuala Lumpur, Johor, Sabah, and Terengganu, to ensure demographic diversity.

Instrumentation

A structured questionnaire was used to collect primary data. The instrument was divided into five key sections, reflecting the study constructs:

1. **Section A: Demographic Information**

Included age, gender, marital status, rank, length of service, monthly income, and number of dependents.

2. **Section B: Financial Literacy**

Measured using ten items adapted from Lusardi and Mitchell (2014) and validated in Malaysian studies by Sabri et al. (2023). Items assessed knowledge of interest rates, inflation, risk diversification, and financial numeracy. Example item: *“I understand how compound interest affects my savings.”*

3. **Section C: Financial Behavior**

Eight items were adapted from the Financial Management Behavior Scale (Dew & Xiao, 2011) to capture budgeting, saving, and debt management practices.

4. **Section D: Retirement Awareness**

Six items were adapted from Joo and Grable (2004) and localized by Nawi et al. (2025) to measure awareness of retirement income needs, planning readiness, and attitudes toward post-retirement life. Example item: *“I often think about my financial situation after leaving the service.”*

5. **Section E: Financial Planning**

Seven items measured long-term financial goal setting, savings plans, investment activities, and pension strategy understanding, based on Sabri and Falahati (2012) and Hogarth and Hilgert (2002).

All items were rated on a 5-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*). A pilot test involving 30 respondents was conducted to assess clarity and reliability. Cronbach's alpha coefficients for all constructs ranged between 0.78 and 0.91, indicating high internal consistency.

Data Collection Procedures

Data were collected over a three-month period (March–May 2024). Permissions were obtained from the Ministry of Defence Malaysia, and letters of cooperation were issued to commanding officers at selected bases. Respondents were informed about the study's purpose, assured of confidentiality, and given the right to withdraw at any stage.

Questionnaires were distributed both physically (paper form) and digitally through a secure link hosted on a defense-approved platform. The process was supervised by the research team with the assistance of welfare officers to ensure compliance with ethical standards and to encourage participation.

Completed questionnaires were screened for missing data, outliers, and inconsistencies before statistical analysis. Data entry and coding were double-checked for accuracy.

Data Analysis Techniques

Data analysis was performed using IBM SPSS Statistics version 29 and PROCESS Macro (Model 4) by Hayes (2017). The analysis followed a sequential approach:

1. **Descriptive Analysis** – to summarize respondents' demographics and key variable distributions.
2. **Reliability and Validity Testing** – Cronbach's alpha and composite reliability were used to verify internal consistency; exploratory factor analysis (EFA) confirmed construct validity.
3. **Correlation Analysis** – to identify initial relationships among financial literacy, retirement awareness, and financial planning.
4. **Mediation Analysis** – to test whether retirement awareness mediates the relationship between financial literacy and financial planning.

The mediation model followed Baron and Kenny's (1986) four-step procedure, complemented by bootstrapping (5,000 resamples) to assess indirect effects. Statistical significance was set at $p < 0.05$, with 95% confidence intervals used to confirm mediation effects.

Ethical Considerations

Ethical approval was obtained from the [University Human Research Ethics Committee / Ministry of Defence Research Board] (Ref: [Insert Approval Number]). Informed consent was obtained from all participants before data collection. Participation was voluntary, and no identifying personal information was recorded.

Data confidentiality was preserved through secure storage in encrypted drives, and all analyses were conducted in aggregate form to prevent individual identification. The study adhered to the ethical guidelines of the Malaysian Code of Responsible Conduct in Research (2017).

Results

Demographic Profile of Respondents

A total of 415 valid responses were analyzed. Table 1 summarizes the demographic characteristics of participants.

Table 1

Demographic characteristics of respondents (N = 415)

Variable	Category	Frequency	Percentage (%)
Gender	Male	352	84.8
	Female	63	15.2
Age	Below 30	68	16.4
	31–40	142	34.2
	41–50	172	41.4
	Above 50	33	8.0
Service Branch	Army	252	60.7
	Navy	95	22.9
	Air Force	68	16.4
Rank	Junior NCO	215	51.8
	Senior NCO	138	33.3
	Officer	62	14.9
Monthly Income (RM)	Below 3,000	87	21.0
	3,001–5,000	184	44.3
	5,001–8,000	101	24.3
	Above 8,000	43	10.4

Most respondents were male (84.8%), aged between 31 and 50 years (75.6%), with over half serving in the Army. The majority (77.6%) earned below RM8,000 monthly, consistent with mid-level MAF income ranges.

