

Determinants of Stock Investment Decisions Among Indonesian University Students: Examining the Role of Peer Influence and Financial Literacy Through the Mediating Effect of Risk Tolerance

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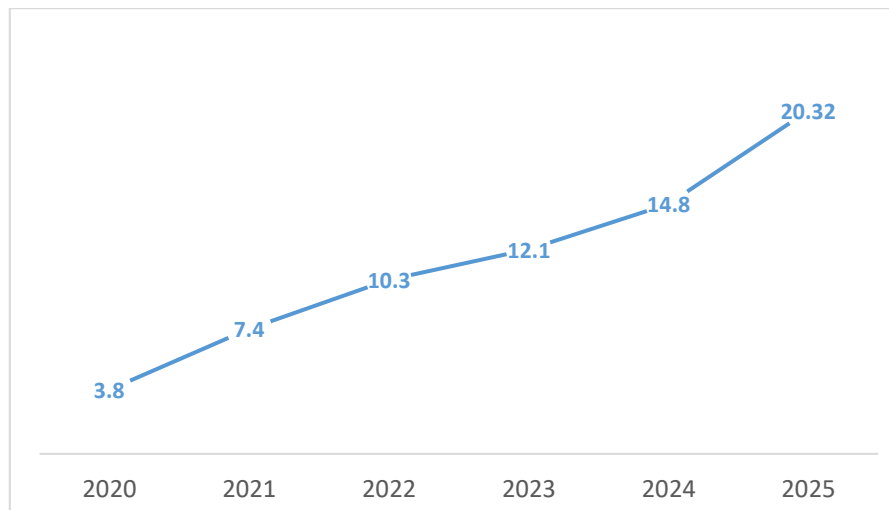
Abstract

The purpose of this study is to analyze the determinants of stock investment decisions among undergraduate students in Indonesia, with risk tolerance serving as a mediating variable. Despite the exponential growth of young investors reaching 20.32 million Single Investor Identification (SID) by 2025, with more than 52% under the age of 30 the quality of investment decision-making among this cohort remains underexplored, particularly with respect to the psychological mechanisms that bridge cognitive and social influences. Using a quantitative associative-causal design, data were collected from 141 active undergraduate students who hold verified securities accounts and actively trade stocks, selected through purposive sampling. Structural Equation Modeling with Partial Least Squares (SEM-PLS) was employed for analysis. The findings reveal that financial literacy exerts a strong direct positive effect on stock investment decisions and on risk tolerance. Peer influence demonstrates no direct effect on investment decisions, but exerts a significant indirect effect fully mediated by risk tolerance (full mediation). Risk tolerance itself is a significant determinant of investment decisions, and partially mediates the relationship between financial literacy and investment decisions (complementary mediation). These results confirm that investment decisions among students are the product of a complex integration of cognitive, social, and psychological factors. The study contributes theoretically by integrating Theory of Planned Behavior, Financial Socialization Theory, and Prospect Theory into a unified behavioral finance model for young investors.

INTRODUCTION

The dynamics of the Indonesian capital market over the past five years reflect a structural transformation that is not only economic in dimension, but also sociological in nature. The Indonesian capital market has undergone a profound demographic transformation over the past decade, marked by an unprecedented acceleration in investor participation. The Indonesian Central Securities Depository (Kustodian Sentral Efek Indonesia/KSEI) recorded that the total number of investors reached 20.32 million Single Investor Identification (SID) in 2025, a figure that represents a compound annual growth rate exceeding 37% from the end of 2024. This remarkable growth is inseparable from the proliferation of fintech-based securities platforms (Nihaya et al., 2024), the institutionalization of investment galleries in higher education institutions, and campus-based capital market communities that have substantially lowered entry barriers to stock investment. Furthermore, more than 52.59% of all investors belong to the under-30 age group, predominantly comprising Generation Z and Millennials. This condition demonstrates that university students play a significant role in the growth of the national investor base (Ipotnews, 2025; Kurnijanto et al., 2025). These developments also reflect a demographic shift within the Indonesian capital market, as illustrated in the following figure

Figure 1. Growth of Capital Market Investors in Indonesia



(Source: Data processed from KSEI, 2026)

As depicted in Figure 1, the investor base of the Indonesian capital market expanded more than fivefold, from 3.8 million SID in 2020 to 20.32 million SID by mid 2025. The most significant growth occurred during the 2024–2025 period, indicating that the momentum of investor growth has been accelerating in the most recent short-term interval. This dramatic quantitative surge underscores the academic urgency to critically examine whether such rapid expansion in participation has been accompanied by a commensurate improvement in the quality of investment decision-making or whether, conversely, growth in numbers alone does not guarantee behavioral maturity among young investors (Kurnijanto et al., 2025). Nevertheless, behind this remarkable increase in investor participation, a more substantive concern persists regarding the quality of investment decisions. Several indicators point to structural anomalies, including low average invested capital and fluctuating trends in new account openings during certain periods ((Anggarani, 2024; Sembel et al., 2024). This raises the question of whether the growing participation of young investors is genuinely grounded in adequate financial literacy and rational risk tolerance, or whether it is instead more strongly driven by social pressure from peer networks amid increasingly pervasive digitalization(Gudmunson & Danes, 2011; Malhotra & Baag, 2023).

