The influence of behavioural finance biases on individual investment decisions: Evidence from the Dar es Salaam stock exchange, Tanzania

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ABSTRACT

This study examined the influence of behavioral biases on investment decisions among individual investors at the Dar es Salaam Stock Exchange (DSE) in Tanzania. Recognizing that many investors rely on psychological tendencies rather than systematic financial analysis, the research focused on overconfidence, availability, and self-attribution biases. This study applies four key theories: Prospect Theory, Heuristics and Biases Theory, Self-Attribution Theory, and Behavioural Finance Theory to analyze how overconfidence bias, availability bias, and self-attribution bias affect the investment decisions of individual investors in Tanzania. A quantitative cross-sectional design was employed, and data were collected from 396 investors using structured questionnaires. The data were analyzed using multiple linear regression to assess the impact of these biases on investment decision-making. The findings revealed that self-attribution bias had the strongest positive influence on investment decision-making ($\beta = 0.379$, $p < 0.001$), followed closely by availability bias ($\beta = 0.377$, $p < 0.001$). Overconfidence bias, also showed a positive but weaker effect ($\beta = 0.086$, $p = 0.036$). The model explained 45.1% of the variance in investment decision-making ($R^2 = 0.451$), indicating that nearly half of investors' choices could be attributed to these behavioural biases. These results suggest that investors who overestimate their skills, rely on readily available information, or attribute success to personal ability while externalizing failure are more prone to making biased investment decisions. The study concludes that behavioural biases play a significant role in shaping investment behaviour in Tanzania's retail stock market. It recommends strengthening financial literacy programs, integrating behavioural finance principles into investment education, and providing advisory services that help investors recognize and mitigate cognitive biases. Such measures can enhance rational decision-making, reduce the risks associated with biased trading, and contribute to sustainable market efficiency and stability in Tanzania's capital markets.

Keywords: Availability Bias, Dar es Salaam Stock Exchange, Overconfidence Bias, Self-Attribution Bias, Investment Decisions
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I. INTRODUCTION

Behavioural finance is increasingly recognized as a vital framework for explaining real-world deviations from rational investment decision-making. Unlike classical financial theories such as the Efficient Market Hypothesis, which assume investor rationality and market efficiency, behavioural finance emphasizes the influence of cognitive biases, emotions, and heuristics on individual financial behavior (Barberis, 2018; Kahneman & Tversky, 2013). Empirical evidence shows that investors often make decisions based on psychological distortions rather than objective analysis, leading to outcomes that deviate from optimal portfolio strategies (Sahu et al., 2025; Bouteska et.al., 2023).

Globally, individual investors are affected by persistent behavioural biases such as overconfidence (the tendency to overestimate own abilities), availability bias (the tendency of relying on easily recalled information when doing judgments), and self-attribution bias (the tendency to credit success to yourself while blaming external factors for failure). These biases contribute to overtrading, poor diversification, and exaggerated risk-taking, which can destabilize both personal finances and broader market systems (Syukur et al., 2025; Shu & Hung, 2009). While developed markets have made significant strides in recognizing and addressing these patterns through investor education and policy reforms, developing economies continue to grapple with unique challenges, including low financial literacy, information asymmetry, and limited institutional safeguards (Paisarn et al., 2021; Ul Abdin et al., 2025).

Historical patterns of investor behavior illustrate the impact of psychological factors on financial markets. Events such as the dot-com bubble, the 2008 global financial crisis, and more recently, the speculative cryptocurrency surges, underscore how collective biases can lead to market overreactions and inefficiencies (Ooi et al., 2025; Clarke & Dean., 2014).). In emerging economies like Tanzania, these vulnerabilities are compounded by inadequate access to quality financial information, weak financial infrastructure, and regulatory gaps (Sharma & Gupta, 2025; Komba,

2024). These structural barriers increase reliance on subjective decision-making, reinforcing the prevalence of cognitive biases in local investment behaviors.

The Dar es Salaam Stock Exchange (DSE), Tanzania's primary capital market, plays a critical role in facilitating investment and economic development. Despite the expansion of digital access through mobile trading and regulatory support from the Capital Markets and Securities Authority (CMSA), retail investors continue to demonstrate behavioural patterns marked by cognitive distortions (Kuria, 2019; Bawalle et al., 2025). Many investors rely heavily on recent events or news headlines when making investment decisions, overestimate their predictive abilities, or attribute financial outcomes to personal competence rather than external market factors (Tlili et al., 2023).

While global behavioural finance research has grown substantially, there is limited empirical literature focused on the Tanzanian context especially studies investigating the combined effect of these three biases. Most existing studies are based in developed economies or large emerging markets such as India, Indonesia, and China (Hans et al., 2024; Kandpal & Mehrotra, 2018). This gap in localized data restricts the development of tailored educational programs and policy interventions to guide rational investment behavior in Tanzania. Furthermore, the interaction of multiple biases and their compound effects on decision-making remains underexplored in African financial markets.

