

UNDERSTANDING INVESTMENT DECISIONS IN THE DIGITAL ERA: THE ROLE OF DIGITAL FINANCIAL LITERACY AND FINANCIAL ANXIETY

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Diterima: Juni 2026; Direvisi: Juli 2026; Dipublikasikan: Juli 2026

ABSTRACT

This study aims to examine the effect of Digital Financial Literacy on Investment Decision and investigate the moderating role of Financial Anxiety among stock and cryptocurrency investors in Semarang City. A quantitative approach was employed using a survey method involving 234 respondents selected through purposive sampling. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that Digital Financial Literacy has a positive and significant effect on Investment Decision ($\beta = 0.405$; $p = 0.000$). Furthermore, Financial Anxiety negatively moderates this relationship ($\beta = -0.089$; $p = 0.018$), suggesting that higher levels of financial anxiety reduce the effectiveness of digital financial literacy in supporting investment decisions. These findings highlight that investment decisions in the digital era are influenced by both cognitive and psychological factors. Therefore, efforts to improve digital financial literacy should be accompanied by initiatives to strengthen investors' psychological readiness in dealing with market risks and uncertainties.

Keywords: digital financial literacy; financial anxiety; investment decision, investors; behavioral finance; pls-sem.

ABSTRAK [Times New Roman 9 Cetak Tebal, Jarak Huruf 1 Spasi]

Penelitian ini bertujuan untuk menganalisis pengaruh Digital Financial Literacy terhadap Investment Decision serta menguji peran Financial Anxiety sebagai variabel moderasi pada investor saham dan cryptocurrency di Kota Semarang. Penelitian menggunakan pendekatan kuantitatif dengan metode survei terhadap 234 responden yang dipilih melalui purposive sampling. Analisis data dilakukan menggunakan Partial Least Squares Structural Equation Modeling (PLS-SEM). Hasil penelitian menunjukkan bahwa Digital Financial Literacy berpengaruh positif dan signifikan terhadap Investment Decision ($\beta = 0,405$; $p = 0,000$). Selain itu, Financial Anxiety terbukti memoderasi hubungan tersebut secara negatif ($\beta = -0,089$; $p = 0,018$), yang menunjukkan bahwa kecemasan keuangan yang tinggi dapat mengurangi efektivitas literasi keuangan digital dalam mendukung pengambilan keputusan investasi. Temuan ini menegaskan bahwa keputusan investasi di era digital dipengaruhi oleh faktor kognitif dan psikologis. Oleh karena itu, peningkatan literasi keuangan digital perlu diimbangi dengan penguatan kesiapan psikologis investor agar mampu menghadapi risiko dan ketidakpastian pasar secara lebih optimal.

Kata Kunci: digital financial literacy; financial anxiety; investment decision, investors; behavioral finance; pls-sem.

INTRODUCTION

The development of digital technology has transformed investment behavior, particularly in the use of stock and cryptocurrency investment platforms (Savithri & Rajakumari, 2025). Easy access to information through investment applications, social media, and various digital financial platforms has made investing increasingly attractive to a wide range of individuals, especially younger generations. This condition highlights the importance of Digital Financial Literacy, which refers to an individual's ability to understand, evaluate, and utilize digital-based financial information to support sound investment decision-making (Lusardi & Mitchell, 2023). This phenomenon is reflected in the continuous growth of investors in Indonesia. The Indonesian capital market recorded more than 19 million investors in 2025, while the number of cryptocurrency investors reached approximately 19.56 million users in November 2025. This increase indicates that people are becoming more active in utilizing digital investment instruments as an alternative means of financial management and long-term wealth creation.

