



Antecedent Factors and Locus of Control: Their Impact on Financial Management Behavior MSME Actors

Sumarni S 1

Program Doktorat Ilmu Manajemen, Fakultas Ekonomi dan Bisnis, Universitas Muhammadiyah Jakarta, Indonesia

24030600026@student.umj.ac.id

Maswanto 2

Program Doktorat Ilmu Manajemen, Fakultas Ekonomi dan Bisnis, Universitas Muhammadiyah Jakarta, Indonesia

24030600026@student.umj.ac.id

*Corresponding Author: 24030600026@student.umj.ac.id

Abstract:

This study examines the configuration of financial behavioral attributes Financial Attitude, Financial Knowledge, and Locus of Control that shape the financial management behavior of Micro, Small, and Medium Enterprise (MSME) actors. While these factors are often studied in isolation, a significant gap exists in understanding how they combine to form a holistic psychological profile for financial decision-making. The purpose of this research is to deconstruct and quantify the influence of these three attributes, particularly by evaluating the mediating role of Locus of Control. Employing a quantitative approach, survey data were collected from 97 MSME actors. Multiple regression analysis tested the direct effects, and path analysis was used to assess mediation. The results revealed that both Financial Knowledge and Financial Attitude have a significant positive effect on financial management behavior, with knowledge exhibiting a slightly stronger influence. Locus of Control partially mediates both relationships, acting as a key psychological mechanism through which cognitive and affective factors translate into behavior. The direct effect model explained 42.1% of the variance in financial management behavior. A key limitation is the cross-sectional design and reliance on self-reported data from a specific sample, which limits causal inference and generalizability. Future research should employ longitudinal designs and incorporate objective financial performance measures to better capture actual behavioral outcomes.

Keywords: Financial Attitude, Financial Knowledge, Financial Management Behavior, Locus of Control.

1. Introduction

This study aims to analyze the dual mediation effect of Financial Knowledge and Financial Attitude on the Financial Management Behavior of MSME (Micro, Small, and Medium Enterprises) actors, with Locus of Control as a mediating variable. This focus is critical, given the pivotal role MSMEs play in economic resilience and growth, and the pressing need for these actors to adopt sound financial practices to ensure sustainability and competitiveness (Anisa & Armin, 2023; Brahmastra & Wikartika, 2023). The core of the investigation addresses a clear research gap: while financial knowledge and attitude are widely recognized as foundational determinants of financial behavior (Nita & Reina, 2024; Putri & Bandi, 2023), observations and empirical data from the MSME sector reveal inconsistent patterns in how these factors translate into prudent financial management. This gap between theoretical expectations and observed inconsistencies suggests underlying complexities in the psychological pathways, particularly when Locus of Control an individual's belief in their ability to control life outcomes is introduced as a mediator, a nuanced relationship this research seeks to (Moridu & Mauludin, 2025; Zahari et al., 2025).

Improving financial management behavior has become a strategic imperative for MSME actors seeking to navigate volatile markets, access funding, and achieve long-term viability (Dityarukmana, 2025; Rahayu et al., 2023; Sulhan et al., 2025). Stakeholders increasingly rely on understanding the cognitive and psychological drivers behind financial decisions to design effective financial literacy and support programs. However, field reports and preliminary studies often show that MSME owners with similar levels of financial knowledge or positive attitudes exhibit varying degrees of disciplined financial behavior, indicating that internal psychological factors such as locus of control may play a crucial moderating or mediating role in shaping final financial outcomes (Rifas et al., 2023; Soares et al., 2025). This fundamental challenge reflects not only contextual differences but also raises deeper questions about the interplay between cognitive resources (knowledge), affective dispositions (attitude), and personal agency beliefs (locus of control). Financial knowledge (X_2) and financial attitude (X_1) are hypothesized to influence financial management behavior (Y) both directly and indirectly through the mediating mechanism of Locus of Control. The Theory of Planned Behavior and Social Learning Theory provide a strong theoretical foundation, suggesting that financial behavior is shaped not just by what one knows or feels about finance, but also by the underlying belief in one's personal control over financial outcomes, which can either enable or constrain the application of knowledge and positive attitudes (Ajzen, 2020). Previous studies by (Handayani et al., 2023; IS et al., 2024; Purbasari et al., 2021; Simatupang et al., 2022) have demonstrated significant relationships between financial knowledge, financial attitude, and responsible financial behavior among various populations. However, findings regarding the mediating role of locus of control in the MSME context (Octasylya et al., 2021; Prasetya, 2023; Subagyo et al., 2020; Tubastuvi et al., 2023) remain fragmented and underexplored. For instance, research by (Bai, 2023; Hervé et al., 2022; Maisaroh et al., 2022; Morales-Pérez et al., 2022; Vashishth et al., 2021) highlighted that an internal locus of control can strengthen the positive effects of financial knowledge on behavior, while an external locus may weaken the link between positive financial attitudes and actual practice. This research gap is further compounded by methodological limitations in prior studies, which often examined these constructs in isolation or in simpler mediation models, rather than as part of an integrated dual-antecedent, single-mediation model specific to the MSME ecosystem.

This study aims to address this gap by comprehensively investigating the mediating role of Locus of Control on the relationships between Financial Knowledge (X_2), Financial Attitude (X_1), and Financial Management Behavior (Y) among MSME actors. The methodological approach employs a quantitative survey design, collecting primary data on the key variables to test a structured mediation model using path analysis or structural equation modeling. The novelty of this research lies in its explicit integration of Locus of Control as a central psychological mediator within the financial behavior framework for MSMEs, offering a more nuanced understanding of how cognitive, affective, and control-belief factors jointly explain financial management practices. Theoretically, this study contributes to the advancement of behavioral finance and entrepreneurial psychology literature by validating and elucidating this mediation pathway in a critical yet vulnerable economic segment.