This study addresses this research gap by investigating the influence of overconfidence bias, availability bias, and self-attribution bias on individual investment decisions at the Dar es Salaam Stock Exchange. The findings will provide both theoretical insights into the behavioural finance literature and practical recommendations to enhance financial decision-making, investor education, and policy frameworks in Tanzania's capital markets.

1.1 Research Objectives

This study has examined the influence of behavioral biases on individual investment decision making in Tanzania. Specifically, the study had three objectives: first, to assess the effect of overconfidence bias on individual investment decision-making; second, to examine the role of availability bias in shaping individual investment decisions; and third, to evaluate the influence of self-attribution bias on individual investment decision-making.

II. LITERATURE REVIEW

2.1 Theoretical Review

Understanding the influence of behavioural biases on investment decision-making requires a firm grounding in relevant theoretical frameworks. These theories offer insight into the psychological mechanisms through which cognitive distortions shape financial behavior. This study applies four key theories: Prospect Theory, Heuristics and Biases Theory, Self-Attribution Theory, and Behavioural Finance Theory to analyze how overconfidence bias, availability bias, and self-attribution bias affect the investment decisions of individual investors in Tanzania.

Prospect Theory, developed by Kahneman and Tversky (2013), challenges the rational choice assumptions of traditional finance by proposing that individuals evaluate potential losses and gains asymmetrically. Investors are typically more sensitive to losses than to gains, a concept known as loss aversion. This can lead investors to hold onto losing stocks too long or sell winning ones too early. In the context of the Dar es Salaam Stock Exchange, this behavior may be amplified by limited financial literacy and heightened economic uncertainty, causing investors to react disproportionately to perceived risks or losses (Barberis, 2018; Ooi et al., 2025).

Heuristics and Biases Theory, introduced by Tversky and Kahneman (1974), explains how individuals rely on mental shortcuts when making complex decisions under uncertainty. These shortcuts often lead to systematic errors in judgment, known as cognitive biases. Overconfidence and availability bias are key examples. Overconfidence bias occurs when investors overestimate their knowledge or ability to predict market trends, leading to excessive trading and risk exposure. Availability bias, on the other hand, causes investors to make decisions based on readily recalled or recent information, such as recent news or market fluctuations, without fully analyzing broader trends (Ul Abdin et al., 2025; Syukur et al., 2025). In Tanzania, these biases may be intensified by the scarcity of reliable investment research and data.

Self-Attribution Theory, as discussed by Shefrin (2000), addresses how individuals explain their successes and failures. Investors exhibiting self-attribution bias tend to credit successful investment outcomes to their own skill and blame failures on external factors. This distorts learning and leads to inflated perceptions of control, reinforcing poor investment habits. On the Dar es Salaam Stock Exchange, such bias may lead to overconfidence, reduced openness to advice, and persistent risk-taking, particularly among investors with limited market experience (Paisarn et al., 2021; Shu & Hung, 2009).

Behavioural Finance Theory serves as the overarching framework that integrates the principles of these individual theories. It asserts that market outcomes are significantly influenced by the psychological traits and biases of investors, challenging the assumptions of perfect rationality found in classical finance. Behavioural finance incorporates the combined effects of heuristics, emotional influences, and social dynamics in shaping investor

behavior. It is especially relevant in emerging markets like Tanzania, where low financial literacy, high market volatility, and limited regulatory protections create an environment in which biases thrive (Goyal et al., 2026).

Together, these theories provide a robust conceptual lens for assessing how overconfidence, availability, and self-attribution biases influence investor decision-making. Their application contextualizes the study within both global behavioural finance discourse and the specific psychological and economic realities of individual investors in Tanzania's developing capital market.

2.2 Empirical Review

While the theoretical literature outlines the psychological foundations of behavioural biases, empirical studies provide evidence on how these biases manifest in real-world investment behaviour. Reviewing these evidences helps identify how cognitive distortions influence investor behaviour across various financial environments and exposes the specific gaps that this study aims to address within the Tanzanian context.

Overconfidence bias has been consistently identified as a critical determinant of investment decision-making, often leading to excessive trading and poor risk assessment. Thanushree et al. (2024) argue that overconfidence, along with other biases, challenges the assumptions of the Efficient Market Hypothesis by driving irrational trading behaviors. Their Indian context emphasizes the systematic overestimation of knowledge, resulting in increased trading volume and suboptimal outcomes. Sahu et al. (2025) further demonstrate that overconfidence distorts judgment through emotional and cognitive filters, reinforcing poor decision-making patterns. While both studies affirm the negative influence of overconfidence, they highlight different implications: Thanushree and Farzana focus on education as a mitigating tool, whereas Sahu et al. (2025). stress psychological awareness. Kaban and Linata (2024), studying Indonesian Gen Z investors, add that overconfidence not only affects trading frequency but also distorts risk perception, thus linking psychological traits directly to investment strategy. Al Rahahleh (2024) strengthens this argument by showing that overconfidence mediates anchoring effects, suggesting that it operates in conjunction with other biases to amplify irrational behaviors. Bouteska et.al. (2023) provide another perspective by showing that self-control moderates the effect of overconfidence, implying that investor discipline can partially counteract this bias. Collectively, these findings validate overconfidence bias as a universal phenomenon that degrades decision quality, albeit moderated by individual traits and contextual factors. In the Tanzanian setting characterized by lower financial literacy and emerging market volatility these dynamics are especially relevant, making overconfidence a justifiable variable in the current study's framework.

