

Understanding Financial Management Behavior among Banking Frontliners: The Roles of Financial Knowledge, Financial Attitude, and Income

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ABSTRACT

Managing personal finances has become more demanding as employees navigate increasingly diverse financial products and digital services. This study investigates whether financial knowledge, financial attitude, and income are associated with Financial Management Behavior (FMB) among banking frontliners, using the Theory of Planned Behavior (TPB) as an interpretive framework. This quantitative study used a cross-sectional survey of 103 banking frontliners in Indonesia and analyzed the data using multiple linear regression. The results show that financial knowledge ($b = 0.391$, $p < 0.001$), financial attitude ($b = 0.393$, $p < 0.001$), and income ($b = 0.211$, $p = 0.007$) were each positively associated with FMB. Financial attitude and financial knowledge showed virtually equivalent standardized associations, whereas income had a smaller coefficient. The regression model accounted for 47.8% of the variance in FMB (Adjusted $R^2 = 0.463$). The results indicate that sound personal financial practices among banking frontliners are linked to a combination of financial understanding, constructive attitudes toward money management, and available economic resources. Employee financial-well-being initiatives should therefore combine financial education with behavioral support for budgeting, saving, planning, and disciplined resource use.

Keywords: Banking Frontliners; Financial Attitude; Financial Knowledge; Financial Management Behavior; Income

JEL Classification: D14; G53;M12

INTRODUCTION

Digitalization has changed the way individuals conduct routine financial activities. Mobile banking, digital wallets, e-commerce, instant payment systems, and Buy Now Pay Later (BNPL) facilities have made transactions more convenient, but they have also created more frequent and complex financial choices. [Organisation for Economic Co-operation and Development or OECD \(2026\)](#) shows that the rapid expansion of digital finance has not been matched uniformly by adequate digital financial literacy. This gap is important because easier access to credit and deferred payment can increase financial pressure when users lack the capability to evaluate costs, timing, and repayment consequences. Personal financial management is therefore increasingly relevant to maintaining financial stability and longer-term well-being.

Financial Management Behavior (FMB) refers to the recurring practices through which individuals organize and use their financial resources, including budgeting, spending, saving, borrowing, debt management, and planning. Financial knowledge can support these practices by improving the ability to interpret alternatives and anticipate financial consequences ([Lusardi & Mitchell, 2014](#)). However, knowledge alone does not fully explain how individuals manage their finances. [Goyal et al. \(2022\)](#) show that psychological factors are also important, while [Sutriani et al. \(2026\)](#) demonstrate that financial literacy remains relevant to financial management in a technology-intensive environment. These findings suggest that responsible FMB emerges from the interaction of capability, personal evaluation, and the resources available for action.

The growing complexity of personal financial decisions makes FMB particularly relevant for working individuals who must balance current consumption with saving, debt obligations, emergency preparation, and longer-term financial goals. Recent research indicates that financial management behavior cannot be explained solely by access to financial products or information. [Cappelli et al. \(2024\)](#) show that money-management behavior reflects multiple interacting determinants, while [Kumar and Rani \(2025\)](#) emphasize the continuing importance of psychological and capability-related factors in explaining how individuals manage their finances. In technology-intensive financial environments, [Sutriani et al. \(2026\)](#) further demonstrate that financial literacy remains relevant to financial management behavior even when financial technology becomes increasingly embedded in everyday transactions. Together, these studies suggest that understanding FMB requires attention to both individual financial capability and the conditions under which that capability is translated into actual financial practices.

This study focuses on three conditions that may help explain differences in FMB: financial knowledge, financial attitude, and income. Financial knowledge reflects the cognitive capacity to understand and compare financial alternatives, financial attitude captures the value individuals place on disciplined and future-oriented money management, and income represents the economic means available to implement financial decisions. Within the Theory of Planned Behavior (TPB), these variables are not treated as equivalent components but as complementary conditions that may accompany financial action. Despite growing interest in personal financial management, several gaps remain. First, these variables have often been examined in different combinations, limiting direct comparison within a single empirical model. Second, existing evidence is not entirely consistent across populations, particularly regarding the role of income and the relative importance of financial knowledge and financial attitude. Third, much of the existing evidence has been generated from students, young adults, consumers, or general community samples, whereas employees working directly within financial-service environments remain less frequently examined.

Banking frontliners provide a particularly relevant context for addressing these gaps. Customer service employees, tellers, and other front-line personnel routinely interact with financial transactions, banking products, digital services, and customers' financial needs. Such professional exposure may increase familiarity with financial concepts and services, but it does not necessarily indicate how employees manage their own income, expenditure, saving, borrowing, or future financial needs. This distinction between professional financial exposure and personal financial capability makes banking frontliners theoretically interesting: if knowledge, attitude, and income remain associated with FMB within a financially intensive occupation, routine exposure to finance alone may be insufficient to explain responsible personal financial practices. Examining this occupational group therefore provides a more demanding context in which to evaluate the proposed relationships.