Investment decisions are fundamentally strategic policies through which individuals allocate their financial resources to particular instruments in anticipation of future returns (Wulansari et al., 2024). For university students, investment decisions are not merely about pursuing financial independence; they also serve as a practical implementation of the economic and financial knowledge acquired through the learning process (Hidayat & Hartono, 2022). However, the dynamic and uncertainty-laden nature of capital markets renders young investors susceptible to behavioral biases and decision-making errors (Zoelva et al., 2024). From a behavioral finance perspective, stock investment decisions are not exclusively determined by cognitive rationality through fundamental and technical analysis; they are also shaped by psychological factors and the social environment of the investor (Briston & Liversidge, 1979; Dixit & Pindyck, 1994).

In the context of university students, the social environment particularly peers constitutes one of the more dominant influencing factors. Social interactions through investment discussions, the exchange of experiences, and stock recommendations frequently shape students' perceptions and convictions regarding investment decisions. Peer influence operates through mechanisms of information dissemination, communication intensity, and social learning processes within peer networks (Malhotra & Baag, 2023; Saputri & Mardaleta, 2025). The Financial Socialization Theory proposed by Gudmunson dan Danes (2011) provides a theoretical foundation for this phenomenon, asserting that individuals' financial behavior is significantly shaped through socialization agents within their immediate environment.

Beyond social factors, the quality of investment decisions is also influenced by the cognitive factor of financial literacy (Oktaryani & Manan, 2020). Individuals with higher levels of financial literacy tend to be more capable of understanding the risk-return relationship, evaluating investment information, and making more rational decisions (Lusardi et al., 2014; Rooij et al., 2024). In the context of Indonesian university students, a number of studies have likewise found that financial literacy exerts a positive influence on the quality of stock investment decisions (Anggarani, 2024; Kulintang & Putri, 2024; Pitoy, 2025; Setiawan et al., 2025). However, several prior studies continue to yield inconsistent results. Handini (2024) and Raya et al. (2023), for instance, found that financial literacy does not exert a significant direct effect on investment decisions, while Aprayuda and Misra (2020) and Abadi and Annuar (2023) found that peer influence was not proven significant in the context of high-risk instruments such as cryptocurrencies and stocks.

This inconsistency is not merely a matter of differing research contexts; it indicates the presence of an intervening variable that has yet to be fully mapped an internal psychological mechanism that bridges the influence of cognitive and social factors before both manifest as actual investment decisions. It is precisely here that the researchers identify the research gap serving as the theoretical justification for this study. This study positions risk tolerance as a mediating variable that bridges the influence of financial literacy and peer influence on stock investment decisions. Conceptually, risk tolerance reflects an individual's subjective willingness to bear the risk of loss in pursuit of potentially higher returns (Kulintang & Putri, 2024; Wahl & Kirchner, 2020). Within this framework, high financial literacy enables individuals to rationally understand their risk profile, thereby strengthening risk tolerance through the mechanism of perceived behavioral control (Ajzen, 1991); while on the other hand, positive interactions with peers build self-confidence through social learning processes that gradually transform an individual's risk perception (Mumtazah & Anwar, 2022; Rahyuda & Candradewi, 2023). In other words, cognitive and social factors do not operate in a direct and mechanistic manner; rather, they first pass through the psychological filter of risk tolerance before ultimately crystallizing into actual investment behavior.

This study possesses a multidimensional novelty. First, it is among those that explicitly examine the dual mediating role of risk tolerance in the simultaneous relationship between financial literacy and peer influence with stock investment decisions among Indonesian university students within a single unified model. Second, the use of data and context from 2024–2025 ensures that the findings accurately reflect the actual investment behavior of Generation Z as a new actor significantly shaped by a continuously evolving digital ecosystem. Third, this study cohesively and complementarily integrates three major theoretical frameworks: the Theory of Planned Behavior

by Ajzen (1991) to understand how financial literacy forms perceived behavioral control and how peer influence represents subjective norms; the Financial Socialization; Financial Socialization by Theory Gudmunson and Danes (2011) to understand how financial literacy forms perceived behavioral control and how peer influence represents subjective norms; the Financial Socialization Theory by Kahneman and Tversky (1979) to examine how risk tolerance functions as a psychological filter in the face of market uncertainty. Based on these arguments, this study aims to empirically examine the influence of financial literacy and peer influence on students' stock investment decisions, as well as to test the mediating role of risk tolerance in both relationships.