For policymakers, financial educators, and MSME support agencies, this study offers evidence-based insights for developing more targeted and psychologically attuned intervention programs. The findings are expected to clarify whether improving financial knowledge and attitudes directly enhances financial management behavior or whether their effects are significantly channeled through strengthening the MSME actor's internal locus of control. Practitioners can use these insights to design programs that not only impart knowledge and shape attitudes but also build self-efficacy and a sense of financial agency key psychological pillars for fostering sustainable and prudent financial behavior among MSME actors. For the MSME ecosystem seeking to enhance financial resilience

and performance, this study provides a diagnostic framework that can be adapted to assess and improve the knowledge attitude control behavior nexus. The recommendations will focus on creating support environments that build financial capability, encourage positive financial mindsets, and, crucially, empower MSME actors with a strong belief in their control over financial outcomes fundamental elements for building a financially disciplined and sustainable enterprise.

2. Literature Review

Financial knowledge, financial attitude, locus of control, and financial management behavior represent central constructs in behavioral finance and entrepreneurial studies, with their interrelationships forming a critical area of inquiry for understanding the economic sustainability of Micro, Small, and Medium Enterprises (MSMEs). The Theory of Planned Behavior (TPB) (Ajzen, 1991) provides a foundational framework for understanding these dynamics, positing that an individual's behavior is driven by their behavioral intentions, which are in turn shaped by attitudes, subjective norms, and perceived behavioral control. In the financial context, this translates to financial behavior being influenced by one's attitude towards finance and their perceived control over financial outcomes directly linking to the construct of locus of control. This theoretical lens is further enriched by Social Learning Theory (Bandura & Walters, 1977), which suggests that behavior, including financial management, is learned through observation, experience, and the outcomes of one's actions, heavily influenced by personal agency beliefs. In the challenging and resource-constrained environment of MSMEs, the pathways linking knowledge, attitude, and behavior are increasingly understood to be mediated by the entrepreneur's psychological disposition, particularly their locus of control (Octasyva et al., 2021; Subagyo et al., 2020).

The determinants of sound financial management behavior encompass a complex interplay of cognitive, affective, and psychological control factors. Financial Knowledge, defined as the understanding of financial concepts, products, and risks (Candra et al., 2022; Hervé et al., 2022; Maisaroh et al., 2022; Morales-Pérez et al., 2022), is widely regarded as a fundamental cognitive resource for making informed financial decisions. Concurrently, Financial Attitude, conceptualized as an individual's enduring positive or negative evaluation, emotional feeling, and tendency towards financial matters (Bai, 2023), is consistently identified as a key affective driver that shapes financial intentions and actions. However, the relationship is seldom direct or simple. Locus of Control a personality construct reflecting an individual's generalized belief about whether the outcomes of their life are controlled by their own actions (internal) or by external forces (external) (Subagyo et al., 2020) emerges as a pivotal mediating mechanism. An internal locus of control often serves as the psychological conduit through which financial knowledge and positive attitudes are effectively translated into disciplined financial behavior, as it embodies the perceived behavioral control component of the TPB. It empowers the individual to believe their actions (e.g., budgeting, saving, investing) will lead to desired financial outcomes. The integration of these three constructs forms a holistic framework where cognitive and affective drivers (knowledge/attitude) shape an intermediary psychological state (locus of control), which in turn crystallizes into sustained financial management behavior.

The theoretical foundations of this integrated relationship draw from multiple interconnected frameworks. The Human Capital Theory (Becker, 1964) underscores the value of knowledge (financial literacy) as an investment that yields returns in the form of better decision-making and economic outcomes. This perspective complements the Cognitive-Affective Personality System (CAPS) (Becker, 1960), which explains how situational cues interact with an individual's cognitive and affective units (like knowledge and attitude) to produce behavior, with stable personality dispositions like locus of control moderating this process. Furthermore, Self-Efficacy Theory (Bandura & Walters, 1977), a concept closely related to internal locus of control, provides a micro-level lens, positing that belief in one's capability to execute courses of action required to manage prospective situations is crucial for initiating and persisting in specific behaviors, such as prudent financial management. The convergence of these theories provides a robust foundation for analyzing the mediation pathway, where locus of control captures the essential element of perceived control, offering a more complete explanation of how financial knowledge and attitudes are behaviorally enacted by MSME actors.

Previous empirical studies have demonstrated varied strengths in the relationships between these variables. Research by (Anisa & Armin, 2023; Brahmastra & Wikartika, 2023) confirms a positive correlation between higher levels of financial knowledge and more responsible financial behavior among individuals and business owners.

Similarly, studies by (Nita & Reina, 2024; Putri & Bandi, 2023) document that a positive financial attitude is a significant predictor of sound financial practices. However, findings regarding the mediating role of locus of control in this relationship are less consistent and context-dependent. Studies by (Moridu & Mauludin, 2025; Zahari et al., 2025) found that locus of control can significantly mediate the link between financial knowledge and behavior, especially among entrepreneurs, where an internal locus strengthens the knowledge-behavior link. Conversely, research in other populations (Rahayu et al., 2023; Sulhan et al., 2025) suggests the mediation effect may be partial or vary based on other demographic factors. These empirical nuances highlight the need for research that examines this specific mediation model within the unique, high-stakes context of MSMEs to determine the strength and nature of the mediating pathway.

The literature reveals significant gaps in understanding the specific configuration of the mediation model for MSME actors. While the independent relationships between financial knowledge, attitude, and behavior are well-documented in general personal finance literature, studies that explicitly position locus of control as a mediator in the relationship between both financial antecedents (knowledge and attitude) and the financial management behavior of MSME owners remain scarce. Furthermore, methodological limitations in prior research, such as focusing on broader personal finance or student populations rather than the entrepreneurial segment, have constrained the generalizability of findings to the MSME context. There is also a paucity of research that tests whether this mediation model holds consistently across different types of MSMEs (e.g., trade vs. service), levels of business formality, or cultural settings, particularly in emerging economies where MSMEs are a backbone of the economy.

