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What Drives Retail Investors' Decisions in the Indonesian Market? Understanding the Role of Cognitive and Social Biases

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ABSTRACT

Purpose: This study examines the effects of representativeness bias, availability bias, and herding behavior on retail investors' investment decisions in Indonesia. It also investigates whether internal locus of control moderates the relationship between behavioral biases and investment decisions.

Method: A quantitative survey approach was employed using data from 302 active retail investors in the Indonesian capital market, selected through purposive sampling. Data were collected using a structured questionnaire with a five-point Likert scale and analyzed using Structural Equation Modeling with the Partial Least Squares (SEM-PLS) technique.

Result: The results indicate that representativeness bias, availability bias, and herding behavior have positive and significant effects on retail investors' investment decisions, suggesting that decisions are largely driven by heuristic judgments and social influence rather than purely rational evaluation. However, internal locus of control does not significantly moderate the relationships between behavioral biases and investment decisions, suggesting that individual psychological control does not automatically function as a debiasing mechanism in highly digitalized and socially influenced investment environments.

Practical Implications for Economic Growth and Development: The results highlight the importance of behavioral-based financial education that emphasizes bias awareness to improve decision-making quality, promote more efficient capital allocation, and enhance capital market stability.

Originality/Value: This study contributes to behavioral finance literature by integrating cognitive and social biases with internal locus of control as a moderator in an emerging market context.

Keywords: *Behavioral Finance, Cognitive Bias, Herding Behavior, Internal Locus of Control, Investment Decisions*

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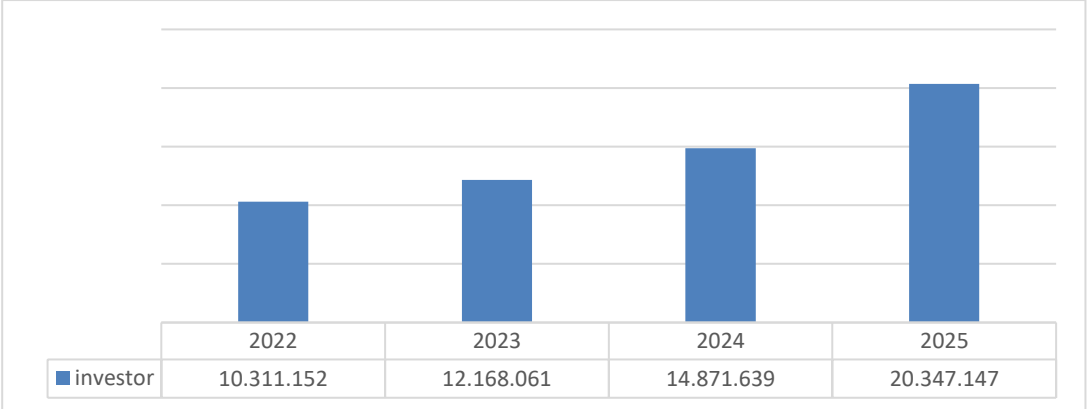
INTRODUCTION

The stock market is widely recognized as a crucial indicator of a country's economic stability. In recent years, Indonesia's capital market has experienced rapid growth, driven by the increasing participation of retail investors. As illustrated in Figure 1, the number of registered capital market investors rose sharply from 2022 to 2025, reaching 20,347,147 investors by December 2025. Data from the Indonesian Central Securities Depository further indicate that individual investors are predominantly male (63.44%) and largely under the age of 30 (54.24%), underscoring the growing dominance of young retail investors in the Indonesian capital market (Kustodian Sentral Efek Indonesia, 2025).

Figure 1. Growth of Capital Market Investors in Indonesia



Source: www.ksei.co.id (2026)

While this expansion reflects broader access to financial markets, it also coincides with persistent stock price volatility where market movements do not always align with firms' fundamental values. Classical financial theory, particularly the Efficient Market Hypothesis, assumes that investors behave rationally and that asset prices fully reflect available information (Fama, 1970). However, extensive empirical evidence suggests that investment decisions are frequently shaped by psychological and social influences, leading to systematic deviations from rational behavior (Thaler, 1999).