METHODS

This study employs an explanatory quantitative design with a cross-sectional survey approach, which is considered appropriate for simultaneously testing causal relationships among variables at a single point in time. The study population consists of active undergraduate students at Indonesian higher education institutions who have experience investing in stocks on the domestic capital market. Since no national registry specifically identifying student investors is available, the population is classified as unknown, and purposive sampling was applied with two inclusion criteria: (1) enrolled as a full-time active student at an officially recognized Indonesian higher education institution, and (2) possessing documented stock investment activity through a registered securities account.

The sample size was determined through power analysis based on the recommendations of (Hair et al., 2017) for PLS-SEM with two exogenous constructs, a significance level of 1% (0.01), and $R^2 \geq 0.10$, yielding a minimum requirement of 130 respondents. Data collection was conducted via an online questionnaire (Google Forms) distributed through WhatsApp networks during the period of January to March 2026, yielding 141 complete and valid responses. All participants were provided with adequate information regarding the research objectives; participation was voluntary, and respondent anonymity was fully maintained throughout the research process.

The research instrument comprised four reflective constructs. Peer influence was measured using an 8-item five-point Likert scale (1 = strongly disagree; 5 = strongly agree) covering the dimensions of peer knowledge, investment discussion intensity, and adoption of advice and attitudes (Malhotra & Baag, 2023). Financial literacy was measured through two complementary approaches: 6 Likert-scale items to assess subjective perception, covering the dimensions of financial knowledge, behavior, and attitudes (Chen & Volpe, 1998; Lusardi et al., 2014), along with 8 multiple-choice questions to objectively measure financial comprehension, ensuring that the measurement was not solely reliant on respondent self-assessment. Risk tolerance was measured through 8 Likert items representing the dimensions of individual risk propensity, attitude, and capacity (Wahl & Kirchler, 2020). Stock investment decisions were measured using 9 Likert items covering the dimensions of information analysis, purchase execution, and portfolio management (Briston & Liversidge, 1979). All variables were also supplemented with open-ended questions to deepen the contextual understanding of respondents' answers.

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS software in two stages. In the first stage, the measurement model (outer model) was evaluated through outer loadings (> 0.60), Average Variance Extracted (AVE > 0.50), Composite Reliability (CR > 0.70), Cronbach's alpha (> 0.70), and the Heterotrait-Monotrait ratio (HTMT $<$

0.90), following Hair et al. (2020). In the second stage, the structural model (inner model) was evaluated through path coefficients, the coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2). Hypothesis testing was conducted using a bootstrapping procedure with 5,000 resamples at a significance threshold of $p < 0.01$ (Hair et al., 2017). Mediation analysis employed the Sobel test to determine the type of mediation full, partial complementary, or competitive by comparing the significance and direction of the direct and indirect effects (Sobel, 1982).

RESULTS AND DISCUSSION

Respondent Demographic Profile

The following presents the demographic profile of the 141 respondents successfully analyzed in this study, encompassing distributions by gender, age, region, semester, and faculty.

Table 1. Respondent Demographic Profile

Variable	Category	Frequency	Percentage
Gender	Male	67	47.5%
	Female	74	52.5%
Age	< 18 Years	2	1.4%
	18–20 Years	53	37.6%
	21–23 Years	86	61.0%
Region	Western Indonesia	40	28.4%
	Central Indonesia	79	56.0%
	Eastern Indonesia	22	15.6%
Semester	Semester 1–2	13	9.2%
	Semester 3–4	35	24.8%
	Semester 5–6	30	21.3%
	Semester 7–8	59	41.8%
	> Semester 8	4	2.8%
Faculty	Economics and Business	136	96.5%
	Non-Economics	5	3.5%

Source: Primary data processed (2025)

A total of 141 valid responses were successfully analyzed in this study. The majority of respondents fell within the 21–23 age bracket (61.0%) and were predominantly enrolled in their 7th–8th semester (41.8%). This indicates that most respondents are in the early adulthood phase a developmental stage during which individuals begin to develop an orientation toward financial independence, more rational thinking capacities, and a tendency to consider risk and long-term consequences in investment decision making (Santrock, 2012). Furthermore, 96.5% of

respondents came from the Faculty of Economics and Business, suggesting that respondents possess academic exposure to economic, financial, and investment concepts, thereby making their level of financial literacy more relevant for explaining stock investment behavior.

In terms of investment experience, the majority of respondents had been investing for one to two years (48.9%), indicating that respondents are not entirely novice investors but have already acquired foundational experience in capital market activity. Another notable finding is that 78.7% of respondents identified peers as their primary source of investment information, demonstrating that the social environment plays a considerably dominant role in the process of information exchange, perception formation, and investment learning among university students. From the perspective of Financial Socialization Theory, peers function as financial socialization agents capable of influencing how individuals understand and respond to financial decisions (Gudmunson & Danes, 2011). The characteristics of respondents in this study are therefore considered relevant for explaining the relationship between peer networks, financial literacy, risk tolerance, and stock investment decisions among undergraduate students in Indonesia.

