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The Effect Of Financial Literacy And Self-Control On Students' Financial Behavior: The Mediating Role Of Financial Attitude

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Abstract

Background/purpose: This study is motivated by the importance of students' financial behavior during the transition toward economic independence, particularly when access to digital financial services is increasingly widespread. This study aims to analyze the effects of financial literacy and self-control on students' financial behavior, both directly and indirectly through financial attitude as a mediating variable. Methods: This study used a quantitative approach with an explanatory research design. The respondents were 95 students of the Department of Accounting, Universitas Negeri Makassar, selected using purposive sampling. Data were collected using a closed-ended questionnaire based on a five-point Likert scale and analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) with SmartPLS. Results: The results show that financial literacy and self-control have positive and significant effects on financial attitude and financial behavior. Financial attitude also has a positive and significant effect on financial behavior. In addition, financial attitude partially mediates the effects of financial literacy and self-control on students' financial behavior. Conclusion/implications: These findings indicate that improving students' financial behavior should not rely only on strengthening financial knowledge, but should also be directed toward forming positive financial attitudes and developing self-control in facing consumptive impulses.

Keywords: financial literacy; self-control; financial attitude; financial behavior; students.

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INTRODUCTION

Students' financial behavior is an important issue in higher education studies because students are in a transition phase toward economic independence. In this phase, students begin to make financial decisions more independently, such as managing allowances, determining consumption priorities, saving, using digital financial services, and managing academic and personal needs. The development of digital financial services, such as e-wallets, mobile banking, and cashless transactions, has expanded students' access to financial activities. However, this ease of access may also increase the risk of consumptive behavior, impulsive buying, and weak expenditure control when it is not accompanied by adequate financial literacy and self-control. Nationally, the National Survey of Financial Literacy and Inclusion shows that Indonesia's financial literacy index in 2024 reached 65.43%, while the financial inclusion index reached 75.02% (Otoritas Jasa Keuangan, 2024). This condition indicates that access to financial services is not always followed by optimal financial understanding and behavior.

In the context of Accounting students, financial behavior is particularly relevant because accounting students academically receive exposure to financial recording, budgeting, economic decision-making, and financial information management. Theoretically, accounting students may be assumed to have better understanding of financial concepts than students who do not receive intensive financial learning. However, mastery of financial concepts in academic settings is not necessarily consistent with personal financial behavior in everyday life. Students who understand recording, budgeting, and financial management theories may not always be able to control spending, set priority needs, save consistently, or avoid impulsive consumption. Therefore, students' financial behavior cannot be explained only through knowledge, but must also be examined through psychological factors and evaluative attitudes that influence the application of knowledge in actual financial actions.

Financial literacy is one of the main factors widely used to explain financial behavior. Financial literacy describes individuals' ability to understand financial concepts, evaluate financial information, make economic decisions, and manage financial resources rationally. Potrich et al. (2016) explain that students' financial literacy is a multidimensional construct that includes financial knowledge, attitudes, and behavior. In the Indonesian context, Johan et al. (2021) found that personal finance education contributes to improving students' financial knowledge, although its effects on financial attitudes and behavior are not always significant. This finding indicates that financial knowledge is an important foundation, but it does not automatically form responsible financial behavior. This argument is also supported by Khalisharani et al. (2022) dan Vaghela et al.

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(2023), who show that the relationship among financial literacy, financial attitude, and financial behavior among students should be understood as interrelated rather than merely a direct relationship between knowledge and action.

In addition to financial literacy, self-control is also an important psychological factor in shaping students' financial behavior. Self-control refers to individuals' ability to resist impulsive urges, delay immediate gratification, organize priorities, and consider long-term consequences before making financial decisions. In the student context, self-control is needed to avoid unplanned spending, lifestyle-based consumption, and purchasing decisions driven more by desire than by need. Rey-Ares et al. (2021) show that self-control plays an important role in explaining financial behavior and attitudes among young people. Mawad et al. (2022) also found that financial self-control contributes to individual financial behavior and performance. Meanwhile, Bai (2023) emphasizes that self-control, together with financial literacy and mental budgeting, plays a role in explaining individual financial well-being through financial decision-making processes.

Although financial literacy and self-control play important roles, their relationship with financial behavior is not always direct. Good financial knowledge may be less effective when it is not followed by a positive attitude toward planning, control, and financial responsibility. Similarly, self-control must be manifested in an attitude orientation that supports healthy financial habits. In this regard, financial attitude becomes an important variable because it represents how individuals evaluate money, view the importance of financial planning, control spending, and take responsibility for financial decisions. Based on the Theory of Planned Behavior, attitude is one of the important determinants that may influence an individual's tendency to perform a behavior Ajzen (1991). Thus, in the context of students' financial behavior, financial attitude can serve as a psychological mechanism that links financial knowledge and self-control to actual financial behavior.

Several previous studies have shown the importance of financial attitude in shaping financial behavior. Khalisharani et al. (2022) found that financial attitude has a positive effect on students' financial behavior in Indonesia and Malaysia. Vaghela et al. (2023) also showed that students with better financial literacy tend to have more positive financial attitudes, which subsequently contribute to better financial behavior. In the Indonesian context, Wahyuni et al. (2023) found that financial literacy and financial attitude affect students' financial management behavior, although their study emphasized behavioral intention as a mediating variable. These findings strengthen the argument that financial attitude is an important variable in explaining how

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individuals' knowledge and evaluations of money can influence financial management actions.