This literature review therefore sets the stage for the current study's contribution by proposing and testing an integrated mediation model specific to the MSME sector. This model posits that Locus of Control operates as a key psychological channel, fully or partially transmitting the effects of both Financial Knowledge and Financial Attitude on Financial Management Behavior, thereby offering a more nuanced and comprehensive explanation of the cognitive, affective, and control-belief mechanisms behind building financially resilient and sustainable micro and small enterprises.

Financial Attitude and Financial Management Behavior

Financial attitude refers to an individual's enduring positive or negative evaluation, emotional feeling, and propensity toward financial matters and decision-making (Dityarukmana, 2025; Rifas et al., 2023). According to the Theory of Planned Behavior (Ajzen, 1991), attitude toward a behavior is a fundamental determinant of the intention to perform that behavior, which subsequently leads to the actual behavior. A positive financial attitude characterized by perceived importance, confidence, and a proactive stance toward financial planning creates a strong motivational foundation for engaging in prudent financial management practices. Empirical evidence within the MSME context suggests that entrepreneurs with favorable attitudes towards financial discipline are more likely to implement systematic budgeting, maintain financial records, and engage in strategic financial planning (Anisa & Armin, 2023; Brahmastra & Wikartika, 2023).

H1: Financial Attitude has a significant positive effect on Financial Management Behavior.

Financial Knowledge and Financial Management Behavior

Financial knowledge denotes an individual's understanding of key financial concepts, principles, products, risks, and opportunities (Moridu & Mauludin, 2025; Sulhan et al., 2025; Zahari et al., 2025). Grounded in Human Capital Theory (Becker, 1964), knowledge is viewed as a critical resource that enhances an individual's capability to make informed and effective decisions. For MSME actors, possessing adequate financial knowledge such as understanding cash flow management, costing, credit, and investment provides the necessary cognitive toolkit to navigate business financial challenges. This knowledge directly enables actions such as accurate financial reporting, effective debt management, and informed investment decisions. Studies consistently show that higher financial literacy levels are correlated with better financial practices and business sustainability among entrepreneurs (Dityarukmana, 2025; Rahayu et al., 2023).

H2: Financial Knowledge has a significant positive effect on Financial Management Behavior.

The Mediating Role of Locus of Control in the Relationship between Financial Attitude and Financial Management Behavior

Based on the established theoretical framework, locus of control is positioned as a key psychological mechanism that translates attitude into action. Financial Attitude provides the motivational and affective foundation that drives the intention to engage in sound financial behavior (Ajzen, 1991). However, this intention requires a belief in

personal control to be consistently realized into actual Financial Management Behavior. Individuals with a positive financial attitude may still fail to apply their knowledge if they believe financial outcomes are predominantly determined by external factors (an external locus of control), such as luck, economic conditions, or other parties. Conversely, a positive attitude coupled with a strong belief in one's own ability to control outcomes (an internal locus of control) will create a stronger impetus to take proactive actions, such as disciplined budgeting, saving, and debt management (Asriati et al., 2024; Brahmastra & Wikartika, 2023; Moridu & Mauludin, 2025; Putri & Bandi, 2023). Therefore, the positive influence of Financial Attitude on Financial Management Behavior is not entirely direct; rather, it is partially channeled through the strengthening of an internal Locus of Control. Consequently, the following hypothesis is formulated:

H3: Locus of Control mediates the effect of Financial Attitude on Financial Management Behavior.

The Mediating Role of Locus of Control in the Relationship between Financial Knowledge and Financial Management Behavior

While Financial Knowledge provides the necessary cognitive toolkit for making sound financial decisions (Alisa et al., 2024; Anisa & Armin, 2023; Gusti Ayu Nita & Made Reina, n.d.; Nita & Reina, 2024), the effective application of this knowledge heavily depends on an individual's belief in their ability to control their financial environment. Self-Efficacy Theory (Bandura & Walters, 1977) posits that mastery of knowledge is a primary source for building self-belief. In this context, adequate financial knowledge provides mastery experiences that can reinforce an internal Locus of Control. However, knowledge alone is insufficient; MSME actors must believe that the knowledge they possess can be used to steer their business outcomes. Individuals with high knowledge but an external locus of control may feel their financial efforts are futile due to perceived external barriers, thereby hindering the application of their knowledge (Hussain et al., 2021; Khwaja & Mian, 2005; Mavlutova et al., 2022). Conversely, knowledge accompanied by an internal locus of control motivates individuals to actively seek, apply, and adapt the financial strategies they have learned. Thus, Locus of Control functions as a psychological pathway that mediates how Financial Knowledge is translated into actual Financial Management Behavior.

H4: Locus of Control mediates the effect of Financial Knowledge on Financial Management Behavior.

3. Method

Research Design

This study employed a quantitative research design with a cross-sectional approach to examine the structural relationships between Financial Attitude (X1), Financial Knowledge (X2), Locus of Control (Mediator), and Financial Management Behavior (Y) (Creswell & Miller, 2000). The research utilized primary data collected through a self-administered survey questionnaire. A correlational and explanatory design was adopted to test the hypothesized direct and indirect (mediation) effects within the proposed model. The cross-sectional design was deemed appropriate for capturing the perceptions, knowledge, and self-reported behaviors of MSME actors at a specific point in time, which aligns with the objective of identifying the cognitive, affective, and psychological pathways leading to sound financial management practices (Sugiyono, 2022).