At the regional level, Semarang City has emerged as one of the major centers of investor growth in Central Java. As a metropolitan city, educational hub, and business center in the province, Semarang exhibits a high level of digital technology adoption, which has contributed to increasing public interest in stock and cryptocurrency investments. Investors in Semarang no longer rely solely on formal financial information sources but also obtain information from social media, online investment communities, and content shared by financial influencers (finfluencers). While this situation provides investors with rapid access to information, it also increases the risk of exposure to inaccurate or misleading information when not supported by adequate Digital Financial Literacy. From a behavioral finance perspective, investment decisions are influenced not only by cognitive abilities and financial knowledge but also by psychological factors (Amran et al., 2024). One psychological factor that may affect investor behavior is Financial Anxiety (Furinto et al., 2023). Financial Anxiety refers to feelings of worry, concern, and discomfort arising from uncertainty regarding financial conditions and potential investment losses (Gambetti & Giusberti, 2012). In highly volatile investment instruments such as stocks and cryptocurrencies, financial anxiety often influences investors' ability to process information and make rational investment decisions.

Theoretically, investors with a high level of Digital Financial Literacy are better equipped to understand investment risks, critically evaluate information, and make more informed investment decisions (Lusardi & Mitchell, 2023). However, such capabilities may not necessarily lead to optimal investment decisions when investors experience high levels of Financial Anxiety. Excessive anxiety may cause investors to become overly cautious, delay investment decisions, or even make choices that are inconsistent with the information available to them. In contrast, lower levels of anxiety enable investors to utilize their digital knowledge and financial information more effectively in the investment decision-making process (Gignac et al., 2023). Although numerous studies have examined the relationship between financial literacy and investment decisions, research specifically investigating the effect of Digital Financial Literacy on Investment Decision while considering the moderating role of Financial Anxiety remains limited, particularly among stock and cryptocurrency investors in Semarang City. Therefore, this study is important to analyze the influence of Digital Financial Literacy on Investment Decision with Financial Anxiety serving as a moderating variable among stock and cryptocurrency investors in Semarang City. The findings are expected to contribute to the development of the behavioral finance literature and provide valuable insights for investors and financial institutions in improving the quality of investment decisions in the digital era.

LITERATURE REVIEW

The Effect of Digital Financial Literacy on Investment Decision

Digital Financial Literacy refers to an individual's ability to access, understand, evaluate, and utilize digital-based financial information and services to support effective financial decision-making (Fatwa, 2026). In the digital era, investors are required not only to possess basic financial knowledge but also the ability to identify the quality and credibility of information obtained through various digital platforms, including investment applications, social media, financial websites, and digital asset trading platforms (Amran et al., 2024). This study is grounded in Behavioral Finance Theory, which explains that investment decisions are not determined solely by rational economic considerations but are also influenced by the investor's knowledge, cognitive capabilities, and psychological conditions. Behavioral finance argues that investors operate under bounded rationality, meaning that their decisions are shaped by the information available to them, their ability to process that information, and their emotional responses to uncertainty (Kahneman & Tversky, 1979; Barberis & Thaler, 2003). Consequently, improving an individual's capability to understand and evaluate financial information is expected to reduce cognitive errors and promote more rational investment behavior. Within this theoretical perspective, Digital Financial Literacy represents an important cognitive capability that enables investors to process digital financial information effectively. Financial Literacy Theory further suggests that individuals with higher levels of financial literacy are better equipped to understand financial products, evaluate investment alternatives, manage risks, and make decisions that are consistent with their long-term financial objectives (Lusardi & Mitchell, 2014). In the context of stock and cryptocurrency investments, Digital Financial Literacy enables investors to analyze market information, assess investment risks, distinguish credible information from misinformation, and avoid decisions driven by speculation or unreliable sources (Amran et al., 2024). Consequently, investors with higher levels of Digital Financial Literacy tend to make more rational, informed, and confident investment decisions (Mishra et al., 2024). Previous empirical studies have consistently demonstrated that financial literacy has a positive influence on investment decisions. Investors possessing greater financial knowledge and stronger analytical capabilities are more likely to select appropriate investment instruments and achieve better investment outcomes than those with lower levels of literacy (Lusardi & Mitchell, 2023). Based on the perspective of Behavioral Finance Theory, Digital Financial Literacy serves as a cognitive resource that helps investors reduce behavioral biases and improve the quality of their investment decisions. Therefore, higher levels of Digital Financial Literacy are expected to lead to better investment decision.