Based on previous studies, several research gaps need to be addressed. First, most prior studies still position financial literacy and self-control as direct predictors of financial behavior; therefore, the psychological mechanism explaining how both variables shape financial behavior has not been fully described. Second, several mediation studies on students' financial behavior have used variables such as behavioral intention, financial self-efficacy, self-esteem, risk tolerance, or investment decisions as mediators, while financial attitude has not been widely positioned as the main mediating pathway linking financial literacy and self-control to financial behavior. Third, empirical evidence on the financial behavior of Accounting students at Universitas Negeri Makassar remains limited, even though accounting students have distinctive academic characteristics because they receive direct exposure to financial, accounting, and economic decision-making concepts.

The novelty of this study lies in testing a mediation model that positions financial attitude as an intervening variable in the effects of financial literacy and self-control on students' financial behavior. This study does not only examine whether financial literacy and self-control directly affect financial behavior, but also explains how financial attitude becomes a psychological pathway through which knowledge and self-control are transformed into more responsible financial actions. Therefore, this study aims to analyze the effects of financial literacy and self-control on the financial behavior of Accounting students at Universitas Negeri Makassar, both directly and indirectly through financial attitude.

LITERATURE REVIEW

Theory of Planned Behavior

This study uses the Theory of Planned Behavior as the theoretical basis for explaining the relationship among financial literacy, self-control, financial attitude, and students' financial behavior. The Theory of Planned Behavior explains that individual behavior does not arise randomly, but is influenced by psychological factors that precede action, particularly attitude toward behavior, subjective norms, and perceived behavioral control. In this study, financial attitude is viewed as an individual's evaluation of the importance of planning, control, and responsibility in managing finances. This attitude can then encourage the formation of more rational and responsible financial behavior.

The Theory of Planned Behavior is relevant because students' financial behavior is not determined only by financial knowledge, but also by how students evaluate money, view the

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importance of spending control, and believe that financial management is part of personal responsibility. Accordingly, financial literacy and self-control may influence financial behavior directly or indirectly through the formation of financial attitude. In the research model, financial attitude is positioned as a mediating variable that explains the psychological mechanism among knowledge, self-control, and actual financial actions.

Financial Behavior

Financial behavior refers to individuals' actions in managing financial resources, including managing expenditures, preparing budgets, saving, managing debt, and making daily financial decisions. Dew & Xiao (2011) developed the concept of financial management behavior, which includes several main dimensions: consumption, cash flow, saving and investment, and credit management. These dimensions show that financial behavior is not only related to the ability to spend money, but also includes the ability to make planned and long-term-oriented financial decisions.

In the student context, financial behavior is important because students are in a transition phase toward economic independence. Students begin to make financial decisions independently, such as managing allowances, fulfilling academic needs, using digital financial services, and setting consumption priorities. If students do not have good financial behavior, they may face difficulties in controlling expenditures, have low saving habits, and show consumptive tendencies. Therefore, students' financial behavior needs to be understood through cognitive, psychological, and evaluative-attitudinal factors that influence financial decision-making processes.

Financial Literacy

Financial literacy refers to individuals' ability to understand financial concepts, use financial information, evaluate decision alternatives, and manage financial resources effectively. Remund (2010) explains that financial literacy is related to a person's competence in managing money, while Atkinson & Messy (2012) define financial literacy as a combination of awareness, knowledge, skills, attitudes, and behavior needed to make sound financial decisions. These definitions show that financial literacy is not merely conceptual knowledge, but also includes the ability to apply such knowledge in everyday life.

Potrich et al. (2016) explain that financial literacy among university students is a multidimensional construct involving financial knowledge, financial attitude, and financial behavior. This means that students with good financial literacy do not only understand financial

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concepts, but are also able to use such knowledge to make responsible decisions. In higher education, financial literacy is important because students face various financial decisions, such as allowance management, consumption, saving, use of digital financial products, and planning for future needs.

Johan et al. (2021) found that personal finance education has a positive effect on improving Indonesian students' financial knowledge, although its effects on financial attitude and financial behavior are not always significant. This finding indicates that financial knowledge is an important foundation, but it does not automatically produce behavioral change. Therefore, the relationship between financial literacy and financial behavior needs to be understood through another mechanism, one of which is financial attitude.

Self-Control

Self-control is the ability of individuals to regulate impulses, resist short-term desires, delay gratification, and consider long-term consequences before making decisions. In the financial context, self-control plays an important role in helping individuals avoid impulsive purchases, control expenditures, prioritize needs, and maintain saving habits. Students with good self-control tend to be better able to limit unnecessary consumption and are more cautious in using money.
Rey-Ares et al. (2021) show that self-control is an important driver of financial behavior and attitude, especially among young people. Individuals with better self-control tend to have stronger ability to regulate financial decisions and avoid harmful financial behavior. Mawad et al. (2022) also found that financial self-control contributes to individual financial behavior and performance. These findings indicate that self-control is a key psychological aspect in explaining financial behavior.

In this study, self-control is viewed as a factor that can influence students' financial attitude and financial behavior. Students who are able to control consumptive impulses are more likely to form positive attitudes toward financial planning, saving, and financial responsibility. Such positive attitudes can then encourage better financial behavior, such as budgeting, controlling expenditures, and saving consistently.

Financial Attitude

Financial attitude is an individual's evaluative tendency toward money and financial management. This attitude reflects how individuals assess the importance of financial planning, spending control, saving, investment, and responsibility in using money. From the perspective of

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the Theory of Planned Behavior, attitude is an important factor that influences an individual's tendency to perform a behavior. Therefore, financial attitude can become a link between financial knowledge and actual financial behavior.

Khalisharani et al. (2022) show that financial attitude affects students' financial behavior. Their study indicates that students with more positive financial attitudes tend to have better financial behavior. Vaghela et al. (2023) also demonstrate that financial literacy and financial attitude play roles in explaining students' financial behavior. These findings strengthen the view that financial attitude is not merely a complementary variable, but can function as an important mechanism in shaping students' financial behavior.