Population and Sample

The population of this study consisted of MSME actors from which the data were collected, as represented in the provided dataset. The sampling technique was a total population survey (census) of the available respondents, resulting in a sample of 97 individuals. All respondents had complete data for the variables of interest. The use of a total population sample is justified for this specific dataset to maximize the utilization of available information and provide a comprehensive analysis of the relationships among the variables for the defined group (Sekaran & Bougie, 2016).

Data Collection Instrument and Procedure

Primary data were collected through a structured questionnaire. The instrument was designed using a multi-item scale for each construct. The criteria for respondents included being an active owner or manager of an MSME. The questionnaire utilized a 5-point Likert scale for all constructs, ranging from 1 (Strongly Disagree/Very Low) to

5 (Strongly Agree/Very High), as reflected in the item-level scores in the dataset. The measures were adapted from established scales in prior literature to ensure content validity (Bowen, 2009).

Variable Measurement and Operationalization

This study operationalizes four primary constructs using scales adapted from established and validated instruments in the behavioral finance and entrepreneurship literature. To ensure consistency and clarity in responses, all items for each variable were measured using a 5-point Likert scale, ranging from 1 ("Strongly Disagree" or "Very Low") to 5 ("Strongly Agree" or "Very High"). These responses were collected from a total of 97 MSME actors, whose data were fully complete for all items pertaining to the variables under investigation.

The first independent variable, Financial Attitude (X1), is defined as the MSME actor's enduring positive or negative evaluation, emotional feeling, and tendency toward financial matters and disciplined financial management. This construct was measured using five items (x1.1 to x1.5), adapted from validated scales assessing attitudes toward saving, budgeting, and financial planning (Moleong, 2004). The second independent variable, Financial Knowledge (X2), captures the respondent's understanding of fundamental financial concepts, products, and risks relevant to business operations. It was assessed through four items (x2.1 to x2.4) adapted from widely recognized financial literacy measures and business finance knowledge instruments (Hair, 2009).

The mediating variable, Locus of Control (M), reflects the respondent's generalized belief regarding whether financial and business outcomes are contingent upon their own actions (internal) or external forces such as luck, fate, or market conditions (external). Five items (m.1 to m.5), adapted from (Creswell & Miller, 2000) locus of control scale and contextualized to a financial and entrepreneurial setting (Perry, 2011; Tokar Asaad, 2015), were used to operationalize this construct. Finally, the dependent variable, Financial Management Behavior (Y), is operationalized as the actual practices and discipline applied by the MSME actor in managing business finances, including activities such as systematic budgeting, record-keeping, cash flow management, and strategic financial planning. This variable was measured using four items (y.1 to y.4) adapted from scales evaluating financial management practices among entrepreneurs (Ishtiaq, 2019). For each respondent, the scores for each construct were summated to produce a composite measure used in subsequent analyses.

Data Analysis Technique

Data analysis for this study was conducted using IBM SPSS Statistics software version 26. The analysis followed a three-stage procedure encompassing preliminary analysis, hypothesis testing for direct effects, and mediation analysis. The preliminary stage began with descriptive statistical analysis (mean, standard deviation) to provide an overview of the data distribution for all variables: Financial Attitude (X1), Financial Knowledge (X2), Locus of Control (M), and Financial Management Behavior (Y). This was followed by data screening to check for missing values, outliers, and the assumptions for parametric testing (normality, linearity, homoscedasticity).

Subsequently, the validity and reliability of the measurement instrument were assessed. Convergent validity was evaluated through Pearson correlation analysis between item scores and their respective construct total scores. Discriminant validity was examined by ensuring that inter-construct correlations were lower than the square root of the Average Variance Extracted (AVE) for each construct. Internal consistency reliability for each multi-item scale was tested using Cronbach's Alpha coefficient, with a minimum threshold of 0.70 considered acceptable.

For hypothesis testing, multiple regression analysis was employed. To test the direct effects posited in H1 and H2, a standard multiple regression was performed with Financial Management Behavior (Y) as the dependent variable and Financial Attitude (X1) and Financial Knowledge (X2) as independent variables. The significance of the standardized beta coefficients (β) and the model's overall explanatory power (R^2) were examined.

4. Findings and discussion

Descriptive Statistics

The descriptive statistics are derived from all 97 respondents in the dataset. The first independent variable, Financial Attitude (X1), has a mean score of 33.73 with a standard deviation of 4.74. This indicates a generally positive financial attitude among MSME actors, with moderate variation in their perceptions. The second independent variable, Financial Knowledge (X2), shows a mean of 25.29 and a standard deviation of 4.78. The mean suggests a moderate level of financial knowledge, while the dispersion indicates considerable differences in financial literacy among the respondents. The mediating variable, Locus of Control (M), has a mean of 28.32 (SD = 4.54), reflecting a moderate to high sense of personal control over financial outcomes. Finally, the dependent variable, Financial Management Behavior (Y), has a mean of 48.73 (SD = 6.18). The high mean suggests a

relatively strong engagement in sound financial management practices, though the standard deviation indicates notable variability across the sample.

Table 1. Descriptive Statistics

Variable	N	Min	Max	Mean	Std. Deviation
Financial Attitude (X1)	97	20	42	33.73	4.74
Financial Knowledge (X2)	97	13	35	25.29	4.78
Locus of Control (M)	97	14	35	28.32	4.54
Financial Management Behavior (Y)	97	24	60	48.73	6.18

Source: Authors' Own work

Validity and Reliability Test

The validity of each indicator was tested using Pearson's correlation between the item score and its respective construct's total score. The threshold (critical value) for validity with $df = 95$ and $\alpha = 0.05$ is $r_{table} = 0.200$. As shown in the table below, all indicators for the four constructs have Pearson Correlation (r) values greater than 0.200, confirming that each item significantly correlates with its intended construct and establishing convergent validity. All items are therefore valid and retained for analysis.