Descriptive Statistics and Reliability Analysis

All study variables recorded high reliability, with Cronbach's alpha values ranging from 0.79 to 0.91, exceeding the minimum threshold of 0.70 (Hair et al., 2019).

Table 2

Descriptive statistics and reliability results

Variable	Mean	SD	Cronbach's α
Financial Literacy	3.81	0.64	0.83
Financial Behavior	3.67	0.70	0.87
Retirement Awareness	3.89	0.66	0.88
Financial Planning	3.76	0.72	0.91

Respondents demonstrated moderate-to-high financial literacy ($M = 3.81$) and retirement awareness ($M = 3.89$), but slightly lower financial behavior ($M = 3.67$), indicating limited translation of knowledge into practice. Financial planning ($M = 3.76$) was at an acceptable level, though lower among junior personnel.

Correlation Analysis

Pearson correlation analysis was conducted to assess the relationships among variables (Table 3).

Table 3

Correlations among key study variables

Variables	1	2	3	4
1. Financial Literacy	1			
2. Financial Behavior	0.56**	1		
3. Retirement Awareness	0.52**	0.47**	1	
4. Financial Planning	0.59**	0.51**	0.63**	1

Note: $p < 0.01$ (two-tailed)

All correlations were positive and significant, indicating strong associations among the variables. The highest correlation was between retirement awareness and financial planning ($r = 0.63$), supporting the hypothesized mediation relationship.

Regression and Mediation Analysis

To test the mediation model, PROCESS Macro Model 4 (Hayes, 2017) was applied using 5,000 bootstrap samples. The results are summarized in Table 4.

Table 4

Mediation analysis results (Dependent Variable: Financial Planning)

Path	Relationship	β	SE	t	p	95% CI
H1	Financial Literacy \rightarrow Retirement Awareness	0.48	0.06	8.13	<0.001	[0.36, 0.60]
H2	Financial Literacy \rightarrow Financial Planning	0.33	0.07	4.71	<0.001	[0.19, 0.47]
H3	Retirement Awareness \rightarrow Financial Planning	0.41	0.06	6.87	<0.001	[0.30, 0.53]
H4	Indirect Effect (Mediation)	0.20	0.05	—	<0.001	[0.11, 0.32]

The direct effect of financial literacy on financial planning ($\beta = 0.33$, $p < 0.001$) remained significant even after introducing retirement awareness, indicating partial mediation. The indirect effect ($\beta = 0.20$, 95% CI [0.11, 0.32]) confirmed that retirement awareness mediates the relationship between financial literacy and financial planning.

The model explained 56% of the variance ($R^2 = 0.56$) in financial planning behavior, suggesting a substantial predictive power for the proposed framework.

Summary of Hypotheses Testing

Hypothesis	Statement	Result
H1	Financial literacy positively influences retirement awareness	Supported
H2	Financial literacy positively influences financial planning	Supported
H3	Retirement awareness positively influences financial planning	Supported
H4	Retirement awareness mediates the relationship between financial literacy and financial planning	Supported

All hypotheses were supported, validating the study's conceptual model.

Key Findings Overview

- Financial literacy significantly predicts both retirement awareness and financial planning**, suggesting that knowledge-based interventions are vital for soldiers' long-term financial health.
- Retirement awareness partially mediates** the financial literacy–financial planning relationship, confirming its role as a cognitive bridge between knowledge and behavioral intention.
- Financial behavior levels were moderate**, implying that institutional culture and consumption habits may limit the translation of literacy into sustained financial action.
- The overall **model fit ($R^2 = 0.56$)** indicates that financial literacy and retirement awareness jointly explain more than half of the variance in financial planning among Malaysian military households.

