

Determinants of Personal Financial Management Behavior in MSME Actors in North Semarang District

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ABSTRACT

This study aims to analyze the influence of financial literacy, financial attitude, and financial knowledge on personal financial management behavior (PFMB), as well as examine the mediating role of locus of control among MSME actors in North Semarang District. This research employs a quantitative approach with 96 respondents selected through a purposive sampling technique. The analytical method used is Partial Least Squares Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS 4.0. The results indicate that financial literacy, financial attitude, and financial knowledge have a positive and significant effect on PFMB. In addition, locus of control significantly mediates the relationship between financial literacy and PFMB, financial attitude and PFMB, as well as financial knowledge and PFMB. These findings suggest that individuals' belief in their ability to control financial decisions strengthens the influence of financial literacy, financial attitude, and financial knowledge on financial management behavior. Overall, this study highlights the importance of enhancing financial literacy, financial attitude, financial knowledge, and locus of control in supporting better financial management behavior among MSME actors

Keywords: *Financial Literacy; Financial Attitude; Financial Knowledge; Locus of Control; Personal Financial Management Behavior.*

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have a strategic role in the Indonesian economy, especially in labor absorption, income equity, and their contribution to the national Gross Domestic Product (GDP). The resilience of MSMEs has been proven, including during the 1997–1998 economic crisis when many large companies went bankrupt. However, the sustainability of MSMEs is not only determined by operational capabilities but also by the quality of business actors' financial management behavior.

Personal Financial Management Behavior (PFMB) is an important aspect in maintaining the financial stability of MSMEs because it is related to the ability to manage income, expenses, savings, and business financial planning. Various factors, including financial literacy, financial attitude, and financial knowledge, influence PFMB. In

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addition, psychological factors, such as locus of control, play a role in shaping financial behavior, although previous studies have reported inconsistent findings.

Table 1: Gap Phenomenon

No	Indicator	Percentage of MSME Actors (%)	Gap Description
1.	Financial Literacy (Good Score)	49,68%	Still 50.32% of MSMEs have low literacy (OJK 2022 data)
2.	Financial Attitude (Positive)	54%	46% of MSME actors do not have a positive financial attitude
3.	Financial Knowledge (High)	48%	52% of MSMEs have limited financial knowledge
4.	Internal Locus of Control (Strong)	42%	58% are likely to feel outside factors control finances

Source: OJK Portal, snki.go.id

The phenomenon of low financial management capacity of MSME actors is reflected in the Financial Services Authority's (OJK) National Survey on Financial Literacy and Inclusion (SNLIK) in 2022. The financial literacy index of the Indonesian people was recorded at 49.68%, far below the financial inclusion index which reached 85.10%. In addition, only 54% of MSME actors have a positive financial attitude, 48% have high financial knowledge, and 42% have *Locus of Control* strong internal. This condition shows that there is a gap between financial access and its management capabilities.

A number of studies have found that *Financial Attitude* has a significant effect on PFMB (Putri & Andarini, 2022; Mebis et al., 2023; Chinedu & Nwizuzu, 2021). Individuals with good financial attitudes tend to be able to control spending and conduct financial planning more effectively. However, different results were found by Azizah & Digidowiseiso (2023) which shows that *Financial Attitude* does not have a significant effect on financial management behavior, so the relationship between the two variables is still inconsistent.

Financial literacy and *financial knowledge* are also seen as fundamental factors in forming PFMB. Research Haryanto & Limbong (2024), Ritakumalasari & Susanti

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(2021), and Humaira & Sagoro (2018) Finding the positive influence of financial literacy and knowledge on financial management behavior. Instead, Sampoerno & Asandimitra (2021), Firmansyah & Indrawati (2024), and Khakimah & Handayani (2024) shows that these two variables do not have a significant effect on PFMB, thus showing the existence of a *research gap* in the study of financial behavior.

On the other hand, *Locus of Control* is a psychological factor that has the potential to strengthen or weaken the influence of financial literacy, attitude, and knowledge on PFMB. Natan & Mahastanti (2022) and Santoso et al., (2024) Found that *internal Locus of Control* has a positive effect on financial management behavior. However, Laurensia Augustine (2021) Find different results, where *Locus of Control* does not have a significant effect on financial behavior, so the role of this variable as a mediator still needs to be tested further.

The novelty of this research lies in the integration of *locus of control* as a specific mediating variable that bridges the relationship between financial literacy, attitudes, and knowledge, and financial management behavior specifically within the context of urban MSMEs in the post-digital transformation era. Unlike previous research, which has often examined these variables in isolation or through direct effects, this study's comprehensive mediation model investigates how the internal psychological beliefs of business owners mediate their financial competencies, ultimately leading to tangible impacts on their financial management behavior.