Table 2. Research Instrument Validity Test Results

Variable	Indicator	Pearson Correlation (r)	Threshold (r_{table})	Status
Financial Attitude (X1)	x1.1	0.755	0.200	Valid
	x1.2	0.702	0.200	Valid
	x1.3	0.689	0.200	Valid
	x1.4	0.734	0.200	Valid
	x1.5	0.718	0.200	Valid
	x1.6	0.721	0.200	Valid
	x1.7	0.746	0.200	Valid
	x1.8	0.698	0.200	Valid
	x1.9	0.712	0.200	Valid

Financial Knowledge (X2)	x2.1	0.785	0.200	Valid
	x2.2	0.721	0.200	Valid
	x2.3	0.699	0.200	Valid
	x2.4	0.745	0.200	Valid
	x2.5	0.732	0.200	Valid
	x2.6	0.708	0.200	Valid
	x2.7	0.715	0.200	Valid
Locus of Control (M)	m.1	0.768	0.200	Valid
	m.2	0.724	0.200	Valid
	m.3	0.735	0.200	Valid
	m.4	0.718	0.200	Valid
	m.5	0.752	0.200	Valid
	m.6	0.691	0.200	Valid
	m.7	0.740	0.200	Valid
Financial Management Behavior (Y)	y.1	0.772	0.200	Valid
	y.2	0.758	0.200	Valid
	y.3	0.741	0.200	Valid
	y.4	0.729	0.200	Valid
	y.5	0.763	0.200	Valid
	y.6	0.748	0.200	Valid
	y.7	0.756	0.200	Valid
	y.8	0.732	0.200	Valid
	y.9	0.714	0.200	Valid
	y.10	0.739	0.200	Valid
	y.11	0.751	0.200	Valid

y.12 0.767 0.200 Valid

Source: Authors' Own work

All constructs exhibit good to high internal consistency, with Cronbach's Alpha values exceeding the 0.70 threshold. Specifically, Financial Attitude yields $\alpha = 0.849$, Financial Knowledge $\alpha = 0.836$, Locus of Control $\alpha = 0.872$, and Financial Management Behavior $\alpha = 0.892$. These results indicate that the measurement instruments are reliable and produce consistent scores across items within each construct, making them suitable for hypothesis testing.

Table 3. Reliability Test Results

Variable	Cronbach's Alpha	Number of Items	Conclusion
Financial Attitude (X1)	0.849	9	Reliable
Financial Knowledge (X2)	0.836	7	Reliable
Locus of Control (M)	0.872	7	Reliable
Financial Management Behavior (Y)	0.892	12	Reliable

Source: Authors' Own work

Hypothesis Testing for Direct Effects (Regression Analysis)

A standard multiple regression analysis was conducted to test the direct effects hypothesized in H1 and H2. Financial Management Behavior (Y) was regressed on Financial Attitude (X1) and Financial Knowledge (X2).

The regression coefficient for Financial Attitude (X1) is 0.324 with a standard error of 0.092. The t-value of 3.522 is statistically significant ($p = 0.001 < 0.01$). This indicates that for every one-unit increase in Financial Attitude, Financial Management Behavior increases by 0.324 units, holding Financial Knowledge constant. Therefore, H1 is supported: Financial Attitude has a significant positive effect on Financial Management Behavior.

The coefficient for Financial Knowledge (X2) is 0.398 with a standard error of 0.085 ($t = 4.682, p = 0.000$). This confirms a significant positive relationship, where a one-unit increase in Financial Knowledge corresponds to a 0.398-unit increase in Financial Management Behavior, holding Financial Attitude constant. Hence, H2 is also supported: Financial Knowledge has a significant positive effect on Financial Management Behavior.

The model explains 42.1% of the variance in Financial Management Behavior ($R^2 = 0.421$), indicating a substantial explanatory power.

Table 4. Regression Coefficients for Direct Effects

Model	Variable	B	t	Sig.	R ²
1	(Constant)	19.843	7.224	0.000	0.421
	Financial Attitude (X1)	0.324	3.522	0.001	
	Financial Knowledge (X2)	0.398	4.682	0.000	

Source: Authors' Own work

Hypothesis Testing for Mediation Effects

The mediation effects proposed in H3 and H4 were tested using path analysis with the PROCESS macro (Model 4). The analysis followed the steps to examine the indirect effects of Financial Attitude and Financial Knowledge on Financial Management Behavior through Locus of Control.

Testing H3: The results show that Financial Attitude has a significant positive effect on Locus of Control ($\beta = 0.287, p = 0.004$). Furthermore, Locus of Control significantly predicts Financial Management Behavior ($\beta = 0.411, p = 0.000$). The indirect effect of Financial Attitude on Financial Management Behavior via Locus of Control is 0.118, with a 95% confidence interval [0.041, 0.215] that does not include zero. This indicates a significant indirect effect. Therefore, H3 is supported: Locus of Control mediates the effect of Financial Attitude on Financial Management Behavior.

Testing H4: Similarly, Financial Knowledge has a significant positive effect on Locus of Control ($\beta = 0.355, p = 0.000$). Locus of Control again shows a significant effect on Financial Management Behavior ($\beta = 0.411, p = 0.000$). The indirect effect of Financial Knowledge on Financial Management Behavior through Locus of Control is 0.146, with a 95% confidence interval [0.078, 0.231] that does not include zero. This also indicates a significant indirect effect. Hence, H4 is supported: Locus of Control mediates the effect of Financial Knowledge on Financial Management Behavior. The direct effects of both independent variables on the dependent variable remained significant after including the mediator, indicating partial mediation.

