



Digital Investment Decisions: How Financial Behavior and Attitude Interacts with Financial Literacy?

Tutik Siswanti ^{1*}, Juniati Gunawan ², Susi Dwi Mulyani ²

¹ Student Program Doctor of Economics, Trisakti University, Jakarta, Indonesia

² Lecture of the Faculty of Economics and Business, Trisakti University, Jakarta, Indonesia

*Corresponding author E-mail: juniatigunawan@trisakti.ac.id

Received: July 23, 2025, Accepted: October 9, 2025, Published: January 14, 2026

Abstract

This study investigates the influence of financial behavior and attitudes on digital investment decisions, with financial literacy acting as a moderating variable. Data were obtained through a structured questionnaire involving 300 respondents employed in consumer cyclical and non-cyclical sectors listed on the Indonesia Stock Exchange. Using Structural Equation Modeling with Partial Least Squares (SEM-PLS), the results demonstrate that financial behavior ($\beta = 0.178$, $t = 3.710$, $p < 0.001$) and financial attitude ($\beta = 0.238$, $t = 4.836$, $p < 0.001$) significantly and positively influence digital investment decisions. Moreover, financial literacy significantly strengthens the effects of both financial behavior ($\beta = 0.067$, $t = 2.841$, $p = 0.005$) and financial attitude ($\beta = 0.071$, $t = 2.774$, $p = 0.006$) on digital investment decisions. Additionally, financial literacy ($\beta = 0.184$, $t = 3.131$, $p = 0.002$) and investment experience ($\beta = 0.262$, $t = 4.427$, $p < 0.001$) also show a significant positive impact. The model achieved a good fit with SRMR = 0.068 and an adjusted R^2 of 59.5%. The inclusion of religiosity ($\beta = 0.180$, $p = 0.018$) and environmental concern ($\beta = 0.211$, $p = 0.019$) as behavioral dimensions significantly enhances explanatory power. This research offers practical insights for developing value-oriented financial literacy initiatives and investor protection strategies, particularly targeting young and novice investors in emerging digital finance ecosystems.

Keywords: Financial Behavior; Financial Attitude; Financial Literacy; Digital Investment Decisions; Religiosity; Environmental Concern.

1. Introduction

The goal of investing is to achieve financial well-being, which requires the ability to manage and invest money wisely, along with maintaining financial flexibility [1]. The development of financial technology (FinTech) has drastically transformed the investment landscape, including in Indonesia. Today, people can make investment decisions quickly and conveniently through digital platforms accessed via mobile devices or the internet [2]. However, this ease of access also brings new risks, such as digital investment fraud, ranging from Ponzi schemes and phishing to illegal investment offers that promise unrealistically high returns [3]. According to OJK, during the period 2017-2023, total losses suffered by Indonesians due to illegal investments exceeded IDR 139.67 trillion. This concern is reinforced by a global survey conducted by [4] across 12 countries, including Indonesia, which found that people in low-income countries are more vulnerable to financial fraud, especially through online platforms. These findings highlight that technological advancement has not been matched by adequate financial literacy among the general population.

Previous research has revealed that FinTech adoption is influenced by trust and perceived ease of use (according to the Technology Acceptance Model (TAM) concept), and that both financial behavior and financial attitude significantly impact investment decisions [5]. Psychological elements, including financial behavior and attitudes, hold a vital influence in encouraging individuals to make rational and sustainable investment decisions. Positive individual attitudes towards money management, such as diligent saving, controlled spending, and long-term financial planning, are generally better prepared to handle investment risks [6]; [7]. Research by [8] and [9] confirms that positive financial attitudes have a significant impact on investment decisions.

Literature on financial behavior continues to grow, most studies remain focused on classical behavioral dimensions: overconfidence, risk perception, herding behavior, and loss aversion in influencing investment decisions [5]; [10]. While these dimensions are well-established and empirically supported, this approach tends to overlook the influence of personal values and ethics that are increasingly significant in financial decision-making, particularly within the social and cultural context of developing countries like Indonesia.

In several studies and the literature, it was found that financial behavior and religiosity have not been well integrated. In Indonesia, the majority population believes in religious values, and religious norms have a big impact on daily decision-making, including financial decisions. Studies conducted by [11] and [12] show that religiosity significantly influences financial behavior.

However, very few studies have explored religiosity as a behavioral dimension that influences digital investment decisions in a different context from conventional investment due to its ease of access and new types of risks.

There is still limited attention paid to environmental concerns as an integral part of financial behavior. In fact, more and more investors, especially from the younger generation, are starting to consider the social and environmental impacts of financial decisions, showing that

sustainability awareness impacts how individuals manage their money and their financial decision-making. In fact relationship between environmental concerns and digital investment decisions is still under-explored in empirical studies, especially in Indonesia.

Most previous studies have separated behavioral analysis from value systems or focused only on technical and cognitive aspects, ignoring the relevant cultural background and social norms that shape financial decision making [13 – 16]. Therefore, necessary to conduct research with an integrated behavioral model that incorporates value-based dimensions such as religiosity and environmental concerns into the financial behavioral model.

This research aims to resolve these issues by developing a more contextual and value-enriched model of financial behavior through the inclusion of religiosity and environmental concern. These dimensions are analyzed for influence on digital investment decisions. Additionally, financial literacy will strengthen influence behavior, values, and financial decisions by shaping understanding of digital financial tools.

Young investors in Indonesia, particularly those aged 20 – 30, are increasingly active in utilizing FinTech to achieve financial well-being. However, many of them lack adequate financial literacy, risk awareness, and strong ethical or religious value frameworks, making them more vulnerable to impulsive or irrational investment decisions [17]. A study of the interaction between psychological factors, social values, and literacy is essential for designing financial education programs that are more contextual and effective. Such understanding will also aid regulators like the OJK in crafting more targeted digital investor protection policies. Furthermore, this study is expected to be able to FinTech platforms to develop more ethical, educational, and inclusive products and services.

Although financial literacy is relevant to psychological factors in financial decisions, it has not been widely explored as a moderating factor. As digitalization progresses, stronger digital financial skills are needed to handle complex financial decisions and risk evaluations effectively [18]; [19]; [20]. A failure to consider this factor can lead to incomplete or skewed interpretations of financial behavior.