Against this background, the present study focuses on financial knowledge, financial attitude, and income as three conceptually distinct conditions associated with FMB. Financial knowledge represents the cognitive resources individuals use to understand financial alternatives and anticipate their consequences, whereas financial attitude reflects the evaluations and orientations that can encourage or discourage disciplined financial practices. Income differs from these two constructs because it represents the economic resources available for implementing financial decisions. Considering these predictors simultaneously is important because individuals may possess adequate financial knowledge but lack a constructive orientation toward applying it, while favorable financial attitudes may still be constrained by limited economic resources. Recent studies also report varying relationships among these factors and financial behavior across different populations and settings (Abidin et al. 2024; Ariyanti et al., 2026; Hasan et al. 2025). Their joint examination therefore offers a more integrated view of the cognitive, psychological, and economic conditions associated with personal financial management.

The TPB provides the behavioral framework for interpreting these relationships. Ajzen (1991) proposes that behavior is preceded by intention, which is shaped by attitude toward the behavior, subjective norms, and perceived behavioral control. Within the present study, financial attitude corresponds most directly to the evaluative logic of TPB because it reflects how individuals perceive the desirability of disciplined financial practices. Financial knowledge is positioned as a cognitive resource that can strengthen the evaluation of financial alternatives, while Income represents an economic condition that can expand or constrain the implementation of intended financial actions. This positioning does not treat financial knowledge and income as original TPB constructs; rather, it uses TPB to explain how behavioral evaluation operates alongside the capability and resources available for personal financial action. Such an interpretation is consistent with recent financial-behavior research that continues to apply behavioral frameworks to financial planning and financial management decisions (Kumar & Rani, 2025). The banking-frontliner context further allows the study to assess whether routine professional exposure to finance is accompanied by responsible personal money management.

Accordingly, this study examines the associations of financial knowledge, financial attitude, and income with financial management behavior among banking frontliners in Indonesia. The study is significant because routine exposure to financial products and services does not necessarily translate into effective personal financial management. Its novelty lies in examining these three complementary dimensions (cognitive capability, psychological evaluation, and economic resources) simultaneously within a finance-intensive occupational setting. Theoretically, the study extends the use of TPB as an organizing framework by interpreting financial attitude alongside financial knowledge and income without treating all three as original TPB constructs. Practically, the findings

provide a basis for banking institutions to design employee financial well-being initiatives that combine financial education with support for constructive financial attitudes and effective income management.

LITERATURE REVIEW

Theory of Planned Behavior (TPB)

TPB explains behavior through the role of behavioral intention, which is shaped by attitude toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). In personal finance, this framework is useful for understanding why recognizing a desirable financial action does not necessarily lead to its implementation. Yeo et al. (2024), demonstrate the continuing relevance of TPB to financial planning, while Kumar and Rani (2025) identify psychological and capability-related factors as important in financial management. In the present model, financial attitude is linked most directly to behavioral evaluation, financial knowledge is treated as a cognitive resource supporting financial judgment, and income represents an economic condition that can expand or constrain feasible action. TPB is therefore used as an organizing perspective rather than as a claim that all three predictors are original TPB components.

Financial Management Behavior (FMB)

FMB describes the actions through which people manage personal financial resources in everyday life. These actions include controlling expenditure, maintaining savings, meeting borrowing commitments, preparing for future needs, and reviewing financial priorities. FMB is conceptually different from knowing financial concepts because it concerns the implementation of financial decisions rather than the possession of information. Recent reviews portray financial management as a multidimensional behavioral domain involving saving, spending, borrowing, debt repayment, and related practices (Cappelli et al., 2024; Kumar & Rani, 2025; Prameswari & Wafa, 2026). In this study, FMB is the behavioral outcome whose variation is examined in relation to knowledge, attitude, and income.

Financial Knowledge

Financial knowledge refers to an individual's understanding of concepts needed to evaluate personal financial choices. It may include knowledge of saving, credit, interest, inflation, insurance, investment, and risk. Its practical value lies in helping individuals compare options, recognize potential consequences, and select actions that fit their financial circumstances. Aminnuddin and Amin (2026) report that financial knowledge is relevant to behavioral intention and banking behavior, while Maalouf and Sfeir (2026) find that financial literacy remains important across contrasting digital-finance settings. Accordingly, financial knowledge is treated here as a cognitive capability that may support, but does not automatically guarantee, responsible FMB.

Financial Attitude

Financial attitude reflects an individual's evaluation of prudent money-management practices. It captures the extent to which expenditure control, saving, preparation for future needs, and financial discipline are viewed as worthwhile. Individuals with comparable knowledge may behave differently when they attach different importance to these practices. This construct therefore adds a psychological dimension to the cognitive role of financial knowledge and corresponds closely with the attitudinal logic of TPB. Recent evidence links favorable financial attitudes with financial management behavior, both through behavioral intention and through other psychological mechanisms such as locus of control (Banurea & Usman, 2025; Pricilla et al., 2024).