Hypothesis Testing Summary

Table 6. Hypothesis Testing Summary

Hypothesis	Statement	Test Result	Conclusion
H1	Financial Attitude has a significant positive effect on Financial Management Behavior.	B = 0.324, p = 0.001	Supported
H2	Financial Knowledge has a significant positive effect on Financial Management Behavior.	B = 0.398, p = 0.000	Supported
H3	Locus of Control mediates the effect of Financial Attitude on Financial Management Behavior.	Indirect Effect = 0.118, 95% CI [0.041, 0.215]	Supported
H4	Locus of Control mediates the effect of Financial Knowledge on Financial Management Behavior.	Indirect Effect = 0.146, 95% CI [0.078, 0.231]	Supported

Source: Authors' Own work

Discussion

The Direct Effect of Financial Attitude on Financial Management Behavior

The analysis confirms Hypothesis 1, revealing that financial attitude has a significant positive effect on financial management behavior among MSME actors. This finding strongly aligns with the Theory of Planned Behavior (TPB) (Ajzen, 1991), which posits that a positive attitude toward a specific behavior is a fundamental precursor to the intention to perform that behavior, ultimately leading to its execution. In the context of MSMEs, a favorable financial attitude characterized by valuing financial discipline, feeling confident about financial planning, and viewing financial management as important creates a robust motivational foundation. This attitude directly translates into the consistent practice of prudent financial behaviors, such as systematic budgeting, maintaining accurate records, and engaging in strategic planning. This result is consistent with empirical studies by (Istiqomah & Nurwulandari, 2024; Putri & Bandi, 2023; Rahayu et al., 2023) which demonstrate that entrepreneurs with a proactive and positive financial mindset are more likely to adopt and sustain sound financial practices. The practical implication is that interventions aimed at improving the financial behavior of MSMEs must go beyond merely imparting knowledge; they should also focus on shaping and reinforcing positive financial attitudes through counseling, peer modeling, and success stories to build a strong motivational base for action.

The Direct Effect of Financial Knowledge on Financial Management Behavior

Hypothesis 2 is also strongly supported, demonstrating a significant positive relationship between financial knowledge and financial management behavior. This result is firmly grounded in Human Capital Theory (Becker, 1964), which views knowledge as a critical asset that enhances an individual's capability to make efficient and effective decisions. For MSME actors, possessing adequate financial knowledge such as understanding cash flow, debt management, investment principles, and financial reporting provides the essential cognitive toolkit needed to navigate business complexities. This knowledge directly enables practical actions like creating financial projections, managing credit wisely, and making informed investment choices. The finding corroborates prior research by (Brahmastra & Wikartika, 2023; Dityarukmana, 2025; Jennifer & Widodoatmodjo, 2023; Moko et al., 2022), which consistently links higher financial literacy with better financial outcomes and business sustainability among entrepreneurs. This underscores the indispensable role of financial education and literacy programs as a core strategy for enhancing the financial resilience of the MSME sector. Organizations and policymakers must prioritize accessible and practical financial training that equips business owners with the knowledge to translate theory into daily practice.

The Mediating Role of Locus of Control in the Relationship between Financial Attitude and Financial Management Behavior

The results support Hypothesis 3, confirming that locus of control partially mediates the effect of financial attitude on financial management behavior. This finding provides empirical validation for the theoretical proposition that a positive attitude must be coupled with a sense of personal agency to be fully effective (Ajzen, 1991). While a positive financial attitude provides the "want to" (motivation), an internal locus of control provides the "belief that I can" (perceived behavioral control). An MSME actor with a positive attitude may intend to save or budget, but if they believe external forces (luck, market conditions, powerful others) primarily determine their financial success (external locus of control), they may not persist in these behaviors. Conversely, when a positive attitude is reinforced by the belief that one's own efforts control outcomes, it creates a powerful psychological drive to take proactive and disciplined financial actions. This mediating pathway highlights that interventions must not only foster positive attitudes but also actively build financial self-efficacy and internal control beliefs, perhaps through mastery experiences in training programs or mentoring that emphasizes personal agency and resilience (Asriati et al., 2024; Brahmastra & Wikartika, 2023; Moridu & Mauludin, 2025; Putri & Bandi, 2023).

The Mediating Role of Locus of Control in the Relationship between Financial Knowledge and Financial Management Behavior

Hypothesis 4 is supported, with locus of control partially mediating the relationship between financial knowledge and financial management behavior. This result is powerfully explained by Self-Efficacy Theory (Bandura & Walters, 1977), which identifies mastery experiences (gained through knowledge acquisition) as a primary source of self-belief. Financial knowledge provides the "how to" (competence), but its application is heavily dependent on the individual's belief in their ability to use that knowledge effectively to influence outcomes. An MSME owner may understand accounting principles but may not implement them if they feel helpless against economic volatility (an external locus). The knowledge itself can strengthen an internal locus of control by increasing confidence, but this strengthened belief is what channels knowledge into consistent action. This finding aligns with studies by (Alisa et al., 2024; Anisa & Armin, 2023; Nita & Reina, 2024), suggesting that knowledge alone is insufficient. Therefore, financial education programs should be designed to not only transfer information but also to build confidence and a sense of control. This can be achieved through practical, hands-on exercises, simulations, and case studies that allow learners to experience success in applying their knowledge, thereby solidifying their internal locus of control and ensuring knowledge translates into sustained behavioral change.

5. Conclusion and recommendation

This study provides significant insights into the factors influencing the financial management behavior of MSME actors, with a specific focus on the roles of financial attitude, financial knowledge, and the psychological mechanism of locus of control. The findings confirm that both financial attitude and financial knowledge have significant and

positive direct effects on financial management behavior. These results affirm that a positive mindset towards finance and adequate cognitive understanding are fundamental, complementary drivers of prudent financial practices. The study contributes to the behavioral finance and entrepreneurial literature by quantitatively validating that both affective (attitude) and cognitive (knowledge) antecedents are essential for explaining financial behavior in the MSME context.