Based on empirical phenomena and inconsistencies of previous research results, this study is important to analyze the influence of *Financial Literacy*, *Financial Attitude*, and *Financial Knowledge* against *Personal Financial Management Behavior* with *Locus of Control* as a mediation variable for MSME actors in North Semarang District. Financial management challenges faced by MSMEs in the North Semarang District include the common practice among micro-entrepreneurs—particularly in this coastal and densely populated commercial area—of commingling personal and business funds, a lack of daily cash flow recording, and a reliance on informal loans stemming from an insufficient understanding of financial risk mitigation. This research is expected to make an empirical contribution to the development of behavioral finance literature and become the basis for

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the formulation of strategies to improve the quality of MSME financial management in a sustainable manner.

THEORETICAL BACKGROUND

Theory of Planned Behavior (TPB)

Theory of Planned Behavior (TPB) explains that individual behavior is influenced by intention, while intention is formed by attitude, subjective norms, and perception of behavior control. The stronger a person's intentions, the more likely it is that the behavior will manifest itself (Gondo, 2024). In addition, the SDGs also emphasize the role of background factors such as personal, social, and informational characteristics (e.g., education, income, experience, and media exposure) in shaping individual beliefs and intentions towards a behavior (Saragih, 2023). In the context of this research, the SDGs are used to explain how *Financial Attitude, Financial Literacy, and Financial Knowledge* forming the confidence and intention of MSME actors in managing finances, which ultimately affects *personal financial management behavior*.

MSME Performance Theory

MSME Performance can be explained through a dynamic capability approach (*dynamic capabilities*), namely the ability to adapt, reorient, and innovate in the face of changes in the business environment. Dejardin et al., (2023) shows that *Dynamic capabilities* has a positive effect on the performance of SMEs, including in crisis conditions, because it supports innovation capabilities, absorption of market information, process improvement, and more effective marketing. Innovation is not only related to products, but also strategies, processes, and business models, and is strengthened by social networks that help MSMEs be more adaptive and sustainable (Dejardin et al., 2023). In this study, the performance of MSMEs is seen as being supported by good financial management behavior as part of business adaptation and sustainability capacity.

Personal Financial Management Behavior

Personal financial management behavior is an individual's behavior in managing cash, savings, credit, and investments responsibly (R. S. Putri et al., 2023). This behavior includes the ability to plan, make budgets, control funds, and save money regularly

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(Hidayati & Nugroho, 2023). Widi Asih & Khafid (2020) affirms that financial management behavior is the way individuals productively manage and control finances and assets to meet current and future needs, while Nisa & Haryono, (2022) emphasizing that the behavior arises because of the impulse to adjust expenses to income. Financial management behavior is also related to the responsibility of utilizing financial and non-financial assets effectively and efficiently Damayanti et al., (2023), and individuals with good behavior tend to budget, save, and control expenses Charlyvia & Riva'i (2023) PFMB indicators include consumption, cash flow, savings & investments, and credit management (Amaliyah et al., 2023).

Financial Literacy

Financial literacy It is a combination of knowledge and skills to understand financial concepts and risks so that individuals are able to make effective financial decisions for their welfare, Financial literacy is a holistic combination of awareness, knowledge, skills, attitudes, and behaviors necessary for making sound financial decisions and achieving individual well-being (Ministry of Education and Culture, 2017). Individuals who have adequate financial literacy tend to be able to make better decisions and manage finances more effectively (Lusardi & Streeter, 2023). Financial literacy also includes the ability to understand, analyze, and manage financial conditions and contributes to forming healthy financial behaviors Widyakto et al., (2024) and affirmed by the Financial Services Authority (2022). Financial literacy indicators include *Basic Personal Finance*, *Cash Management*, and *Credit and debt management* (Mustika et al., 2022).

Financial Attitude

Financial attitude is an individual's attitude or tendency to respond to financial problems through thinking, assessing, and acting when making financial decisions (Herry & Dewi, 2024). This attitude is formed through environmental influences such as family, education, community, and association (Nisa & Haryono, 2022). *Financial attitude* Describe an individual's beliefs and judgments of money management that affect spending priorities, saving habits, and control of consumptive behavior (Widyakto et al., 2024), as well as guiding financial behavior in budgeting and financial decisions

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(Budiono, 2020)Indicator *Financial Attitude* including saving awareness, financial record-keeping habits, financial planning, and expense control (Setyaningsih & As'ari, 2024).