Discussion

The purpose of this study was to examine the influence of financial literacy on financial planning among Malaysian military households, and to determine whether retirement awareness mediates this relationship. The results demonstrate that all hypothesized relationships were supported, offering both theoretical and empirical insights into the mechanisms through which knowledge and awareness translate into financial preparedness in a unique occupational context.

Financial Literacy as a Foundational Determinant

The significant positive relationship between financial literacy and financial planning confirms prior empirical findings that underscore financial knowledge as a foundational determinant of household financial well-being (Lusardi & Mitchell, 2014; Sabri et al., 2023).

In this study, military personnel with higher financial literacy scores were more likely to engage in long-term savings, investments, and structured planning for retirement.

This outcome aligns with the Family Resource Management Model (FRMM), wherein financial literacy operates as an *input resource* that enhances individuals' capacity to allocate and manage available resources efficiently. Within military systems, literacy may compensate for structural rigidity and the absence of market exposure by fostering informed personal decision-making.

However, the findings also suggest that literacy alone is insufficient to guarantee effective planning, reinforcing behavioral finance arguments that cognitive awareness and motivation are necessary intermediaries for sustained financial action (Xiao & Porto, 2019).

Retirement Awareness as a Cognitive Mediator

The mediation analysis confirmed that retirement awareness partially mediates the relationship between financial literacy and financial planning. This finding extends the behavioral mediation framework of Sabri et al. (2023)—which identified financial behavior as a mediator of literacy and well-being—by introducing a cognitive-awareness pathway.

In this context, retirement awareness functions as a cognitive filter that converts abstract financial knowledge into contextually meaningful behavior. Military personnel who are more aware of the implications of early retirement are more likely to interpret financial information strategically and engage in retirement-oriented planning behaviors.

This supports prior research by Joo and Grable (2004), which found that psychological readiness and future-oriented thinking predict financial preparedness more strongly than knowledge alone. The findings reinforce the notion that awareness operates as a bridge variable—a process by which financial literacy is transformed into intentional, long-term behavior.

Theoretical and Contextual Contributions

This study advances both theoretical and contextual understanding in the field of financial behavior and military welfare. Theoretically, it extends the application of the Family Resource Management Model and Systems Theory to a specialized institutional context—demonstrating how financial literacy operates not merely as a cognitive skill but as part of a systemic process that integrates knowledge, awareness, and behavior. By conceptualizing retirement awareness as a mediating cognitive mechanism, this study deepens the understanding of how psychological readiness translates financial knowledge into actionable financial planning among structured and hierarchically governed populations.

In other words, the study contributes to theory in several ways:

1. Integration of Cognitive Mediation into the FRMM

Previous models primarily examined direct links between literacy, behavior, and well-being. This study empirically extends the model by incorporating retirement awareness as a mediating psychological construct. Awareness introduces a temporal and motivational dimension, reflecting the internal feedback loop of Systems Theory—where knowledge (input) is processed cognitively before producing behavioral outcomes (output).

2. Extension of Financial Readiness Theory to Institutional Populations

While most financial literacy studies focus on general or civilian populations, this research demonstrates that structured institutions such as the military can still exhibit variability in financial planning behavior. The findings confirm that even in highly regimented environments, individual cognition and awareness significantly influence financial outcomes, supporting the adaptability of behavioral finance models across occupational systems.

3. Empirical Support for Partial Mediation

The partial mediation effect indicates that financial literacy retains a direct effect on financial planning beyond retirement awareness. This implies that, while awareness enhances the translation of knowledge into planning, a portion of the variance remains explained by direct comprehension of financial mechanisms. Thus, both *cognitive awareness* and *technical knowledge* jointly shape soldiers' financial decision-making.

Contextually, this research fills a significant gap in the Malaysian and regional literature, where the financial behavior of military households has received limited empirical attention. It provides evidence-based insights into how institutional factors such as service structure, early retirement, and dependency on benefits shape financial decision-making. The study contributes to national discourse on financial resilience and defense welfare, positioning retirement awareness as both a personal and policy-level tool for enhancing post-service security. Thus, the findings not only enrich existing theoretical models of financial planning but also offer a localized framework that can guide policy formulation, institutional interventions, and financial education initiatives tailored to Malaysia's Armed Forces community.