In the Indonesian context, Fitri Wahyuni et al. (2023) found that financial literacy and financial attitude affect students' financial management behavior, while behavioral intention does not mediate the relationship. This finding provides room for further research to test another mediating variable that is closer to the individual evaluative process, namely financial attitude. Therefore, this study positions financial attitude as a mediating variable in the effects of financial literacy and self-control on students' financial behavior.

The Effect of Financial Literacy on Financial Attitude

Financial literacy can influence financial attitude because adequate knowledge of financial concepts helps individuals understand the benefits of planning, saving, spending control, and rational financial decision-making. Students who have better understanding of finance tend to have more positive views on the importance of personal financial management. In other words, financial literacy can shape students' evaluations of money and financial decisions.

Potrich et al. (2016) position financial literacy as a construct related to knowledge, attitude, and behavior. This indicates that financial knowledge can be associated with individuals' attitudes in managing money. Johan et al. (2021) also emphasize that personal finance education can improve students' financial knowledge, although changes in attitude and behavior do not always occur directly. Therefore, the higher students' financial literacy, the greater the possibility that they will have positive financial attitudes.

H1: Financial literacy has a positive effect on students' financial attitude.

The Effect of Self-Control on Financial Attitude

Self-control plays a role in shaping financial attitude because individuals who are able to control consumptive impulses tend to have more positive views on financial planning and

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management. Students with good self-control are better able to distinguish needs from wants, delay immediate gratification, and consider the consequences of financial decisions. This ability may form a more responsible attitude toward money.

Rey-Ares et al. (2021) show that self-control is related to financial attitudes and behavior, especially among young people. Bai (2023) also found that self-control, together with financial literacy and mental budgeting, has a positive effect on individual financial well-being through financial decision-making processes. These findings indicate that self-control does not only influence financial actions, but may also shape individuals' orientations and attitudes toward financial management.

H2: Self-control has a positive effect on students' financial attitude.

The Effect of Financial Literacy on Financial Behavior

Financial literacy can influence financial behavior because individuals who understand financial concepts tend to be more capable of making rational financial decisions. Students with good financial literacy better understand the importance of budgeting, controlling expenditures, saving, and avoiding risky financial decisions. Financial knowledge helps students evaluate the consequences of each financial decision they make.

Lusardi & Mitchell (2014) explain that financial literacy plays an important role in individual economic decisions because financial knowledge can be regarded as part of human capital investment. In the Indonesian student context, Johan et al. (2021) show that personal finance education can improve students' financial knowledge. However, because the effect on behavior is not always direct, financial literacy still needs to be tested as a predictor of financial behavior in the context of accounting students.

H3: Financial literacy has a positive effect on students' financial behavior.

The Effect of Self-Control on Financial Behavior

Self-control can influence financial behavior because daily financial decisions often involve conflict between rational needs and consumptive impulses. Students with high self-control tend to be better able to limit impulsive purchases, avoid unplanned spending, and maintain consistency in saving. Conversely, students with low self-control are more vulnerable to making financial decisions based on immediate desires.

(Mawad et al., 2022) found that financial self-control contributes to individual financial behavior and performance. Anita et al. (2022) also examined the effects of self-control and

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financial literacy on students' money management behavior in business faculties, reinforcing the relevance of self-control in the student context. Thus, self-control can be viewed as a psychological factor that directly shapes students' financial behavior.

H4: Self-control has a positive effect on students' financial behavior.

The Effect of Financial Attitude on Financial Behavior

Financial attitude can influence financial behavior because attitude reflects an individual's evaluation of the importance of financial management. Students who have positive attitudes toward money tend to be more careful in spending, value saving more highly, and take greater responsibility in making financial decisions. Based on the Theory of Planned Behavior, a positive attitude toward a behavior can increase an individual's tendency to perform that behavior.

Khalisharani et al. (2022) found that financial attitude affects students' financial behavior. Fitri Wahyuni et al. (2023) also showed that financial attitude affects students' financial management behavior in Indonesia. These findings indicate that financial attitude is an important factor in the formation of students' financial behavior.

H5: Financial attitude has a positive effect on students' financial behavior.

The Mediating Role of Financial Attitude in the Effect of Financial Literacy on Financial Behavior

Financial literacy does not always directly produce good financial behavior. Students may have knowledge of budgeting, saving, and financial management, but such knowledge is not necessarily applied when it is not accompanied by a positive attitude toward financial management. Therefore, financial attitude can become a mechanism that explains how financial literacy is transformed into financial behavior.

Johan et al. (2021) show that financial education can improve financial knowledge, but it does not always directly change students' attitudes and behavior. This finding indicates the need to test an intervening variable that can explain the relationship between knowledge and action. In this study, financial attitude is positioned as a mediator because attitude reflects students' evaluations of the importance of planning, control, and financial responsibility.

H6: Financial attitude mediates the effect of financial literacy on students' financial behavior.

The Mediating Role of Financial Attitude in the Effect of Self-Control on Financial Behavior

Self-control can help students resist consumptive impulses, but its effect will be stronger

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when accompanied by a positive financial attitude. Students who are able to control themselves tend to have better orientations toward money management, such as viewing saving, financial planning, and financial responsibility as important. Such attitudes can then encourage healthier financial behavior.

Rey-Ares et al. (2021) show that self-control is related to financial attitudes and behavior. This indicates that self-control does not only affect financial actions, but also how individuals form evaluations of money management. Thus, financial attitude can serve as a mediating pathway that explains how self-control influences students' financial behavior.

H7: Financial attitude mediates the effect of self-control on students' financial behavior.

Conceptual Research Model

Based on the literature review and hypothesis development, this study tests a conceptual model that positions financial literacy and self-control as independent variables, financial attitude as a mediating variable, and financial behavior as the dependent variable. The model includes the paths financial literacy -> financial attitude -> financial behavior, self-control -> financial attitude -> financial behavior, financial literacy -> financial behavior, and self-control -> financial behavior.