H1: Digital Financial Literacy has a positive effect on Investment Decision.

The Moderating Role of Financial Anxiety in the Relationship Between Digital Financial Literacy and Investment Decision

Financial Anxiety is a psychological condition characterized by feelings of worry, fear, and concern regarding financial circumstances and the potential for future financial losses (Gignac et al., 2023). From a behavioral finance perspective, psychological factors often influence an individual's ability to process information and make rational decisions (Ani & Özari, 2020). Investors who experience high levels of financial anxiety tend to be more sensitive to risk and uncertainty associated with investment activities (López-Guzmán & Sautua, 2024). In principle, investors with high levels of Digital Financial Literacy are better equipped to understand investment information and make appropriate investment decisions (Furinto et al., 2023). However, when investors experience high levels of Financial Anxiety, these capabilities may become less effective because excessive anxiety encourages individuals

to focus more on potential losses than on potential gains. As a result, investors may become overly cautious, delay investment decisions, or even avoid investing despite possessing adequate knowledge and information. Conversely, investors with lower levels of Financial Anxiety are more capable of utilizing their digital knowledge and financial information to objectively evaluate investment opportunities (Gambetti & Giusberti, 2012). Under such conditions, the influence of Digital Financial Literacy on Investment Decision is expected to become stronger because investors can fully utilize their digital literacy capabilities without being hindered by excessive psychological pressure (Furinto et al., 2023). Therefore, Financial Anxiety is expected to weaken the relationship between Digital Financial Literacy and Investment Decision. The higher the level of financial anxiety experienced by investors, the weaker the positive influence of Digital Financial Literacy on investment decisions (Rahman & Gan, 2020).

H2: Financial Anxiety moderates the effect of Digital Financial Literacy on Investment Decision, such that high Financial Anxiety weakens the positive effect of Digital Financial Literacy on Investment Decision.

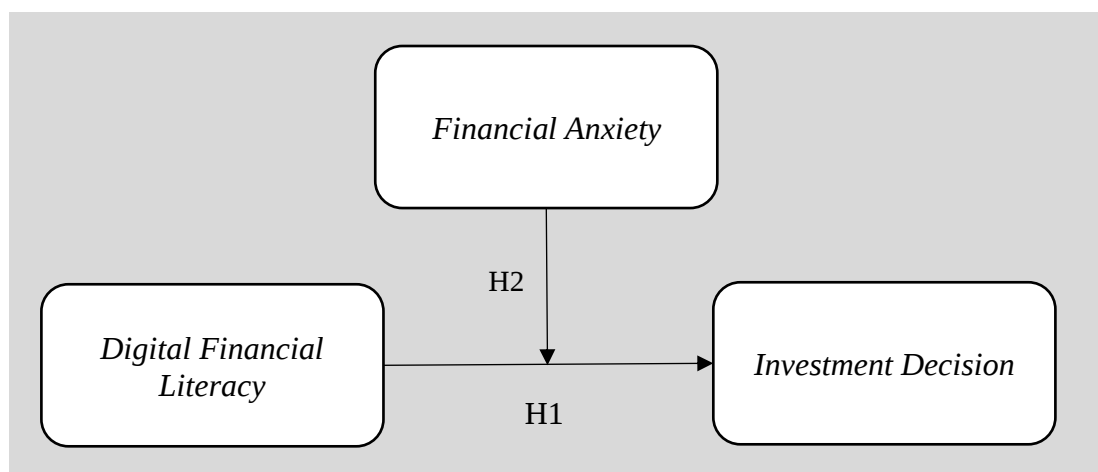


Figure 1. Conceptual Framework

RESEARCH METHOD

This study was designed to examine how Digital Financial Literacy influences Investment Decision and to investigate the moderating role of Financial Anxiety in this relationship. A quantitative approach was employed because the study focuses on testing relationships among variables using numerical data collected from respondents. The research was conducted in Semarang City, which was selected as one of the major centers of investor growth in Central Java. The rapid adoption of investment applications and the increasing participation of the public in stock and cryptocurrency investments make Semarang a relevant context for examining investment behavior in the digital era.