Investment experience also greatly influences investment decisions. Investors tend to avoid reinvesting after experiencing negative experiences and are more likely to reinvest after experiencing positive and profitable experiences [21]. Investment experience also shapes investment behavior through risk perception, as investors assess their experiences based on ongoing feedback from future investments [22]; [23]. This study responds to existing research gaps by proposing an expanded behavioral finance model that integrates religious and environmental concerns into financial behavior. This research also explores whether digital financial literacy can strengthen the influence of financial behavior on digital investment decisions, thereby amplifying or reducing its impact. By combining a behavioral finance approach with technological and cultural perspectives, this study offers a more comprehensive model to protect investors while encouraging sustainable FinTech innovation, particularly among young professionals in Indonesia.

1.1. Research questions

Research questions include the following:

- a) To what extent does financial behavior influence digital investment decisions?
- b) To what extent does financial attitude influence digital investment decisions?
- c) Does financial literacy strengthen the influence of financial behavior on digital investment decisions?
- d) Does financial literacy strengthen the influence of financial attitudes on digital investment decisions?

2. Literature Review

2.1. Behavioral theory

Theory of Planned Behavior (TPB) by Ajzen (1991) states person's actions are influenced by intentions, which are formed from attitudes, subjective norms, and perceived control over the behavior. These factors shape an individual's intention to act and ultimately determine whether the action is carried out. Normative beliefs, behavioral control perceptions, risk appetite, and financial actions, as well as knowledge in financial literacy [26].

According to TPB, attitudes describe an individual's assessment of the goodness or badness of a particular behavior. Positive attitudes increase an individual's intention to act, while negative attitudes reduce it. Financial attitudes, reflected in how individuals value and use money positively, play an important role in shaping financial decisions [6]. Subjective norms refer influence of the social environment in encouraging individuals to take action, including investing through digital platforms. According to Mahmood et al (2024), social norms involve following others' decisions or accepting their advice. Individual behavioral control reflects an individual's sense of capability and confidence in making investment decisions. It can influence belief perceptions that either strengthen or weaken intention to perform behavior [27].

Fishbein and Ajzen (1975) introduced the Theory of Reasoned Action (TRA), stating that behavioral intention, including in digital investment, is primarily determined by their personal attitude and the influence of social norms. TRA emphasizes intention as the primary predictor of behavior; therefore, in the context of digital investment, the more positive attitude and stronger social support, the more likely an individual is to invest through a digital platform. Behavior finance theory explains that investors' financial decisions are often affected by their emotions and thinking patterns, which can lead to choices that are not always logical.

Behavioral finance theory is an approach that combines psychological concepts with financial theory to understand how individuals often make irrational financial decisions. This theory is based on the idea that investors do not always act based on logic or perfect information as assumed in classical financial theory, but are influenced by cognitive biases, emotions, and heuristics [29]. This theory explains investor behavior influenced by mindset, risk perception, and emotional experience, so that investment decisions may not be in line with the principle of rationality. Behavioral finance in the context of digital investment, decisions are often made quickly and based on subjective perceptions of market trends, technology, and other people's opinions.

2.2. Financial behavior and digital investment decisions

Digital investment decisions are the process of allocating funds to financial instruments with online applications [3]. In line with the goal of investment, which is to achieve financial well-being, financial behavior has an important contribution to achieving that goal [30]; [31]. Financial behavior is a reflection of psychological reactions and individual values in making financial decisions, including investment. Digital platforms such as financial applications, fintech services, and internet-based financial systems have changed individual behavior in managing and making financial decisions [32]. In investing with digital platforms, good financial behavior is expected to make indi-

viduals rational and measurable in making investment decisions. According to Ajzen (1991), to develop healthy financial behavior, it is important to consider not only knowledge and fundamental analysis but also individual psychological factors, including attitudes, social norms, and self-control.

Kadoya & Khan (2020) and Mahmood et al (2024) [13]; [15], recognize behavioral finance elements such as emotional tendencies, social pressures, perceived risk, and individual personality characteristics that influence how investment The study by Shunmugasundaram and Sinha (2022) finding one type of behavioral bias loss aversion affects investment decisions in life insurance [33]. Meanwhile, Hossain and Siddiqua (2022), Iram et al (2023), and Khawaja and Alharbi (2021) [5]; [34]; [35] have demonstrated that behavioral factors like loss aversion, risk assessment, overconfidence, and herd behavior have an important role in investment selection.

People who have good financial behavior are well-prepared, use technology wisely, assess risks objectively, and value investing. The better the behavior, the greater the chance of making wise digital investment decisions.

Based on this explanation, the hypothesis is:

H1: Financial behavior has a positive influence on digital investment decisions.

2.3. Financial attitude and digital investment decisions

Financial attitude reflects an individual's beliefs, values, and perspectives toward money, as well as how they respond to and make financial decisions in daily life. Attitude includes awareness importance of saving, managing expenses, and planning for the future. Financial attitude mirrors a person's mindset, trust, and emotions related to money, and how they make decisions regarding spending, saving, investing, and managing debt [6].

Individuals with a positive financial attitude possess a constructive mindset, judgment, and perspective in making financial decisions, which helps them allocate funds appropriately into suitable investment instruments. Attitude shows the degree to which a person views a certain behavior in a positive or negative light [25]. A person with a healthy financial attitude is likely to create a financial surplus that can be allocated for future needs or used as investment capital to achieve long-term financial well-being [14].

Meanwhile, individuals with negative financial attitudes have less respect for money, which is reflected in their consumerist behavior, difficulty managing debt and bills, and inability to manage finances, which causes financial problems [36 - 38]. Financial attitude concept includes the ability to plan, manage expenses, and focus on long-term goals, all of which contribute to making wiser financial decisions [18]. Financial attitude will help individuals to manage tasks such as budgeting and investment [39]. A good financial attitude encourages individuals to wisely utilize digital platforms for placing funds in investment instruments according to their goals.

Based on the explanation research hypothesis follows:

H2: Financial attitude has a positive influence on digital investment decisions.

2.4. Financial literacy

Financial literacy refers to the integration of understanding, comprehension, ability, and self-assurance that enables individuals to make well-informed and sound financial choices [6]. People with high levels of financial literacy will engage in responsible financial practices, such as analyzing and managing budgets, saving, and investing. They also recognize social norms or expectations from their environment, family, friends, and community that encourage more responsible financial practices [14]. Financial literacy functions as a core pillar for shaping attitudes and social norms, which in turn motivate intentions and behaviors toward more responsible financial practices.