Income

Income represents the economic resources available to meet current needs and pursue future financial objectives. Unlike financial knowledge and financial attitude, it is not a cognitive or evaluative construct; instead, it defines part of the practical resource environment in which financial decisions are made. Higher income may create greater room for saving, investment, emergency preparation, or debt repayment, although greater resources do not necessarily lead to better management. In this study, Income is therefore interpreted as an enabling economic condition rather than a psychological component of TPB. Evidence remains context dependent, which makes its association with FMB worth testing alongside knowledge and attitude (Abidin et al., 2024).

Hypotheses Development

Financial Knowledge and Financial Management Behavior

Financial knowledge may improve financial management because it equips individuals to interpret information, compare alternatives, and anticipate the consequences of financial choices. In TPB terms, such understanding can strengthen the perceived capacity to carry out intended financial actions. This mechanism is especially relevant for banking frontliners: occupational contact with financial products does not necessarily mean that financial information is applied effectively in personal life. Recent studies associate financial knowledge or literacy with behavioral intention, financial behavior, financial competence, and FMB across different settings (Aminnuddin & Amin, 2026; Hasan et al., 2025; Maalouf & Sfeir, 2026; Nurisaputri et al., 2024). These findings support the expectation that greater financial understanding is associated with more responsible personal financial practices. Accordingly:

H1: Financial knowledge is positively associated with financial management behavior among banking frontliners.

Financial Attitude and Financial Management Behavior

Financial attitude may influence money management by shaping the value individuals attach to financial discipline and future preparation. Under TPB, a favorable evaluation of a behavior increases the likelihood that a person will intend to perform it. Applied to personal finance, positive attitudes toward saving, expenditure control, and planning can provide the motivational orientation needed to put financial knowledge into practice. Recent evidence supports an association between financial attitude and financial management behavior, including pathways involving behavioral intention and locus of control (Banurea & Usman, 2025; Pricilla et al., 2024). Goyal et al. (2022) likewise identify psychological antecedents as important to personal financial management, while (Herdjiono & Damanik, 2016; Widyakto et al., 2022) provide additional evidence from Indonesian settings. Accordingly:

H2: Financial attitude is positively associated with financial management behavior among banking frontliners.

Income and Financial Management Behavior

Income can affect financial management by altering the set of financial actions that are realistically available. Greater resources may make it easier to save, build emergency funds, invest, or meet financial obligations, but income alone does not determine how those resources are allocated. The empirical evidence is mixed. Nugraha et al. (2024) report a positive but statistically insignificant association between income and FMB, whereas Abidin et al. (2024) identify income as relevant to financial decision-making in an investment context. Ariyanti et al. (2026) find that income contributes to personal financial management alongside financial knowledge and financial attitude. Because

these findings vary by context, the relationship is re-examined among banking frontliners. Accordingly:

H3: Income is positively associated with financial management behavior among banking frontliners.

Conceptual Framework

The framework brings together three distinct conditions associated with FMB. Financial knowledge represents cognitive capability, financial attitude represents psychological evaluation, and income represents economic resource capacity. Their simultaneous inclusion allows the analysis to compare the relationships of these complementary dimensions with personal financial management within the same occupational setting.

Figure 1. Research Framework

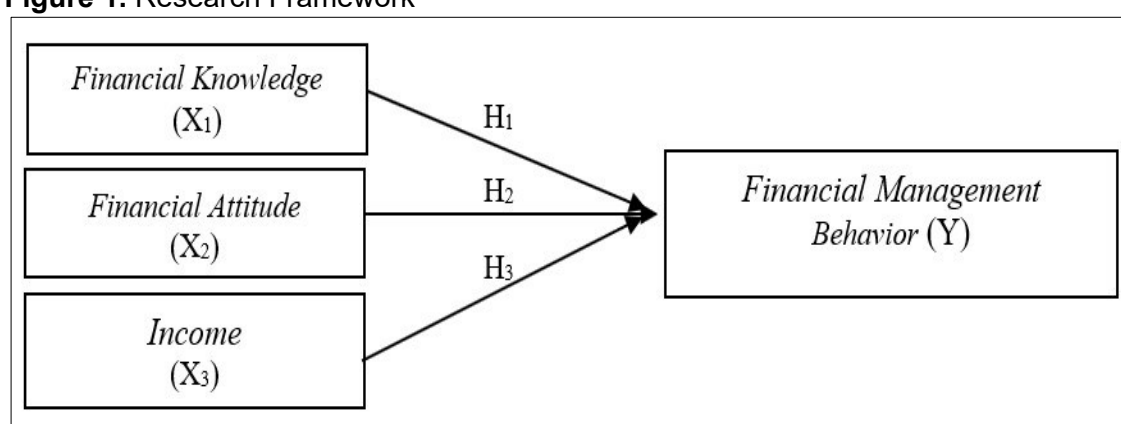


Figure 1 presents the proposed model. Financial knowledge, financial attitude, and income are specified as separate predictors of FMB, representing cognitive, psychological, and economic dimensions that may help explain differences in personal financial management among banking frontliners.