The unit of analysis in this study consists of individuals who invest in stocks and/or cryptocurrencies. Since there is no precise information regarding the total number of investors who meet the study criteria, respondents were selected using a purposive sampling technique. This method enables the researcher to reach individuals who possess the experience and knowledge required for the study. The selection criteria included investors who reside in Semarang City, own a stock or cryptocurrency investment account, and have conducted investment transactions within the last six months. Data were collected through an online survey using a structured questionnaire. The use of an online survey was considered appropriate because most investors currently interact with investment platforms and

investment communities through digital media. All questionnaire items were measured using a five-point Likert scale to capture respondents' levels of agreement with each research indicator.

The study targeted a minimum sample of 200 respondents. The determination of the sample size was based on the recommendations for Partial Least Squares Structural Equation Modeling (PLS-SEM), which emphasize that sample adequacy should consider the complexity of the structural model and the desired level of statistical power. The proposed research model includes multiple latent constructs and a moderating effect, resulting in a relatively complex structural relationship that requires a sufficiently large sample to obtain stable parameter estimates and adequate statistical power. Consistent with the recommendations of Hair et al. (2014), a minimum sample of 200 respondents is considered appropriate for PLS-SEM studies involving moderation analysis and multiple latent variables, thereby improving the precision and robustness of the estimated structural relationships.

Data analysis was conducted using SmartPLS software. The selection of the PLS-SEM approach was based on its ability to analyze predictive research models, accommodate latent variables measured by multiple indicators, and simultaneously estimate moderating relationships within a single analytical framework (Hair et al., 2014). The analysis began with an evaluation of the measurement model to assess indicator reliability and construct validity, ensuring that all measurement items met the required psychometric standards. Subsequently, the structural model was evaluated to examine the magnitude and significance of the relationships among the constructs and to test the proposed hypotheses. The moderating role of Financial Anxiety was assessed by constructing an interaction term between Digital Financial Literacy and Financial Anxiety. This procedure enabled the researcher to determine whether financial anxiety strengthens or weakens the effect of digital financial literacy on investment decisions. Through this analytical framework, the study aims to provide a more comprehensive understanding of how digital financial capability and investors' psychological conditions jointly influence investment decisions in stock and cryptocurrency markets.

Table 1. Operational Definition of Variables

Variable	Operational Definition	Indicators	Code
Digital Financial Literacy (X)	The ability of investors to understand, evaluate, and utilize digital financial information and services to support investment decision-making	Digital Financial Knowledge	DFL1
		Ability to use digital financial services and applications Digital Financial Skills	DFL2
		Ability to evaluate digital financial information Information Evaluation	DFL3
		Awareness of risks and security in digital transactions Digital Financial Risk Awareness	DFL4
		Confidence in using digital financial services Digital Financial Confidence	DFL5
Financial Anxiety (M)	The level of anxiety, worry, and discomfort experienced by individuals regarding their financial condition and investment activities	Concern about personal financial conditions	FA1
		Anxiety regarding potential investment losses	FA2
		Difficulty remaining calm when thinking about financial conditions	FA3
		Feelings of insecurity about future financial well-being	FA4
		Stress when facing investment risks	FA5
Investment Decision (Y)	The ability of investors to make investment choices based on risk	Ability to select appropriate investment instruments	ID1
		Consideration of risks before investing	ID2

	considerations, available information, and financial objectives	Use of information as the basis for investment decisions	ID3
		Confidence in the investment decisions made	ID4
		Consistency in implementing investment decisions	ID5

Source: Primary research data processed using SmartPLS 4 software, 2026.