With the development of financial technology, society is expected to improve its financial understanding in line with advancements in digital financial services. Increasing digital financial literacy helps individuals make more rational and informed investment decisions on digital platforms, while reducing personal financial risks and problems [20]. Highly digitally literate individuals understand digital financial services, are aware of and can manage risks, know their consumer rights, and make wise investment decisions [21]. Meanwhile, weak financial literacy can lead to a lack of understanding of financial concepts and often result in making mistakes in making financial decisions [40].

Adequate financial literacy has an impact on making appropriate financial decisions, protecting oneself from fraud, and building confidence in managing contemporary financial complexities [41]. Financial skills and knowledge as indicators of financial literacy have a positive influence on appropriate and rational investment decisions [40]; [41].

Based on previous discussion, the following hypothesis is developed:

H3: Financial literacy strengthens the influence of financial behavior on digital investment decisions.

H4: Financial literacy strengthens the influence of financial attitude on digital investment decisions.

2.5. Conceptual framework

A conceptual framework is a visual representation of the ideas, theories, and variables used in research to explain the relationships between key constructs. This framework serves as a guide in formulating hypotheses, directing analysis, and providing an overview of the researcher's line of thinking. In this study, the conceptual framework is illustrated in Figure 1, which shows the research model and the hypothesized relationships between the main constructs:

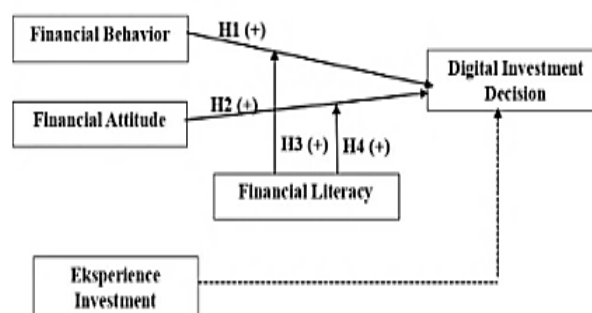


Fig. 1: Conceptual Framework.

3. Method

3.1. Questionnaire design

This is quantitative research. This study explores how financial behavior and attitudes influence digital investment decisions, with financial literacy as a moderator. Primary data were collected via questionnaires distributed through Google Forms. Indicators of each research variable: digital investment decisions (DID) with 16 indicators, financial behavior (FB) with 18 indicators, financial attitudes (FA) with 9 indicators, financial literacy (FL) with 12 indicators, and investment experience (IE) with 7 indicators. The variable measurement table is presented in Appendix A.

The questionnaire consists of three parts: Part 1 covers respondent demographics, and Part 2 includes questions on investment decisions, financial behavior, attitude, literacy, and experience, using 6 6-point Likert scale from 1 (strongly disagree) to 6 (strongly agree).

3.2. Sampling and data collection

The research sample consisted of 300 people working in companies operating in the cyclical and non-cyclical consumer sectors on the Indonesia Stock Exchange (IDX). Participants were selected based on purposive sampling criteria. The respondents' criteria were as follows: (1) a minimum job position of supervisor, (2) at least two years of investment experience through digital platforms, (3) aged between 20 and 35 years old, and (4) a minimum education level of senior high school or equivalent. Sampling size estimation was guided by Hair et al (2018) recommendation.

3.3. Data analysis

Analysis of data used SEM-PLS. These testing procedures involved validating the instruments through assessments of convergent and discriminant validity, along with evaluating construct reliability using Cronbach's Alpha and composite reliability [24]; [25]. Testing accuracy and suitability of the model based on the Standardized Root Mean Square Residual from the Goodness of Fit model test [24]. Adjusted R-Square reflects the proportion of the independent variable explaining the change in the dependent variable [25]. Hypothesis testing assesses their influence and the moderating effect. The regression models are tested in this study:

a) Main Regression Model.

The main regression test analyzes how financial behavior and attitudes shape digital investment decision-making using a modified financial behavior measure that includes two new dimensions: religiosity and environmental concern.

$$DID = \alpha + \beta_1FB + \beta_2FA + \beta_3FB*FL + \beta_4FA*FL + \beta_5IE + \epsilon \quad (1)$$

b) Sensitivity Test

The sensitivity test uses the original financial behavior measure to assess whether the main regression results remain robust under a different model specification.

$$DID = \alpha + \beta_1FB + \beta_2FA + \beta_3FB*FL + \beta_4FA*FL + \beta_5IE + \epsilon \quad (2)$$

4. Result

4.1. Demographic respondents

The demographics of respondents in this study are: gender, age, educational qualification, job position, and investment experience.

Table 1: Demographic Characteristics of Respondents

Demographic factor	Classification	Frequency	Percent
Gender	Female	156	52%
	Male	144	48%
Educational Qualification	Total	300	100
	High School	45	15%
	Diploma	30	10%
	Bachelor	192	64%
	Postgraduate	27	9%
Job Position	Doctoral degree	6	2%
	Total	300	100
	Supervisor	175	58.4%
	Manager	97	32.3%
Investment Experience	Others	28	9.3%
	Total	300	100
	2 – 3 years	182	61%
	3 – 5 years	101	34%
Investment Experience	More than 5 years	17	6%
	Total	300	100

As presented in Table 1, the respondents are dominated by women, with the majority of undergraduate education, with the most job positions being supervisors. While the investment experience of most respondents is between 2 to 3 years.

4.2. Descriptive statistics

Respondent data will be analyzed and interpreted using descriptive statistical measures, including mean, median, maximum, minimum, and standard deviation.

Table 2: Descriptive Statistics

Variable	Mean	Median	Min	Max	Standard Deviation	Kurtosis	Skewness	Observations
DD	5	5	4	6	0.623	-0.408	-0.172	300
FB	5	5	3	6	0.793	-1.773	-0.093	300
FA	5	5	4	6	0.518	-0.212	-0.419	300
FL	5	5	4	6	0.624	-0.198	-0.327	300
IE	5	5	4	6	0.668	-0.564	-0.273	300

DID: Digital Investment Decision, FB: Financial Behavior, FA: Financial Attitude, FL: Financial Literacy, IE: Investment Experience.