Self-attribution bias, where investors claim credit for success and deflect blame for failure, has been widely shown to exacerbate overconfidence and reduce learning from past mistakes. Maurya et al. (2026) identify that even financially literate investors are prone to this bias, suggesting its deeply ingrained cognitive nature. This finding is particularly useful for contexts like Tanzania, where low financial literacy may further intensify the bias's impact. Sahu et al. (2025) emphasize that self-attribution impairs reflective learning, leading to repeated errors in judgment. Hans et al. (2024) links the bias to skewed risk perception, showing that individuals overestimate control and make speculative decisions, especially dangerous in volatile markets. These findings are consistent with Tuyon and Ahmad (2016), who extend the implications to systemic levels by suggesting that widespread self-attribution among investors can induce market inefficiencies and asset mispricing. The collective analysis reveals that self-attribution bias operates both at the individual and market level, reinforcing overconfidence and poor strategic adjustment. Its inclusion in this study is therefore not just empirically grounded but also essential for understanding behavioral distortions in the Tanzanian stock market, aligning well with the conceptual model that links biases to decision outcomes.

Availability bias leads investors to overweigh recent or memorable information, compromising objective risk assessment and decision quality. Sahu et al. (2025) show that this bias results in irrational investment actions due to an overemphasis on vivid events. Ul Abdin et al. (2025) empirically confirm this in the Indian context, noting that investors driven by recent news rather than comprehensive data engage in overtrading. Barber and Odean (2001) demonstrate that availability bias among young investors correlates with poor diversification and misjudged risks. Al Rahahleh (2024) extends this by illustrating how availability interacts with anchoring and overconfidence, forming a web of biases that collectively degrade investment decisions. Meanwhile, Pughethaa and Deepa (2024) underline the susceptibility of younger investors to availability effects, suggesting that education and cognitive training are vital countermeasures. These studies collectively indicate that availability bias not only distorts individual judgments but also enhances the effects of other biases, thereby validating its inclusion in the study's conceptual framework. In Tanzania, where access to financial data may be limited, reliance on easily accessible or recent information is particularly likely, making availability bias a critical factor influencing investment decisions.

In summary, the empirical literature demonstrate that behavioral biases systematically impair investment decision-making. Overconfidence leads to excessive risk-taking, self-attribution impedes learning, and availability bias distorts information processing. These effects are context-sensitive but universally observed, providing strong justification for their inclusion in the current study's objectives and conceptual framework. By integrating these

biases, the research not only aligns with established literature but also addresses critical gaps in the Tanzanian investment context.

III. METHODOLOGY

3.1 Research Design

This study employed a quantitative cross-sectional research design underpinned by positivist philosophy to examine the influence of behavioral finance biases on individual investment decision-making among investors in the Dar es Salaam Stock Exchange (DSE). The positivist approach emphasizes objective measurement, empirical observation, and statistical testing, making it suitable for evaluating the measurable effects of psychological constructs such as overconfidence, availability bias, and self-attribution bias on investment behavior.

3.2 Study Area

The study was conducted in Dar es Salaam, Tanzania, which hosts the country's main capital market, the Dar es Salaam Stock Exchange. The DSE was chosen because of its growing participation of retail investors and its importance to the national financial system.

3.3 Target Population

The target population included all active individual investors registered with the DSE, totaling 37,910 according to the 2024 DSE Annual Report.

3.4 Sampling Procedures and Sample Size

A sample of 396 investors was determined using Yamane's (1967) formula for finite populations at a five percent margin of error. A stratified random sampling technique was applied to ensure proportional representation of key demographic categories such as gender, age, education level, and investment experience. This approach enhanced representativeness and reduced sampling bias.

3.5 Data Collection Instruments and Procedures

Primary data were collected using a structured questionnaire distributed both electronically and in person. The instrument consisted of two main parts. The first section captured demographic details such as age, gender, education level, and investment experience. The second section contained statements measuring the three behavioural biases and investment decision-making, each rated on a five-point Likert scale ranging from "strongly disagree" to "strongly agree." The items were adapted from previous studies in behavioural finance, including those by Tuyon and Ahmad (2016) and Kandpal & Mehrotra (2018), and modified to reflect the Tanzanian investment context.

The reliability of the measurement instruments was confirmed using Cronbach's alpha coefficients, all of which exceeded the acceptable threshold of 0.70, demonstrating internal consistency. Composite reliability and indicator reliability were also assessed to ensure robustness. Convergent validity was established with average variance extracted values above 0.50, while discriminant validity was confirmed through inter-construct correlations, ensuring that each variable measured a distinct concept.

