

Availability Bias, Financial Literacy and Investment Decisions of Selected Small and Medium Enterprises in Nairobi County

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Abstract

Original Research Article

Investment decision-making is essential for the effective allocation of resources, especially for small and medium enterprises in developing economies such as Kenya, where these enterprises are pivotal to economic development. Although theoretical frameworks such as current portfolio theory highlight rational decision-making, empirical evidence indicates that behavioral biases considerably affect small and medium enterprises investment decisions. This study examined the influence of availability bias on investment decisions mediated by financial literacy among small and medium enterprises in Nairobi County. Using a positivist research philosophy and survey research design, data was collected from 376 proprietors and managers of small and medium enterprises from trade and service sectors. Descriptive and inferential statistics, including regression analysis and the PROCESS macro to examine mediation effects were used to analyze data. Pearson correlation analysis revealed robust significant correlations: availability bias and financial literacy ($r = 0.978$), availability bias and investment decisions ($r = 0.964$), and financial literacy and investment decisions ($r = 0.981$). Further, regression analysis indicated that availability bias strongly influenced financial literacy (coeff = 0.8041) and investment decisions (coeff = 0.1000), while financial literacy also exerted a significant influence on investment decisions (coeff = 0.8684). The financial literacy model accounted for 95.56% of the variation ($R^2 = 0.9556$), whereas the investment decisions model accounted for 96.23% ($R^2 = 0.9623$). The indirect effect of availability bias on investment decisions mediated by financial literacy was significant ($r = 0.6983$). The study concludes that availability bias and financial literacy significantly influence SME investment decisions in Nairobi County, with financial literacy mediating this relationship. Small and medium enterprises should adopt structured decision-making frameworks to reduce bias, while the government and financial institutions should implement financial education programs targeting cognitive bias mitigation.

Keywords: Availability Bias, Behavioral Biases, Financial Literacy, Investment Decisions, Small and Medium Enterprises.

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INTRODUCTION

Investment decision-making is crucial for individuals and businesses seeking to optimally deploy resources and achieve long-term financial objectives. For small and medium enterprises (SMEs), Nicolas (2022) argues that they are often constrained by limited finances and volatile circumstances, these decisions become increasingly critical. Investment decisions are the systematic evaluation of potential opportunities, informed by considerations such as risk, return, liquidity, and time horizon (Daniyal & Tukiran, 2024). Modern portfolio theory posits that rational investors seek to optimize the risk-return profile by diversifying assets

across many asset classes, hence safeguarding their financial stability (Fama & French, 1993 cited in Jiang & Returns, 2022). The volatile nature of financial markets necessitates that investors, including SME proprietors, consistently monitor economic trends, reassess financial goals, and modify their investment portfolios (Ze & Loang, 2025).

Despite theoretical rationale in investment models, empirical data indicates that investment decisions are not consistently made prudently. An increasing number of scholars recognize that behavioral biases significantly distort decision-making processes. Established by Tversky and Kahneman (1974) cited in

Muslim (2024), behavioral finance highlights the impact of cognitive and emotional biases; such as availability bias, overconfidence, loss aversion, and confirmation bias, on the rational evaluation of information. Availability bias is a cognitive heuristic in which individuals assess information based on its immediate accessibility rather than conducting a comprehensive evaluation of all relevant data (Muslim, 2023)). Particularly in unstable or information-deficient environments such as SMEs in developing countries, this may lead to a misunderstanding of investment risk and an improper allocation of resources. However, higher levels of financial literacy helps decision makers to follow structured process to make investment decisions. However, Sharma & Ranjan (2021) maintain that variations in financial acumen among decision-makers intensify the effects of behavioral biases.