METHODS, DATA, AND ANALYSIS

Research Design

This study uses a quantitative approach with an explanatory research design. The quantitative approach was used because this study aims to empirically test relationships among variables using numerical data, while explanatory research was used to explain the effects of financial literacy and self-control on students' financial behavior, both directly and indirectly through financial attitude as a mediating variable. The research model positions financial literacy and self-control as independent variables, financial attitude as a mediating variable, and financial behavior as the dependent variable.

Population and Sample

This study was conducted on students of the Department of Accounting, Universitas Negeri Makassar. The population consisted of all active students of the Department of Accounting, Universitas Negeri Makassar. The sampling technique used was purposive sampling, namely a technique for determining samples based on specific criteria aligned with the research objectives. The respondent criteria were active students of the Department of Accounting, Universitas Negeri

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Makassar; having experience in managing allowances or personal income; having taken courses related to accounting or finance; and being willing to complete the research questionnaire. Based on the data collection process, 95 respondents met the criteria and were analyzed in this study.

The sample size of 95 respondents was considered adequate for analysis using Partial Least Squares-Structural Equation Modeling because the research model has a maximum of three arrows pointing to one endogenous variable, namely financial literacy, self-control, and financial attitude toward financial behavior. Based on the 10-times rule, the minimum sample size is ten times the largest number of structural paths directed at an endogenous construct; therefore, the minimum requirement in this study was 30 respondents. Thus, the sample size of 95 respondents exceeded the minimum threshold. Nevertheless, because the 10-times rule is an initial guideline, the results are still interpreted cautiously by considering sample characteristics and research context.

Data Collection and Measurement

Research data were collected using a closed-ended questionnaire developed based on the indicators of each research variable. A questionnaire was used because this study measures respondents' perceptions, attitudes, and behavior regarding personal financial management. Each statement item was measured using a five-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. Higher respondent scores indicate higher levels of financial literacy, self-control, financial attitude, and students' financial behavior.

Table 1. Operational Definitions of Variables

Variable	Operational Definition	Indicators	References
Financial Literacy	Students' ability to understand, evaluate, and use financial information to make personal financial decisions.	Basic financial knowledge, money management, saving, loans, investment, and understanding of financial risk.	(Johan et al., 2021; Khalisharani et al., 2022; Potrich et al., 2016)
Self-Control	Students' ability to resist consumptive impulses, organize	Impulse control, ability to delay purchases, spending	(Bai, 2023; Mawad et al., 2022; Rey-Ares et al., 2021)

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Variable	Operational Definition	Indicators	References
	priorities, delay gratification, and consider consequences before making financial decisions.	discipline, priority of needs, and ability to avoid unplanned purchases.	
Financial Attitude	Students' views, evaluations, and tendencies regarding the importance of planning, control, and responsibility in financial management.	Orientation toward financial planning, attitude toward saving, caution in spending, financial responsibility, and views on the use of money.	(Fitri Wahyuni et al., 2023; Khalisharani et al., 2022; Vaghela et al., 2023)
Financial Behavior	Students' daily actions in managing personal finances, including managing expenditures, saving, budgeting, and controlling money use.	Budget preparation, expenditure recording, obligation payment, saving habits, consumption control, and financial decision-making.	(Dew & Xiao, 2011; Johan et al., 2021)

Data Analysis Technique

Data analysis in this study used Partial Least Squares-Structural Equation Modeling with the assistance of SmartPLS software. PLS-SEM was selected because this study aims to test a predictive model involving several latent constructs and to examine direct and indirect relationships through a mediating variable. In addition, PLS-SEM is suitable for studies with relatively limited sample sizes and does not require strict data normality assumptions.

The PLS-SEM analysis was conducted in two stages: evaluation of the measurement model and evaluation of the structural model. Measurement model evaluation was conducted to ensure

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that the indicators used were valid and reliable in measuring each construct. This evaluation included convergent validity, discriminant validity, and reliability testing. Convergent validity was assessed using outer loading and Average Variance Extracted. Indicators were considered to meet convergent validity when they had adequate outer loading values and AVE values greater than 0.50. Construct reliability was assessed using Cronbach's alpha and composite reliability, with criteria greater than 0.70.

Structural model evaluation was conducted to test relationships among variables in the research model. This evaluation included R-square, f-square, Q-square, path coefficients, t-statistics, and p-values. R-square values were used to examine the ability of independent and mediating variables to explain endogenous variables. Path coefficients were used to examine the direction and magnitude of relationships among variables. Hypotheses were accepted when p-values were less than 0.05 or t-statistics were greater than 1.96 at the 5% significance level.

Mediation testing was conducted by examining indirect effects through the bootstrapping procedure. Financial attitude was considered to mediate the effect of financial literacy on financial behavior when the indirect path financial literacy -> financial attitude -> financial behavior had a p-value less than 0.05. Similarly, financial attitude was considered to mediate the effect of self-control on financial behavior when the indirect path self-control -> financial attitude -> financial behavior had a p-value less than 0.05. The type of mediation was determined by comparing direct and indirect effects. When both direct and indirect effects were significant, mediation was categorized as partial mediation. Conversely, when the direct effect was not significant but the indirect effect was significant, mediation was categorized as full mediation.

RESULTS AND DISCUSSION

Measurement Model Evaluation

Measurement model evaluation was conducted to ensure that all indicators used in this study met validity and reliability criteria. The measurement model tests included convergent validity, discriminant validity, Average Variance Extracted, Cronbach's alpha, and composite reliability.

Convergent Validity

Convergent validity was evaluated through the outer loading values of each indicator. An indicator is considered valid when its outer loading value is above 0.70. The data processing results showed that all indicators of financial attitude, financial behavior, financial literacy, and self-

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control had outer loading values greater than 0.70.