Financial Knowledge

Financial knowledge is the ability of individuals to think and act rationally in managing finances based on the information they have. Financial knowledge focuses more on pure cognitive mastery (a theoretical and technical understanding of financial instruments, interest rates, inflation, and banking products) (Amanah et al., 2016) in (Widi Asih & Khafid, 2020). This knowledge helps individuals evaluate and make informed financial decisions (R. S. Putri et al., 2023). *Financial knowledge* It also includes an understanding of financial instruments as well as practical skills in selecting and using such instruments (Czech et al., 2024), including the ability to budget, manage cash flow, and understand loan interest (Firmansyah & Indrawati, 2024). Strengthening financial literacy and knowledge requires practical skills training and understanding of financial instruments/tools(Shafiee et al., 2023). Financial knowledge indicators include general knowledge, saving and borrowing, insurance, and investment (Triana & Ibrohim, 2022).

Locus Of Control

Locus of control is the individual's belief in the source of control over the outcome of life: whether it is determined by one's own efforts and abilities (*internal*) or external factors such as luck and destiny (*external*) (Mwamwenda & Kariuki, 2020). This concept was introduced by Rotter (1996) and explains the extent to which individuals believe in the relationship between actions and outcomes obtained. *Locus of control* It is also understood as the perception of the source of control of life events (Chinedu & Nwizuzu, 2021), and relates to the attribution of responsibility for actions and results (Botha & Dahmann, 2024). *Locus of internal control* tends to encourage better financial management behaviors (Cahyaningrum & Fikri, 2021), although other findings suggest insignificant results (Setiawan & Laulita, 2024). Locus of control indicators include *Internality*, *Luck*, and *powerful others* (Octari et al., 2020).

Within the framework of the Theory of Planned Behavior (TPB), "perceived behavioral control" shares a very strong conceptual affinity with locus of control. This

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study explains that locus of control reinforces an individual's perceived control determining the extent to which MSME owners believe that their financial outcomes are shaped by their own independent efforts (internal), thereby fostering the intention to engage in, and the actual manifestation of, responsible financial management behavior.

Logical Relationships Between Variables

The Effect of Financial Literacy on Personal Financial Management Behavior

Financial literacy is an understanding of financial facts, concepts, principles and techniques that enable individuals to make smart decisions about money (Generation et al., 2022). Individuals with good financial awareness have knowledge related to personal finances that ultimately influence how they manage their finances (Muhammad Hafizd Fauzi et al., 2024). Higher financial insight associated with responsible financial management behaviors can help individuals cope with economic uncertainty and improve economic stability and well-being (Rosa & Listiadi, 2020). This research is strengthened by the results of the research conducted Ritakumalasari & Susanti, (2021), states that *Financial Literacy* positively relate to *Personal Financial Management Behavior*.

Hypothesis1: *It is suspected that Financial Literacy has a significant positive effect on personal financial management behavior*

The Influence of Financial Attitude on Personal Financial Management Behavior

According to (Humaira & Sagoro, 2018), a person's financial attitude is the way they make decisions and execute them according to their beliefs or principles. According to Widyakto et al., (2024), a person's positive financial attitude reflects his or her positive financial mindset. This is proven in research Firmansyah & Indrawati, (2024) which shows that *Financial Attitude* affects *Financial Management Behavior*.

Hypothesis 2: *It is suspected that Financial Attitude has a significant positive effect on personal financial management behavior*

The Effect of Financial Knowledge on Personal Financial Management Behavior

Theory of Planned Behavior explains that the influence *Financial Knowledge* against *Financial Management Behavior* arises because the knowledge that individuals possess shapes intentions and goals in making better financial decisions (Ridwan & Primadanar,

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2023). The higher a person's financial information and understanding, the more likely they are to exhibit better financial management behavior. A person who has the responsibility to overcome various financial problems will manage finances well, namely by setting aside his money to pay bills on time. Someone who owns *Financial Knowledge* who are good, will be better at managing finances because they easily understand the financial problems they are facing. According to research Sukma et al., (2022) Finding that financial knowledge influences personal financial management behavior means that the better a person's financial knowledge, the better their ability to plan, manage, and control personal finances.

Hypothesis 3: It is suspected that Financial Knowledge has a significant positive effect on *personal financial management behavior*

The Influence of Locus of Control Mediates Financial Literacy on Personal Financial Management Behavior

Individuals are not so likely to take advantage of the financial knowledge they have acquired unless they feel responsible and in control of their future. *Financial Literacy* can be used optimally and will provide benefits in managing personal finances. According to the findings Budiasni & Ayuni, (2022), Financial Literacy can affect PFMB through locus of control mediation. So the conclusion is that *Locus of Control* play a positive and significant mediating role in influencing *Financial Literacy on Personal Financial Management Behavior*.