A substantial body of empirical research demonstrates that behavioral biases significantly influence retail investors decision making. In the Indonesian context, representativeness bias has been found to positively affect investment decisions as investors tend to extrapolate past performance patterns when evaluating stocks (Taufik et al., 2024). Similarly, availability bias leads investors to rely disproportionately on easily accessible or frequently encountered information rather than conducting comprehensive analysis (Maiziyah & Helmayunita, 2024). Beyond individual cognitive biases, herding behavior is also prevalent, particularly among young retail investors who tend to follow collective market trends under conditions of uncertainty (Ramdani, 2018). Although these studies provide strong evidence regarding the direct effects of behavioral biases, they largely overlook how internal psychological characteristics shape investors capacity to respond to such biases, leaving an important theoretical question insufficiently explored.

This study addresses a critical theoretical gap in the behavioral finance literature by explicitly challenging the dominant assumption that internal locus of control functions as a rational debiasing mechanism in investment decision making. Prior studies generally treat internal locus of control as an indicator of effective self-regulation, suggesting that investors who believe outcomes are determined by their own actions are better able to mitigate cognitive and social biases (Ikram, 2016). However, in highly digitalized and socially driven investment environments characterized by information overload and strong peer influence, this

assumption becomes theoretically questionable (Shahrzadi et al., 2024). Rather than enhancing rational control, a strong internal locus of control may foster illusory control, leading investors to overestimate their decision-making ability while remaining susceptible to representativeness bias, availability bias, and herding behavior. By positioning internal locus of control as a theoretically contested construct and empirically testing its moderating role within an emerging market context, this study offers novel insight into the limitations of internal psychological control in moderating behavioral biases and extends behavioral finance literature beyond the conventional debiasing framework.

Based on these theoretical considerations, this study aims to analyze the effects of representativeness bias, availability bias, and herding behavior on the investment decisions of retail investors in Indonesia. In addition, this study seeks to examine whether internal locus of control moderates the relationship between cognitive and social behavioral biases and investment decision making. By integrating cognitive, social, and psychological dimensions within a unified empirical framework, this study provides deeper insight into investor behavior in emerging markets and highlights the potential ineffectiveness of internal psychological control as a debiasing mechanism in highly digitalized and socially influenced investment environments.

Hypotheses Development

Representativeness Bias and Investment Decisions

In behavioral finance, investors frequently rely on heuristics due to the limitations of cognitive capacity when processing complex market information, leading to decisions that deviate from full rationality (Thaler, 1999). According to heuristic judgment theory, representativeness bias occurs when investors assess investment prospects by comparing them to familiar patterns or past performance, rather than evaluating objective probabilities (Tversky & Kahneman, 1974). This cognitive shortcut results in an overemphasis on prominent historical trends while neglecting changes in underlying fundamentals, leading investors to mistakenly perceive past performance as a reliable indicator of future outcomes (Barberis et al., 1998). Consequently, investment decisions are more influenced by intuitive pattern recognition and perceived similarity than by deliberate, analytical evaluation. This increases the likelihood of irrational investment decisions. Based on this, the first hypothesis is proposed as follows:

H1: There is a significant positive relationship between representativeness bias and investment decisions.

Availability Bias and Investment Decisions

Availability bias arises when investors assign greater importance to information that is easily recalled or frequently encountered, rather than evaluating all relevant information comprehensively, as explained by heuristic judgment theory (Tversky & Kahneman, 1974). In modern capital markets, characterized by rapid information flows and the dominance of digital media, investors often prioritize recent news, popular stocks, and widely discussed information, leading to faster but less analytical decision-making (Barberis & Thaler, 2003). Psychologically, easily accessible information creates a sense of familiarity and perceived relevance, which increases its subjective weight in the decision-making process (Ahmad et al., 2025). As a result, investors reduce cognitive effort by relying on salient cues rather than conducting thorough fundamental analysis, which heightens the tendency to make irrational investment decisions. Based on this, the second hypothesis is formulated as follows:

H2: There is a significant positive relationship between availability bias and investment decisions.

Herding Behavior and Investment Decisions

Herding behavior reflects investors' tendency to imitate the actions of other market participants when facing uncertainty and limited information, with individual judgment perceived as less reliable than collective behavior (Bakar & Yi, 2016). Psychologically, this behavior operates through the mechanism of social proof, where individuals interpret the actions of the majority as a safe and appropriate reference for decision-making under ambiguity (Cialdini, 2001). In investment contexts, observing widespread participation in certain stocks generates perceived consensus and informational conformity, leading investors to believe that collective decisions are more accurate than personal analysis (Bikhchandani & Sharma, 2001). As a result, investors rely more on market trends and social signals than on independent evaluation, which increases the tendency to make irrational investment decisions. Based on this, the third hypothesis is formulated as follows:

H3: There is a significant positive relationship between herding behavior and investment decisions.