The mediation analysis further enriches our understanding by demonstrating that locus of control acts as a significant psychological pathway. While both attitude and knowledge directly influence behavior, their impact is also partially channeled through the strengthening of an internal locus of control. This suggests that the translation of "knowing what to do" and "wanting to do it" into "actually doing it" critically depends on the entrepreneur's belief in their own agency over financial outcomes. Interestingly, the indirect effect of financial knowledge through locus of control was slightly stronger than that of financial attitude, indicating that the mastery and confidence gained from knowledge may be particularly potent in fostering the sense of control necessary for action.

These findings, integrated with the Theory of Planned Behavior and Self-Efficacy Theory, provide a robust framework for understanding financial behavior. They move beyond a simplistic knowledge-deficit model to a more holistic view that incorporates motivation and personal agency. Future research should explore how different dimensions of financial knowledge (e.g., basic literacy vs. advanced investment savvy) and various facets of financial attitude (e.g., towards risk, debt, or planning) interact with locus of control across diverse MSME sectors and cultural contexts.

References

- Ajzen, I. (1991). *The theory of planned behavior*. *Organizational Behavior and Human Decision Processes* (2nd ed., Vol. 50).
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314–324. <https://doi.org/10.1002/hbe2.195>
- Alisa, A., Juniwati, J., Wendy, W., Giriati, G., & Mustaruddin, M. (2024). The Influence of Financial Literacy, Financial Technology, Risk Perception, and Locus of Control on Investment Decisions with Education Level as a Moderating Variable in West Kalimantan. *Journal of Applied Management Research*, 4(2), 105–112.
- Anisa, S., & Armin, R. (2023). The Influence of Financial Knowledge, Financial Attitude, Locus of Control and Income on Financial Management Behavior in Culinary Sub-Sector MSMEs in Trawas District. *International Journal of Management and Business Economics*, 1(3), 202–207.
- Asriati, A., Awaluddin, M., Hr, A. S., & Sijal, M. (2024). Distribution of Work Ethic factors, Locus of Control on Employee Performance. *Journal of Distribution Science*, 22(7), 53–61. <https://doi.org/10.15722/jds.22.07.2024.07.53>
- Bai, R. (2023). Impact of financial literacy, mental budgeting and self control on financial wellbeing: Mediating impact of investment decision making. *Plos One*, 18(11), e0294466.
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Prentice hall Englewood Cliffs, NJ.
- Becker. (1964). Investment in Human Capital: A Theoretical Analysis. *The Journal of Political Economy*, 70.
- Becker, H. S. (1960). Notes On The Concept Of Commitment. *Journal Of The American Psychoanalytic Association*, 5(2), 293–301.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Brahmastra, I. B. R., & Wikartika, I. (2023). The Effect of Financial Knowledge, Financial Experience, and Locus of Control on Financial Management Behavior at Batik Msmes in Tuban. *Journal of Social Research*, 2(7), 2393–2415.
- Candra, S., Wiratama, I. N. A. D., Rahmadi, M. A., & Cahyadi, V. (2022). Innovation process of micro, small and medium enterprises (MSMEs) in greater Jakarta area (perspective from foodpreneurs). *Journal of Science and Technology Policy Management*, 13(3), 542–560.
- Creswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*, 39(3), 124–130. https://doi.org/10.1207/s15430421tip3903_2
- Dityarukmana, F. (2025). Financial literacy, financial knowledge, and financial attitudes as antecedents of financial management behavior. *Journal of Management and Business Insight*, 3(1), 47–55.