According to Lyons and Kass-Hanna (2021), financial literacy encompasses the understanding of fundamental concepts such as budgeting, investing, tax management, and risk management, together with the ability to use these concepts in decision-making. Kulathunga *et al.*, (2020) observe that financial literacy serves as a strategic advantage for SMEs, influencing investments while facilitating improved access to financial services and capital. Financial literacy serves as an instrument that helps mitigate the impact of behavioral biases. Providing individuals with the cognitive instruments necessary for precise financial evaluation and risk assessment mitigates susceptibility to overconfidence and availability heuristics (Tansuchat & Thaicharo, 2025). In this regard, financial literacy serves as both a safeguard against irrationality and a catalyst for prudent investment practices.

SMEs in Kenya, which constitute over 90% of businesses, are the cornerstone of the economy and significant contributors to Gross Domestic Product and employment (Kaberia & Muathe, 2021; World Bank, 2023). SMEs operate within a complex environment characterized by intense competition, regulatory uncertainty, and fluctuating market conditions in Nairobi County (Kaaria, 2021). In this context, investment decisions are not merely strategic but also essential for survival, thereby influencing organizations' ability to expand, innovate, or withstand economic disruptions. The interaction of cognitive biases, particularly availability bias, with financial literacy and its influence on investment decisions remains an important area among SME investment behavior in Nairobi. Therefore, this study sought to determine the mediating effect of financial literacy on the relationship between availability bias and investment decisions among SMEs in Nairobi County. Resultantly, this study provided empirical insights into the behavioral underpinnings of financial decision-making Nairobi county and Kenya at large. Secondly, this study could provide evidence for policy framework and serve as a basis for establishment of financial literacy interventions for SMEs thereby

fostering more resilient and economically prosperous enterprises.

LITERATURE REVIEW

The investing decision-making process is significantly influenced by a combination of human behavioral biases and personality traits. Polychronakis (2023) identified behavioral tendencies that impede rational decision-making, including information availability, reduced self-control, overconfidence, illusion of control, and representational bias, particularly during market volatility, which exacerbates under economic uncertainty and undermines investors' sense of security. Gabhane *et al.*, (2023) underscored that behavioral finance elucidates the influence of cognitive and emotional processes on investing decisions, indicating that while certain individuals are motivated by emotions, others rely on a variety of elements. Sujatha *et al.*, (2024) presented empirical data connecting behavioral inclinations to investment choices among female investors. Salman *et al.*, (2024) empirically demonstrated that availability bias strongly influences investment decision-making via the mediating effect of risk tolerance, with this relationship further tempered by an external locus of control.

Financial literacy is crucial in the relationship between behavioral tendencies and investing choices. Nguyen *et al.*, (2023) observed pervasive inadequate financial literacy, with several individuals missing comprehension of essential concepts such as risk diversification, inflation, and compound interest; elements that impede sensible investing behavior. Suresh (2024) and Baveja and Verma (2024) indicated that investors with limited financial literacy frequently eschew the stock market or depend on external counsel instead of conducting independent analysis. Ranaweera and Kawshala (2022) discovered that financial literacy significantly affects individuals' management of behavioral characteristics, including risk aversion and herding tendency. Kristanto and Gusaptono (2020) cited in Naqvi and Siddiqui (2024), demonstrated a significant positive correlation between financial literacy and investing decisions among consumers of Islamic banks. Baihaqqy *et al.*, (2020) affirmed the robust correlation between financial literacy and the caliber of investing judgments.

Wikartika *et al.*, (2023) determined that availability bias exerted no significant direct influence on investment satisfaction or decision-making among young investors in Surabaya, indicating that financial literacy supersedes the impact of readily available information. Conversely, Suresh (2024) shown that heuristic bias, particularly availability bias, significantly influences investment behavior, suggesting a preference for heuristics over alternative biases. Gulzar *et al.*, (2024) reaffirmed the significant impact of behavioral biases, including availability bias, on investing decisions, with emotional stability serving as a

moderating factor. These studies collectively demonstrate that availability bias functions through intricate interactions with personal characteristics and contextual factors, highlighting the importance of financial literacy and emotional resilience in promoting prudent investing decisions.