Respondent Investor Profile

The following presents the investor profile of the 141 respondents, encompassing distributions by risk level, investment experience, average transaction frequency, information sources, and monthly income.

Table 2. Investor Profile

Variable	Category	Frequency	Percentage
Risk Level	Very Low	9	6.4%
	Low	26	18.4%
	Moderate	68	48.2%
	High	26	28.4%
	Risk Seeker	12	8.5%
Investment Experience	< 1 Year	31	22.0%
	1–2 Years	69	48.9%
	2–3 Years	25	17.7%
	> 3 Years	16	11.3%
Average Transactions (per year)	1–2 Times	33	23.4%
	3–6 Times	65	46.1%
	7–12 Times	12	8.5%
	> 12 Times	31	22.0%
Investment Information Sources	Peers	111	78.7%
	Social Media	73	51.8%
	Family	2	1.4%
	Lecturers	45	31.9%

	Books and Journals	4	2.8%
	Investment Gallery	88	62.4%
	< IDR 500,000	56	39.7%
Monthly Income	IDR 500,000 – IDR 1,000,000	52	36.9%
	> IDR 1,000,000	33	23.4%

Source: Primary data processed (2025)

The investor profile reveals several important findings that reinforce the research context. A large proportion of respondents (78.7%) identified peers as their primary source of investment information, indicating that the social environment plays a dominant role in information exchange and in shaping students' investment behavior. This finding is consistent with Financial Socialization Theory, which posits that interaction with one's immediate environment particularly peers plays a central role in shaping individual financial behavior and decisions (Gudmunson & Danes, 2011). Additionally, the majority of respondents exhibited a moderate-to-high risk profile (76.6%), indicating that student investors generally possess a readiness to manage market uncertainty in pursuit of higher potential returns. This also reflects a characteristic of young investors, who tend to be more risk-tolerant than older age groups (Hallahan et al., 2004).

Another noteworthy finding is that the majority of respondents had monthly incomes below IDR 1,000,000 (76.6%), yet remained actively engaged in investment transactions, with 68.1% of respondents transacting more than three times per year. This condition suggests that financial constraints do not constitute the primary barrier to investment activity and indicates a relatively solid level of investment awareness and understanding among students. The fact that 62.4% of respondents cited investment galleries as an information source, and 31.9% cited lecturers, further illustrates that respondents' investment behavior is not solely driven by social influences but is also reinforced by formal and institutional education. Accordingly, the respondents' investment characteristics reflect the interplay between social influence, financial literacy, and risk tolerance in shaping stock investment decisions among university students.

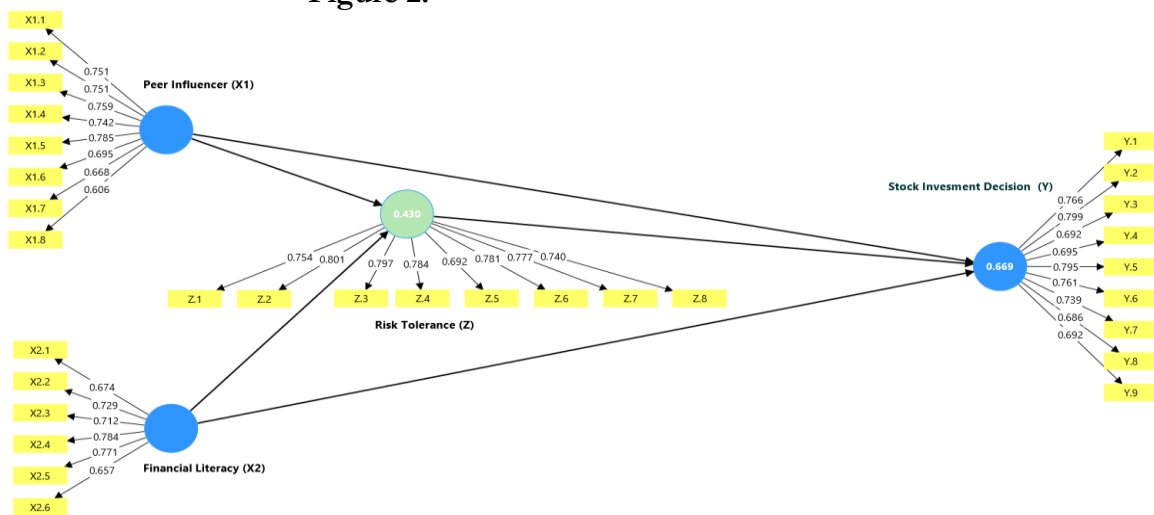
Model Pengukuran (Outer Model)

Within the Partial Least Squares Structural Equation Modeling (PLS-SEM) framework, the measurement model technically referred to as the outer model represents the precise mathematical relationship between unobservable latent variables and their observable measurement indicators. Evaluation of the outer model aims to obtain convincing empirical evidence that the survey instruments used are capable of accurately, consistently, and distinctly measuring the intended theoretical dimensions. Validation at this stage constitutes an essential prerequisite that must be fulfilled before reliable causal structural hypothesis testing can be conducted (Hair et al., 2017).