DATA ANALYSIS AND DISCUSSION

Respondent Demographics

Based on the characteristics of 234 respondents, the majority were male (59.0%), aged 21–30 years (47.9%), and held a bachelor's degree (51.3%). In terms of occupation, respondents were predominantly private employees (35.9%), followed by students (23.1%) and entrepreneurs (17.1%). Regarding investment experience, most respondents had been investing for 1–3 years (41.9%). In terms of investment instruments used, the majority invested in stocks (41.0%), followed by a combination of stocks and cryptocurrency (35.9%), and cryptocurrency only (23.1%). These demographic characteristics are important because they may influence how individuals obtain, understand, and utilize digital financial information in the investment decision-making process. The dominance of respondents in the productive age group with relatively high educational attainment indicates that the sample has adequate capacity to access technology and investment information, making it relevant for examining the relationship between digital financial literacy, financial anxiety, and investment decision. In addition, the variation in investment experience and investment instruments provides a more comprehensive overview of investor behavior in the context of digital investment. The respondent demographics are presented in Table 2.

Table 2. Respondent Demographics

Characteristics	Category	Frequency	Percentage (%)
Gender	Male	138	59.0
	Female	96	41.0
Age	< 21 years	21	9.0
	21–30 years	112	47.9
	31–40 years	68	29.1
	41–50 years	24	10.3
	> 50 years	9	3.8
Education Level	High School or equivalent	56	23.9
	Diploma	26	11.1
	Bachelor's Degree	120	51.3
	Master's Degree	28	12.0
	Doctoral Degree	4	1.7
Occupation	Student	54	23.1
	Private Employee	84	35.9
	Government Employee	31	13.2
	Entrepreneur	40	17.1
	Others	25	10.7
Investment Experience	< 1 year	61	26.1
	1–3 years	98	41.9
	4–5 years	45	19.2
	> 5 years	30	12.8
Investment Instrument	Stocks	96	41.0
	Cryptocurrency	54	23.1
	Stocks and Cryptocurrency	84	35.9

Convergent Validity

The assessment of convergent validity was conducted to ensure that each indicator adequately explains the construct it represents. The results of the analysis show that all indicators of Digital Financial Literacy, Financial Anxiety, and Investment Decision have outer loading values above 0.70, ranging from 0.754 to 0.918. For the Digital Financial Literacy construct, the outer loading values range between 0.814 and 0.904, indicating a strong relationship between the indicators and the construct. The Financial Anxiety construct shows outer loading values between 0.830 and 0.918, reflecting a very strong representation of the latent variable. Meanwhile, the indicators of the Investment Decision construct range from 0.754 to 0.865, which also meets the required threshold. These findings indicate that each indicator has a sufficient level of representation of its respective variable. Therefore, the research instrument demonstrates good convergent validity and is suitable for further model testing. The convergent validity results are presented in Table 4.

Reliability

The results of reliability and construct validity testing indicate that all research variables meet the required criteria. The Digital Financial Literacy variable shows a Cronbach's Alpha value of 0.922, Composite Reliability (pa) of 0.924, Composite Reliability (pc) of 0.941, and AVE of 0.763. The Financial Anxiety variable has a Cronbach's Alpha of 0.906, Composite Reliability (pa) of 0.908, Composite Reliability (pc) of 0.934, and AVE of 0.781. Meanwhile, the Investment Decision variable records a Cronbach's Alpha of 0.868, Composite Reliability (pa) of 0.873, Composite Reliability (pc) of 0.905, and AVE of 0.656. All Cronbach's Alpha and Composite Reliability values are above 0.70, indicating good internal consistency. In addition, all AVE values exceed the minimum threshold of 0.50, demonstrating that each construct is able to explain a sufficient proportion of variance in its indicators (Sarstedt et al., 2020). Therefore, all variables in this study are considered reliable and demonstrate good construct validity, making them suitable for structural model analysis. Reliability results are presented in Table 3.