RESEARCH METHOD

Research Design

A quantitative cross-sectional survey design was used to examine the associations between financial knowledge, financial attitude, income, and FMB among banking frontliners. All variables were measured at one point in time using a structured questionnaire. The relationships specified in the TPB-informed model were estimated with multiple linear regression in IBM SPSS.

Population and Sample

The population consisted of 103 frontliner employees from the selected banking institution in East Java, Indonesia, covering customer service, teller, and security functions. Security personnel were included because they form part of the front-line service process in the setting studied, including customer guidance and service-flow assistance. Because the target population was small and fully accessible, saturated sampling was applied and all 103 employees were invited to participate, consistent with the use of complete coverage for a defined population (Hair et al., 2019). All distributed questionnaires were returned and met the analysis requirements, yielding 103 valid observations and a 100% response rate.

Research Instrument and Variable Operationalization

The questionnaire measured the three predictors and FMB. Financial knowledge, financial attitude, and FMB used five-point Likert-type responses from 1 (strongly disagree) to 5 (strongly agree), whereas income was recorded as an ordered category. Financial knowledge was measured with eight items covering personal finance, saving and borrowing, insurance, and investment, drawing on [Lusardi and Mitchell \(2014\)](#). Financial attitude comprised 12 items concerning orientations toward money management, informed by [Furnham \(1984\)](#) and the measurement sources reported in [Table 1](#). FMB was assessed with eight items addressing consumption, cash-flow management, saving and investment, and credit management, adapted from ([Dew & Xiao, 2011](#)). Income was represented by one of five monthly-income categories, from below IDR 1.25 million to above IDR 5 million. Measurement quality and internal consistency were assessed before hypothesis testing.

Table 1. Operational Definition of Variables

Variable	Operational Definition	Source	Items	Measurement
Financial Knowledge	Understanding and application of financial concepts in personal financial decision-making	Lusardi & Mitchell (2014)	8	Likert (1–5)
Financial Attitude	Psychological evaluation toward money management and financial planning	Furnham, (1984); Rai et al. (2019)	12	Likert (1–5)
Income	Monthly income classified into five ordered income categories	Perry & Morris (2005)	1	Ordinal categories
Financial Management Behavior	Personal practices related to budgeting, saving, expenditure management, and financial planning	Dew & Xiao (2011)	8	Likert (1–5)

Data Analysis Technique

The proposed relationships were estimated using multiple linear regression in IBM SPSS. Before model estimation, the multi-item measures were checked for internal consistency using Cronbach's alpha, with 0.70 used as the minimum acceptable benchmark ([Hair et al. 2019](#)). Regression diagnostics covered residual normality, multicollinearity, and heteroscedasticity. H1-H3 were evaluated from the estimated coefficients, t statistics, and p values. Overall model performance was assessed using the F test, R, R², Adjusted R², and the standard error of the estimate, with statistical significance evaluated at the 5% level.

RESULTS

Respondent Characteristics

Table 2. Respondent Characteristics (N = 103)

Characteristics	Category	Frequency (n)	Percentage (%)
Gender	Male	53	51.5
	Female	50	48.5
Education	High School/Vocational	35	34
	Diploma (D1–D3)	21	20.4
	Bachelor's Degree (D4/S1)	47	45.6
Job Position	Customer Service	36	35
	Teller	32	31

	Security Personnel	35	34
Income Measurement	Less than IDR 1,250,000	0	0
	IDR 1,250,000–2,500,000	0	0
	IDR 2,500,001–3,750,000	0	0
	IDR 3,750,001–5,000,000	68	66
	More than IDR 5,000,000.	35	34

Table 2 presents the demographic, educational, occupational, and income characteristics of the 103 banking frontliners included in the study. The sample was relatively balanced by gender, consisting of 53 male respondents (51.5%) and 50 female respondents (48.5%). Regarding educational attainment, respondents with a bachelor's or applied bachelor's degree (D4/S1) represented the largest group (45.6%), followed by senior high school or vocational high school graduates (34%) and diploma holders (20.4%). The occupational composition was also relatively balanced across the three frontliner positions, comprising customer service employees (35%), security personnel (34%), and tellers (31%).

The income distribution was more concentrated. None of the respondents were classified in the first three income categories. A total of 68 respondents (66%) reported monthly income between IDR 3,750,001 and IDR 5,000,000, while 35 respondents (34%) reported monthly income above IDR 5,000,000. Thus, all respondents were concentrated in the two highest income categories used in the study. This distribution is consistent with the original coded data, in which income ranges from category 4 to category 5. The relatively narrow income distribution should be considered when interpreting the association between income and FMB because the estimated relationship reflects variation within these two observed income categories rather than across the full five-category scale.