Individuals are not likely to take advantage of the financial knowledge they have acquired unless they feel responsible and have control over their future. *Financial literacy* can be used optimally and provides benefits in managing their personal finances (Wardani & Fitrayati, 2022).

Hypothesis 4: It is suspected that Financial Literacy has a positive and significant effect on Personal Financial Management Behavior through the Locus of Control.

The Influence of Locus of Control Mediates Financial Attitude on Personal Financial Management Behavior

In TPB, attitudes, subjective standards, and behavioral control reactions influence behavioral intentions. An individual's high desire to perform a behavior is influenced by

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positive attitudes, environmental support (subjective norms), and the perception that there are no significant barriers to the behavior (N. Y. Hidayati & Destiana, 2023). The existence of a locus of control in individuals is so significant that they can account for their decisions (Triono, 2021). Findings that have been researched by Rindayani et al., (2022) It shows that the relationship between the influence of financial attitudes on financial management behavior can be mediated positively and significantly by the locus of control.

Financial attitude A person includes a person's perception, mindset, beliefs, and judgment of money that influence the way they make financial decisions (Herry & Dewi, 2024). Financial circumstances can determine a person's financial attitude and behavior when facing financial problems. A person with poor financial management tends to have difficulty managing their personal finances. Therefore, it is very important for one to understand *Locus of Control* especially in business actors. In addition to *Financial attitude*, *locus of control* are other factors that can affect *financial management behavior*. Hypothesis 5: It is suspected that Financial Attitude has a positive and significant influence on Personal Financial Management Behavior through the Locus of Control.

The Influence of Locus Of Control Mediates Financial Knowledge on Personal Financial Management Behavior

According to Adiputra et al., (2021), *Financial Knowledge* is the individual's level of knowledge or understanding of personal finance concepts and principles, including an understanding of the instruments and skills needed to make effective financial management decisions. Individuals who have good financial knowledge will have good financial management behaviors, such as paying bills on time, recording expenses, and having an emergency fund (Aisyah et al., 2023). A person's financial attitude determines how they respond and behave when faced with financial difficulties. People who fail to manage their finances tend to respond to their personal financial problems in an unwise way. Understanding the locus of control is also important for business actors. *Locus of control* are other factors that can affect *Financial Management Behavior* in addition to financial knowledge.

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TPB is the basis for understanding financial management behavior influenced by Financial Knowledge. According to research Setiana & Hadiano, (2022) It shows that financial knowledge is positively related to the formation of internal locus of control, which in turn influences personal financial management behavior. They can control themselves to make informed and careful decision judgments according to their skills or knowledge. Findings Sukma et al., (2022) also shows that the locus of control can positively and significantly mediate the influence of *Financial Knowledge on Personal Financial Management Behavior*.

Hypothesis 6: It is suspected that Financial Knowledge has a positive and significant influence on Personal Financial Management Behavior through *the Locus of Control*

METHOD, DATA AND ANALYSIS

This study employed a quantitative research design, which emphasizes the collection and analysis of numerical data to identify patterns and test hypotheses through statistical analysis (A.Siroj et al., 2024). Primary data were collected using structured questionnaires, while secondary data were obtained from the 2024 report of the Semarang City Cooperatives and MSMEs Office. The study examined Financial Literacy, Financial Attitude, and Financial Knowledge as independent variables (Jenita et al., 2023), Personal Financial Management Behavior (PFMB) as the dependent variable (Ramdani et al., 2024), and Locus of Control as the moderating variable. The population consisted of MSME owners in North Semarang District, Semarang City, whose exact number was unknown (Amin et al., 2023). Therefore, the sample size was determined using the Rao Purba formula, resulting in 96 respondents, and purposive sampling was employed to select participants who met the research criteria (Rizal et al., 2024; Campbell et al., 2020).

The operational variables were measured using established indicators adapted from previous studies, including Financial Literacy (Juliyanti et al., 2023), Financial Attitude (de Almeida et al., 2021), Financial Knowledge (Damayanti et al., 2023), Locus of Control (Budiono, 2020), and Personal Financial Management Behavior (Damayanti et al., 2023). Descriptive statistical analysis was conducted to summarize the

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characteristics of the data through minimum, maximum, mean, and standard deviation values before further analysis (Mishra et al., 2019). Hypothesis testing was performed using Structural Equation Modeling (SEM) with SmartPLS 4.0, which is appropriate for analyzing complex models with relatively small sample sizes. Of the 100 questionnaires distributed, 96 valid responses were analyzed. The majority of respondents were approximately 30 years old, and 56.12% were female, indicating that women had greater participation in managing MSME finances in North Semarang District.