Table 2 shows that all variables have a mean of 5 on a 1–6 Likert scale, indicating that all variables show an average score of 5 on a 1–6 Likert scale, suggesting generally high perceptions or attitudes. This suggests strong respondent agreement with the research statements. A median value of 5 for all variables indicates most respondents selected “agree,” reflecting strong, consistent support and positive perceptions toward the measured variables.

Minimum values of 4 for DID, FA, FL, and IE indicate that all respondents at least “somewhat agreed,” showing no negative responses. A minimum of 3 for FB reflects lower but still positive attitudes. No responses fell below 3, suggesting no rejection of the measured variables.

The maximum value of six for all variables indicates some respondents chose “strongly agree,” showing strong support and positive perceptions. This suggests the measured aspects are highly relevant and well-received by participants.

Standard deviation values above 0.5 indicate notable variation in responses, suggesting diverse perceptions or attitudes toward the measured variables, despite generally positive responses. Kurtosis values from -0.078 to -1.068 indicate a slightly platykurtic distribution but remain within acceptable normality thresholds, suggesting the data is approximately normal.

Skewness values, ranging from -0.564 to -0.198, show that the data distribution is slightly skewed to the left (negative). Although not perfectly symmetrical, the deviation remains within an acceptable range. This suggests that most respondents gave responses above the average. Statistically, this distribution is still considered moderate or close to normal.

4.3. Main structural model

The primary structural model analysis further specifies the direct and indirect relationships (paths) between the research constructs, as shown in Figure 2:

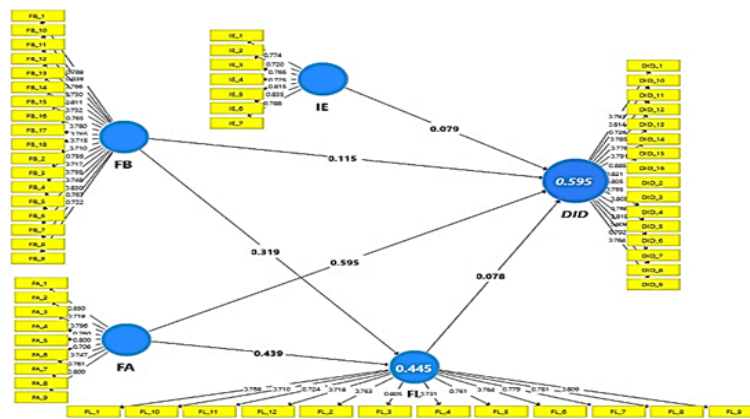


Fig. 2: Path Diagram of the Main Research Model.

Table 3: Items Loading, Composite Reliability and Convergent Validity (AVE)

Indicator	Loading	CA	CR	AVE
DD 1	0.772			
DD 2	0.783			
DD 3	0.805			
DD 4	0.785			
DD 5	0.705			
DD 6	0.768			
DD 7	0.803			
DD 8	0.813			
DD 9	0.792			
DD 10	0.781			
DD 11	0.726			
DD 12	0.804			
DD 13	0.812			
DD 14	0.778			
DD 15	0.821			
DD 16	0.815			
FB 1	0.710			
FB 2	0.717			
FB 3	0.750			
FB 4	0.759			
FB 5	0.748			
FB 6	0.848			
FB 7	0.767			
FB 8	0.732			
FB 9	0.812			
		0.962	0.966	0.637
		0.957	0.961	0.681

FB_10	0.766			
FB_11	0.730			
FB_12	0.811			
FB_13	0.768			
FB_14	0.783			
FB_15	0.765			
FB_16	0.785			
FB_17	0.768			
FB_18	0.715			
FA_1	0.850			
FA_2	0.718			
FA_3	0.796			
FA_4	0.789	0.915	0.930	0.596
FA_5	0.806			
FA_6	0.749			
FA_7	0.827			
FA_8	0.806			
FL_1	0.765			
FL_2	0.763			
FL_3	0.805			
FL_4	0.731			
FL_5	0.761			
FL_6	0.764			
FL_7	0.789	0.934	0.942	0.578
FL_8	0.781			
FL_9	0.809			
FL_10	0.719			
FL_11	0.724			
FL_12	0.718			
IE_1	0.771			
IE_2	0.720			
IE_3	0.765			
IE_4	0.774	0.889	0.913	0.602
IE_5	0.815			
IE_6	0.835			
IE_7	0.785			

Table 4: Discriminant Validity

Variable	DID	FA	FB	FL	IE
DID	0.798				
FA	0.752	0.772			
FB	0.525	0.537	0.762		
FL	0.558	0.610	0.555	0.760	
IE	0.558	0.603	0.590	0.674	0.776

Table 2 indicates that each measurement item has a factor loading exceeding 0.7, while the AVE value of all variables is greater than 0.5, indicating that all instruments are valid [24]. Cronbach's Alpha and Composite Reliability values are greater than 0.70, suggesting that all instruments are reliable. This means that the indicators in this research instrument measure the intended constructs stably and consistently [24]; [25].

Hypothesis testing results that evaluate the associations between the variables in this research are summarized below:

Table 5: Main Test Hypothesis

Hypothesis	Pedection	Path Coefficient	T Statistics	P Values	Result
H1: FB -> DID	(+)	0.178	3.710	0.000***	Accepted
H2: FA -> DID	(+)	0.238	4.836	0.000***	Accepted
H3: FB -> FL -> DID	(+)	0.067	2.841	0.005***	Accepted
H4: FA -> FL -> DID	(+)	0.071	2.744	0.006***	Accepted
IE -> DID		0.262	4.427	0.000***	
FL -> DID		0.184	3.131	0.002***	
R Square Adjusted					0.595
Standardized Root Mean Square Residual (SRMR)					0.068

Note: DID: Digital Investment Decision, FB: Financial Behavior, FA: Financial Attitude, FL: Financial Literacy, IE: Investment Experience. *** sig level 1%, ** sig level 5%

Equation Model:

$$DID = 0,115FB + 0,595FA + 0,078FL + 0,397FB*FL + 0,517FA*FL + 0,079IE \quad (4)$$

Table 4 confirms the acceptance of H1 and H2, indicating that both financial behavior (β : 0.178, t: 3.710, p: 0.000) and financial attitude (β : 0.238, t: 4.836, p: 0.000) significantly and positively influence digital investment decisions. These results imply that stronger financial behavior and attitudes enhance individuals' motivation to invest digitally.