Validity Testing

Convergent Validity

Figure 2.



Source: SmartPLS Output (2026)

Convergent validity was assessed through outer loadings and the Average Variance Extracted (AVE). A construct is considered to fulfill convergent validity when its outer loading value exceeds 0.60 and its AVE exceeds 0.50, meaning the construct is capable of explaining more than half of the variance in its indicators (Hair et al., 2017). Based on Figure 2, all item indicators have outer loadings > 0.60, confirming that all items are valid. The AVE values are presented in the following table.

Table 3. Average Variance Extracted (AVE)

Variable	AVE
Peer Influence (X1)	0.52
Financial Literacy (X2)	0.52
Risk Tolerance (Z)	0.59
Stock Investment Decision (Y)	0.54

Source: SmartPLS Output (2026).

The AVE test results indicate that all variables in the study have AVE values above 0.50: peer influence at 0.52, financial literacy at 0.52, risk tolerance at 0.59, and stock investment decision at 0.54. These values confirm that each construct satisfies the convergent validity criterion, as each is capable of explaining more than 50% of the variance in its constituent indicators. Accordingly, all variables in this study are declared valid and suitable for use in structural model testing.

Discriminant Validity

Discriminant validity was assessed using the Heterotrait–Monotrait (HTMT) ratio. Two constructs are considered to have adequate discriminant validity when their HTMT value falls below the threshold of 0.90 (Hair et al., 2017).

Table 4. Discriminant Validity – HTMT Ratio

Construct	PI	FL	RT	SID
Peer Influence (PI)	—			
Financial Literacy (FL)	0.525	—		
Risk Tolerance (RT)	0.515	0.715	—	
Stock Investment Decision (SID)	0.447	0.858	0.809	—

Source: SmartPLS Output (2026)

As presented in Table 4, all HTMT values fall below the conservative threshold of 0.90, with the highest inter-construct value found between Financial Literacy and Stock Investment Decision (HTMT = 0.858). These results confirm that adequate discriminant validity has been achieved across all research constructs.

Internal Consistency Reliability

Construct reliability was assessed through two measures: Composite Reliability (CR) and Cronbach's α , with a minimum required value of 0.70 for both (Hair et al., 2020).

Table 5. Reliability Test Results

Construct	Cronbach's α	Composite Reliability (CR)
Peer Influence	0.870	0.896
Financial Literacy	0.816	0.867
Risk Tolerance	0.900	0.919
Stock Investment Decision	0.895	0.914

Source: SmartPLS Output (2026)

Table 5 shows that all constructs have α and CR values > 0.70 , indicating adequate internal consistency. The measurement model is therefore declared to satisfy the validity and reliability requirements acceptable for structural testing.

Structural Model (Inner Model)

Evaluation of the structural model was conducted through examination of the coefficient of determination (R^2) and predictive relevance (Q^2). The R^2 value indicates the proportion of variance in endogenous constructs explained by the exogenous constructs, categorized as weak (< 0.25), moderate (0.25–0.50), and substantial (> 0.50) (Hair et al., 2017). Q^2 values exceeding zero indicate that the model possesses adequate predictive relevance (Hair et al., 2017). Table 6 presents the R^2 and Q^2 values for each endogenous construct in this study.

Table 6. Coefficient of Determination (R^2) and Predictive Relevance (Q^2)

Endogenous Construct	R^2	Q^2
Risk Tolerance	0.430	0.397
Stock Investment Decision	0.669	0.528

Source: SmartPLS Output (2026)

The R^2 value for Stock Investment Decision of 0.669 indicates that Peer Influence, Financial Literacy, and Risk Tolerance collectively explain 66.9% of the variance in students' investment decisions a figure that falls within the substantial category. The R^2 for Risk Tolerance of 0.430 is classified as moderate. The Q^2 values for both variables exceed zero, demonstrating adequate predictive relevance. Financial Literacy exerts a large effect on both endogenous variables, whereas Peer Influence exerts only a small effect on Risk Tolerance and makes no direct contribution to Stock Investment Decisions.

Hypothesis Testing – Direct Effects

Direct effect hypothesis testing was performed using the bootstrapping method with 5,000 resamples. A path is considered significant when the t-statistic exceeds 2.57 and the p-value falls below 0.01 (Hair et al., 2017). Table 7 presents the structural path coefficients along with the decisions to accept or reject each hypothesis.