RESULTS

Measurement Model (Outer Model)

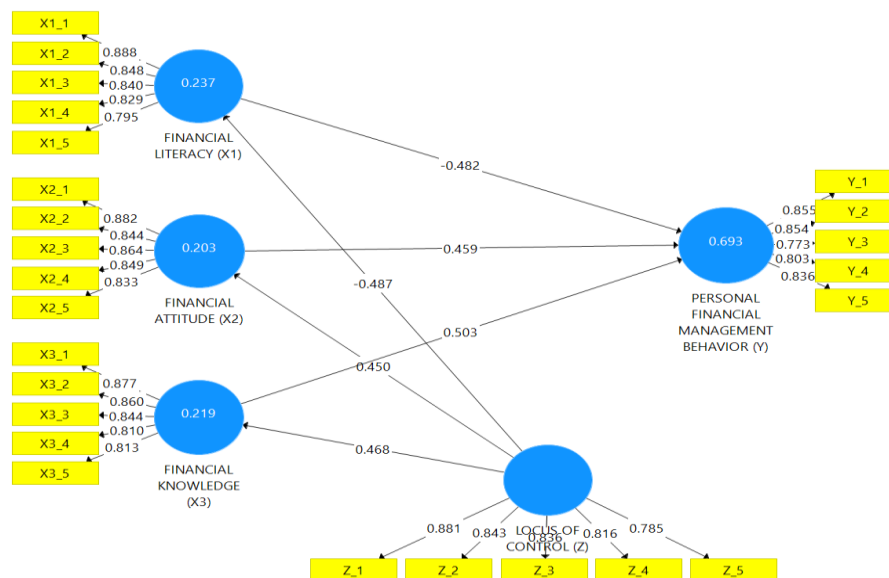


Figure 1: Results of External Loading Testing of Variables X1, X2, X3, Z and Y
The following are the results of outer loading of each indicator of research variables:

Table 2: Loading Factor

	Financial Attitude (X2)	Financial Knowledge (X3)	Financial Literacy (X1)	Locus Of Control (Z)	Personal Financial Management Behavior (Y)
X1.1			0.888		
X1.2			0.848		
X1.3			0.840		
X1.4			0.829		
X1.5			0.795		
X2.1	0.882				
X2.2	0.844				

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X2.3	0.864	
X2.4	0.849	
X2.5	0.833	
X3.1	0.877	
X3.2	0.860	
X3.3	0.844	
X3.4	0.810	
X3.5	0.813	
Y.1		0.855
Y.2		0.854
Y.3		0.773
Y.4		0.803
Y.5		0.836
Z.1	0.881	
Z.2	0.843	
Z.3	0.836	
Z.4	0.816	
Z.5	0.785	

Source : Results of SmartPLS (2026)

Based on the SmartPLS output results, all indicators have an outer loading value above 0.70, so they are declared valid and able to present the measured construct. In addition, each indicator has the highest loading value on its origin variable as well as an Average Variance Extracted (AVE) value above 0.50. This shows that the model has met convergent validity and discriminant validity, so that the research instrument is declared feasible and can be used for the next stage of hypothesis testing. A number greater than 0.5 is recommended. The AVE values in this study are as follows:

Table 3: Outer Loading and AVE Values

VARIABLE	OUTER LOADINGS	AVE
Financial Literacy (X1)	0.888	0.707
	0.848	
	0.840	
	0.829	
	0.795	
Financial Attitude (X2)	0.882	0.730
	0.844	
	0.864	
	0.849	
	0.833	
Financial Knowledge (X3)	0.877	0.708
	0.860	

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	0.844	
	0.810	
	0.813	
	0.881	
	0.843	
Locus Of Control (Z)	0.836	0.694
	0.816	
	0.785	
	0.855	
PERSONAL FINANCIAL	0.854	
MANAGEMENT BEHAVIOR	0.773	0.680
(Y)	0.803	
	0.836	

Source : Results of SmartPLS (2026)

Based on the AVE value, all research variables have met the convergent validity criteria because they have an AVE value above 0.50. The AVE values of each variable, namely Financial Literacy (0.707), Financial Attitude (0.730), Financial Knowledge (0.708), Locus Of Control (0.694), and Personal Financial Management Behavior (0.680), show that more than 50% of the variance of the indicator can be explained by its construct. Thus, the measurement model is declared valid and feasible for further analysis.