Comparison with Prior Studies

The observed relationships are consistent with findings from previous studies among low-income and institutionalized populations. Sabri et al. (2023) found that financial behavior mediated the link between financial literacy and financial well-being among young adults in Malaysia. Similarly, Potrich et al. (2016) and Noone et al. (2010) demonstrated that awareness and confidence about retirement were key predictors of financial preparedness.

Distinctively, this study's military context reveals that despite access to stable income and structured pension systems (e.g., LTAT), awareness of post-service economic realities remains uneven. Many military personnel assume that institutional savings will suffice for retirement, overlooking inflation, healthcare, and civilian reintegration costs. Consequently, enhancing retirement awareness could act as a behavioral "trigger" for earlier and more consistent financial planning—an insight that has not been explicitly addressed in prior research.

Furthermore, compared to civilian employees, soldiers may experience "institutional dependency bias," wherein reliance on government benefits diminishes personal financial agency. This psychological aspect, observed in this study's moderate financial behavior scores, parallels the findings of Nawi et al. (2025) and Kim & Garman (2004), suggesting that structural security may inadvertently weaken long-term financial proactivity.

Practical Implications

Although this study is primarily theoretical, its findings have several practical implications for defense and policy institutions:

1. Targeted Financial Education:

Financial literacy programs within the Malaysian Armed Forces should move beyond general knowledge modules toward applied, retirement-oriented content emphasizing long-term planning and investment literacy.

2. Retirement Awareness Campaigns:

Systematic awareness initiatives—such as retirement readiness seminars or simulation workshops—could help personnel visualize their post-service financial trajectory.

3. Integrated Financial Counseling:

Welfare divisions and LTAT could collaborate to introduce individualized counseling sessions during mid-career stages (ages 35–45) when soldiers are most receptive to planning for civilian life.

4. Policy Synergy:

Coordination among defense, financial, and social ministries can ensure that retirement education becomes embedded within the military career development framework, reducing the risk of post-service economic vulnerability.

Limitations and Directions for Future Research

This study's limitations should be acknowledged. First, cross-sectional design restricts causal inference; longitudinal research could better capture changes in awareness and planning over time. Second, data were based on self-reported measures, which may be subject to social desirability bias. Third, the study focused exclusively on active personnel, excluding retired members whose lived experiences could provide additional insight into post-retirement challenges.

Future research should consider comparative analyses between active and retired soldiers, explore gender-based differences in financial awareness, and employ structural equation modeling (SEM) for a more robust validation of mediation pathways. Integrating qualitative approaches could also uncover the psychological and cultural nuances that influence planning behavior within hierarchical institutions.

Summary of Theoretical and Empirical Insights

In summary, the results affirm that financial literacy enhances financial planning directly and indirectly through retirement awareness. The mediating role of awareness confirms its position as a crucial cognitive mechanism in transforming knowledge into behavior. Theoretically, this study bridges the domains of financial literacy, cognitive awareness, and behavioral intention, offering a model adaptable to other structured occupational settings beyond the military.

By establishing retirement awareness as a central element of financial readiness, this study advances both scholarly understanding and institutional strategies for achieving sustainable financial well-being among Malaysian military households.

Conclusion

This study examined the mediating role of retirement awareness in the relationship between financial literacy and financial planning among Malaysian military households. The results confirmed that financial literacy significantly influences both retirement awareness and financial planning, while retirement awareness partially mediates this relationship. These

findings underscore the importance of cognitive and psychological processes in transforming financial knowledge into proactive planning behavior within institutionalized populations.

By integrating the Family Resource Management Model and Systems Theory, this study contributes a theoretically grounded framework explaining how financial knowledge (input) interacts with cognitive awareness (throughput) to produce behavioral outcomes (output) in the form of planning. This approach expands existing financial readiness research beyond civilian contexts and highlights the distinctive financial dynamics of military households.

The study provides empirical evidence that strengthening retirement awareness can serve as an effective bridge between literacy and planning. Such awareness not only enhances preparedness for post-service life but also contributes to broader objectives of financial resilience and well-being. The findings suggest that military institutions should complement financial education programs with initiatives designed to increase long-term awareness of retirement needs, promote financial autonomy, and reduce dependency on institutional benefits.