3.6 Data analysis

Data were analyzed using both descriptive and inferential statistics. Descriptive analysis was used to summarize demographic characteristics and general behavioural tendencies of the respondents. Inferential analysis was conducted using multiple linear regression to examine the effect of overconfidence bias, availability bias, and self-attribution bias on investment decision-making. The regression model was expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where Y represents investment decision-making, X_1 denotes overconfidence bias, X_2 represents availability bias, and X_3 represents self-attribution bias. β_0 is the constant term, $\beta_1, \beta_2, \beta_3$ are the regression coefficients and, ε is the error term. Significance was determined at the 5 percent level ($p < 0.05$). Multicollinearity, normality, and heteroscedasticity tests were conducted to ensure the robustness and validity of the model.

3.7 Ethical Considerations

Ethical approval was obtained prior to data collection. All participants were informed about the purpose of the study and their right to anonymity, confidentiality, voluntary participation, and withdrawal at any stage. Data were handled securely and used exclusively for academic purposes. The study complied with established ethical guidelines for behavioural research as described by Kimmel (2009).

IV. FINDINGS & DISCUSSION

This study views overconfidence, availability, and self-attribution biases being the key variables influencing how individual investors make investment decisions. The study examines how the three behavioural biases to find out how they help explain why many individual investors in Tanzania more than often depart from purely rational decision-making when choosing and managing their investments.

The data analysis for this study utilized Multiple Linear Regression (MLR) to examine the relationships between key behavioral biases, overconfidence bias, self-attribution bias, and availability bias and individual investment decision-making among investors at the Dar es Salaam Stock Exchange (DSE). The demographic profile of the participants revealed a diverse sample in terms of gender, age, educational attainment, and investment experience, providing a robust foundation for evaluating investor behaviour within an emerging market context.

Table 1
Demographic Characteristics

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	243	61.4%
	Female	153	38.6%
Age Group	18–24 years	45	11.4%
	25–34 years	122	30.8%
	35–44 years	153	38.6%
	45–54 years	56	14.1%
	55 years and above	20	5.1%
Education Level	High School or Below	29	7.3%
	Bachelor's Degree	232	58.6%
	Master's Degree	119	30.1%
	Doctorate	16	4.0%
Investment Experience	0–5 years	182	45.9%
	6–10 years	143	36.1%
	More than 10 years	71	17.9%

Before conducting the multiple linear regression analysis, key statistical assumptions were assessed to ensure the accuracy, reliability, and validity of the model used to examine the influence of overconfidence bias, self-attribution bias, and availability bias on investment decision-making among investors at the Dar es Salaam Stock Exchange (DSE). These assumptions, normality of residuals, linearity, homoscedasticity, multicollinearity, and measurement reliability are essential for confirming that the regression estimates are unbiased and that the model produces meaningful and interpretable results. The diagnostic tests conducted, including normality assessments, correlation patterns, variance inflation factors (VIF), and Cronbach's alpha, provide evidence on whether the dataset meets the statistical requirements necessary for applying multiple linear regression in this study.

4.1 Normality of Residuals

Table 2
Descriptive for Normality

			Statistic	Std. Error
Investment Decision-Making	Mean		11.9760	.12254
	95% Confidence Interval for Mean	Lower Bound	11.7351	
		Upper Bound	12.2169	
	5% Trimmed Mean		12.0574	
	Median		12.0000	
	Variance		5.947	
	Std. Deviation		2.43856	
	Minimum		5.25	
	Maximum		16.25	
	Range		11.00	
	Interquartile Range		3.00	
	Skewness		-.380	.123
	Kurtosis		.002	.245