Moderating Role of Internal Locus of Control: Representativeness Bias on Investment Decisions

Locus of control theory posits that individuals with a strong internal locus of control believe that outcomes are primarily determined by their own abilities and efforts (Rotter, 1966). While internal locus of control is commonly associated with rational self-regulation, its ability to mitigate behavioral biases remains theoretically debatable. In highly uncertain and information-intensive investment environments, a strong sense of personal control may instead foster illusory control, where investors overestimate their ability to predict and manage outcomes (Atikah & Kurniawan, 2020). Psychologically, this condition encourages excessive confidence in personal judgment and past experiences, leading investors to rely more heavily on historical performance patterns when evaluating investment opportunities (Ariani et al., 2015). Since prior success is cognitively interpreted as confirmation of superior personal skill, internal locus of control may reinforce, rather than weaken, the influence of representativeness bias, thereby intensifying intuition-driven investment decisions. Based on this, the fourth hypothesis is formulated as follows:

H4: Internal locus of control moderates the effect of representativeness bias on investment decisions.

Moderating Role of Internal Locus of Control: Availability Bias on Investment Decisions

Investors with a high internal locus of control believe that investment outcomes are largely determined by their own decisions and actions (Rotter, 1966). While this belief is often associated with proactive behavior, in information-intensive investment environments, it may foster illusory control, where investors overestimate their ability to process and interpret market information. Psychologically, this perceived control can increase investors' confidence in responding quickly to readily available or salient information, such as trending news or frequently discussed stocks (Mardiana et al., 2025). Under conditions of information overload, an internal locus of control may therefore reduce cognitive caution and reinforce availability bias, as investors feel capable of making accurate judgments without engaging in extensive analytical evaluation (Lather et al., 2020). As a result, internal locus of control may strengthen, rather than mitigate, the influence of availability bias on investment decision-making. Based on this, the next hypothesis is formulated as follows:

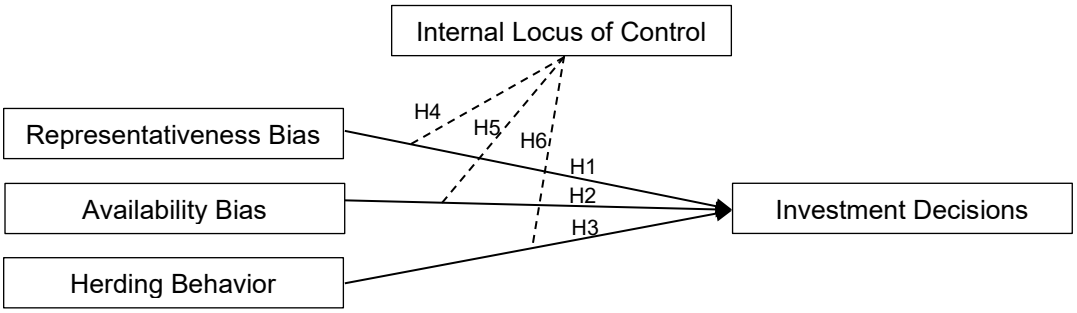
H5: Internal locus of control moderates the effect of availability bias on investment decisions.

Moderating Role of Internal Locus of Control: Herding Behavior on Investment Decisions

From a behavioral finance perspective, internal locus of control reflects an individual's belief that outcomes are primarily shaped by personal judgment and effort (Rotter, 1966). However, under conditions of uncertainty, individuals tend to rely on social proof, perceiving majority behavior as the safest and most valid reference for decision-making (Cialdini, 2001). In such contexts, investors with a strong internal locus of control may cognitively reconcile herding behavior as a rational strategy aligned with their own judgment, rather than as passive conformity. Psychologically, market consensus is interpreted as informational validation that supports personal decision-making, allowing social influence to reinforce, rather than contradict, perceived personal control (Kengatharan & Navaneethakrishnan, 2014). This cognitive reframing enables social signals to legitimize individual decisions rather than challenge them, reinforcing reliance on collective trends (Bikhchandani & Sharma, 2001). Consequently, internal locus of control may amplify, rather than reduce, the influence of herding behavior on investment decision-making. Based on this, the sixth hypothesis is formulated as follows:

H6: Internal locus of control moderates the effect of herding behavior on investment decisions.