Table 7. Structural Path Coefficients – Direct Effects

Path Relationship	Original Sample	t-Statistic	p-Value	Decision
Peer Influence → Investment Decision	-0.024	0.431	0.666	Rejected
Peer Influence → Risk Tolerance	0.236	3.132	0.002	Accepted
Financial Literacy → Investment Decision	0.475	6.073	0.000	Accepted
Financial Literacy → Risk Tolerance	0.500	5.637	0.000	Accepted
Risk Tolerance → Investment Decision	0.453	5.231	0.000	Accepted

Source: SmartPLS Output (2026)

H1: Effect of Peer Influence on Stock Investment Decisions

Peer influence does not exert a significant effect on stock investment decisions (original sample = -0.024; $t = 0.431$; $p = 0.666$); therefore, H1 is rejected.

H2: Effect of Peer Influence on Risk Tolerance

Peer influence exerts a positive and significant effect on risk tolerance (original sample = 0.236; $t = 3.132$; $p = 0.002$); therefore, H2 is accepted.

H3: Effect of Financial Literacy on Stock Investment Decisions

Financial literacy exerts a positive and significant effect on stock investment decisions (original sample = 0.475; $t = 6.073$; $p = 0.000$); therefore, H3 is accepted.

H4: Effect of Financial Literacy on Risk Tolerance

Financial literacy exerts a positive and significant effect on risk tolerance (original sample = 0.500; $t = 5.637$; $p = 0.000$); therefore, H4 is accepted.

H5: Effect of Risk Tolerance on Stock Investment Decisions

Risk tolerance exerts a positive and significant effect on stock investment decisions (original sample = 0.453; $t = 5.231$; $p = 0.000$); therefore, H5 is accepted.

Analisis Mediasi

Mediation hypotheses were tested using the Sobel test. A mediation effect is considered significant when the z-statistic exceeds 2.57 and the p-value falls below 0.01 (Sobel, 1982).

Figure 3. Result of Sobel Test Hypothesis 6

Input:		Test statistic:	Std. Error:	p-value:
<i>a</i>	0.236	Sobel test: 2.6631684	0.03854807	0.00774087
<i>b</i>	0.435	Aroian test: 2.62581654	0.03909641	0.00864414
<i>s_a</i>	0.075	Goodman test: 2.70216096	0.03799182	0.00688904
<i>s_b</i>	0.087	Reset all	Calculate	

H6: Mediating Role of Risk Tolerance in the Peer Influence → Investment Decision Relationship

Risk tolerance is confirmed to fully mediate the effect of peer influence on stock investment decisions (z-statistic = 2.663; p-Value = 0.007); therefore, H6 is accepted.

Figure 4. Result of Sobel Test Hypothesis 7

Input:		Test statistic:	Std. Error:	p-value:
<i>a</i>	0.500	Sobel test: 3.73498519	0.05823316	0.00018773
<i>b</i>	0.435	Aroian test: 3.70239971	0.05874568	0.00021357
<i>s_a</i>	0.089	Goodman test: 3.76844647	0.05771609	0.00016427
<i>s_b</i>	0.087	Reset all	Calculate	

H7: Mediating Role of Risk Tolerance in the Financial Literacy → Investment Decision Relationship

Risk tolerance is confirmed to serve as a complementary (partial) mediator of the effect of financial literacy on stock investment decisions (z-statistic = 3.734; p-value = 0.000); therefore, H7 is accepted.

DISCUSSION

Effect of Peer Influence on Stock Investment Decisions

Inferentially, peer influence is not proven to exert a significant effect on stock investment decisions, leading to the rejection of H1. This finding is particularly noteworthy given that, descriptively, the majority of respondents identified peers as their primary source of investment information; however, open-ended responses indicate that such information was used solely as preliminary input and was not directly adopted as the basis for investment decisions. This reveals a discrepancy between the high level of social interaction observed descriptively and the non-significant inferential result, suggesting that respondents still engage in independent cognitive selection and evaluation processes before arriving at an investment decision.

From the perspective of the Theory of Planned Behavior, peers represent subjective norms that do not invariably serve as the primary determinant of behavior, as investment decisions are more significantly influenced by perceived behavioral control that is, individuals' confidence in their own analytical capabilities. Furthermore, the tendency for the influence to lean in a negative direction suggests that, in the context of high-risk instruments such as stocks, unverified information originating from the social environment tends to elicit caution rather than conformity. In accordance with Social Compliance Theory (Cialdini & Goldstein, 2004), when the goal of accuracy supersedes the goal of affiliation, individuals apply a rigorous cognitive filter to the advice

or recommendations of peers who are not perceived as grounding their suggestions in solid analysis. This phenomenon becomes even more pertinent given respondents' characteristics they are in early adulthood and have developed a relatively mature level of investment experience. At this developmental stage, individuals tend to be more independent and rational in their decision-making (Santrock, 2012), and are thus less susceptible to social pressure. Consistent with Aprayuda & Misra (2020), young investors who have accumulated experience in the capital market tend to rely more on self-reliance than on following the tide of group opinion.