Instrument Reliability

Internal consistency was assessed for each multi-item construct using Cronbach's alpha. Following [Hair et al. \(2019\)](#), a Cronbach's Alpha coefficient of 0.70 or above indicates satisfactory reliability for established measurement scales.

Table 3. Instrument Reliability

Variable	Number of Items	Cronbach's Alpha	Decision
Financial Knowledge	8	0.830	Reliable
Financial Attitude	12	0.843	Reliable
Financial Management Behavior	8	0.865	Reliable
Income	1	N/A	Single-item measure

Table 3 reports the internal consistency of the multi-item measures used in the study. Financial knowledge records a Cronbach's alpha of 0.830, financial attitude 0.843, and FMB 0.865. All three coefficients exceed the minimum criterion of 0.70 adopted in this study, indicating satisfactory internal consistency across the respective measurement items. Among the three constructs, FMB has the highest reliability coefficient, followed by financial attitude and financial knowledge; nevertheless, all values fall within an acceptable range for subsequent statistical analysis. Income is not included in the reliability assessment because it is represented by a single ordered categorical measure rather than a multi-item scale. Overall, the results indicate that the multi-item instruments provide sufficiently consistent measurements for evaluating the proposed relationships.

Classical Assumption Tests

Regression assumptions were examined before hypothesis testing. Table 4 shows that the residual normality criterion was satisfied, tolerance and VIF values did not indicate problematic multicollinearity, and the Glejser tests did not identify heteroscedasticity for any predictor. The diagnostic results therefore supported proceeding with the multiple regression analysis.

Table 4. Results of Classical Assumption Tests

Assumption Test	Indicator	Result	Criterion	Decision
Normality	Kolmogorov–Smirnov Sig.	0.081	Sig. > 0.05	Normal distribution
Multicollinearity	Financial Knowledge (Tolerance / VIF)	0.955 / 1.047	Tolerance > 0.10; VIF < 10	No multicollinearity
	Financial Attitude (Tolerance / VIF)	0.905 / 1.105	Tolerance > 0.10; VIF < 10	No multicollinearity
	Income (Tolerance / VIF)	0.915 / 1.093	Tolerance > 0.10; VIF < 10	No multicollinearity
Heteroscedasticity	Glejser Test (Financial Knowledge)	0.520	Sig. > 0.05	No heteroscedasticity
	Glejser Test (Financial Attitude)	0.386	Sig. > 0.05	No heteroscedasticity
	Glejser Test (Income)	0.135	Sig. > 0.05	No heteroscedasticity

Table 4 summarizes the diagnostic tests conducted before estimating the multiple regression model. The residual normality assessment satisfies the criterion adopted in the study, indicating no evidence of a problematic departure from normality. The tolerance and Variance Inflation Factor (VIF) values for financial knowledge, financial attitude, and income are also within acceptable limits, suggesting that the predictors do not exhibit problematic multicollinearity. In addition, the Glejser test results do not indicate heteroscedasticity for any of the three predictors. Taken together, these diagnostic results show that the regression model does not exhibit the specific assumption problems examined in this study. The multiple regression estimates can therefore be interpreted using the subsequent coefficient and model-level tests.

Multiple Linear Regression Analysis

Multiple linear regression was used to estimate the associations of financial knowledge, financial attitude, and income with FMB. Table 5 reports the resulting coefficients.

Table 5. Multiple Linear Regression Results

Predictor	B	Std. Error	β	t	p-value	Decision
Constant	-2.480	0.732	–	-3.386	0.001	–
Financial Knowledge	0.696	0.132	0.391	5.259	< 0.001	Significant
Financial Attitude	0.519	0.101	0.393	5.148	< 0.001	Significant
Income	0.250	0.090	0.211	2.776	0.007	Significant

Table 5 presents the estimated coefficients from the multiple linear regression model. Financial knowledge has a positive unstandardized coefficient ($B = 0.696$) and a standardized coefficient of $\beta = 0.391$, with $t = 5.259$ and $p < 0.001$. This indicates that, holding financial attitude and income constant, higher financial knowledge is associated with higher FMB. Financial attitude also shows a positive association ($B = 0.519$, $\beta = 0.393$, $t = 5.148$, $p < 0.001$). Its standardized coefficient is almost identical to that of financial knowledge, indicating that the two predictors have comparably strong associations with FMB within the estimated model.