Figure 2. Research Framework



Source: Developed by the authors (2025)

METHOD

This study employs a quantitative research design with an explanatory approach to examine the effects of cognitive and social biases on retail investors' investment decisions, as well as the moderating role of internal locus of control. Primary data were collected through a structured questionnaire using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The sample consisted of 302 active retail investors in the Indonesian stock market, selected through purposive sampling. Data were gathered online through Stockbit Stream and stock-related Telegram groups. Stockbit was chosen as the primary data collection platform due to its position as one of the largest securities applications in Indonesia, with a high concentration of retail investors (Investing.com, 2025). This sampling strategy intentionally targets digitally active and predominantly young retail investors, a segment highly exposed to social interaction, information overload, and heuristic-based decision-making, which aligns with the behavioral focus of this study.

The collected data were analyzed using Structural Equation Modeling with the Partial Least Squares approach (SEM-PLS), assisted by SmartPLS 4 software. The analysis was conducted in several stages: first, the measurement model was evaluated through validity and reliability testing, followed by an assessment of the structural model using R-squared values and hypothesis testing based on path coefficient significance. Moderation analysis was performed to examine the role of internal locus of control in influencing the relationship between behavioral biases and investment decisions. SEM-PLS was chosen due to its

suitability for predictive research models and its ability to handle complex relationships among latent variables.

Table 1. Operational Variables

Variables	Codes	Statements	Source
Representativeness Bias (RB)	RB1	I consider past stock performance before deciding to invest.	Rasheed et al. (2018)
	RB2	I believe that analyzing past performance can help predict future stock values.	
	RB3	I avoid investing in stocks that have a history of poor earnings.	
	RB4	I buy popular stocks that have recently provided high returns and avoid stocks that have performed poorly in the near term.	
	RB5	I use trend analysis in making investment decisions.	
	RB6	I use the trends of specific stocks to make decisions regarding other stocks.	
Availability Bias (AB)	AB1	I tend to sell stocks when the market index is declining.	Rasheed et al. (2018)
	AB2	I tend to buy stocks when the market index is increasing.	
	AB3	I prefer investing in local stocks because the information is easier for me to obtain.	
	AB4	I consider information from friends or relatives as a reliable reference source for investing.	
	AB5	I am more interested in buying local stocks compared to international stocks.	
Herding Behavior (HB)	HB1	I prefer investing in stocks that are also sought after by my friends or relatives.	Gupta & Shrivastava (2022)
	HB2	I consider the popularity of a company's products or services before investing in its stock.	
	HB3	I follow the market direction when buying or selling stocks.	
	HB4	Recommendations from other investors influence my decisions in buying stocks.	
Internal Locus of Control (ILOC)	ILOC1	Careful investment planning is the primary key to achieving wealth.	Rasheed et al. (2018)
	ILOC2	Investment losses often occur due to one's own negligence.	
	ILOC3	My investment results depend on my ability to make decisions.	
	ILOC4	In the long run, people who manage their investments well will remain wealthy.	
	ILOC5	When I make an investment plan, I am confident that the plan will succeed.	
	ILOC6	I feel that I can determine what will happen to my investments.	
	ILOC7	I am able to protect my investment interests well.	
	ILOC8	When I succeed in investing, it is usually because of my own hard work.	

Variables	Codes	Statements	Source
Investment Decisions (ID)	ID1	In investing, I often rely on my intuition or feelings.	Rasheed et al. (2018)
	ID2	I usually choose investments that feel right to me.	
	ID3	I trust my instincts in making investment decisions.	
	ID4	I prioritize personal conviction over rational analysis in making investment decisions.	
	ID5	I tend to follow my intuition when deciding to invest.	

Source: Compiled by the authors (2025)

RESULT AND DISCUSSION

Demographic Characteristics of Respondents

Table 2 presents the demographic characteristics of the respondents involved in this study. A total of 302 respondents participated, all of whom were confirmed as active retail investors in the Indonesia Stock Exchange, with a 100% response rate obtained from the online questionnaire distribution. The demographic characteristics indicate that the sample was predominantly male, accounting for 68.9%, while female respondents represented 31.1% of the total sample. In terms of age, the largest proportion of respondents were in the 20–24 year age group (42.1%), followed by those aged 25–30 years (25.8%), suggesting that young investors constitute a significant segment of retail market participation in Indonesia.