The normality of residuals was assessed to determine whether the distribution of the dependent variable aligned with the assumptions of multiple linear regression. The descriptive results show that Investment Decision-Making had a mean of 11.98 and a median of 12.00, indicating a nearly symmetric distribution. The skewness value of –0.380 and kurtosis value of 0.002 fall within acceptable ranges, suggesting that the data are approximately normally distributed. Although minor deviations from perfect normality exist, the statistics indicate no severe violation of the normality assumption.
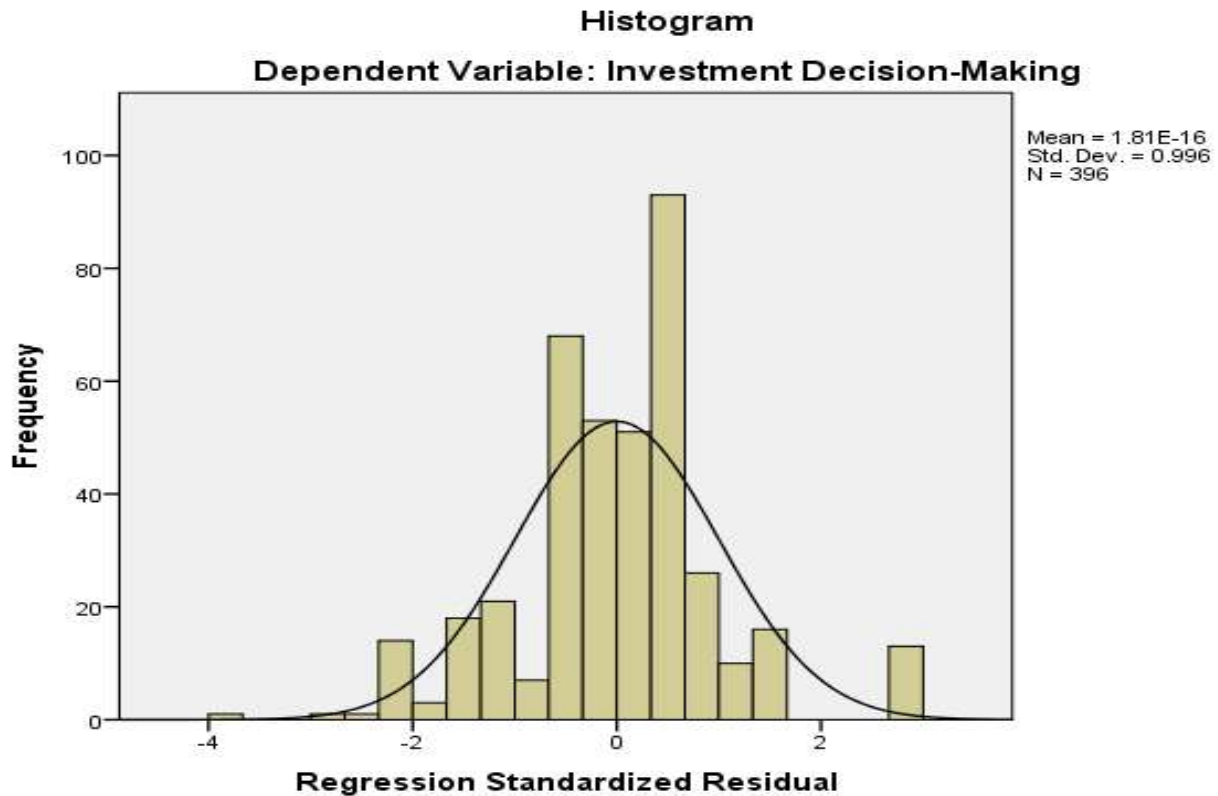

Figure 1
The Normality of Residuals

The histogram of the regression standardized residuals provides a visual check for the normality assumption in the multiple linear regression model. The distribution of residuals is centered on zero and follows a pattern closely resembling the expected bell-shaped curve, indicating that most residuals cluster near the mean with fewer observations in the tails. The mean value of the standardized residuals is extremely close to zero (1.81E-16), and the standard deviation is approximately one (0.996), which confirms correct standardization of the residuals. With a sample size of 396, the residuals appear to meet the normality assumption reasonably well, supporting the validity of the regression analysis.
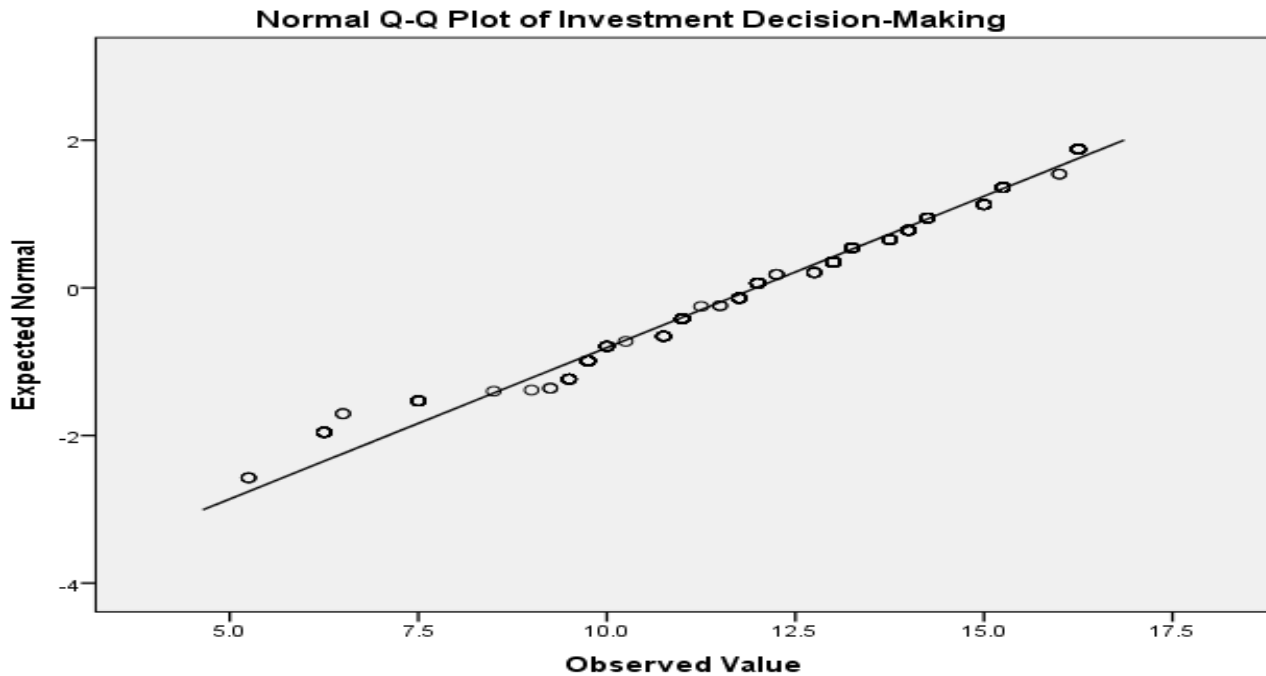
Figure 2
Q-Q Plot