Income has a positive coefficient of $B = 0.250$ and a standardized coefficient of $\beta = 0.211$, with $t = 2.776$ and $p = 0.007$. Thus, income remains statistically associated with FMB after financial knowledge and financial attitude are taken into account, although its standardized coefficient is smaller than those of the other two predictors. The pattern of coefficients therefore indicates that all three variables contribute distinct information to the regression model, with financial knowledge and financial attitude showing similar standardized associations and Income showing a comparatively smaller association. Based on the unstandardized coefficients, the estimated regression model is:

$$\text{FMB} = -2.480 + 0.696(\text{FK}) + 0.519(\text{FA}) + 0.250(\text{Income}) + \varepsilon$$

The positive signs of all three slope coefficients indicate that increases in each predictor are associated with higher predicted FMB scores when the remaining predictors are held constant. The coefficients should be interpreted as conditional associations within the cross-sectional regression model rather than as causal effects.

Model Evaluation

The overall regression model was subsequently evaluated using the F-test and the coefficient of determination (Adjusted R^2). The results are summarized in Table 6.

Table 6. Model Evaluation

Indicator	Value	Interpretation
Multiple Correlation (R)	0.692	Strong positive relationship
Coefficient of Determination (R^2)	0.478	47.8% of variance explained
Adjusted R^2	0.463	Moderate explanatory power
Standard Error of Estimate	0.41371	Model estimation error
F-value	30.259	Significant
Sig.	< 0.001	Model is statistically significant

Table 6 reports the overall performance of the regression model. The model is statistically significant, $F(3, 99) = 30.259$, $p < 0.001$, indicating that financial knowledge, financial attitude, and income are jointly associated with FMB. The coefficient of determination ($R^2 = 0.478$) shows that the three predictors collectively account for 47.8% of the observed variance in FMB among the respondents. After adjustment for the number of predictors and sample size, the model retains an Adjusted R^2 of 0.463, indicating that approximately 46.3% of the variance is explained on an adjusted basis. The difference between R^2 and Adjusted R^2 is relatively small, suggesting limited reduction in explanatory performance after adjustment. Nevertheless, more than half of the variance in FMB remains outside the current model, indicating that additional psychological, social, behavioral, or contextual factors may also be relevant.

Summary of Hypothesis Testing

Table 7 summarizes the decisions for H1-H3 using the standardized coefficients, t statistics, and p values from the regression model.

Table 7. Summary of Hypothesis Testing

	Hypothesis & Relationship	β	t-value	p-value	Decision
H1	Financial Knowledge → Financial Management Behavior	0.391	5.259	< 0.001	Supported
H2	Financial Attitude → Financial Management Behavior	0.393	5.148	< 0.001	Supported
H3	Income → Financial Management Behavior	0.211	2.776	0.007	Supported

As shown in Table 7, H1 is supported because financial knowledge is positively and significantly associated with FMB ($\beta = 0.391$, $t = 5.259$, $p < 0.001$). H2 is also supported, with financial attitude showing a positive and significant association ($\beta = 0.393$, $t = 5.148$, $p < 0.001$). H3 is supported because income remains positively associated with FMB ($\beta = 0.211$, $t = 2.776$, $p = 0.007$). Thus, the empirical evidence supports all three relationships proposed in the research framework. Comparison of the standardized coefficients provides additional insight into the relative pattern of associations. Financial attitude and financial knowledge have nearly equivalent coefficients (0.393 and 0.391, respectively), with a difference of only 0.002. It would therefore be inappropriate to characterize either variable as substantially more dominant than the other. Income has a smaller standardized coefficient (0.211) but remains statistically significant. Overall, the hypothesis results indicate that FMB among the banking frontliners is associated with a combination of cognitive, psychological, and economic conditions rather than with a single dimension alone.

DISCUSSION

The regression results indicate that financial knowledge, financial attitude, and income are each positively associated with FMB among banking frontliners. Financial knowledge and financial attitude have almost identical standardized coefficients, while income has a smaller but statistically significant coefficient. The pattern suggests that personal financial management in this occupational group is related to both cognitive and psychological factors, with economic resources providing an additional contribution.

Financial Knowledge and Financial Management Behavior (H1)

The results support H1, showing that financial knowledge is positively and significantly associated with FMB among banking frontliners ($\beta = 0.391$, $t = 5.259$, $p < 0.001$). This finding indicates that greater financial understanding is associated with more responsible personal financial practices, even among employees who are routinely exposed to financial products, transactions, and banking information. Financial knowledge may enable individuals to evaluate financial alternatives more carefully, anticipate the consequences of financial decisions, and apply appropriate considerations to saving, borrowing, investment, and financial planning.

From a TPB perspective, financial knowledge is not positioned as an original component of the theory but as a cognitive resource that can support the evaluation and implementation of intended financial actions. Greater understanding of financial alternatives may strengthen an individual's capacity to assess available choices and translate financial intentions into appropriate practices. This interpretation is consistent with Aminnuddin and Amin (2026), who identify financial knowledge as relevant to behavioral intention and banking behavior, and Maalouf & Sfeir (2026), who demonstrate the continuing relevance of financial literacy across different digital financial environments. Hasan et al. (2025) similarly associate financial literacy with financial management behavior through financial competence and locus of control, while Nurisaputri et al. (2024) report a positive relationship between financial knowledge and financial management behavior.