Regarding educational attainment, most respondents held a bachelor's degree (44%), followed by those with senior high school or equivalent education (40.4%), while respondents with postgraduate qualifications comprised only a small proportion of the sample. In terms of investment experience, the majority had been investing for one to three years (43.4%), with a considerable portion having less than one year of experience, indicating that most participants were in the early to intermediate stages of their investment journey. Additionally, the distribution of monthly income was largely concentrated between IDR 1,000,000 and IDR 3,500,000, reflecting that the respondents were primarily drawn from the low- to middle-income investor segment. This provides a relevant context for examining the behavioral factors and investment decision-making of retail investors in Indonesia.

Table 2. Demographic Characteristics of Respondents

Characteristics	Category	Frequency (n)	Percentage (%)
Age	< 20 years	31	10.3%
	20 – 24 years	127	42.1%
	25 – 30 years	78	25.8%
	> 30 years	66	21.9%
Gender	Male	208	68.9%
	Female	94	31.1%
Educational Background	Senior High School	122	40.4%
	Diploma	33	10.9%
	Bachelor's Degree	133	44%
	Postgraduate (Master's and Doctoral)	14	4.6%
Investment Duration	< 1 Years	100	33.1%
	1 – 3 Years	131	43.4%
	4 – 6 Years	54	17.9%
	> 6 Years	17	5.6%
Income	< IDR 1,000,000	25	8.3%

Characteristics	Category	Frequency (n)	Percentage (%)
	IDR 1,000,000 – IDR 2,500,000	89	29.5%
	IDR 2,500,000 – IDR 3,500,000	75	24.8%
	IDR 3,500,000 – IDR 5,000,000	47	15.6%
	IDR 5,000,000 – IDR 10,000,000	44	14.9%
	> IDR 10,000,000	21	7%

Source: Processed data (2025)

Outer Loading

The first step in evaluating the reflective measurement model is to assess indicator reliability through outer loadings. Outer loadings indicate the extent to which an indicator's variance is explained by its underlying construct, with values above 0.708 generally recommended to ensure adequate indicator reliability (Hair et al., 2022). Indicators with loadings between 0.40 and 0.70 do not necessarily need to be eliminated and should only be considered for removal if their exclusion leads to a meaningful improvement in composite reliability or Average Variance Extracted (AVE) (Hair et al., 2022).

Based on the outer loading results presented in Table 3, two indicators—HB3 from the herding behavior construct and ILOC1 from the internal locus of control construct—exhibited loading values below the recommended threshold of 0.708. However, both indicators remained within the acceptable range of 0.40 to 0.70. Further evaluation revealed that the composite reliability and AVE values for both herding behavior and internal locus of control met the recommended criteria, even with the inclusion of these indicators. Therefore, HB3 and ILOC1 were retained in the measurement model to preserve content validity and ensure comprehensive representation of the constructs' conceptual dimensions.

Table 3. Outer Loading

Construct	Indicator	Outer Loading
Representativeness Bias	RB1	0.814
	RB2	0.784
	RB3	0.778
	RB4	0.856
	RB5	0.831
	RB6	0.769
Availability Bias	AB1	0.817
	AB2	0.797
	AB3	0.762
	AB4	0.821
	AB5	0.714
Herding Behavior	HB1	0.811
	HB2	0.781
	HB3	0.594
	HB4	0.821
Internal Locus of Control	ILOC1	0.667
	ILOC2	0.706
	ILOC3	0.726
	ILOC4	0.750
	ILOC5	0.819
	ILOC6	0.762
	ILOC7	0.826
	ILOC8	0.714
Investment Decisions	ID1	0.759

Construct	Indicator	Outer Loading
	ID2	0.739
	ID3	0.799
	ID4	0.814
	ID5	0.876

Source: Processed data (2025)

Reliability and Validity of Constructs

Convergent validity was assessed to evaluate the extent to which indicators of a construct share a high proportion of variance, using the Average Variance Extracted (AVE) as the primary metric. A construct is considered to demonstrate adequate convergent validity when the AVE value exceeds 0.50, indicating that more than half of the variance of the indicators is explained by the latent construct (Hair et al., 2022). As presented in Table 4, the AVE values for all constructs met the recommended threshold prior to any indicator elimination. Specifically, the herding behavior construct achieved an AVE value of 0.574, while internal locus of control recorded an AVE of 0.638. These results indicate that the measurement model satisfies the criteria for convergent validity, as all constructs demonstrated sufficient explanatory power over their respective indicators.