The hypothesis test supports H3, demonstrating financial literacy enhances the positive influence of financial behavior on digital investment decisions (β : 0.067, t: 2.841, p: 0.005). This finding individuals with higher financial knowledge and competence are more capable of translating their behavior into effective investment decisions.

The findings of this study also show that financial literacy significantly strengthens the positive influence of financial attitudes on digital investment decisions (β : 0.071, t: 2.774, p: 0.006), supporting H4. This shows that individuals have higher financial literacy can apply

their financial attitudes effectively in making investment decisions. Thus, financial literacy serves a critical role in reinforcing sound financial attitudes and enhancing the quality of investment choices.

Financial literacy positively significantly influences digital investment decisions (β : 0.184, t : 3.131, p : 0.002). This explains that financial literacy is important in making investment decisions. Financial skills and abilities help individuals to be more capable of making better investment decisions through digital platforms.

Investment experience, included as a control variable, also demonstrates significant influence on digital investment decisions (β : 0.262, t : 4.427, p : 0.000). Individuals who possess investment experience are generally more prudent and use their past experiences as lessons that influence future investment decisions.

The adjusted R-Square value 0.595 shows that the ability of independent variables to influence dependent variables is 59.5%. Meanwhile remaining 40.5% is attributable to other factors not examined within the scope of this study. Furthermore, the Goodness-of-Fit assessment yields an SRMR value of 0.068, lower than 0.08, so that the model is declared fit.

4.4. Sensitivity test

To ensure robustness and assess result consistency, a sensitivity test was conducted by re-estimating the financial behavior construct with four dimensions. The alternative structural model is presented in Figure 3:

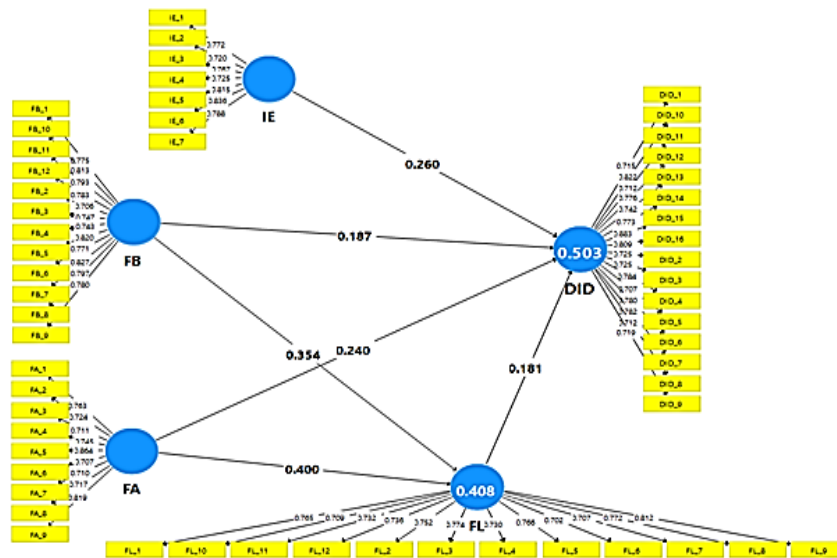


Fig. 3: Path Diagram of Sensitivity Test.

Table 6: Sensitivity Test Hypothesis

Hypothesis	Prediction	Path Coefficient	T Statistics	P Values	Hasil	
H1	FB→ DID	(+)	0.187	3.980	0.000***	Accepted
H2	FA→ DID	(+)	0.240	4.418	0.000***	Accepted
H3	FB→FL→ DID	(+)	0.464	2.879	0.004***	Accepted
H4	FA→FL→ DID	(+)	0.581	2.910	0.004***	Accepted
	FL→ DID	(+)	3.298	3.298	0.001***	Accepted
	IE→ DID	(+)	0.260	4.596	0.000***	
R Square Adjusted					0.503	
Standardized Root Mean Square Residual (SRMR)					0.079	

Note: DID: Digital Investment Decision, FB: Financial Behavior, FA: Financial Attitude, FL: Financial Literacy, IE: Investment Experience. *** sig level 1%, ** sig level 5%

Equation Model:

$$DID = 0.187FB + 0.240FA + 0.181FL + 0.464FB*FL + 0.581FA*FL + 0.260IE \tag{5}$$

Table 6 shows that the sensitivity test results align with the main hypothesis test. Financial behavior and attitude directly influence digital investment decisions, while financial literacy strengthens both effects. Financial literacy and investment experience also consistently show significant impacts. This consistency indicates model stability, confirming that the main regression model remains robust despite the modified financial behavior measurements.

The Adjusted R-Square value in the sensitivity test was 0.503, lower than the main test result of 0.595, indicating that although the alternative model was still able to explain the variation in digital investment decisions well, the modified financial behavior measurement produced a relatively lower explanation of the dependent variable. This difference may be due to a reduction in variable complexity, where changes in financial behavior measurements reduce predictive power because the variation originally explained by the main indicators becomes more dispersed across new dimensions, as well as the potential for multicollinearity between dimensions, which reduces the overall explanatory power of the model.

In addition, the higher R² in the main model indicates that the financial behavior construct with the original measurement is more representative in explaining digital investment decisions among the respondents in this study. The SRMR value of 0.079 is still within the acceptable threshold, although slightly higher than the main model (0.069), indicating that although the sensitivity model still has good suitability, the main model is more optimal in explaining the relationship between constructs. Thus, the sensitivity test reinforces the belief that the main model is more stable and efficient, while the alternative model remains useful as a validation of the consistency of the findings.

4.5. Discussion

The study finds that financial behavior positively influences digital investment decisions, as healthy behaviors like risk awareness and loss aversion promote wiser choices. This finding is consistent with behavioral finance theory and TPB [26]. This highlights the role of psychological biases, intentions, attitudes, norms, and perceived control in shaping individual decisions.

Based on a demographic perspective, the majority of respondents were young adults (aged 20–30), held positions as supervisors or managers, and had more than two years of digital investment experience. This reflects a generation that is technologically adaptive and in the process of developing more mature financial patterns. These findings support earlier studies, Hossain & Siddiqua (2022); Kadoya & Khan (2020), and Mahmood et al (2024) [5];[13];[15] showing that financial behaviors like risk tolerance and self-control significantly affect investment decisions.