The outer loading values for financial attitude ranged from 0.710 to 0.807. Financial behavior had outer loading values ranging from 0.718 to 0.845. Financial literacy had outer loading values ranging from 0.739 to 0.838, while self-control had outer loading values ranging from 0.753 to 0.836. Thus, all indicators were declared valid and could be used in further analysis.

Average Variance Extracted and Construct Reliability

Based on Table 2, all constructs had AVE values above 0.50 and Cronbach's alpha and composite reliability values above 0.70. Therefore, all constructs in this study met the criteria for convergent validity and reliability.

Table 2. Convergent Validity and Construct Reliability

Variable	AVE	Cronbach's Alpha	Composite Reliability	Description
Financial Attitude	0.586	0.858	0.895	Valid and reliable
Financial Behavior	0.625	0.879	0.909	Valid and reliable
Financial Literacy	0.638	0.886	0.913	Valid and reliable
Self-Control	0.634	0.885	0.912	Valid and reliable

Discriminant Validity

The Fornell-Larcker test results showed that the square root of AVE for each construct was greater than its correlations with other constructs. In addition, the HTMT test results showed that all values for inter-construct relationships were below 0.90. The highest HTMT value was found in the relationship between financial behavior and financial attitude at 0.715, while the other values ranged from 0.225 to 0.641. Thus, all constructs in this study met the discriminant validity criterion.

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Table 3. Fornell-Larcker Criterion

Variable	Financial Attitude	Financial Behavior	Financial Literacy	Self-Control
Financial Attitude	0.766			
Financial Behavior	0.623	0.790		
Financial Literacy	0.479	0.520	0.799	
Self-Control	0.356	0.570	0.195	0.796

Structural Model Evaluation

After the measurement model met the validity and reliability criteria, the next stage was the evaluation of the structural model. Structural model evaluation was conducted through model fit testing, R-square, f-square, Q-square, and hypothesis testing using the bootstrapping procedure.

Model Fit

The model fit test showed that the Standardized Root Mean Square Residual value was 0.068. This value is lower than 0.080; therefore, the research model can be stated to have a good level of fit and is suitable for testing relationships among variables.

Table 4. Model Fit

Indicator	Saturated Model	Estimated Model
SRMR	0.068	0.068
d_ULS	1.397	1.397
d_G	0.689	0.689
Chi-square	340.251	340.251
NFI	0.761	0.761

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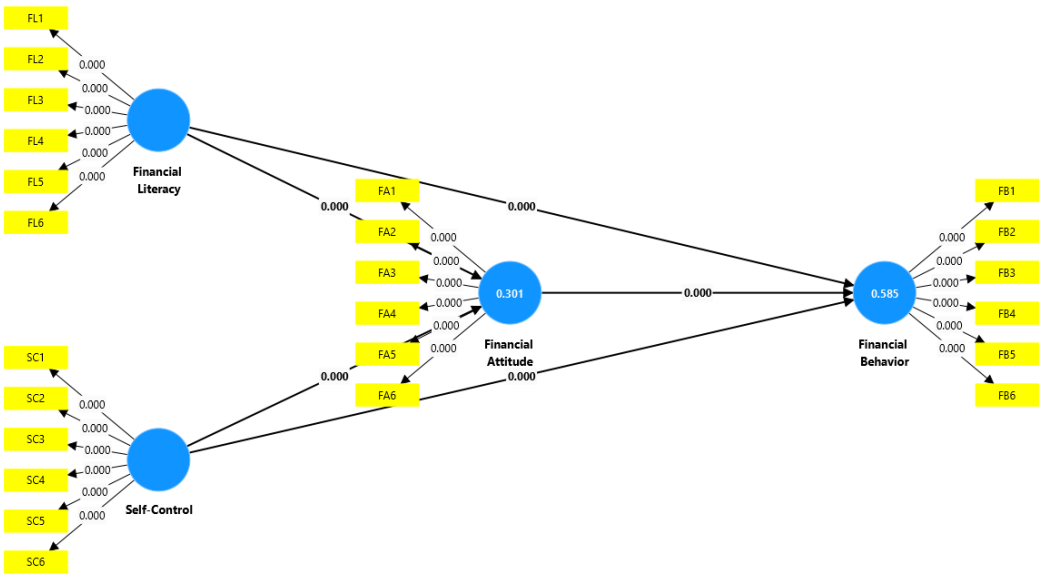


Figure 1. Structural Model Test Results with Bootstrapping

Source: SmartPLS 4.0 output, processed data.

R-Square

The R-square value for financial attitude was 0.301, indicating that 30.1% of the variation in financial attitude can be explained by financial literacy and self-control, while the remaining 69.9% is explained by other variables outside the research model. The R-square value for financial behavior was 0.585, indicating that 58.5% of the variation in financial behavior can be explained by financial literacy, self-control, and financial attitude, while the remaining 41.5% is explained by other factors not examined in this study. Thus, the research model has sufficient explanatory power for students' financial behavior.

Table 5. R-Square Values

Endogenous Variable	R-square	Adjusted R-square
Financial Attitude	0.301	0.286
Financial Behavior	0.585	0.571

f-Square Effect Size

Based on Table 6, financial attitude had a medium effect size on financial behavior. Financial literacy had a medium effect size on financial attitude, but its direct effect size on

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financial behavior was weak. Meanwhile, self-control had a weak effect size on financial attitude, but a medium effect size on financial behavior. This finding indicates that self-control has a fairly important direct contribution in explaining students' financial behavior.