Reliability testing was conducted to ensure the internal consistency of the indicators measuring each construct, using Cronbach's Alpha and Composite Reliability as evaluation criteria. A construct is considered reliable when both reliability coefficients exceed the minimum threshold of 0.70, with values between 0.70 and 0.90 regarded as satisfactory for advanced research (Hair et al., 2022). The results shown in Table 4 reveal that all constructs exhibited Cronbach's Alpha values above the recommended minimum level, indicating acceptable internal consistency. Furthermore, the Composite Reliability values across all constructs were also within acceptable ranges, confirming the stability and reliability of the measurement model. Therefore, all constructs in this study met the required reliability criteria and were deemed suitable for subsequent structural model analysis.

Table 4. Reliability and Validity Test Result

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
RB	0.891	0.896	0.647
AB	0.841	0.848	0.614
HB	0.760	0.798	0.574
ILOC	0.903	0.947	0.638
ID	0.858	0.869	0.559

Source: Processed data (2025)

Discriminant Validity

Discriminant validity was assessed to ensure that each construct in the measurement model is empirically distinct from the other constructs. Following recent methodological recommendations, this study employed the Heterotrait-Monotrait ratio of correlations (HTMT), which is considered more reliable and robust than traditional approaches such as the Fornell–Larcker criterion (Hair et al., 2022). Discriminant validity is deemed satisfactory when HTMT values between constructs are below the threshold of 0.90, or more conservatively below 0.85, indicating adequate separation among latent variables (Hair et al., 2022).

As presented in Table 5, all HTMT values among the constructs were below the recommended maximum threshold. These results indicate that each construct demonstrates sufficient discriminant validity and that no critical issues of construct overlap are present in the model. Therefore, the discriminant validity of the measurement model in this study was successfully established based on the HTMT criterion.

Table 5. HTMT Matrix of Correlations

	RB	AB	HB	ILOC	ID	ILOC x RB	ILOC x AB	ILOC x HB
RB								
AB	0.234							
HB	0.355	0.574						
ILOC	0.355	0.131	0.298					
ID	0.333	0.485	0.448	0.152				
ILOC x RB	0.313	0.198	0.265	0.253	0.119			
ILOC x AB	0.211	0.059	0.142	0.127	0.105	0.357		
ILOC x HB	0.224	0.110	0.210	0.241	0.172	0.441	0.563	

Source: Processed data (2025)

Collinearity Test

Collinearity assessment was conducted to ensure that multicollinearity among predictor variables did not compromise the estimation of the structural model. Multicollinearity occurs when two or more independent variables are highly correlated, potentially biasing path coefficient estimates. The Variance Inflation Factor (VIF) was used to evaluate collinearity, with values recommended to be below 3, or at least lower than 5, to indicate that collinearity is not at a critical level (Hair et al., 2022). As reported in Table 6, all predictor variables exhibited VIF values well below the maximum threshold, indicating no multicollinearity concerns. Specifically, the VIF values for representativeness bias, availability bias, herding behavior, and internal locus of control were 1.258, 1.382, 1.467, and 1.212, respectively. These results confirm that the structural model is free from multicollinearity issues and suitable for subsequent hypothesis testing and structural analysis.

Table 6. Collinearity Test Result

Variable	VIF
RB	1.258
AB	1.382
HB	1.467
ILOC	1.212

Source: Processed data (2025)

R-squared Test

The coefficient of determination (R^2) was assessed to evaluate the explanatory power of the independent variables and the moderating variable in explaining variations in the dependent variable. A higher R^2 value indicates a stronger predictive capability of the model, with values ranging from 0 to 1 (Hair et al., 2022). The results show that the R^2 value for investment decision was 0.26, indicating that representativeness bias, availability bias, herding behavior, and the interaction of internal locus of control jointly explained 26% of the variance in investment decision. According to prior methodological literature, an R^2 value of 0.26 falls within the weak to moderate category, suggesting that the model remains acceptable for behavioral research. The remaining 74% of the variance is explained by other factors not included in the model, such as emotional influences, investment experience, financial literacy, and market conditions, which may play a substantial role in shaping retail investors' decision-making processes.