Table 3. Factor Loadings and Reliability

Variable	Indicator	Outer Loading	Cronbach's Alpha	Composite Reliability (pa)	Composite Reliability (pc)	AVE
Digital Financial Literacy	DFL1	0.892	0.922	0.924	0.941	0.763
	DFL2	0.904				
	DFL3	0.899				
	DFL4	0.854				
	DFL5	0.814				
Financial Anxiety	FAX1	0.918	0.906	0.908	0.934	0.781
	FAX2	0.830				
	FAX3	0.899				
	FAX4	0.885				
Investment Decision	IDM1	0.826	0.868	0.873	0.905	0.656
	IDM2	0.775				
	IDM3	0.824				
	IDM4	0.865				
	IDM5	0.754				

Source: Primary research data processed using SmartPLS 4 software, 2026.

Discriminant Validity

The discriminant validity test using the Heterotrait-Monotrait Ratio (HTMT) method shows that all HTMT values between constructs are below the recommended threshold of 0.90. The HTMT value between Digital Financial Literacy and Financial Anxiety is 0.840, between Digital Financial Literacy and Investment Decision is 0.860, and between Financial Anxiety and Investment Decision is 0.869. These results indicate that each construct demonstrates an adequate level of distinction and is able to measure different concepts from one another (Hair et al., 2021). Therefore, the measurement model in this study meets the criteria for discriminant validity, meaning that each latent variable has good construct uniqueness and there is no issue of measurement overlap or multicollinearity between constructs. The discriminant validity results are presented in Table 4.

Table 4. Heterotrait-Monotrait Ratio (HTMT)

	Digital Financial Literacy	Financial Anxiety	Investment Decision
Digital Financial Literacy			
Financial Anxiety	0,840		
Investment Decision	0,860	0,869	

Source: Primary research data processed using SmartPLS 4 software, 2026.

Hypothesis Testing

Hypothesis testing was conducted by evaluating T-statistics values greater than 1.96 and p-values below 0.05 (Memon et al., 2021). The results show that Digital Financial Literacy has a positive and significant effect on Investment Decision, with a coefficient of 0.405, a T-statistics value of 5.355, and a p-value of 0.000. Therefore, the first hypothesis is supported, indicating that higher levels of digital financial literacy lead to better investment decisions. Furthermore, the moderation analysis indicates that the interaction between Financial Anxiety and Digital Financial Literacy has a significant effect on Investment Decision, with a coefficient of -0.089, a T-statistics value of 2.364, and a p-value of 0.018. This result shows that Financial Anxiety negatively moderates the relationship, and thus the second hypothesis is also supported. In other words, higher levels of financial anxiety tend to weaken the positive effect of digital financial literacy on investment decisions. The hypothesis testing results are presented in Table 5.

Table 5. Hypothesis Testing

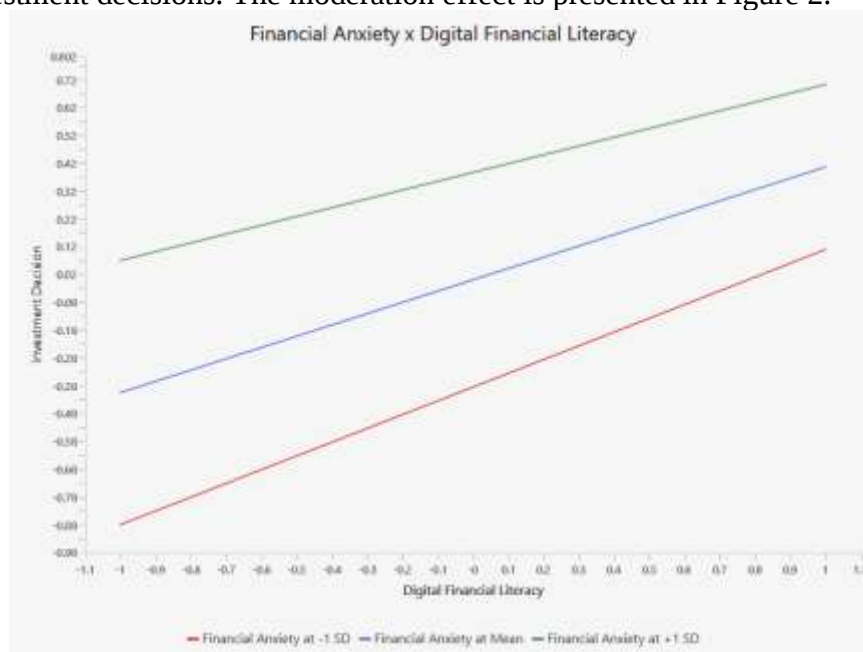
	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Digital Financial Literacy -> Investment Decision	0,405	0,406	0,076	5,355	0,000
Financial Anxiety x Digital Financial Literacy -> Investment Decision	-0,089	-0,089	0,038	2,364	0,018