Table 6. f-Square Effect Size

Relationship Between Variables	f-square	Category
Financial Attitude -> Financial Behavior	0.209	Medium
Financial Literacy -> Financial Attitude	0.249	Medium
Financial Literacy -> Financial Behavior	0.141	Weak
Self-Control -> Financial Attitude	0.103	Weak
Self-Control -> Financial Behavior	0.321	Medium

Q-Square Predictive Relevance

The Q-square value for financial attitude was 0.169 and for financial behavior was 0.355. Both values are greater than 0, indicating that the research model has predictive relevance. This means that the model is able to adequately predict students' financial attitude and financial behavior.

Table 7. Q-Square Predictive Relevance

Endogenous Variable	SSO	SSE	Q-square
Financial Attitude	570.000	473.930	0.169
Financial Behavior	570.000	367.561	0.355

Hypothesis Testing

Direct Effects

The test results showed that financial literacy had a positive and significant effect on financial attitude, with a coefficient of 0.425, t-statistic of 5.144, and p-value < 0.001. This means that the higher students' financial literacy, the more positive their financial attitude. Therefore,

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H1 is accepted.

Self-control had a positive and significant effect on financial attitude, with a coefficient of 0.273, t-statistic of 3.836, and p-value < 0.001. This indicates that the better students' self-control, the more positive their attitude toward financial management. Therefore, H2 is accepted.

Financial literacy had a positive and significant effect on financial behavior, with a coefficient of 0.275, t-statistic of 3.520, and p-value < 0.001. This result shows that students with better financial literacy tend to have more responsible financial behavior. Therefore, H3 is accepted.

Self-control had a positive and significant effect on financial behavior, with a coefficient of 0.391, t-statistic of 5.118, and p-value < 0.001. This means that students with better self-control tend to be able to manage expenses, resist consumptive impulses, and make wiser financial decisions. Therefore, H4 is accepted.

Financial attitude had a positive and significant effect on financial behavior, with a coefficient of 0.352, t-statistic of 4.298, and p-value < 0.001. This finding indicates that the more positive students' financial attitude, the better their financial behavior. Therefore, H5 is accepted.

Table 8. Direct Effects

Relationship Between Variables	Original Sample	T-statistic	P-value	Description
Financial Literacy -> Financial Attitude	0.425	5.144	< 0.001	Significant
Self-Control -> Financial Attitude	0.273	3.836	< 0.001	Significant
Financial Literacy -> Financial Behavior	0.275	3.520	< 0.001	Significant
Self-Control -> Financial	0.391	5.118	< 0.001	Significant

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Relationship Between Variables	Original Sample	T-statistic	P-value	Description
Behavior				
Financial Attitude -> Financial Behavior	0.352	4.298	< 0.001	Significant

Indirect Effects

The test results showed that financial attitude mediated the effect of financial literacy on financial behavior, with a coefficient of 0.150, t-statistic of 2.986, and p-value of 0.003. This means that financial literacy does not only directly affect financial behavior, but also indirectly affects it through the formation of financial attitude. Therefore, H6 is accepted.

Financial attitude also mediated the effect of self-control on financial behavior, with a coefficient of 0.096, t-statistic of 2.801, and p-value of 0.005. This result indicates that self-control can improve students' financial behavior through positive financial attitude. Therefore, H7 is accepted.

Because the direct effect of financial literacy on financial behavior was significant and the indirect effect through financial attitude was also significant, financial attitude served as a partial mediator. Similarly, because the direct effect of self-control on financial behavior was significant and the indirect effect through financial attitude was also significant, financial attitude also served as a partial mediator in the relationship between self-control and financial behavior.

Overall, the research results show that all proposed hypotheses were accepted. Financial literacy and self-control were proven to have positive and significant effects on financial attitude and financial behavior. Financial attitude was also proven to have a positive effect on financial behavior and to mediate the effects of financial literacy and self-control on financial behavior.

Table 9. Indirect Effects

Mediation Relationship	Original Sample	T-statistic	P-value	Description
Financial Literacy ->	0.150	2.986	0.003	Significant

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Mediation Relationship	Original Sample	T-statistic	P-value	Description
Financial Attitude -> Financial Behavior				
Self-Control -> Financial Attitude -> Financial Behavior	0.096	2.801	0.005	Significant

Table 10. Summary of Hypothesis Testing

Hypothesis	Hypothesis Statement	Result
H1	Financial literacy has a positive effect on financial attitude	Accepted
H2	Self-control has a positive effect on financial attitude	Accepted
H3	Financial literacy has a positive effect on financial behavior	Accepted
H4	Self-control has a positive effect on financial behavior	Accepted
H5	Financial attitude has a positive effect on financial behavior	Accepted
H6	Financial attitude mediates the effect of financial literacy on financial behavior	Accepted
H7	Financial attitude mediates the effect of self-control on financial behavior	Accepted

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DISCUSSION

The Effect of Financial Literacy on Financial Attitude

The results show that financial literacy has a positive and significant effect on students' financial attitude. This finding indicates that students with better understanding of financial concepts tend to have more positive evaluations of the importance of planning, expenditure control, saving, and financial responsibility. In the context of accounting students, exposure to recording, budgeting, and economic decision-making concepts may strengthen awareness that personal financial management should be carried out rationally and systematically.

This finding is in line with Potrich et al. (2016), who position financial literacy as a construct related to financial knowledge, attitude, and behavior. The result also supports Johan et al. (2021), who show that personal finance education contributes to improving students' financial knowledge. Thus, financial literacy functions not only as a cognitive ability, but also as a basis for forming positive evaluative attitudes toward financial management.

The Effect of Self-Control on Financial Attitude

Self-control was proven to have a positive and significant effect on students' financial attitude. This result indicates that students who are able to resist consumptive impulses, delay immediate gratification, and prioritize needs tend to have more positive attitudes toward financial management. Self-control helps students view money not merely as a short-term consumption tool, but as a resource that needs to be managed wisely.