This study was based on three principal theories: Heuristics Theory, Behavioral Portfolio Theory (BPT), and Human Capital Theory (HCT). Heuristics Theory, formulated by Tversky and Kahneman (1974), explains how individuals employ cognitive shortcuts to streamline intricate decision-making processes (Arnott & Gao, 2022). Mental heuristics such as availability bias enables rapid assessments but can also lead to systematic biases (Doyle *et al.*, 2021). In light of the volatile and unpredictable investment landscape for SMEs, heuristics offer a pragmatic framework to comprehend how constraints in time, cognitive ability, and information can influence suboptimal investment choices. Nonetheless, although this approach emphasizes the existence and effect of behavioral biases, it fails to include the mediating effect that financial literacy may have in alleviating these biases.

BPT, introduced by Shefrin and Statman (2000), posits that investors construct their portfolios not merely for maximal returns but through a stratified framework that embodies varying objectives and risk appetites (Majewski & Majewska, 2022). This theory explains the influence of psychological elements on portfolio creation, emphasizing constrained rationality and the emotional and cognitive motivations driving investment decisions (Akkaya, 2021). In the context of SMEs, BPT explained the manifestation of behavioral biases in investment decisions as SMEs strive to reconcile financial security with growth ambitions. Nonetheless, akin to Heuristics Theory, BPT fails to clearly consider how financial literacy may mediate these behavioral biases, revealing a theoretical deficiency in elucidating more rational investment results.

To address this disparity, HCT, as formulated by Schultz (1961) and Becker (1964), is incorporated into the framework (Hung & Ramsden, 2021). HCT maintains that investments in education, training, and skills development, including financial literacy, augment individuals' cognitive abilities and economic output. This study defines financial literacy as an essential element of human capital that empowers SME decision-makers to identify and mitigate cognitive biases, leading to more informed investment choices. This theory validates the mediating function of financial literacy in the relationship between behavioral biases and investing decisions. However, critics contend that HCT excessively prioritizes economic rationality while disregarding social and cultural factors (Marginson, 2019), yet it is crucial in demonstrating how cognitive and educational investments can alleviate the impact of heuristic-driven

and emotionally biased behaviors in financial decision-making.

METHODOLOGY

This research utilized a positivist viewpoint. A cross-sectional survey design was employed to collect data from November 2024 to January 2025, as they were responsible for the firms' decision-making processes. Proportionate stratified random sampling technique was used to select 426 SMEs from trade and service sectors out of from the 18,872 SMEs registered with the Small and Medium Enterprises Authority. Study participants included owners and managers of SMEs namely from the. The data obtained from a semi-structured questionnaire was examined by descriptive and inferential statistics using Statistical Package for Social Sciences. Mediation effect was tested using PROCESS macro Hayes Model 4.

RESULTS AND DISCUSSION

A total of 376 questionnaires were completed and returned from the 426 originally distributed, resulting in a response rate of 88.2%. The reliability results demonstrated that the Cronbach alpha for all variables exceeded the 0.700 criterion, with availability bias at 0.978, financial literacy at 0.987, and investment decisions at 0.986. The availability bias comprised 8 statements, financial literacy included 10 statements, and investment decisions contained 12 statements, all evaluated using a five-point Likert scale.

Descriptive statistics regarding the influence of availability bias on investment decisions indicated that respondents favored easily accessible local market investment possibilities, with a mean of 2.311 (SD = 1.176). This suggested that convenience significantly influenced their decision-making processes. A comparable trend was noted in the selection of products and services that were readily available in the local market (Mean = 2.888, SD = 1.494). This indicated a preference for familiarity and accessibility, hence strengthening the impact of availability bias on investment choices. The sourcing decisions of the respondents were influenced by customer demand (Mean = 2.721, SD = 1.480), underscoring the influence of market demand on their selections.