Discriminant Validity

To determine whether the construct indicator has a greater loading factor in the created structure compared to the loading factor in other constructs, a Discriminant Validity test is performed. The cross-loading values for each indicator are shown below:

Table 4: Discriminant Validity

	Financial Attitude (X2)	Financial Knowledge (X3)	Financial Literacy (X1)	Locus Of Control (Z)	Personal Financial Management Bahavior (Y)
Financial Attitude (X2)					
Financial Knowledge (X3)	0.074				
Financial Literacy (X1)	0.056	0.058			
Locus Of Control (Z)	0.499	0.521	0.541		
Personal Financial	0.496	0.545	0.567	0.926	

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Management
Bahavior (Y)

Source : Results of SmartPLS (2026)

Based on the results of the analysis, each indicator has the highest correlation value to its original construct, with the highest value in the Personal Financial Management Behavior variable of 0.926. The correlation value of indicators to other variables is relatively lower, thus indicating that indicators are better able to represent their respective constructs. Thus, the discriminant validity in this research model was fulfilled.

Composite Reability

The reliability test is used to assess the reliability at the combined value of reliability and the cronbach alpha value. A high combined value of reliability is considered a sign of high reliability, while a lower cronbach alpha value is considered a sign of good reliability (Canatay et al., 2022). The following cronbach alpha values indicate the reliability value of each variable:

Table 5: Composite Reability and Cronbach Alpha

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (Ave)
Financial Attitude (X2)	0.908	0.909	0.931	0.730
Financial Knowledge (X3)	0.897	0.900	0.924	0.708
Financial Literacy (X1)	0.896	0.901	0.923	0.707
Locus Of Control (Z)	0.889	0.894	0.919	0.694
Personal Financial Management Bahavior (Y)	0.882	0.884	0.914	0.680

Source : Results of SmartPLS (2026)

Based on the results of the reliability test, all variables in this study met the reliability criteria, as shown by the composite reability value of > 0.70 and Cronbach's alpha > 0.60 . The variables Financial Literacy, Financial Attitude, Financial Knowledge, Locus Of Control, and Personal Financial Management Behavior each showed a good level of internal consistency.

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Structural Model Test (Inner Model)

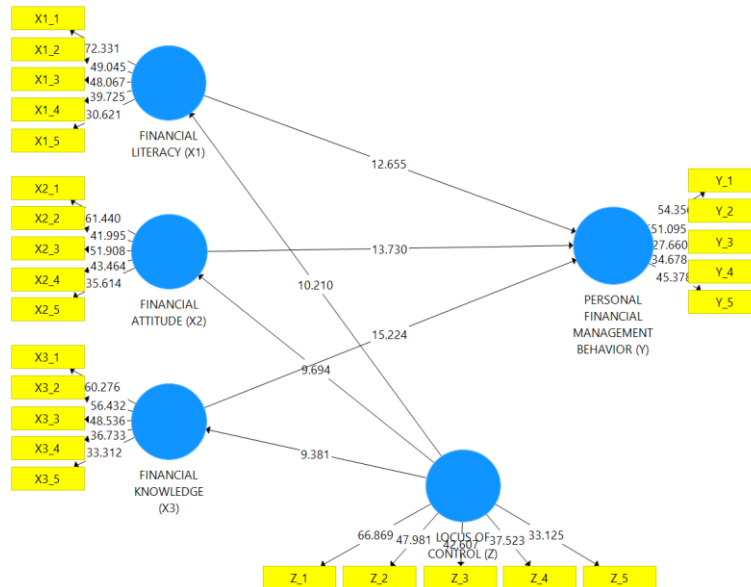


Figure 2: Internal Model Evaluation Bootstrapping Test Results

Source: Results from SmartPLS

Coefficient of Determination Test (R^2)

Table 6: R-Square

	R SQUARE	R SQUARE ADJUSTED
Financial Attitude (X2)	0.203	0.200
Financial Knowledge (X3)	0.219	0.216
Financial Literacy (X1)	0.237	0.234
Personal Financial Management Behavior (Y)	0.693	0.690

Source : Results of SmartPLS (2026)

Based on the results of the R-Square test, the R^2 values for the variables Financial Attitude (0.203), Financial Knowledge (0.219), and Financial Literacy (0.237) indicate that the three variables are in the weak category, because they are less than 0.25 (Afroz & Istiaque, 2022). Meanwhile, the Personal Financial Management Behavior variable had an R-Square value of 0.693 which was a strong category, indicating that 69.3% of the variation in financial management behavior could be explained by independent variables in the model. An Adjusted R-Square value of 0.690 corroborates these findings, indicating that the model has good explanatory ability of dependent variables.