The Normal Q-Q plot for investment Decision-Making visually assesses the normality of the data by comparing observed values to expected normal values. Most points lie close to the diagonal line, indicating that the variable is approximately normally distributed. Minor deviations at the tails suggest slight skewness or potential outliers, but the central portion aligns well with the normality assumption. The Q-Q plot confirms that the normality requirement for applying regression analysis is reasonably satisfied.
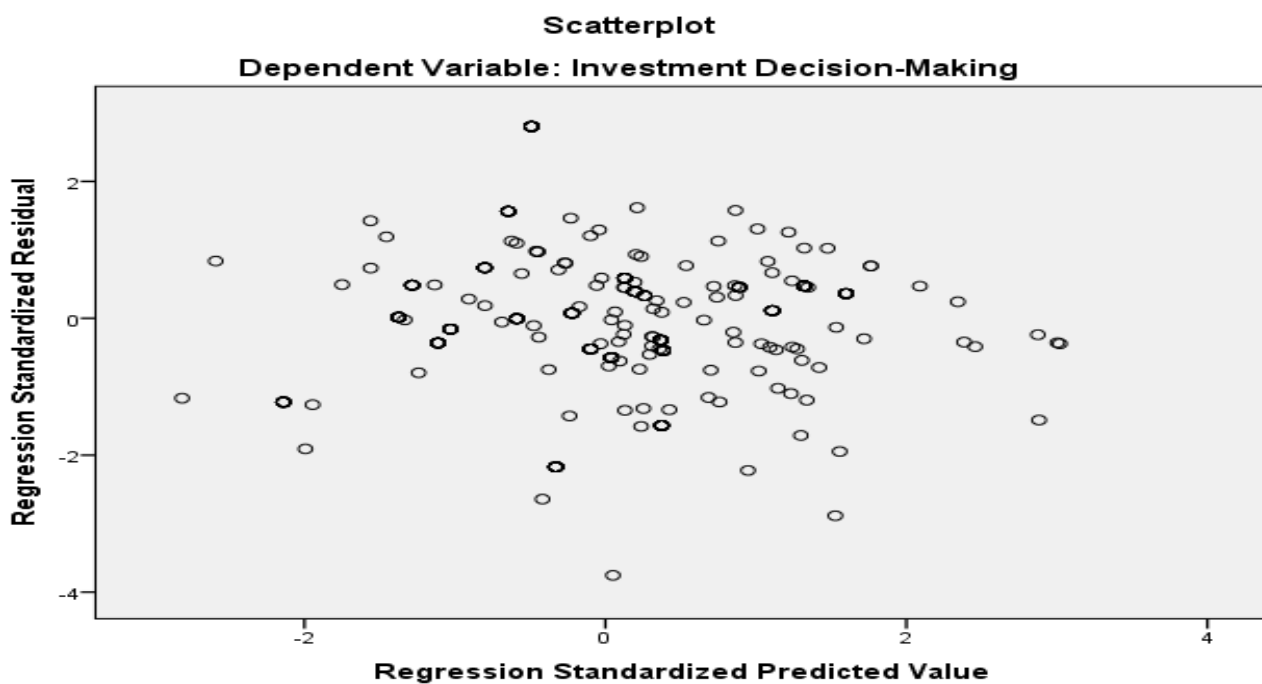
4.2 Homoscedasticity

Figure 3
Scatterplot

The scatterplot of standardized residuals versus standardized predicted values for investment Decision-Making assesses the assumptions of linearity and homoscedasticity in the multiple linear regression model. The plot shows that the residuals are randomly dispersed around the horizontal axis (zero line) without forming a distinct pattern, which indicates that the linearity assumption is reasonably met, there is no systematic curvature suggesting a non-linear relationship between predictors and the dependent variable. Additionally, the spread of residuals appears fairly consistent across the range of predicted values, suggesting that homoscedasticity is satisfied. There is no clear funnelling or clustering that would indicate increasing or decreasing variance of errors.

Table 3
Multicollinearity Results

Model		Collinearity Statistics	
		Tolerance	**VIF**
1	Overconfidence Bias	.833	1.201
	Self-Attribution Bias	.829	1.206
	Availability Bias	.727	1.375

a. Dependent Variable: Investment Decision-Making

Multicollinearity diagnostics were conducted to ensure that the independent variables were not highly correlated. The tolerance values ranged from 0.727 to 0.833, and the VIF values ranged from 1.201 to 1.375, indicating that multicollinearity is not a concern in this study. Therefore, the regression estimates for the influence of Overconfidence Bias, Self-Attribution Bias, and Availability Bias on Investment Decision-Making can be considered stable and reliable.

Table 4
Reliability Statistics

Cronbach's Alpha	N of Items
.838	16

The reliability of the study instrument was assessed using Cronbach's alpha. The results indicate a high level of internal consistency, with a Cronbach's alpha value of 0.838 across the 16 items. This suggests that the questionnaire items reliably measure the underlying constructs and are suitable for use in the study.