The present finding is particularly relevant to the banking-frontliner context. Routine professional exposure to financial services does not necessarily substitute for the personal financial knowledge required to manage personal financial resources effectively. The significant relationship found in this study therefore suggests that professional familiarity with finance and personal financial capability should not be treated as equivalent. Banking frontliners may interact with financial information as part

of their work, but their personal FMB remains associated with how well they understand and apply financial knowledge in their own financial decisions.

Financial Attitude and Financial Management Behavior (H2)

The results support H2, indicating that financial attitude is positively and significantly associated with FMB among banking frontliners ($\beta = 0.393$, $t = 5.148$, $p < 0.001$). This finding suggests that individuals who hold more favorable attitudes toward financial discipline, saving, expenditure control, and future financial preparation tend to demonstrate more responsible financial management practices. Financial attitude may therefore provide an important motivational orientation for translating financial considerations into everyday financial actions. Notably, its standardized coefficient is almost identical to that of financial knowledge ($\beta = 0.391$), indicating that the cognitive and attitudinal dimensions show comparably strong associations with FMB in this sample.

From a TPB perspective, this finding is particularly relevant because financial attitude corresponds most directly to the theory's attitudinal component. A favorable evaluation of prudent financial practices can strengthen an individual's willingness to engage in behaviors such as budgeting, saving, controlling expenditure, and preparing for future financial needs. The result is consistent with [Banurea & Usman \(2025\)](#) and [Pricilla et al. \(2024\)](#), who report positive relationships between financial attitude and financial management behavior. Recent evidence from the literature provides additional support, with [Rahayu et al. \(2024\)](#) demonstrating a significant relationship between financial attitude and financial management behavior in an Indonesian context. The finding also aligns with [Goyal et al. \(2022\)](#), whose meta-analysis emphasizes the importance of psychological antecedents in explaining personal financial management behavior. Earlier Indonesian evidence from [Herdjiono and Damanik \(2016\)](#) likewise supports the relevance of financial attitude to financial management behavior.

In the banking-frontliner context, the finding indicates that professional exposure to financial information does not make personal attitudes toward money management irrelevant. Employees may possess similar access to financial information through their work, yet differ in the importance they attach to saving, expenditure control, planning, and financial discipline. The near-equivalent standardized coefficients of financial attitude ($\beta = 0.393$) and financial knowledge ($\beta = 0.391$) therefore suggest that knowing how to manage finances and valuing responsible financial management are complementary rather than competing conditions. The result supports an interpretation in which financial understanding provides a cognitive basis for decision-making, while Financial Attitude helps shape the orientation through which that knowledge is translated into personal financial practices.

Income and Financial Management Behavior (H3)

The results support H3, showing that Income is positively and significantly associated with FMB among banking frontliners ($\beta = 0.211$, $t = 2.776$, $p = 0.007$). This finding indicates that respondents with higher income tend to demonstrate better financial management practices after financial knowledge and financial attitude are taken into account. Income may provide greater financial flexibility for meeting current obligations while allocating resources to saving, emergency preparation, investment, and other future-oriented financial needs. However, its standardized coefficient is smaller than those of financial knowledge ($\beta = 0.391$) and financial attitude ($\beta = 0.393$), suggesting that economic resources alone have a comparatively more limited association with FMB in the present model.

From the TPB-informed perspective adopted in this study, Income is not treated as an original TPB construct but as an economic resource condition that may facilitate or constrain the implementation of intended financial actions. Individuals may understand appropriate financial practices and hold favorable attitudes toward them, but the extent to which those practices can be implemented may also depend on the resources available. The present result is consistent with [Ariyanti et al. \(2026\)](#), who identify Income as a significant factor in personal financial management alongside financial knowledge and financial attitude. [Lestari \(2025\)](#) likewise reports that Income has a significant direct relationship with financial management among young workers. It also complements [Abidin et al. \(2024\)](#), who demonstrate the relevance of Income to financial decision-making. In contrast, [Nugraha et al. \(2024\)](#) report a positive but statistically insignificant association between Income and FMB, indicating that the role of economic resources may vary across populations and financial contexts.

The income distribution of the present sample provides an important context for interpreting this result. As reported in [Table 2](#), all respondents were concentrated in the two highest income categories used in the original instrument: 68 respondents (66%) earned IDR 3,750,001–5,000,000 per month, while 35 respondents (34%) earned above IDR 5,000,000. No respondents were represented in the first three income categories. Therefore, the significant Income–FMB association should be interpreted as reflecting differences between these two observed income groups rather than variation across the entire five-category income scale. Despite this relatively narrow income distribution, Income remains significantly associated with FMB, suggesting that differences in available economic resources are still relevant to personal financial management within this banking-frontliner sample. This interpretation is also consistent with [Bialowolski et al. \(2025\)](#), who show that income is relevant to financial outcomes across income groups.