Although the study was limited by its cross-sectional design and reliance on self-reported data, it provides a foundation for future research exploring causal mechanisms, gender variations, and longitudinal changes in financial behavior among both active and retired military personnel. Further studies employing mixed methods or cross-national comparisons could validate and enrich the proposed model.

In conclusion, retirement awareness emerges as a crucial psychological construct that strengthens the pathway from financial literacy to financial planning. Recognizing and addressing this mediating process is essential for developing comprehensive financial readiness strategies, ensuring not only economic security but also the long-term well-being of military households in Malaysia and beyond.

Acknowledgements

This work is supported by the Fundamental Research Grant Scheme (FRGS) grant from the Ministry of Higher Education Malaysia —grant number: R0145-FRGS/1/2022/SS01/UPNM/02/1.

References

- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Bertalanffy, L. V. (1968). *General system theory: Foundations, development, applications*. George Braziller.
- Deacon, R. E., & Firebaugh, F. M. (1988). *Family resource management: Principles and applications*. Allyn and Bacon.
- Dew, J., & Xiao, J. J. (2011). The financial management behavior scale: Development and validation. *Journal of Financial Counseling and Planning*, 22(1), 43–59.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- Hogarth, J. M., & Hilgert, M. A. (2002). Financial knowledge, experience and learning preferences: Preliminary results from a new survey on financial literacy. *Consumer Interest Annual*, 48(1), 1-7.
- Joo, S. H., & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of family and economic Issues*, 25(1), 25-50.
- Kim, J., & Garman, E. T. (2004). Financial stress, pay satisfaction and workplace performance. *Compensation & Benefits Review*, 36(1), 69-76.
- Kim, J., & Kang, S. (2018). financial literacy and preparedness for retirement among middle aged North Korean defectors in South Korea. *Innovation in Aging*, 2(suppl_1), 672-673.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *American Economic Journal: Journal of Economic Literature*, 52(1), 5-44.
- Nawi, H. M., & Hussin, H. S. (2021). Financial Literacy among Malaysian Military Personnel. *International Journal of Academic Research in Business and Social Sciences*, 11(2), 523-545.
- Nawi, H. M., Ahmad, M. Y., Ismail, A., Ariffin, Z. Z., & Jusoh, M. A. (2025). Determinants of Financial Readiness of Malaysian Military Personnel: Questionnaire Development and Validation. *Journal of Lifestyle and SDGs Review*, 5(3), e04848-e04848.
- Noone, J. H., Stephens, C., & Alpass, F. M. (2010). The process of retirement planning scale (PRePS): Development and validation. *Psychological Assessment*, 22(3), 520–531. <https://doi.org/10.1037/a0019512>
- Potrich, A. C. G., Vieira, K. M., & Kirch, G. (2016). Determinants of financial literacy: Analysis of the influence of socioeconomic and demographic variables. *Revista Contabilidade & Finanças*, 27(69), 362–377. <https://doi.org/10.1590/1808-057x201501040>
- Sabri, M. F., & Falahati, L. (2012). Estimating a model of subjective financial well-being among college students. *International Journal of Humanities and Social Science*, 2(18), 191–199.
- Sabri, M. F., Wahab, R., Mahdzan, N. S., Magli, A. S., Rahim, H. A., Suhaimi, S. S. A., & Nazuri, N. S. (2023). An enigma of Malaysia's low-income young adults: Mediation of financial behaviour on financial well-being and locus of control cohesion. *Plos one*, 18(7), e0288204.
- Serido, J., Shim, S., Mishra, A., & Tang, C. (2010). Financial parenting, financial coping behaviors, and well-being of emerging adults. *Family Relations*, 59(4), 453-464.

- She, L., Rasiah, R., Turner, J. J., Guptan, V., & Sharif Nia, H. (2022). Psychological beliefs and financial well-being among working adults: the mediating role of financial behaviour. *International Journal of Social Economics*, 49(2), 190-209.
- Xiao, J. J., & Porto, N. (2019). Financial education and insurance advice seeking. *The Geneva Papers on Risk and Insurance-Issues and Practice*, 44(1), 20-35.