Source: Primary research data processed using SmartPLS 4 software, 2026

Moderation Effect

The simple slope analysis graph indicates that Digital Financial Literacy has a positive relationship with Investment Decision across all levels of Financial Anxiety. However, the significant moderation result with a negative coefficient ($\beta = -0.089$; $p = 0.018$) suggests that Financial Anxiety weakens the positive effect of Digital Financial Literacy on Investment Decision. Thus, even when investors possess a high level of digital financial literacy, higher

levels of financial anxiety can reduce the effectiveness of applying that knowledge in making optimal investment decisions. The moderation effect is presented in Figure 2.



Source: Primary research data processed using SmartPLS 4 software, 2026.

Figure 2. Simple Slope

Effect of Digital Financial Literacy on Investment Decision

The test results show that Digital Financial Literacy has a positive and significant effect on Investment Decision among stock investors in Semarang City. This finding is indicated by a path coefficient of 0.405, a t-statistic value of 5.355, and a p-value of 0.000. These results suggest that the higher the level of digital financial literacy possessed by investors, the better the quality of their investment decisions. Therefore, the first hypothesis in this study is accepted. These findings indicate that investors' ability to understand digital financial information, utilize financial technology, evaluate investment information obtained through digital media, and effectively use various investment platforms plays an important role in determining investment decision quality. In the era of digital transformation, the investment process is no longer conducted conventionally but is highly dependent on the use of information technology. Investors must be able to access various information sources quickly, understand real-time market data, and analyze investment risks and opportunities through digital investment applications.

In the context of stock investors in Semarang City, digital technological development has provided easier access to various investment platforms such as securities applications, capital market information portals, investment social media, and online investor communities. This convenience allows investors to obtain broader information compared to previous periods. However, the abundance of information also presents challenges, as not all available information has the same quality and credibility. Therefore, investors with a high level of Digital Financial Literacy are more capable of filtering relevant information, verifying information sources, and avoiding decisions based on rumors or speculation.

Theoretically, these findings reinforce the view that financial literacy is a key asset in investment decision-making. Individuals with strong financial understanding are better able to plan finances, manage risk, understand investment instruments, and evaluate potential returns. In the digital investment environment, these capabilities become even more important as investment decisions often need to be made quickly in response to dynamic market changes.

In addition, high Digital Financial Literacy can increase investors' confidence in making investment decisions. Investors who understand capital market mechanisms and are able to effectively use investment technology tend to be less influenced by short-term market sentiment. They rely more on rational analysis and valid information rather than following herd behavior. Therefore, improving digital financial literacy can be an important strategy to enhance the quality of public investment decisions. This study also suggests that digital financial literacy education should continue to be strengthened by governments, financial institutions, and brokerage firms. The better investors' ability to understand and utilize financial technology, the greater the likelihood of achieving rational and long-term investment-oriented decisions.

Moderating Role of Financial Anxiety in the Relationship Between Digital Financial Literacy and Investment Decision

The moderation test results show that the interaction between Financial Anxiety and Digital Financial Literacy has a coefficient of -0.089, a t-statistic value of 2.364, and a p-value of 0.018. These values indicate that Financial Anxiety acts as a significant moderating variable with a negative direction. Therefore, the third hypothesis is accepted. The negative interaction coefficient indicates that Financial Anxiety weakens the positive effect of Digital Financial Literacy on Investment Decision. This means that even though investors have a high level of digital financial literacy, such capability does not always lead to optimal investment decisions when they experience high levels of financial anxiety.