Financial attitude positively influences digital investment decisions, as individuals who value money, save, and manage expenses tend to be more prepared and confident to invest digitally. This result supports TPB [26] and TRA by Fishbein and Ajzen (1975), emphasizing that positive financial attitudes and supportive social norms strengthen investment intentions and drive digital investment behavior. Most respondents, holding bachelor's degrees and working in established companies, likely have structured spending and long-term financial plans. This supports findings by Ratnawati et al., and Fathoni et al. (2024) [9];[28] which highlight the role of saving behavior and financial planning investment decisions. The interaction of financial literacy with financial behavior and attitudes will strengthen its influence on digital investment decisions.

When individuals possess adequate financial knowledge and competencies, these characteristics contribute to rational and informed decision-making. The findings of this study support the research of Adil et al. (2022) and Johri et al. (2023) [18];[29], show good financial behavior and positive attitudes supported by a high level of financial literacy, encourage wiser investment choices, and can be less emotionally influenced.

5. Conclusion

This study concludes that both financial behavior and financial attitude exert a positive and significant impact on digital investment decision-making, both directly and when interacting with financial literacy. These findings indicate that investment is not merely about numbers and returns, but also involves behavior, attitude, and knowledge that develop over time. For young investors in Indonesia, who face the fast-paced and risky dynamics of the digital market, a combination of positive financial attitudes, rational behavior, and adequate financial literacy is key to making profitable and sustainable decisions.

The practical contribution of this study is to provide input for financial regulators, particularly the OJK, as well as FinTech service providers. Implementable recommendations include the development of digital-based financial literacy programs targeting young people and early-career professionals, the integration of consumer protection and fraud detection features in investment applications, and the development of more transparent and sustainability-oriented digital financial instruments. Meanwhile, future research should be expanded to include not only behavior, attitudes, and financial literacy, but also other dimensions such as trust in technology, the influence of social media in shaping investment perceptions, and cross-country comparative studies to understand differences in global digital financial ecosystems. In this way, research can make a more comprehensive contribution to academic theory, regulatory policy, and industry practice.

Limitation

This study acknowledges certain limitations. Primarily, it is conducted within the Indonesian context, which is characterized by distinct cultural, religious, and social attributes. Thus, its findings may not apply to countries with different cultural contexts. Second, the respondents were limited to individuals aged 20–35 working in specific sectors (consumer cyclical, non-cyclical, and basic materials) and holding at least a supervisory position.

This restricts the applicability of the findings to individuals in other age groups, informal workers, and novice investors without prior investment experience. Third, data were obtained using a web-based survey (Google Forms), which may lead to self-perception bias and limit data validity for respondents who are unfamiliar with online surveys or Likert-scale instruments.

Acknowledgment

We would like to thank Prof. Etty Murwaningsari, Dedi Wibowo, Ph.D, Saur Simamora, SE, MM, Verra Sitio, SE, MM, MBA, the heads of Consumer Cyclists and Non Consumer Cyclists for their assistance in data collection and other aspects of this research.

Author Contribution

Tutik Siswanti is tasked with developing the research framework, preparing the research proposal, collecting research data, and preparing the overall manuscript. Juniati Gunawan is responsible for the quality of data processing and ensuring the reliability and clarity of the manuscript. Susi Dwi Mulyani is responsible for analyzing the research results and editing the original draft preparation writing.

Conflict of Interest

The authors declare that there is no conflict of interest.

References

- [1] OJK, "SEOJK : NO.30/SEOJK.07/2017 : PELAKSANAAN KEGIATAN DALAM RANGKA MENINGKATKAN LITERASI KEUANGAN DI SEKTOR JASA KEUANGAN," 2017.
- [2] P. Gomber, J. A. Koch, and M. Siering, "Digital Finance and FinTech: Current Research and Future Research Directions," *Journal of Business Economics*, vol. 87, no. 5, pp. 537–580, 2017, <https://doi.org/10.1007/s11573-017-0852-x>.