Moreover, respondents indicated that their recent experiences significantly influenced their decisions (Mean = 2.652, SD = 1.436), demonstrating a considerable dependence on personal and professional history in investing decision-making. The inclination to invest in familiar or well-known enterprises was seen (Mean = 3.008, SD = 1.494), however it received slightly less focus than more readily accessible possibilities. Insights and trends from networks and groups were observed to exert a modest influence on decision-making (Mean = 3.588, SD = 1.555), indicating a degree of deliberation without predominant impact. Respondents exhibited considerable esteem for current market

information, with a mean of 2.048 (SD = 1.279), underscoring its significance in strategic investment decisions. The most significant influence was observed in the high esteem for the experiences and insights of business professionals (Mean = 4.090, SD = 1.064), highlighting the essential significance that expert

judgments had in determining investment strategies. The findings demonstrated the significant impact of availability bias, especially through dependence on familiar, accessible, and expert-supported information in investment decision-making.

Table 1 Availability Bias Descriptive Statistics

N = 376	Mean	SD
My investment strategy prioritizes the selection of assets that are easily accessible in the local market.	2.311	1.176
I prefer to choose products and services that are easily obtainable in the local market.	2.888	1.494
Our sourcing decisions are profoundly shaped by client demand.	2.721	1.480
My recent experiences serve as the foundation for my decisions.	2.652	1.436
I favor investing in enterprises that are familiar or recognized to me.	3.008	1.494
I frequently integrate industry insights and trends obtained from networks and groups into the decision-making process.	3.588	1.555
Possessing up-to-date market information allows individuals to make timely and intelligent financial decisions.	2.048	1.279
The experiences and views of past and present business specialists are highly valued in evaluating potential business possibilities for our firm.	4.090	1.064

Descriptive statistics on the statements on financial literacy presented in table 2 show that the greatest consensus is noted in cost-related practices, including the implementation of cost management policies (mean = 2.144, SD = 1.132) and proactive expenditure reduction (mean = 2.221, SD = 1.169), indicating that respondents are particularly attentive to minimizing operational costs and enhancing profitability. Furthermore, there is substantial consensus regarding the comprehension of tax regulations (mean = 2.287, SD = 1.062) and the pursuit of expert counsel on tax issues (mean = 2.330, SD = 1.082), signifying a knowledge of regulatory obligations and a proactive stance towards compliance.

Conversely, statements pertaining to comprehensive financial planning and analysis exhibit

more neutral responses. For example, respondents exhibited lower affirmation on the consistent assessment of business profitability (mean = 3.295, SD = 1.113), budget modifications (mean = 3.239, SD = 1.1023), and budget-to-expense comparisons (mean = 3.200, SD = 1.157). These findings indicate a disparity between routine financial operations and strategic financial planning. The average score for evaluating cash flow adequacy for company requirements was moderately positive (mean = 2.678, SD = 1.098), indicating fundamental proficiency in liquidity management. Overall, respondents exhibit proficiency in cost management and tax knowledge; nevertheless, there is potential for enhancement in budgeting, performance evaluation, and alignment with long-term financial objectives.

Table 2 Financial Literacy Descriptive Statistics

N = 376	Mean	SD
I do a comparison study of actual expenditures with budgeted amounts to identify disparities.	3.200	1.157
I regularly adjust my budget to align with the firm's needs.	3.239	1.023
I regularly assess and adjust my financial goals to meet with changing company circumstances.	3.154	1.082
I assess risks and uncertainties that may affect my financial inflow and outflow.	3.069	1.069
I actively seek opportunities to minimize costs in business operations.	2.221	1.169
I have instituted a set of policies and practices focused on cost management and improving profitability.	2.144	1.132
I expertly handle cash flow to meet immediate corporate needs.	2.678	1.098
I regularly do an analysis of my business's profitability and financial performance.	3.295	1.113
I am knowledgeable about the tax legislation relevant to my firm.	2.287	1.062
I seek expert help to comply with tax legislation and optimize tax benefits.	2.330	1.082