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F-Square

F-Square is a test used to see how much influence exogenous variables have on endogenous variables in the research model. The value of F-Square can be categorized into three groups according to Pereira et al., (2024), namely: 0.02 = small, 0.15 = medium, and 0.35 = large.

Table 7: F-Square

	Financial Attitude (X2)	Financial Knowledge (X3)	Financial Literacy (X1)	Locus Of Control (Z)	Personal Financial Management Bahavior (Y)
Financial Attitude (X2)					0.682
Financial Knowledge (X3)					0.821
Financial Literacy (X1)					0.754
Locus Of Control (Z)	0.254	0.280	0.310		
Personal Financial Management Bahavior (Y)					

Source : Results of SmartPLS (2026)

Based on the results of the F-Square test, Financial Attitude (0.682), Financial Knowledge (0.821), and Financial Literacy (0.754) each showed a great influence on Personal Financial Management Behavior. Meanwhile, Locus of Control had a moderate influence on Financial Attitude (0.254), Financial Knowledge (0.280), and Financial Literacy (0.310). These results show that financial literacy, attitudes, and knowledge play a strong role in shaping financial management behavior, while locus of control contributes moderately to influencing these three variables.

Q-Square

Q-Square is a test used to assess the model's predictive ability against endogenous variables. The greater the Q-Square value, the better the model's ability to predict the variables being studied. Interpretation of the Q-Square value according to Hair et al.,

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(2021) are: 0.00–0.25 = low prediction, 0.26–0.50 = moderate prediction, and >0.50 = high prediction.

Table 8: Q-Square

	SSO	SSE	Q2(=1-SSE/SSO)
Financial Attitude (X2)	1370.000	1170.704	0.145
Financial Knowledge (X3)	1370.000	1162.888	0.151
Financial Literacy (X1)	1370.000	1145.082	0.164
Locus Of Control (Z)	1370.000	1370.000	
Personal Financial Management Behavior (Y)	1370.000	732.226	0.466

Source : Results of SmartPLS (2025)

Based on the Q-Square results, the model's predictive ability on Financial Attitude (0.145), Financial Knowledge (0.151), and Financial Literacy (0.164) was in the low category, while the Locus of Control had a Q-Square value of 0.000 which indicates the absence of predictive relevance. Meanwhile, Personal Financial Management Behavior has a Q-Square value of 0.466 which is included in the category of moderate prediction, so the model is considered quite good in predicting the main dependent variables.

Hypothesis Testing and Discussion

Table 9: Path Coefficient in Testing Path Coefficient Model

	Original Sample	Sample Mean	Standard	T Statistics	P Values
Financial Attitude (X2) -> Personal Financial Management Behavior (Y)	0.459	0.458	0.035	13.073	0.000
Financial Knowledge (X3) -> Personal Financial Management Behavior (Y)	0.503	0.502	0.032	15.786	0.000
Financial Literacy (X1) -> Personal Financial Management Behavior (Y)	-0.482	-0.483	0.035	13.947	0.000
Locus Of Control (Z) -> Financial Attitude (X2)	0.450	0.451	0.046	9.744	0.000
Locus Of Control (Z) -> Financial Knowledge (X3)	0.468	0.468	0.048	9.710	0.000
Locus Of Control (Z) -> Financial Literacy (X1)	-0.487	-0.483	0.047	10.372	0.000

Source : Results from SmartPLS

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Table 10: Specific indirect effect

	Original Sample	Sample Mean	Standard	T Statistics	P Values
Locus Of Control (Z) -> Financial Attitude (X2) -> Personal Financial Management Behavior (Y)	0.206	0.207	0.030	6.837	0.000
Locus Of Control (Z) -> Financial Knowledge (X3) -> Personal Financial Management Behavior (Y)	0.235	0.235	0.031	7.608	0.000
Locus Of Control (Z) -> Financial Literacy (X1) -> Personal Financial Management Behavior (Y)	0.234	0.234	0.032	7.379	0.000

Source : Results from SmartPLS

The Effect of Financial Literacy on Personal Financial Management Behavior

The hypothesis test showed that financial literacy had a significant effect on personal financial management behavior with a T-statistic value of 13.947 and a p-value of 0.000. However, the coefficient was negative (-0.482), which indicates an inverse relationship between financial literacy and financial management behavior in the context of this study.

The Influence of Financial Attitude on Personal Financial Management Behavior

Financial attitude has been proven to have a positive and significant effect on personal financial management behavior, shown by a T-statistic value of 13.073 and a p-value of 0.000. These results show that the better an individual's financial attitude, the better their behavior in managing their finances.