- [3] A. Furinto, D. Tamara, and N. J. Rahman, "Financial and Digital Literacy Effects on Digital Investment Decision Mediated by Perceived Socio-Economic Status," *E3S Web of Conferences (ICOBAR)*, vol. 02076, no. 426, pp. 1–6, 2023. <https://doi.org/10.1051/e3sconf/202342602076>
- [4] M. Houtti, A. Roy, V. N. R. Gangula, and A. M. Walker, "A survey of scam exposure, victimization, types, vectors, and reporting in 12 countries," *arXiv preprint arXiv:2407.12896*, 2024. <https://doi.org/10.54501/jots.v2i4.204>.
- [5] T. Hossain and P. Siddiqua, "Exploring the influence of behavioral aspects on stock investment decision-making: a study on Bangladeshi individual investors," *PSU Research Review (Emerald Publishing Limited)*, pp. 1–7, 2022.
- [6] P. Tyagi, "Impact of Financial Literacy and Financial Attitudes on Investment Decisions: A Case Study of Delhi-NCR," *YMER*, vol. 21, no. 11, pp. 1233–1244, 2022.
- [7] M. E. Hoque, "Moderating Effects of Financial Cognitive Abilities and Considerations on The Attitude-intentions Nexus of Stock Market Participation," *International Journal of Financial Studies*, vol. 10, no. 1, pp. 1–21, 2022. <https://doi.org/10.3390/ijfs10010005>.
- [8] B. Eko, "The role of financial behavior as a mediator of the influence of financial literacy and financial attitudes on MSME investment decisions in Indonesia," *Journal of Social Economics Research*, vol. 9, no. 4, pp. 193–203, 2022. <https://doi.org/10.18488/35.v9i4.3231>.
- [9] Ratnawati, Sudarmiatin, B. E. Soetjipto, and N. Restuningdiah, "The Role of Financial Behavior as a Mediator of the Influence of Financial Literacy and Financial Attitudes on MSME Investment Decisions in Indonesia," *Journal of Social Economics Research*, vol. 9, no. 4, pp. 193–203, 2022. <https://doi.org/10.18488/35.v9i4.3231>.
- [10] G. M. Gokhale and A. Mittal, "Exploring the Nexus of Capital Market and Investor Behaviour: A Systematic Literature Review," *International Journal of Economics and Financial Issues*, vol. 14, no. 2, pp. 65–76, 2024. <https://doi.org/10.32479/ijefi.15638>.
- [11] H. R. Wijaya, S. R. H. Hati, I. A. Ekaputra, and S. Kassim, "The impact of religiosity and financial literacy on financial management behavior and well-being among Indonesian Muslims," *Humanit Soc Sci Commun*, vol. 11, no. 1, pp. 1–13, 2024. <https://doi.org/10.1057/s41599-024-03309-6>.
- [12] F. Hidayat, "The Impact of Bureaucratic Reform on Indonesian Governance: A Perspective Review of Academic Literature," *Jurnal Politik Pemerintahan Dharma Praja*, vol. 16, no. 2, pp. 169–196, 2023. <https://doi.org/10.33701/jppdp.v16i2.3761>.
- [13] Y. Kadoya and M. S. Rahim Khan, "Financial Literacy in Japan: New Evidence using Financial Knowledge, Behavior, and Attitude," *Sustainability (Switzerland) MDPI*, vol. 12, no. 9, pp. 1–15, 2020. <https://doi.org/10.3390/su12093683>.
- [14] B. Y. Almansour, S. Elkgrhli, and A. Y. Almansour, "Behavioral Finance Factors and Investment Decisions: A Mediating Role of Risk Perception," *Cogent Economics and Finance*, vol. 11, no. 2, 2023. <https://doi.org/10.1080/23322039.2023.2239032>.
- [15] F. Mahmood, R. Arshad, S. Khan, A. Afzal, and M. Bashir, "Impact of behavioral biases on investment decisions and the moderation effect of financial literacy; an evidence of Pakistan," *Acta Psychol (Amst)*, vol. 247, no. April, p. 104303, 2024. <https://doi.org/10.1016/j.actpsy.2024.104303>.
- [16] O. El Ghmari, I. El Ghmari, S. Trid, and M. M'hamdi, "Analysis of the Relationship between Financial Behavior and Short-and Long-Term Returns among Moroccan Investors: A Behavioral Finance Approach," *Salud, Ciencia y Tecnologia - Serie de Conferencias*, vol. 3, 2024. <https://doi.org/10.56294/sctconf20241016>
- [17] A. Syarif and A. Putri, "The Influence of Financial Attitude, Financial Knowledge, and Personal Income on Personal Financial Management Behavior," *Adpebi International Journal of Multidisciplinary Sciences*, vol. 1, no. 1, pp. 145–154, 2022. <https://doi.org/10.54099/aijms.v1i1.226>.
- [18] M. Adil, Y. Singh, and M. S. Ansari, "How Financial Literacy Moderate the Association Between Behaviour Biases and Investment Decision?," *Asian Journal of Accounting Research*, vol. 7, no. 1, pp. 17–30, 2022. <https://doi.org/10.1108/AJAR-09-2020-0086>.
- [19] OECD, "OECD / INFE 2023 International Survey of Adult Financial Literacy," in *OECD/INFE*, 2023, pp. 1–76.
- [20] P. J. Morgan and T. Quang, "Journal of Asian Economics Financial literacy , financial inclusion , and savings behavior in Laos," *Journal of Asian Economics (Elsevier)*, vol. 68, p. 101197, 2020. <https://doi.org/10.1016/j.asieco.2020.101197>.
- [21] F. Ismiyanti and P. A. Mahadwartha, "Investor Experience and Expectation towards Decision-Making Process," *International Journal of Innovation, Creativity and Change*, vol. 12, no. 8, pp. 110–130, 2020.
- [22] Z. Li, Q. Wu, P. Hong, and R. Tian, "Effects of Investment Experience on the Stock Investment Task: The Mediating Role of Risk Perception," *Behavioral Sciences (MDPI)*, vol. 13, no. 115, pp. 1–16, 2023. <https://doi.org/10.3390/bs13020115>.
- [23] H. Zhao and L. Zhang, "Financial Literacy or Investment Experience: Which is more Influential in Cryptocurrency Investment?," *International Journal of Bank Marketing*, vol. 39, no. 7, pp. 1208–1226, 2021. <https://doi.org/10.1108/IJBM-11-2020-0552>.
- [24] C. M. R. S. Joseph F. Hair, Jr, G. Tomas M. Hult, *Multivariate data analysis*, vol. 2. 2018.
- [25] G. D. Garson, *Partial Least Squares Regression & Structural Equation Model*. 2018. <https://doi.org/10.1201/b16017-6>.
- [26] I. Ajzen, "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Process, Univercity of Massachusetts at Amherst*, vol. 50, no. 2, pp. 179–211, 1991. <https://doi.org/10.47985/dcidj.475>.
- [27] I. Fishbein, M., & Ajzen, "Attitude and Behavior : Prediction of Behavior," 1975.
- [28] Ahmad Fathoni Ardyansyah and Nur Khusniyah Indrawati, "The Influence of Financial Knowledge on Financial Management Behavior with Locus of Control and Financial Attitude as Mediation Variables," *International Journal of Research in Business and Social Science (2147- 4478)*, vol. 13, no. 4, pp. 265–276, 2024. <https://doi.org/10.20525/ijrbs.v13i4.3391>.
- [29] A. Johri, M. U. Islam, and M. Kamal, "Assessment of Financial Literacy and Its Impact on Investor's Decisions in Saudi Arabia: A Study in the Context of Enabling Financial Planning to Strengthen Economic Development," *Discrete Dyn Nat Soc*, vol. 2023, pp. 1–12, 2023. <https://doi.org/10.1155/2023/9932444>
- [30] A. Dinarjito, "The influence of financial behavior on investment decisions with financial literacy as a mediation variable: Case study in PKN STAN learning assignment students," *Jurnal Pajak Dan Keuangan Negara*, vol. 5, no. 1, pp. 128–143, 2023. <https://doi.org/10.31092/jpkn.v5i1.2281>.
- [31] G. Suresh, "Impact of financial literacy and behavioural biases on investment decision-making," *FIIB Business Review*, vol. 13, no. 1, pp. 72–86, 2024. <https://doi.org/10.1177/23197145211035481>.
- [32] B. Usman, H. Rianto, and S. Aujirapongpan, "Digital payment adoption: A revisit on the theory of planned behavior among the young generation," *International Journal of Information Management Data Insights*, vol. 5, no. 1, p. 100319, 2025. <https://doi.org/10.1016/j.ijmei.2025.100319>.
- [33] A. Sinha and V. Shunmugasundaram, "Relationship between demographic factors and behavioral biases," *Global Journal of Accounting & Finance (GJAF)*, vol. 7, no. 1, 2023.
- [34] T. Iram, A. R. Bilal, and Z. Ahmad, "Investigating the mediating role of financial literacy on the relationship between women entrepreneurs' behavioral biases and investment decision making," *Gadjah Mada International Journal of Business*, vol. 25, no. 1, pp. 93–118, 2023. <https://doi.org/10.22146/gamaijb.65457>
- [35] M. J. Khawaja and Z. N. Alharbi, "Factors influencing investor behavior: an empirical study of Saudi Stock Market," *International Journal of Social Economics*, vol. 48, no. 4, pp. 587–601, 2021. <https://doi.org/10.1108/IJSE-07-2020-0496>.
- [36] H. Wahyuni, E. Erwantiningsih, and A. R. Pudyaningih, "Generation Z preferences in financial technology, fear of missing out, love of money and its impact on financial management behavior through financial literacy," *Jurnal Manajemen dan Kewirausahaan*, vol. 13, no. 1, 2025. <https://doi.org/10.26905/jmdk.v13i1.15526>.
- [37] R. Hartantri, B. Setyadi, and M. Gunarto, "Analysis of the effect of frugal living on employee financial management in achieving financial freedom," *International Journal of Finance Research*, vol. 5, no. 1, pp. 103–113, 2024. <https://doi.org/10.47747/ijfr.v5i1.1700>
- [38] C. E. Widjayanti, W. R. Adawiyah, and Sudarto, "Financial literacy innovation is mediated by financial attitudes and lifestyles on financial behavior in MSME players," *Journal of Innovation and Entrepreneurship*, vol. 14, no. 1, p. 57, 2025. <https://doi.org/10.1186/s13731-025-00525-5>.
- [39] M. B. M. G. Wutun, S. S. Niha, and H. A. Manafe, "Financial attitude and financial behavior analysis towards student financial literacy in Kupang City," *Enrichment: Journal of Management*, vol. 13, no. 1, pp. 644–653, 2023. <https://doi.org/10.35335/enrichment.v13i1.1304>.
- [40] A. Lusardi and F. A. Messy, "The importance of financial literacy and its impact on financial wellbeing," *Journal of Financial Literacy and Well-being*, vol. 1, no. 1, pp. 1–11, 2023. <https://doi.org/10.1017/flw.2023.8>.