Descriptive data on investment decisions, as shown in Table 3, indicated a multifaceted approach to corporate investment strategies among respondents. The competitive environment was seen as a significant determinant of investment decisions, with a mean of 2.327 (SD = 1.002), underscoring the role of market competition in formulating investment plans. Moreover, enterprises demonstrated a degree of meticulous planning in capital allocation for investments (Mean =

2.750, SD = 1.187), while they often encountered difficulties in ascertaining suitable capital distribution (Mean = 2.827, SD = 1.220). The investigation indicated that businesses consistently assessed the ideal length for each investment (Mean = 2.968, SD = 1.275) and maintained a specified policy about investment horizons for various projects (Mean = 2.790, SD = 1.301), reflecting systematic strategies for controlling investment timelines.

Nonetheless, although investments were predominantly consistent with long-term business goals (Mean = 2.197, SD = 1.149), the necessity for regular modifications to investment objectives in reaction to prevailing business requirements was evident (Mean = 2.130, SD = 1.295). The findings indicated that enterprises depended on a well-articulated investment plan for decision-making (Mean = 3.261, SD = 1.178), yet encountered difficulties in adjusting to changing market conditions (Mean = 2.668, SD = 1.184). This indicated that although a planned framework for investments existed, adaptability was crucial for responding to evolving external conditions.

The comprehensive evaluation of risk and return profiles prior to fund allocation was notably highlighted (Mean = 1.854, SD = 0.841), indicating a strong emphasis on assessing financial risks. Investment diversification emerged as a crucial technique for risk mitigation (Mean = 1.923, SD = 0.821), with enterprises advocating for the distribution of investments across several industries to enhance risk management (Mean = 2.112, SD = 0.929). The results demonstrated a judicious investment strategy, wherein risk management and strategic planning were pivotal in decision-making, complemented by a robust focus on adaptability and long-term objectives.

Table 3 Investment Decisions Descriptive Statistics

N = 376	Mean	SD
The competitive environment significantly impacts our investment decisions.	2.327	1.002
Our enterprise meticulously strategizes the allocation of capital to each investment.	2.750	1.187
We frequently encounter difficulties in ascertaining the suitable capital allocation for investments.	2.827	1.220
We consistently assess the ideal length for each investment undertaken.	2.968	1.275
Our enterprise maintains a specific policy concerning the investment horizon for various initiatives.	2.790	1.301
Our investments consistently align with our long-term company objectives.	2.197	1.149
We regularly evaluate and modify our investment objectives to align with current business requirements.	2.130	1.295
Our enterprise adheres to a clearly articulated investment strategy for all financial choices.	3.261	1.178
We modify our investment strategies in response to fluctuating market conditions.	2.668	1.184
We meticulously evaluate the risk and return characteristics of assets prior to allocating capital.	1.854	.841
Our business investment is diversified to mitigate risk.	1.923	.821
We advocate for diversifying our investments across several sectors to enhance risk management.	2.112	.929

Moreover, correlation analysis results presented in table 4 showed that there was a strong statistically significant associations ($r = 0.978$, $p = .000 < 0.01$) between availability bias and financial literacy, suggesting that persons with more availability bias demonstrated higher financial literacy. Furthermore, availability bias had a strong positive correlation with investment decisions ($r = 0.964$, $p < 0.01$), indicating that dependence on accessible information affects individuals' investment choices. Financial literacy exhibits a robust link with investment decisions ($r = 0.981$, $p = .000 < 0.01$). These findings suggest that improving financial literacy may alleviate the impact of behavioral biases such as availability bias, resulting in superior investing decisions.