This finding is consistent with the research of Megananda & Sutrisno (2024) and Abadi & Annuar (2023), who found that subjective norms can exert a negative or non-significant effect on investment intentions, particularly in the context of high-risk instruments when the social environment holds poorly calibrated risk perceptions. It can therefore be concluded that peer influence in this study does not operate at the level of direct investment decision-making but rather operates through a deeper psychological mechanism namely, the formation of risk tolerance. The outcome of H1 theoretically reinforces the argument that, in the context of high-risk instruments, subjective norms within the TPB framework require a psychological mediating variable for their influence to manifest as actual investment behavior.

Effect of Peer Influence on Risk Tolerance

Peer influence is confirmed to exert a positive and significant effect on risk tolerance, supporting H2. Financial Socialization Theory (Gudmunson & Danes, 2011) explains that peers function as financial socialization agents who transmit experiences and perspectives regarding risk. Through intensive investment discussions, students come to understand risk not merely as a potential loss but also as an inherent part of opportunity a process corroborated by respondents' open-ended answers, which reported the intensity of stock-related discussions among friends, ranging from sharing strategies to directly confronting market fluctuations. This is further reinforced by Prospect Theory (Kahneman & Tversky, 1979), which asserts that risk perception is subjective and heavily influenced by social reference points.

This finding is consistent with the research of Rahman et al. (2023) and Safitri et al. (2025) who demonstrated that individuals actively engaged in social environments tend to possess higher risk tolerance as a result of vicarious learning from the experiences of others. Aren and Zengin, (2016) similarly confirmed that social factors influence individuals' risk preferences. Accordingly, peer influence is proven to gradually shape students' perceptions and readiness to confront investment risk through the process of financial socialization.

Effect of Financial Literacy on Stock Investment Decisions

Financial literacy is confirmed to exert a positive and significant effect on stock investment decisions, supporting H3. Objective measurement through multiple-choice questions revealed that the majority of respondents were able to correctly answer technical and conceptual financial questions covering topics such as the risk-return relationship, inflation, compound interest, margin trading, and the legal standing of investors. The indicators with the highest correct-answer rates were the understanding of investor legal standing (94%) and margin trading mechanisms (90%). Moreover, the majority of respondents achieved very high overall scores, demonstrating that their

financial literacy is not merely perceptual but is supported by genuinely measurable cognitive competence.

This finding is reinforced by respondents' open-ended answers, which revealed that they actively analyze company financial statements, compare stock alternatives, and implement portfolio monitoring and cut-loss strategies prior to making investment decisions. Within the framework of the Theory of Planned Behavior Ajzen (1991) financial literacy shapes attitude toward behavior and enhances perceived behavioral control, thereby fostering more rational and deliberate investment decisions. These results are consistent with the findings of Lusardi et al. (2014), Rooij et al. (2024), Anggarani (2024), Kulintang dan Putri (2024), and Setiawan et al. (2025) all of whom found that financial literacy constitutes a positive influence and a strong predictor of investment decision quality. This study is further supported by Oktaryani dan Manan (2020), who identified financial literacy as the single most influential factor among individuals in the city of Mataram.

Effect of Financial Literacy on Risk Tolerance

Financial literacy is confirmed to exert a positive and significant effect on risk tolerance, supporting H4. Objective measurement via multiple choice questions showed that the majority of respondents were able to comprehend financial concepts related to investment risk such as the risk-return relationship, diversification, margin trading, and stock market mechanisms with correct-answer rates predominantly exceeding 80%. Furthermore, the distribution of financial literacy scores showed a dominance of the "well literate" category, indicating that respondents' financial literacy is not merely perceptual but is also supported by objectively measurable cognitive ability (Financial Services Authority, 2017). This is further affirmed by open-ended responses, which revealed that the majority of students understand risk as an integral part of the high-risk-high-return principle and are capable of calibrating their risk levels in accordance with their financial circumstances and individual investment objectives.

Theoretically, financial literacy enhances perceived behavioral control within the Theory of Planned Behavior Ajzen (1991), such that risk is no longer perceived as a frightening uncertainty but rather as something that can be rationally analyzed and managed. Additionally, Prospect Theory (Kahneman & Tversky, 1979) posits that individuals with higher financial literacy tend to be better equipped to mitigate loss aversion bias and to evaluate potential gains and losses more objectively. When considered in light of respondents' characteristics the majority of whom fall within the 21–23 age range, are enrolled in their 7th–8th semester, and have accumulated one to two years of investment experience with a fairly active transaction frequency it becomes evident that these respondents possess not only theoretical understanding but also empirical exposure to market fluctuations, thereby cultivating a more rational and adaptive risk tolerance. This finding is consistent with the research of Grable et al. (2026), Lusardi et al. (2014), Rooij et al. (2024), and Setiawan et al. (2025) all of whom found that financial literacy exerts a positive influence and plays an important role in enhancing risk tolerance among individuals, particularly young investors.