[41] P. Kumar, R. Pillai, N. Kumar, and M. I. Tabash, "The interplay of skills, digital financial literacy, capability, and autonomy in financial decision making and well-being," *Borsa Istanbul Review*, vol. 23, no. 1, pp. 169–183, 2023, <https://doi.org/10.1016/j.bir.2022.09.012>.

Appendix A.

Table: Variable Measurement

Variables	Code	Indicators	Reference
Digital Investment Decisions (DID)	DID 1	Regulatory service support	Kasemharuetha isuk & Samanchuen (2023)
	DID 2	Regulatory protection support	
	DID 3	Regulatory system oversight	
	DID 4	Able to meet investment needs	
	DID 5	Service security	
	DID 6	Low risk of fraud	
	DID 7	Helps manage finances	
	DID 8	Helps focus on other aspects	
	DID 9	Fast and efficient	
	DID 10	Easy to monitor	
	DID 11	Achieves financial well-being	
	DID 12	More profitable than traditional investments	
	DID 13	Can be adjusted to personal financial conditions	
	DID 14	Gain support from family	
	DID 15	Easy investment procedures	
	Financial Behavior (FB)	DID 16	
FB 1		Panic if investment prices decline	
FB 2		React quickly to adverse market conditions	
FB 3		Sell if prices rise and hold if prices fall	
FB 4		Not worried about investing with certain returns	
FB 5		Concerned about investing in stocks with historically poor trading performance	
FB 6		Confident that their investments will yield profits	
FB 7		Confident about having investment knowledge	
FB 8		Confident about having investment experience	
FB 9		Confident that if an investment error occurs, it is not entirely their fault.	
FB 10		Confident in making decisions based on profitable opportunities	
FB 11		Investment decisions follow the success of family investments	
FB 12		Investment decisions follow the portfolios of other investors	
FB 13		Religious principles are the basis for financial management	
FB 14		Religious knowledge is the basis for financial management	
FB 15		Avoiding financial transactions prohibited by religion	
FB 16		Considering the environmental impact of using money	
FB 17	Prioritizing financial products and services from companies with environmental policies		
Financial Attitude (FA)	FB 18	Financial management that takes environmental considerations into account is part of social responsibility	Tyagi (2022)
	FA 1	Attitudes about the importance of financial security	Fathoni et al (2024)
	FA 2	Having an attitude about the importance of money	
	FA 3	Attitudes about the importance of controlling spending	
	FA 4	Avoiding impulsive spending	
	FA 5	Considering the returns on each use of money	
	FA 6	Understanding the importance of saving habits	
	FA 7	Determining savings goals	
	FA 8	Awareness of the importance of investing helps individuals manage their finances wisely.	
	FA 9	Understanding the importance of valuing the use of money for the future	
Financial Literacy (FL)	FL 1	Understand financial concepts	
	FL 2	Understand the concept of saving and investing	
	FL 3	Able to create financial plans	
	FL 4	Skilled in managing finances	
	FL 5	Skilled in preparing financial budgets	
	FL 6	Has a financial plan for the future	
	FL 7	Skilled in financial decision-making	
	FL 8	Skilled in accessing financial technology online	
	FL 9	Understands financial technology services and products	
	FL 10	Understands the risks in digital financial transactions	
	FL 11	Skilled in using digital devices	
	FL 12	Able to invest through digital platforms	
Investment Experience (IE)	IE 1	Experience with investment opportunities as a basis for investment decisions	Ismiyanti & Mahadwartha, (2020)
	IE 2	Experience with financial market fluctuations as a basis for investment decisions	
	IE 3	Investment experience improves investment analysis skills	
	IE 4	Investment failure as a basis for investment evaluation	
	IE 5	Investment success as a basis for reinvestment	
	IE 6	Experience with investment payback periods as a basis for selecting investment types	
	IE 7	Experience with investment success and failure as a basis for determining the frequency of investment transactions	