Theoretical and Contextual Interpretation

Taken together, the findings provide a more integrated explanation of FMB by showing that cognitive, psychological, and economic conditions are simultaneously associated with personal financial practices. Financial knowledge represents the cognitive capability to understand and evaluate financial alternatives, whereas financial attitude reflects the personal evaluation and orientation that can encourage disciplined financial practices. Income adds a different dimension by representing the economic resources available to implement financial decisions. The significant associations of all three variables indicate that FMB cannot be understood solely through what individuals know about finance or through the resources they possess; how individuals evaluate and approach financial management is also relevant.

The findings also clarify the role of TPB in the present model. Financial attitude corresponds most directly to the attitudinal component of TPB, while financial knowledge and income are positioned as complementary cognitive and economic conditions rather than as original TPB constructs. This distinction is theoretically important because it avoids extending TPB beyond its conceptual boundaries while still allowing the theory to organize the interpretation of personal financial behavior. The nearly equivalent standardized coefficients of financial attitude ($\beta = 0.393$) and financial knowledge ($\beta = 0.391$) further suggest that behavioral evaluation and cognitive capability operate as comparably relevant dimensions of FMB in this sample, whereas income ($\beta = 0.211$) provides an additional but comparatively smaller economic dimension.

The banking-frontliner context provides an additional contribution to the literature. Unlike populations commonly examined in personal-finance studies, such as students, young adults, or general consumers, banking frontliners routinely interact with financial information, transactions, products, and services as part of their professional

responsibilities. Nevertheless, financial knowledge, financial attitude, and income remain significantly associated with their personal FMB. This finding highlights an important distinction between professional financial exposure and personal financial capability. Familiarity with financial services in the workplace does not necessarily translate automatically into responsible personal financial practices, thereby extending the relevance of FMB research to a finance-intensive occupational setting.

Practical Implications

The findings have practical implications for banking institutions and employee financial well-being programs. Because financial knowledge and financial attitude show nearly equivalent associations with FMB, initiatives aimed at improving employees' personal financial management should extend beyond the provision of financial information alone. Financial education may be more useful when accompanied by activities that encourage employees to translate financial understanding into disciplined practices, including budgeting, expenditure control, regular saving, debt management, emergency-fund preparation, and longer-term financial planning. This combined approach recognizes that knowing appropriate financial practices and valuing those practices are complementary aspects of responsible financial management.

The significant association between Income and FMB also suggests that financial well-being initiatives should consider how employees manage the resources available to them rather than assuming that higher earnings automatically produce better financial behavior. Practical programs may therefore include guidance on income allocation, prioritization of financial obligations, emergency reserves, and goal-based saving. This is particularly relevant to the present sample, in which respondents were concentrated in the two highest income categories of the original instrument. Consequently, the practical emphasis should be placed not only on the amount of income received but also on how effectively available income is planned and allocated.

More broadly, the results suggest that banking institutions should avoid assuming that employees who work with financial products and services already possess sufficient personal financial-management capability. Professional exposure may create familiarity with finance, but the findings indicate that personal knowledge, attitudes, and resource management remain relevant to employees' own FMB. Employee financial well-being programs that integrate these dimensions may therefore provide a more appropriate response than information-based financial education alone.

CONCLUSION

This study examined the associations of financial knowledge, financial attitude, and income with FMB among banking frontliners. All three hypotheses were supported. Financial knowledge and financial attitude showed almost identical standardized coefficients, indicating comparable relationships with FMB, while income had a smaller but significant coefficient. The findings show that responsible personal financial management in a finance-intensive occupational setting is associated with more than access to economic resources or routine exposure to financial services. The study contributes context-specific evidence by applying TPB as an organizing behavioral framework to banking frontliners and by considering psychological, cognitive, and economic conditions in the same model. The results imply that banking institutions should not equate professional familiarity with finance with effective personal money management. Employee financial-well-being initiatives are likely to be more useful when financial education is paired with support for disciplined budgeting, saving, planning, and effective use of income.

LIMITATION

This study has four principal limitations. First, its cross-sectional design identifies associations and does not establish temporal or causal relationships; longitudinal or experimental research could examine how FMB changes over time. Second, the respondents came from a specific banking and regional context, limiting generalization to other institutions, occupations, and locations. Third, the model was restricted to financial knowledge, financial attitude, and income, although other psychological, social, and behavioral variables may also explain FMB. Fourth, the occupationally specific sample limits broader socioeconomic generalization. Future studies could test expanded models incorporating variables such as financial self-efficacy, self-control, locus of control, financial socialization, subjective norms, or digital financial literacy across different institutions, regions, and occupational groups.

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DECLARATION OF CONFLICTING INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this article, including financial, professional, or personal relationships that could have influenced the research, analysis, or interpretation of the findings.

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