The results corroborate Salman *et al.*, (2024) and Gulzar *et al.*, (2024), who demonstrate a significant correlation between availability bias and investment decision-making, influenced by risk tolerance, external locus of control, and emotional stability. Conversely, Wikartika *et al.*, (2023) observed no such effect among young investors, indicating that financial literacy may reduce availability bias's effect, in alignment with Lusardi and Mitchell (2014). Consequently, although availability bias frequently influences investment behavior, its effect is dependent on individual and environmental variables such as emotional regulation and financial acumen.

Table 4 Correlation Analysis Results

		Availability bias	Financial literacy	Investment decisions
Availability Bias	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	376		
Financial literacy	Pearson Correlation	.978**	1	
	Sig. (2-tailed)	.000		
	N	376	376	
Investment decisions	Pearson Correlation	.964**	.981**	1
	Sig. (2-tailed)	.000	.000	
	N	376	376	376

****.** Correlation is significant at the 0.01 level (2-tailed).

Additionally, study results on the hypothesis that financial literacy did not have a statistically

significant mediating effect on the relationship between availability bias and investment decisions of selected SMEs in Nairobi County are presented in table 5.

Table 5 Availability Bias, Financial Literacy and Investment Decisions Interaction

Y = investment decisions, X = availability bias, M = financial literacy, N= 376

Outcome variable: Financial literacy

Model Summary

R	R-sq	MSE	F	df1	df2	p
.9776	.9556	.0482	8053.7732	1.0000	374.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	.4191	.0285	14.7296	.0000	.3631	.4750
Availability bias	.8041	.0090	89.7428	.0000	.7865	.8217

Outcome Variable: Investment Decisions

Model Summary

R	R-sq	MSE	F	df1	df2	p
.9810	.9623	.0416	4758.1546	2.0000	373.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	-.2057	.0332	-6.1897	.0000	-.2711	-.1404
Availability bias	.1000	.0395	2.5296	.0118	.0223	.1777
Financial literacy	.8684	.0481	18.0703	.0000	.7739	.9629

Direct and Indirect Effects of X on Y

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
.1000	.0395	2.5296	.0118	.0223	.1777

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
Financial Literacy	.6983	.0710	.5468	.8222

Map of column names to model coefficients:

	Conseqnt	Antecdnt
Column 1	Financial literacy	constant
Column 2	Financial literacy	Availability Bias
Column 3	Investment decisions	constant
Column 4	Investment decisions	Availability bias
Column 5	Investment decisions	Financial literacy

Bootstrap Results for Regression Model Parameters

Outcome Variable: Financial literacy

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
Constant	.4191	.4195	.0286	.3644	.4747
Availability bias	.8041	.8039	.0104	.7834	.8243

Outcome Variable: Investment decisions

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
Constant	-.2057	-.2046	.0430	-.2837	-.1149
Availability bias	.1000	.1012	.0683	-.0167	.2484
Financial literacy	.8684	.8665	.0851	.6850	1.0144

Level of confidence for all confidence intervals in output:95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:5000

The regression analysis indicated that availability bias exerted a positive significant influence on financial literacy (coefficient = 0.8041, $p < 0.0001$),

suggesting that an increase in availability bias correlates with an enhancement in financial literacy. An R-squared value of 0.9556 signifies that availability bias accounted

for a 95.56% of the variance in financial literacy. The bootstrap results further validate the stability of this finding, with a 95% confidence interval for the coefficient of availability bias spanning [0.7834, 0.8243], so emphasizing the robustness of the relationship. The model analyzing financial literacy demonstrates a robust and statistically significant correlation between availability bias and financial literacy.

The second regression model results indicated a complicated interplay of availability bias, financial literacy, and investment decisions within the investment decisions model. The most significant effect arises from financial literacy, which exerts a significant positive influence on investing decisions (coefficient = 0.8684, $p < 0.0001$). An R-squared value of 0.9623 signifies that this model accounts for 96.23% of the variance in investment decisions. The bootstrap analysis for the investment decisions model corroborates these findings, with the 95% confidence intervals for availability bias spanning [-0.0167, 0.2484] and for financial literacy ranging from [0.6850, 1.0144], thereby affirming the significant and consistent impacts of both variables on investment decisions. Although availability bias favorably influences investment decisions (coefficient = 0.1000, $p = 0.0118$), the effect was moderate, as evidenced by the comparatively smaller coefficient.