Table 7. R-squared Test Result

Variable	R-square	R-square Adjusted
Investment Decisions	0.260	0.242

Source: Processed data (2025)

Hypotheses Testing

Hypothesis testing was conducted to evaluate the proposed relationships between behavioral biases, internal locus of control, and investment decisions. As summarized in Table 8, the results reveal that representativeness bias, availability bias, and herding behavior each exert a positive and significant influence on retail investors' investment decisions, thereby supporting H1, H2, and H3. This finding suggests that investment decisions in the retail investor segment are strongly shaped by heuristic-based judgments and social influences, rather than by purely analytical considerations. Among the three biases, availability bias emerges as the most influential factor, indicating that investors are particularly prone to relying on easily accessible, salient, and frequently discussed information when making investment choices. Conversely, the moderating role of internal locus of control is not empirically supported. The interaction effects between internal locus of control and representativeness bias, availability bias, and herding behavior were found to be statistically insignificant. These results imply that a stronger sense of personal control does not meaningfully alter the extent to which behavioral biases influence investment decisions. In other words, internal locus of control neither mitigates nor amplifies the impact of cognitive and social biases in the observed investment context, leading to the rejection of H4, H5, and H6. This outcome suggests that even investors who perceive themselves as having high control over outcomes remain susceptible to heuristic-driven and socially influenced decision-making processes.

Table 8. Hypotheses Testing Result

Path	Original Sample	Sample Mean	Standard Deviation	T statistics	P values	Decision
RB → ID	0.171	0.172	0.060	2.869	0.004	Accepted
AB → ID	0.302	0.301	0.060	5.011	0.000	Accepted
HB → ID	0.176	0.175	0.068	1.017	0.010	Accepted
ILOC x RB → ID	0.087	0.087	0.048	1.811	0.070	Rejected
ILOC x AB → ID	-0.012	-0.013	0.060	0.206	0.837	Rejected
ILOC x HB → ID	-0.069	-0.067	0.062	1.114	0.265	Rejected

Source: Processed data (2025)

Discussion

The positive effect of representativeness bias (H1) indicates that higher representativeness bias increases the tendency of retail investors to make irrational investment decisions by relying heavily on pattern-based inference. Through heuristic representativeness, historical performance is interpreted as a diagnostic signal for future returns, allowing investors to simplify complex decision-making processes while sacrificing probabilistic rigor (Barberis et al., 1998; Tversky & Kahneman, 1974). Importantly, in the context of this study, dominated by young and relatively inexperienced retail investors, this reliance on past patterns does not reflect improved decision quality, but rather reflects a greater tendency to engage in irrational investment decisions driven by familiarity rather than objective evaluation. Consistent with Vijaya (2016), representativeness bias increases action intensity even when decisions deviate from fundamental valuation. In a digitally mediated investment environment, where past winners are prominently displayed through charts, rankings, and platform discussions, historical success becomes highly salient and is easily interpreted as evidence of skill rather than chance. As a result, investors are more inclined to repeat previously successful patterns instead of reassessing changing fundamentals, reinforcing the tendency toward irrational investment decisions observed in this study. While this finding aligns with prior evidence from Maina et al. (2025) and Rasheed et al. (2018), the present results highlight how representativeness bias operates more strongly as a confidence-generating mechanism among young retail investors, echoing the tendency to misattribute past success to personal judgment rather than luck.

The acceptance of the second hypothesis (H2) indicates that availability bias plays a central role in increasing the tendency of retail investors to make irrational investment decisions, as reflected by its strongest effect in the model. This finding suggests that investors in this study operate in a decision environment dominated by information salience rather than analytical depth. When certain stocks are repeatedly exposed through digital platforms, online discussions, or viral news, investors tend to overweight this readily available information and underweight less salient but potentially more informative signals (Tversky & Kahneman, 1974). In the context of digitally active retail investors, easily recalled cues, such as frequently discussed stocks or peer recommendations, become dominant reference points that facilitate faster decisions with lower cognitive effort. From a behavioral finance perspective, this reliance on intuitive judgment reinforces non-deliberative decision making (Thaler, 1999), where the prominence of information substitutes for careful evaluation (İpek & Mandacı, 2025). Consequently, information that is easy to retrieve functions as a practical shortcut for action, helping explain why availability bias emerges as the most influential behavioral factor in this study, consistent with Waweru et al. (2008) and Mamidala et al. (2024). In short, information that is easy to retrieve becomes a practical substitute for costly information processing, often leading investors to rely on simplified judgments rather than rational evaluation.