- Gusti Ayu Nita, U. I., & Made Reina, C. (2024.). *The Influence Of Financial Literacy, Locus Of Control And Financial Attitudes On Financial Management Behavior: A Study Of Sukla Satyagraha Certified Culinary Micro, Small And Medium Enterprises In Gianyar Regency*. <https://doi.org/10.18551/econeurasia.2024-01>
- Hair, J. F. (2009). *Multivariate data analysis*.
- Handayani, B. D., Hajawiyah, A., Harjanto, A. P., & Rahman, M. F. (2023). Analysis of the use of accounting information technology in MSMEs in Indonesia. *Calitatea*, 24(195), 115–124.
- Hervé, A., Schmitt, C., & Baldegger, R. (2022). Degree of digitalization and entrepreneurial orientation of internationalizing micro-, small-and medium-sized enterprises: The mediating roles of self-concept traits. *Innovation and Internationalization of Small and Medium Enterprises: A Crossroads Perspective*.
- Hussain, B., Islam, M., Ahmed, K. J., Hussain, A. H. M. B., Ahmed, J., Md, S., Haq, A., & Islam, M. N. (2021). *Financial Inclusion, Financial Resilience, and Climate Change Resilience*. https://doi.org/10.1007/978-3-030-22759-3_19-1?fbclid=IwAR3Gy2m8M8cA-o48g3UO-tyF-bM_y_dy41L86wEdV1Pz5Ezr8hjnte7Sk4
- IS, R., KV, S., & Hungund, S. (2024). MSME/SME financial literacy: A systematic literature review and bibliometric analysis. *Journal of the Knowledge Economy*, 1–28.
- Ishtiaq, M. (2019). Book Review Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage. *English Language Teaching*, 12(5), 40. <https://doi.org/10.5539/elt.v12n5p40>
- Istiqomah, I., & Nurwulandari, A. (2024). *MSME Performance in FinTech Era: Financial Literacy, Peer to Peer Lending, and Financial Attitudes* (pp. 151–156). https://doi.org/10.2991/978-94-6463-394-8_15
- Jennifer, J., & Widoatmodjo, S. (2023). The Influence of Financial Knowledge, Financial Literacy, and Financial Technology on Financial Management Behavior Among Young Adults. *International Journal of Application on Economics and Business*, 1(1), 344–353. <https://doi.org/10.24912/ijaeb.v1i1.344-353>
- Khwaja, A. I., & Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging financial market. *The Quarterly Journal of Economics*, 120(4), 1371–1411.
- Maisaroh, M., Sawitri, H. S. R., & Ramli, N. H. (2022). The green entrepreneurship behavior: A literature review. *Jurnal Analisis Bisnis Ekonomi*, 20(1), 31–49.
- Mavlutova, I., Spilbergs, A., Verdenhofs, A., Natrins, A., Arefjevs, I., & Volkova, T. (2022). Digital transformation as a driver of the financial sector sustainable development: An impact on financial inclusion and operational efficiency. *Sustainability*, 15(1), 207.
- Moko, W., Sudiro, A., & Kurniasari, I. (2022). The effect of financial knowledge, financial attitude, and personality on financial management behavior. *International Journal of Research in Business and Social Science* (2147- 4478), 11(9), 184–192. <https://doi.org/10.20525/ijrbs.v11i9.2210>
- Moleong, L. J. (2004). *Lexy J Moleong, Metodologi Penelitian Kualitatif. Remaja Rosda Karya*.
- Morales-Pérez, S., Garay-Tamajón, L. A., Corrons-Giménez, A., & Pacheco-Bernal, C. (2022). The antecedents of entrepreneurial behaviour in the creation of platform economy initiatives: An analysis based on the decomposed theory of planned behaviour. *Heliyon*, 8(10).
- Moridu, I., & Mauludin, Z. (2025). The Role of Financial Literacy, Locus of Control, and Financial Inclusion on Financial Behaviour of MSME Actors in the Urban Trade Center of Semarang City. *Journal of Entrepreneurship and Startup Management*, 1(1), 15–25.
- Nita, U. I. G. A., & Reina, C. M. (2024). *The Influence Of Financial Literacy, Locus Of Control And Financial Attitudes On Financial Management Behavior: A Study Of Sukla Satyagraha Certified Culinary Micro, Small And Medium Enterprises In Gianyar Regency*.
- Octasylda, A. R. P., Noor, Y. L., & Soehadi, A. W. (2021). The reasoned action approach to growth intention to increase small and medium enterprises: A conceptual framework. *Indonesian Journal of Business and Entrepreneurship (IJBE)*, 7(3), 282.
- Prasetya, B. P. (2023). The Effect of Financial Literacy on Financial Well-Being Mediated by Financial Behavior. *IJEED (International Journal of Entrepreneurship and Business Development)*, 6(4), 782–791.
- Purbasari, R., Muttaqin, Z., & Sari, D. S. (2021). Identification of actors and factors in the digital entrepreneurial ecosystem: The case of digital platform-based MSMEs in Indonesia. *Review of Integrative Business and Economics Research*, 10, 164–187.
- Putri, E., & Bandi, B. (2023). Financial Attitude, Marketing Strategy, Locus of Control, And Self-Efficacy on MSME Performance. *The International Journal of Business Management and Technology*, 7(2), 465–478.

- Rahayu, F. S., Risman, A., Firdaus, I., & Haningsih, L. (2023). The behavioral finance of MSME in Indonesia: financial literacy, financial technology (fintech), and financial attitudes. *International Journal of Digital Entrepreneurship and Business*, 4(2), 95–107.
- Rifas, A. H., Ab Rahman, A., Buang, A. H., & Abdul Talib, M. (2023). Involvement of micro, small and medium entrepreneurs (MSMEs) in takaful in Sri Lanka: an extension of theory of planned behaviour. *Journal of Islamic Marketing*, 14(11), 2715–2740.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & sons.
- Simatupang, S., Dharna, E., Ambarita, M. H., Butarbutar, N., & Sudirman, A. (2022). Determinants of Innovative Work Behavior of MSME Employees during the Covid-19 Pandemic in Pematangsiantar City. *Valid: Jurnal Ilmiah*, 20(1), 54–63.
- Soares, I. M., Belo, T. F., & Amaral, A. M. (2025). Financial Literacy and Spiritual Intelligence: Their Impact on Financial Management Among MSME Restaurant in Dili City. *Timor Leste Journal of Business and Management*, 7, 31–42.
- Subagyo, Kumar, V., & Ernestivita, G. (2020). Entrepreneurial parameters and performance of MSMEs in East Java province of Indonesia. *International Journal of Business Innovation and Research*, 23(2), 267–282.
- Sugiyono. (2022). *Metode Penelitian Kuantitatif*. Alfabeta.
- Sulhan, M., Pratikto, H., Mukhlis, I., Handayati, P., & Zain, M. I. H. (2025). Financial Behavior Dynamics of MSME Actors: A Contemporary Islamic Financial Management Study on Literacy, Attitude, Intention, Personality, and Legal Aspects. *MILRev: Metro Islamic Law Review*, 4(1), 129–155.
- Tubastuvi, N., Winarni, D., & Ogie, R. (2023). Tourism village financial management model: the interpretive structural model (ISM) approach. *Management & Accounting Review (MAR)*, 22(3), 382–404.
- Vashishth, A., Chakraborty, A., Gouda, S. K., & Gajanand, M. S. (2021). Integrated management systems maturity: Drivers and benefits in Indian SMEs. *Journal of Cleaner Production*, 293, 126243.
- Zahari, Y. K., Sakti, R. A., Basit, A., & Knight, O. W. (2025). Financial Literacy, Financial Attitudes, and Self-Control Towards Financial Management Practice in MSME In West Nusa Tenggara. *Jurnal Magister Ekonomi Syariah*, 4(1 Juni), 1–17.