4.3 Regression analysis results

To examine the influence of cognitive biases on investment decision-making, a multiple regression analysis was conducted. The independent variables included Overconfidence Bias, Self-Attribution Bias, and Availability Bias, while investment Decision-Making was the dependent variable. The analysis assessed the strength and significance of the relationships among these variables.

Table 5
Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.672[a]	.451	.447	1.81296

a. Predictors: (Constant), Availability Bias, Overconfidence Bias, Self-Attribution Bias
b. Dependent Variable: Investment Decision-Making

The model summary (Table 5) shows that the independent variables collectively explain a substantial portion of the variance in investment decision-making. The regression model yielded an R value of 0.672, indicating a moderate to strong correlation between the predictors and the dependent variable. The R-squared value of 0.451 suggests that approximately 45.1% of the variance in investment decision-making can be explained by Overconfidence Bias, Self-Attribution Bias, and Availability Bias. The adjusted R-squared of 0.447 confirms that the model provides a reliable estimate, with a standard error of 1.813.

Table 6

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1060.456	3	353.485	107.546	.000ᵇ
	Residual	1288.441	392	3.287		
	Total	2348.897	395			

a. Dependent Variable: Investment Decision-Making

b. Predictors: (Constant), Availability Bias, Overconfidence Bias, Self-Attribution Bias

The ANOVA results (Table 6) indicate that the regression model is statistically significant. The model produced an F-statistic of 107.546 with a p-value of 0.000, which is below the 0.05 significance level. This confirms that the independent variables collectively have a significant effect on investment decision-making. The sum of squares shows that the regression explains 1060.456 of the total variation, while the residual sum of squares is 1288.441, indicating that the model captures a meaningful proportion of the variance.

Table 7

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5.689	1.101		-5.168	.000
	Overconfidence Bias	.106	.050	.086	2.106	.036
	Self-Attribution Bias	.803	.087	.379	9.235	.000
	Availability Bias	.482	.056	.377	8.598	.000

a. Dependent Variable: Investment Decision-Making

Table 7 presents the regression coefficients, which provide insights into the individual contributions of each cognitive bias. Self-Attribution Bias has the strongest influence on investment decision-making, with a standardized beta coefficient of 0.379 (t = 9.235, p = 0.000), indicating a highly significant positive relationship. Availability Bias also has a strong positive effect (Beta = 0.377, t = 8.598, p = 0.000). Overconfidence Bias has a smaller but statistically significant positive effect on investment decision-making (Beta = 0.086, t = 2.106, p = 0.036). The constant term of -5.689 is significant (p = 0.000), indicating the baseline level of investment decision-making when all predictors are zero.

The study found that overconfidence bias has a statistically significant positive effect on investment decision-making among investors at the Dar es Salaam Stock Exchange ($\beta = 0.086$, p = 0.036), indicating that investors who overestimate their knowledge and predictive abilities tend to make more confident and risk-prone choices (Bouteska et.al 2023; Al Rahahleh, 2024). Consistent with Prospect Theory and the Overconfidence Hypothesis, such investors often misjudge their skill levels, trade excessively, ignore contradictory information, and underestimate risks (Kahneman & Tversky, 2013; Odean, 1998; Barber & Odean, 2001). This behavioural tendency reflects reliance on intuition and past successes rather than systematic analysis (Glaser, 2009), a pattern that may be amplified in emerging markets like Tanzania, where access to advisory services and financial literacy is limited (Syukur et al., 2025; Sahu et al., 2025). Empirical evidence from other emerging markets similarly shows that overconfidence contributes to excessive trading and market volatility (Bouteska et.al 2023; Al Rahahleh, 2024). To address these effects, regulators and financial institutions should strengthen investor education programs that promote realistic self-assessment, data-driven decision-making, and risk awareness through structured feedback and simulation-based learning (Paisarn et al., 2021).

The study revealed that availability bias has a statistically significant positive influence on investment decision-making among investors, with a Beta coefficient of 0.377 and a p-value of 0.000, indicating that investors often rely on easily recalled, vivid, or recent information—such as trending market news or recent stock performance—rather than comprehensive financial analysis (Syukur et al., 2025; Sahu et al., 2025). This strong effect underscores availability bias as a key determinant of investor behavior in Tanzania's retail market, consistent with Bounded Rationality Theory, which suggests that individuals simplify complex problems using heuristics under uncertainty (Simon, 1955). Empirical evidence shows that investors influenced by this bias tend to overweight accessible information while overlooking fundamental data, leading to reactive, short-term, and sometimes herd-like decisions (Syukur et al., 2025; Sahu et al., 2025; Paisarn et al., 2021). Such behavior increases exposure to mispricing risk and portfolio losses by prioritizing visibility over value (Shu & Hung, 2009). To mitigate these effects, access to credible long-term financial data and the use of analytical tools should be expanded through digital platforms and investor education programs (Al Rahahleh, 2024). Regulators and brokerage firms can further address this bias by introducing structured reporting systems and alert mechanisms that promote data-driven, evidence-based decision-

making, thereby enhancing market stability and protecting investors from volatility driven by sensational or incomplete information (Bouteska et.al., 2023).