This finding provides an interesting insight that cognitive abilities and psychological conditions simultaneously influence investment decisions. Digital Financial Literacy represents investors' rational capability in understanding financial information and utilizing investment technology, while Financial Anxiety represents an emotional condition that can influence the decision-making process. When financial anxiety increases, investors tend to focus more on potential losses than on available profit opportunities.

In the context of stock investors in Semarang City, volatile market conditions may trigger various forms of financial anxiety. Investors with high digital financial literacy are actually capable of understanding market information and conducting proper investment analysis. However, when they experience high anxiety regarding financial loss, economic uncertainty, or stock market volatility, their ability becomes less effective in producing rational investment decisions. Highly anxious investors tend to be more sensitive to negative news, more likely to panic during market declines, and more likely to delay investment decisions even when they already possess sufficient information (Gambetti & Giusberti, 2012). This condition reduces the benefits that should be gained from digital financial literacy. In other words, psychological factors can hinder the application of knowledge and skills in investment decision-making (Rahman & Gan, 2020). These findings support the behavioral finance perspective, which explains that investment decisions are not only determined by information and analytical ability but also by investors' emotional conditions. Investors with high knowledge do not necessarily produce optimal investment decisions if their psychological condition is not supportive (Bernaola et al., 2021). Conversely, investors who are able to control financial anxiety tend to be more capable of utilizing their knowledge and information to make more rational investment decisions. The practical implication of this finding is that improving digital financial literacy alone is not sufficient to enhance investment decision quality. Investment education programs should be combined with efforts to improve investors' psychological readiness, such as emotional management, understanding investment risk, and developing disciplined investment behavior. In this way, investors not only have technical competence in managing investments but also possess adequate mental readiness to face market uncertainty.

Overall, this study shows that investment decisions among stock investors in Semarang City are influenced by a combination of cognitive and psychological factors. Digital Financial Literacy improves investment decision quality, while Financial Anxiety encourages participation in investment activities but at the same time reduces the effectiveness of digital financial literacy in producing optimal investment outcomes. These findings enrich the behavioral finance literature by showing that investment success is not only determined by the level of knowledge investors possess, but also by their ability to manage psychological conditions when facing market risk and uncertainty.

CONCLUSION

This study demonstrates that Digital Financial Literacy is an important factor in improving the Investment Decision of stock investors in Semarang City. The findings indicate that investors with higher levels of digital financial literacy are more capable of understanding investment information, evaluating risks, and making better investment decisions. Furthermore, the results reveal that Financial Anxiety significantly moderates the relationship between Digital Financial Literacy and Investment Decision. Specifically, high levels of financial anxiety weaken the positive effect of digital financial literacy on investment decisions. These findings suggest that investment decisions are influenced not only by investors' cognitive abilities and financial knowledge but also by their psychological conditions. Therefore, improving investment decision quality requires a comprehensive approach that combines the enhancement of digital financial literacy with the development of emotional management and financial anxiety control.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study has several limitations that should be acknowledged. First, the research was conducted only among stock investors in Semarang City, which may limit the generalizability of the findings to investors in other regions or investment contexts. Second, the study employed a cross-sectional design, which only captures respondents' perceptions and behavior at a single point in time. As a result, changes in investment behavior and psychological conditions over time could not be examined. Third, the model focused primarily on Digital Financial Literacy and Financial Anxiety, while other potentially relevant factors affecting investment decisions were not included in the analysis.

Future research is recommended to expand the scope of the study by involving investors from different regions and increasing the sample size to enhance the generalizability of the findings. Researchers may also examine the proposed model across various investment instruments, such as cryptocurrency, mutual funds, and bonds. Furthermore, future studies should consider incorporating additional behavioral and psychological variables, including risk tolerance, financial self-efficacy, overconfidence, fear of missing out (FOMO), and investment experience, to provide a more comprehensive understanding of investment decision-making in the digital era. Longitudinal research designs are also recommended to better capture the dynamic relationship between digital financial literacy, psychological factors, and investment decisions over time.

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