The Effect of Financial Knowledge on Personal Financial Management Behavior

In addition, financial knowledge also has a positive and significant effect on personal financial management behavior with a T-statistic value of 15.786 and a p-value of 0.000. These findings indicate that increased financial knowledge contributes to improved personal financial management behavior.

The Effect of Locus of Control on Personal Financial Management Behavior through Financial Literacy

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The Locus of Control has a positive and significant effect indirectly on Personal Financial Management Behavior through Financial Literacy, which shows that the stronger the individual's self-control, the better the level of financial literacy thereby encouraging better financial management behavior.

The Influence of Locus of Control on Personal Financial Management Behavior through Financial Attitude

Locus of Control has been shown to have a positive and significant effect on Personal Financial Management Behavior through Financial Attitude, which means that strong self-control increases positive financial attitudes and has an impact on improving financial management behavior.

The Influence of Locus of Control on Personal Financial Management Behavior through Financial Knowledge

The Locus of Control has a positive and significant influence indirectly on Personal Financial Management Behavior through Financial Knowledge, which indicates that individuals with good self-control tend to have higher financial knowledge so that they are able to manage finances more effectively.

DISCUSSION

The Effect of Financial Literacy on Personal Financial Management Behavior

The results of the study show that financial literacy has an influence on the personal financial management behavior of MSME actors. Good financial literacy helps MSME actors in doing bookkeeping, budget planning, separation of business and personal finances, as well as making more rational financial decisions, in line with the findings (Utamy & Candradewi, 2024).

The Influence of Financial Attitude on Personal Financial Management Behavior

Financial attitude has a positive and significant effect on personal financial management behavior. A disciplined, planned, and responsible financial attitude encourages MSME actors to manage business finances more carefully and oriented towards business development (Mebis et al., 2023).

The Influence of Financial Knowledge on Personal Financial Management Behavior

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Financial knowledge has been proven to have a positive and significant effect on personal financial management behavior. Understanding bookkeeping, credit, investment, and cash management helps MSME actors improve financial management efficiency and minimize business risks (R. S. Putri et al., 2023).

The Effect of Financial Literacy on Personal Financial Management Behavior through the Locus of Control

Financial literacy has a positive and significant effect on personal financial management behavior through the locus of control. Good financial literacy increases the belief of MSME actors that financial success depends on effort and self-control, thereby improving financial management behavior (Pricilla et al., 2024).

The Influence of Financial Attitude on Personal Financial Management Behavior through the Locus of Control

Financial attitude has a positive and significant effect on personal financial management behavior through the locus of control. A positive financial attitude accompanied by strong self-control encourages MSME actors to implement more effective financial management practices (Muntafiah & Assyarofi, 2024).

The Influence of Financial Knowledge on Personal Financial Management Behavior through the Locus of Controls

Financial knowledge has a positive and significant effect on personal financial management behavior through the locus of control. Financial knowledge not only improves technical skills, but also strengthens the self-confidence of MSME actors in controlling financial decisions and facing business risks (Pricilla et al., 2024).

CONCLUSIONS

This study concludes that financial literacy, financial attitude, and financial knowledge each have a positive and significant effect on the personal financial management behavior of MSME owners in North Semarang District. The findings indicate that MSME owners with higher levels of financial understanding, more positive financial attitudes, and better financial knowledge are more likely to demonstrate effective financial management behaviors, including budgeting, recording financial

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transactions, controlling expenditures, and planning for future financial needs. Furthermore, Locus of Control was found to significantly mediate the relationships between financial literacy, financial attitude, and financial knowledge and personal financial management behavior. These results suggest that the positive effects of financial competence and attitudes on financial management become stronger when MSME owners possess a strong internal belief in their ability to control and make sound financial decisions, highlighting the importance of both financial capability and psychological factors in improving financial management behavior. Based on the findings of this study, MSME owners are encouraged to improve their financial literacy through financial training, seminars, workshops, and digital learning, while consistently applying sound financial management practices, such as maintaining regular financial records, separating business and personal finances, developing saving and investment habits, and strengthening their internal locus of control to make more responsible financial decisions. Furthermore, local governments, financial institutions, and related agencies are expected to provide structured financial literacy programs and continuous mentoring to ensure that MSME owners can effectively implement financial management practices in their businesses. Future researchers are recommended to include additional variables, such as financial technology, income, financial experience, self-control, and love of money, as well as expand the research scope beyond MSME owners in North Semarang District to enhance the generalizability and comprehensiveness of the research findings.

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