This finding is consistent with Rey-Ares et al. (2021), who show that self-control is related to young people's financial attitudes and behavior. The finding can also be explained through a psychological perspective: individuals with better self-control tend to have a long-term orientation in decision-making. Therefore, self-control can shape more rational and responsible financial attitudes.

The Effect of Financial Literacy on Financial Behavior

The results indicate that financial literacy has a positive and significant effect on students' financial behavior. This means that the better students' understanding of financial concepts, the stronger their tendency to manage finances responsibly. Students with better financial literacy tend to be more capable of preparing budgets, controlling expenditures, saving, and making financial decisions based on more rational considerations.

This finding supports Lusardi & Mitchell (2014) view that financial literacy is an important

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form of human capital in economic decision-making. The result is also consistent with Khalisharani et al. (2022) dan Vaghela et al. (2023), who show that financial literacy is related to students' financial behavior. In this study, financial literacy becomes an important factor because accounting students have academic exposure to financial concepts, but the application of such concepts still requires sufficient understanding to be translated into daily financial actions.

The Effect of Self-Control on Financial Behavior

Self-control has a positive and significant effect on students' financial behavior. The coefficient of self-control on financial behavior is among the strongest in the model, indicating that this psychological aspect plays an important role in shaping financial behavior. Students with good self-control are better able to avoid impulsive spending, distinguish needs from wants, and maintain discipline in using money.

This result is in line with Mawad et al. (2022), who found that financial self-control contributes to individual financial behavior and performance. The finding is also relevant to the student context, where students face lifestyle pressure, shopping promotions, ease of digital payments, and social needs. In such situations, financial knowledge alone is not sufficient; students need self-control to apply wiser financial decisions.

The Effect of Financial Attitude on Financial Behavior

Financial attitude was proven to have a positive and significant effect on students' financial behavior. This result shows that students with positive attitudes toward financial planning, saving, spending control, and financial responsibility tend to show better financial behavior. Financial attitude serves as a bridge between how students evaluate money and their actual actions in managing money in everyday life.

This finding supports the Theory of Planned Behavior, which states that attitude toward a behavior can influence individuals' tendency to perform that behavior (Ajzen, 1991). The result is also in line with Wahyuni et al. (2023) dan Khalisharani et al. (2022), who show that financial attitude affects financial behavior or financial management behavior. Thus, forming positive attitudes toward money is an important component in efforts to improve students' financial behavior.

The Mediating Role of Financial Attitude

The mediation test results show that financial attitude partially mediates the effect of

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financial literacy on financial behavior. This means that financial literacy affects financial behavior not only directly, but also through the formation of financial attitude. Students who understand financial concepts are more likely to build positive attitudes toward money management, and such attitudes encourage more responsible financial behavior.

Financial attitude also partially mediates the effect of self-control on financial behavior. This indicates that self-control does not only directly influence financial actions, but also shapes attitudinal orientations that support healthy financial behavior. Students who are able to control consumptive impulses tend to have more positive attitudes toward planning and saving, which ultimately strengthens better financial behavior.

Because the mediation found in this study is partial, financial literacy and self-control still have direct roles in financial behavior even though financial attitude explains part of the mechanism. Therefore, students' financial behavior can be understood as the result of an interaction among knowledge, self-control, and evaluative attitudes toward financial management.

CONCLUSION

This study proves that financial literacy and self-control have positive and significant effects on students' financial attitude and financial behavior. Financial attitude also has a positive and significant effect on financial behavior. In addition, financial attitude partially mediates the effects of financial literacy and self-control on students' financial behavior. These findings indicate that students' financial behavior is shaped not only by financial knowledge, but also by self-control ability and positive attitudes toward financial management.

Practically, the findings indicate that efforts to improve students' financial behavior should be carried out through strengthening financial literacy, forming positive financial attitudes, and developing self-control in dealing with consumptive impulses. Future studies are recommended to expand respondent coverage and add other variables such as lifestyle, income, use of digital financial services, and financial self-efficacy so that models of students' financial behavior can be explained more comprehensively.

IMPLICATIONS, LIMITATIONS, AND RECOMMENDATIONS

Implications

The results of this study provide theoretical and practical implications. Theoretically, this study strengthens the view that students' financial behavior is not only determined by financial

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knowledge, but also by psychological factors and evaluative attitudes. Financial literacy and self-control were proven to have positive and significant effects on financial attitude and financial behavior. In addition, financial attitude was proven to mediate the effects of financial literacy and self-control on financial behavior. These findings indicate that financial attitude serves as a psychological mechanism linking financial knowledge and self-control ability to actual financial behavior.

The findings also support the relevance of the Theory of Planned Behavior in explaining students' financial behavior. Financial attitude plays an important role in shaping financial behavior, so students who have positive evaluations of planning, saving, spending control, and financial responsibility tend to show better financial behavior. Thus, improving students' financial behavior should not rely only on increasing financial knowledge, but should also be directed toward building positive financial attitudes.

Practically, the results show that universities need to strengthen financial education programs that integrate cognitive, affective, and behavioral aspects. Financial education should not only contain understanding of budgeting, saving, investment, and financial risk, but should also encourage students to build positive attitudes toward money management. This can be implemented through personal budgeting exercises, simulations of financial decision-making, expenditure recording, and reflective discussions on students' consumption habits.

The findings also show that self-control is an important factor in shaping students' financial behavior. The effect of self-control on financial behavior makes a notable contribution, as indicated by the f-square value of 0.321, which is categorized as medium. Therefore, university learning should not only emphasize financial knowledge, but also help students develop discipline, the ability to delay gratification, control over consumptive impulses, and the ability to prioritize needs.