The acceptance of the third hypothesis (H3) indicates that herding behavior plays a significant role in increasing the tendency of retail investors to make irrational investment decisions in this study. This result suggests that investors are more inclined to rely on collective market behavior as a reference point for action, rather than engaging in independent analytical evaluation. In the context of this research, herding reflects a socially driven decision environment where uncertainty encourages investors to interpret the actions of others as informative and reliable cues. Consistent with social proof theory, individuals tend to perceive an investment decision as more valid when it is widely adopted by others, particularly in situations characterized by ambiguity and limited personal expertise (Cialdini, 2001). For the predominantly young retail investors in this sample, collective behavior functions as a psychological shortcut that reduces perceived risk and responsibility, even though it does not necessarily improve decision quality (Qasim et al., 2019). This context-dependent reliance on group signals helps explain why herding behavior exerts a positive and significant influence on irrational investment decisions in this study, aligning with evidence that investors under volatile conditions prioritize social validation over independent judgment, often at the expense of objective analysis (Abul, 2019; Gupta & Shrivastava, 2022; Thu et al., 2023).

The most theoretically significant outcome of this study is the consistent absence of a moderating effect of internal locus of control on the relationships between behavioral biases and investment decisions (H4–H6). From the perspective of this study, this finding reflects a context-specific limitation of internal psychological control rather than a contradiction of locus of control theory itself. The sample is dominated by young retail investors with relatively short investment experience and moderate income levels, suggesting that internal locus of control may function more as a generalized belief in personal agency than as an effective mechanism of cognitive regulation in investment decision-making. In such conditions, a strong sense of control does not necessarily translate into greater analytical discipline, but may instead foster illusory control, where confidence exceeds actual evaluative capacity (Gino et al., 2011). Consequently, investors tend to interpret past successes, salient information, and collective market signals as confirmation of their own judgment, thereby reinforcing heuristic-based decisions rather than mitigating them (Dangol & Manandhar, 2020).

The Indonesian capital market context further strengthens this interpretation. Retail investors in this study operate within a highly digitalized and socially mediated environment, where information is abundant, rapidly disseminated, and often emotionally framed. Such conditions intensify availability and herding dynamics, leaving limited space for deliberative self-control to operate effectively (Afriani & Halmawati, 2019). Therefore, the non-significant moderation found in this study should be interpreted as evidence that internal locus of control does not automatically function as a debiasing mechanism in fast-moving, socially influenced markets. Instead, in such environments, perceived control may increase the willingness to act on low-

effort cognitive cues rather than enhance resistance to behavioral biases. This finding refines prior literature that treats internal locus of control as uniformly protective (Awalia et al., 2025; Rasheed et al., 2018; Shafna et al., 2024), and highlights its context-dependent role in emerging digital capital markets. Accordingly, the rejection of H4–H6 constitutes a substantive contribution of this study, demonstrating that internal locus of control does not universally operate as a debiasing or reinforcing bias mechanism in emerging, digitally driven capital markets.

CONCLUSION

This paper examines the influence of representativeness bias, availability bias, and herding behavior on retail investors' investment decisions, as well as to assess the moderating role of internal locus of control. The findings demonstrate that cognitive and social biases play a dominant role in shaping retail investment behavior, indicating that decision-making processes in the capital market are largely driven by heuristic mechanisms rather than purely rational evaluation. Importantly, this study finds that internal locus of control does not mitigate the influence of these biases, suggesting that individual beliefs in personal control are insufficient to counteract automatic cognitive processing and social pressures in investment contexts.

From a theoretical perspective, this study contributes to the behavioral finance literature by challenging the conventional assumption that internal locus of control functions as an effective debiasing mechanism. The results indicate that in information-intensive and socially driven market environments, internal control may instead manifest as illusory control, reinforcing confidence in biased judgments rather than promoting rational self-regulation. This finding underscores the contextual nature of psychological traits and highlights the need to integrate environmental and informational factors when explaining investor behavior. Practically, these findings imply that improving investment decision quality cannot rely solely on enhancing investors' self-confidence or sense of personal control. Instead, market participants, regulators, and financial platforms should emphasize structural interventions, such as improving information architecture, reducing noise and salience bias in digital investment platforms, and designing decision-support tools that encourage analytical evaluation rather than intuitive reactions. Investor education initiatives may also benefit from incorporating behavioral awareness and debiasing frameworks, rather than focusing exclusively on technical knowledge.

Future research is encouraged to extend this model by incorporating broader investor segments beyond digitally active communities to enhance generalizability. Additionally, further studies may explore alternative moderating variables, such as financial literacy, investment experience, or emotional regulation, as well as adopt longitudinal or experimental designs to better capture the dynamic nature of behavioral biases in investment decision-making.

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