The study found that self-attribution bias has the strongest and most statistically significant positive effect on investment decision-making among investors, with a Beta coefficient of 0.379 and a p-value of 0.000, indicating that individuals who attribute their successes to personal skill or intelligence and blame failures on external factors tend to persist with their existing investment strategies (Paisarn et al., 2021). This finding aligns with Attribution Theory, which suggests that individuals' interpretations of past outcomes shape future behaviors (Heider, 1958; Weiner, 1985). Investors exhibiting this bias often overestimate their control over outcomes and continue making similar decisions despite adverse market signals, reinforcing suboptimal strategies (Shu & Hung, 2009). Empirical research confirms that self-attribution bias reduces reflective thinking and encourages the repetition of ineffective decisions (Paisarn et al., 2021; Shu & Hung, 2009). In the Tanzanian context, limited access to professional financial advice and feedback mechanisms intensifies this bias, as retail investors rely heavily on personal judgment without critical self-evaluation (Syukur et al., 2025; Sahu et al., 2025). To mitigate these effects, performance tracking tools, feedback systems, and mentorship programs can promote self-awareness and encourage investors to adjust strategies based on evidence rather than perception (Bouteska et.al., 2023). Addressing self-attribution bias through education, accountability mechanisms, and reflective learning can improve individual outcomes, reduce herd behavior, and strengthen overall market stability in Tanzania's emerging financial landscape (Al Rahahleh, 2024).

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

This study examined the role of behavioural biases in shaping individual investment decision-making among retail investors in Tanzania, with a focus on participants in the Dar es Salaam Stock Exchange. Specifically, it investigated the effects of overconfidence bias, availability bias, and self-attribution bias using a quantitative research approach (Multiple Linear Regression). The findings revealed that all three biases significantly influenced investment decisions, with self-attribution bias demonstrating the strongest effect, followed by availability bias and overconfidence bias.

Overconfidence bias was found to encourage excessive trading and reliance on personal judgment, although its influence was relatively weak. This suggests that while investors may exhibit inflated confidence in their abilities, this trait alone does not dominate decision-making processes. Availability bias had a moderate effect, indicating that investors often rely on recent or salient information rather than comprehensive analysis, a pattern that can lead to irrational investment behaviors in reaction to market noise. Self-attribution bias emerged as the most influential, revealing that investors who internalize success and externalize failure are more likely to repeat risk-prone behaviors and underestimate the role of external market forces in their outcomes. Together, these findings highlight the cognitive vulnerabilities that affect investor behavior in an emerging market context. They affirm that psychological factors cannot be overlooked in the analysis of investment decisions, especially in environments characterized by limited financial literacy, uneven access to market data, and underdeveloped regulatory safeguards.

5.2 Recommendations

Several practical and policy-oriented recommendations emerge from this study. First, financial education programs in Tanzania should be expanded to include behavioural components that help investors recognize and manage cognitive biases. These programs should focus not only on financial literacy but also on improving self-awareness, critical thinking, and decision-making under uncertainty. Interactive tools, workshops, and digital simulations can be employed to expose investors to common psychological pitfalls such as overconfidence or anchoring.

Second, Capital Markets and Securities Authority should collaborate with the Dar es Salaam Stock Exchange to improve the quality and accessibility of financial information. Reducing information asymmetry through investor dashboards, timely disclosures, and market briefings can help mitigate the effects of availability bias by encouraging data-driven investment decisions. Third, behavioural nudges could be incorporated into mobile trading platforms and investment advisory services to guide investors toward more rational decision-making. For instance, automated alerts warning against overtrading, portfolio concentration, or impulsive selling can help address common manifestations of overconfidence and availability bias. These tools can be particularly useful in low-resource settings where personalized financial advice may not be readily available.

Additionally, there is a need to promote a culture of reflective learning among investors. Encouraging post-trade analysis and peer learning groups can help reduce self-attribution bias by fostering accountability and shared understanding of market dynamics. Investor forums, digital communities, and feedback mechanisms should be supported to facilitate such engagement. From a theoretical perspective, the findings affirm the relevance of Prospect

Theory, Heuristics and Biases Theory, Self-Attribution Theory, and Behavioural Finance Theory in explaining investor behavior in developing markets. The results suggest that these frameworks retain their explanatory power even when applied in socio-economic contexts distinct from those in which they were originally developed. Finally, the study offers several avenues for future research. Longitudinal studies could examine how behavioural biases evolve over time and in response to economic shocks or market changes. Comparative studies across different investor segments, such as institutional versus retail investors or rural versus urban investors, could uncover important behavioural differences. Future research should also consider the role of emerging technologies such as artificial intelligence in identifying and mitigating behavioural biases through predictive analytics and customized decision-support tools. By deepening our understanding of how cognitive biases influence financial decisions, this research contributes to the growing field of behavioural finance in Africa and supports efforts to build more inclusive, informed, and resilient investment ecosystems in Tanzania and beyond.

Declaration of Interest

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