Limitations

This study has several limitations. First, the study was conducted only on students of the Department of Accounting, Universitas Negeri Makassar; therefore, the results cannot be widely generalized to all students from different study programs, faculties, or universities. Accounting students have specific academic characteristics because they receive exposure to accounting and finance concepts, so their financial behavior may differ from that of non-accounting students.

Second, the number of respondents in this study was 95. This number can be used in PLS-SEM analysis, but it is still relatively limited for producing broader generalizations. Therefore, the

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research findings should be interpreted carefully, especially when used to explain students' financial behavior in general.

Third, this study used a cross-sectional design, in which data were collected at one point in time. This design cannot explain changes in students' financial behavior over time. Financial behavior may change along with students' experiences, exposure to financial education, economic conditions, and use of digital financial services.

Fourth, the research data were obtained through a self-report questionnaire. This method has the potential for response bias because respondents may provide socially desirable answers that do not necessarily fully reflect actual financial behavior. For example, students may state that they are able to control spending even though, in practice, they still experience difficulty managing daily consumption.

Fifth, this study used only financial literacy, self-control, and financial attitude as predictors of financial behavior. The R-square value for financial behavior was 0.585, indicating that 58.5% of the variation in financial behavior can be explained by the variables in the model, while the remaining 41.5% is explained by other variables outside the research model. The R-square value for financial attitude was 0.301, indicating that 30.1% of the variation in financial attitude is explained by financial literacy and self-control, while the remaining 69.9% is influenced by other factors not examined in this study.

Recommendations

Future research is recommended to expand the research object by involving students from various study programs, faculties, and universities. With more diverse respondents, future studies can provide a broader picture of students' financial behavior and test whether the research model also applies to students outside the accounting field.

Future studies are also recommended to increase the number of respondents so that the analysis results have stronger statistical power and greater generalizability. A larger sample would allow researchers to conduct additional analyses, such as comparisons of financial behavior based on gender, year of study, income level, source of allowance, or experience using digital financial services.

Furthermore, future research can use a longitudinal design to observe changes in students' financial behavior over time. This approach is important because students' financial behavior may develop along with increasing experience, changing needs, and exposure to financial education. Future studies may also add other relevant variables, such as lifestyle, financial self-efficacy,

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income, parental influence, peer influence, use of digital wallets, use of paylater services, financial technology adoption, and consumptive behavior. Adding these variables can provide a more comprehensive understanding of the factors that shape students' financial behavior.

Practically, universities are advised to develop more applicable financial literacy programs that are oriented toward behavioral change. These programs may include personal budgeting training, daily expenditure recording, financial decision-making simulations, saving challenges, and education on the risks of digital financial services. Thus, students do not only understand financial concepts, but are also able to build positive financial attitudes and apply them in daily financial behavior.

Students are advised to develop planned personal financial management habits, such as recording expenditures, preparing monthly budgets, distinguishing needs from wants, setting saving targets, and evaluating consumption habits. Students also need to strengthen self-control when facing lifestyle pressure, shopping promotions, ease of digital payments, and impulsive buying tendencies.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Anita, A., Njotoprajitno, R. S., & Hadianto, B. (2022). Self-Control, Financial Literacy, and Behavior in Organizing Money. Journal of Economics and Business, 5(3). https://doi.org/10.31014/aior.1992.05.03.433

Atkinson, A., & Messy, F. A. (2012). Measuring Financial Literacy. https://doi.org/10.1787/5k9csfs90fr4-en

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. https://doi.org/10.1371/journal.pone.0294466

Dew, J., & Xiao, J. J. (2011). A deeper review of the literature resulted in eight more studies that used financial manage-ment behavior scales.

Fitri Wahyuni, S., Radiman, Shareza Hafiz, M., & Jufrizen. (2023). Financial literacy and financial attitude on financial management behavior: An examination of the mediating role of the behavioral intention of students at private universities in Indonesia. Investment Management and Financial Innovations, 20(3), 239–250. https://doi.org/10.21511/imfi.20(3).2023.20

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Johan, I., Rowlingson, K., & Appleyard, L. (2021). The Effect of Personal Finance Education on The Financial Knowledge, Attitudes and Behaviour of University Students in Indonesia. Journal of Family and Economic Issues, 42(2), 351–367. https://doi.org/10.1007/s10834-020-09721-9

Khalisharani, H., Johan, I. R., & Sabri, M. F. (2022). The Influence of Financial Literacy and Attitude Towards Financial Behaviour Amongst Undergraduate Students: A Cross-Country Evidence. Pertanika Journal of Social Sciences and Humanities, 30(2), 449–474. https://doi.org/10.47836/pjssh.30.2.03

Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. Journal of Economic Literature, 52(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Mawad, J. L., Athari, S. A., Khalife, D., & Mawad, N. (2022). Examining the Impact of Financial Literacy, Financial Self-Control, and Demographic Determinants on Individual Financial Performance and Behavior: An Insight from the Lebanese Crisis Period. Sustainability, 14(22), 15129. https://doi.org/10.3390/su142215129

Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. Management Research Review, 39(3), 356–376. https://doi.org/10.1108/MRR-06-2014-0143

REMUND, D. L. (2010). Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy. Journal of Consumer Affairs, 44(2), 276–295. https://doi.org/10.1111/j.1745-6606.2010.01169.x

Rey-Ares, L., Fernández-López, S., Castro-González, S., & Rodeiro-Pazos, D. (2021). Does self-control constitute a driver of millennials' financial behaviors and attitudes? Journal of Behavioral and Experimental Economics, 93, 101702. https://doi.org/10.1016/j.socec.2021.101702

Vaghela, P. S., Kapadia, J. M., Patel, H. R., & Patil, A. G. (2023). Effect of Financial Literacy and Attitude on Financial Behavior among University Students. Indian Journal of Finance, 17(8), 43. https://doi.org/10.17010/ijf/2023/v17i8/173010

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