Effect of Risk Tolerance on Stock Investment Decisions

Risk tolerance is confirmed to exert a positive and significant effect on stock investment decisions, supporting H5. Prospect Theory (Kahneman & Tversky, 1979) explains that individuals

with high risk tolerance exhibit lower levels of loss aversion and are thus capable of making rational investment decisions even under conditions of market uncertainty. This finding is reinforced by respondents' open-ended answers, which expressed a willingness to accept higher risk in exchange for greater returns, provided that such risk remains within manageable boundaries. This confirms that high risk tolerance does not encourage speculative behavior; rather, it strengthens the consistency and quality of decision-making, as evidenced by respondents' tendency to continue conducting analyses, diversifying their portfolios, and actively monitoring their holdings.

These results are consistent with prior studies that found significant positive effects of risk tolerance on investment decisions (Anggarani, 2024; Hendarto et al., 2021; Kulintang & Putri, 2024; Pitoi, 2025; Setiawan et al., 2025). Risk tolerance is therefore confirmed as a pivotal psychological factor that translates knowledge and risk perception into actual, rational investment behavior.

Risk Tolerance Mediates the Effect of Peer Influence on Stock Investment Decisions

The Sobel test results confirm that risk tolerance fully mediates the effect of peer influence on stock investment decisions, supporting H6. This full mediation pattern is consistent with the non-significant direct effect of peer influence on investment decisions (H1), yet the indirect path through risk tolerance proves significant. The integration of Financial Socialization Theory (Gudmunson & Danes, 2011) and Prospect Theory (Kahneman & Tversky, 1979) explains this mechanism: social influence from peers shapes risk perception through the process of financial socialization, which subsequently elevates risk tolerance as a psychological filter before ultimately manifesting as actual investment decisions.

This finding is in line with the research of Safitri et al. (2025) who found that social interaction influences investment decisions through risk tolerance, as well as Yuliani and Nurwulandari (2023) and Gupta et al. (2024) who demonstrated the mediating role of risk tolerance in the relationship between social factors and investment decisions. Peer influence therefore does not operate directly at the level of decision-making but functions through the formation of individuals' psychological courage and readiness to confront risk.

Risk Tolerance Mediates the Effect of Peer Influence on Stock Investment Decisions

The Sobel test results confirm that risk tolerance serves as a complementary (partial) mediator of the effect of financial literacy on stock investment decisions, supporting H7. This partial mediation pattern indicates that financial literacy influences investment decisions through two simultaneous pathways: directly, through the formation of rational attitudes and behavioral control (Ajzen, 1991), and indirectly, through the enhancement of risk tolerance. Prospect Theory (Kahneman & Tversky, 1979) clarifies the mechanism underlying the indirect pathway: higher financial literacy mitigates loss aversion bias, fosters a more rational risk perception, and ultimately elevates risk tolerance as a catalyst for investment decisions.

This finding is supported by the research of Hendarto et al. (2021) and Setiawan et al. (2025), who confirmed the positive influence of financial literacy and risk tolerance on investment decisions, as well as by Yuliani and Nurwulandari (2023) and Gupta et al. (2024), who demonstrated the mediating role of risk tolerance in this relationship. Taken together, these findings affirm that financial literacy does not operate exclusively at the cognitive level but also

cultivates individuals' psychological readiness through risk tolerance, thereby generating investment decisions of higher quality, greater consistency, and a longer-term orientation.

CONCLUSION

This study demonstrates that financial literacy constitutes the primary cognitive determinant exerting both direct and indirect effects on stock investment decisions, with risk tolerance serving as a partial mediator. By contrast, peer influence does not operate directly but must pass through risk tolerance as a full mediator. Theoretically, this study extends the Theory of Planned Behavior Ajzen (1991) by demonstrating that subjective norms in the context of high-risk instruments do not invariably function as direct behavioral determinants but instead operate through the psychological filter of risk tolerance. Furthermore, the integration of Prospect Theory Kahneman dan Tversky (1979) and Financial Socialization Theory Gudmunson and Danes (2011) reveals that students' investment decisions are the product of an interaction among cognitive capacity, social influence, and psychological readiness. Nevertheless, this study remains limited by its cross-sectional design and does not account for other factors that may be more dominant than peer influence such as financial self-efficacy, overconfidence bias, financial behavior, and market sentiment. Future research is therefore recommended to develop a more comprehensive model by incorporating these psychological and behavioral variables and to employ longitudinal or mixed-methods approaches for a more in-depth understanding of the dynamics underlying investment decision-making.

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