Mediation analysis results indicated that the indirect effect of availability bias on investment decisions through financial literacy was 0.6983, with a 95% confidence interval ranging from 0.5468 (LLCI) to 0.8222 (ULCI). The absence of zero in the confidence interval signifies that financial knowledge significantly mediates the relationship between availability bias and investment decisions. Individuals influenced by availability bias generally demonstrated limited financial knowledge, which consequently impaired their investing decisions. The direct impact of availability bias on investment decisions (0.1000, $p = 0.0118 < 0.05$) was lower than its indirect effect through financial literacy, highlighting the critical role of financial education in improving investment outcomes.

The bootstrapped estimations confirm the reliability of these results. The coefficient for availability bias in the model predicting financial literacy was 0.8041 (BootMean = 0.8039, BootSE = 0.0104, BootLLCI = 0.7834, BootULCI = 0.8243, $p < 0.05$), signifying a significant association between availability bias and financial literacy. The Investment Decisions Model exhibited a bootstrapped coefficient of 0.8684 for financial literacy (BootMean = 0.8665, BootSE = 0.0851, BootLLCI = 0.6850, BootULCI = 1.0144, $p < 0.05$), confirming a robust direct effect. The role of financial literacy as a mediating variable is validated by its bootstrapped effect (BootMean = 0.6983, BootSE = 0.0710, BootLLCI = 0.5468, BootULCI = 0.8222, $p < 0.001$). This suggests that while financial literacy

markedly enhances investment decision-making, directly addressing availability bias is also vital for improving financial results.

The linear equation for the direct effect of availability bias (X) on investment decisions (Y) can be represented as:

$$Y = \beta_0 + \beta_1 AB + \epsilon$$

$$Y = -0.2057 + 0.1000 AB + \epsilon$$

Where:

$\beta_0 = -0.2057$ is the constant for investment decisions.

$\beta_1 = 0.1000$ is the coefficient for availability bias (direct effect) on investment decisions.

AB represents the coefficient for availability bias.

ϵ represents the error term.

The linear equation for the direct effect of availability bias (X) on financial literacy (M) is as follows:

$$M = aAB + \epsilon$$

$$M = 0.8041 AB + \epsilon$$

Where:

A = 0.8041 is the coefficient for availability bias on financial literacy.

The direct effect of financial literacy (M) on investment decisions (Y) is:

$$Y = bFL + c'AB + \epsilon$$

$$Y = 0.8684 FL + 0.1000 AB + \epsilon$$

Where:

$b = 0.8684$ is the effect of financial literacy on investment decisions.

$c' = 0.1000$ is the direct effect of availability bias on investment decisions after controlling for financial literacy.

The indirect effect is calculated as:

$$c' = a \times b = 0.8041 \times 0.8684 = 0.6983$$

Total effect:

$$c' + (a \times b) = 0.1000 + 0.6983 = 0.7983$$

Final linear equation for the effect of availability bias and financial literacy on investment decisions:

$$Y = 0.8684 FL + 0.1000 AB + \epsilon$$

The linear equation for the total effect of availability bias on investment decisions:

$$Y = 0.7983 AB + \epsilon$$

Research findings indicated that availability bias significantly influences investment decisions in both direct and indirect ways. The direct effect ($\beta = 0.1000$) suggests that investors reliant on accessible information tend to make suboptimal financial decisions. Financial literacy ($\beta = 0.8041$) significantly enhanced investment decisions ($\beta = 0.8684$), yielding an indirect effect of 0.6983. The significant influence of availability bias on investment decisions (0.7983) highlights the critical role of financial literacy in mitigating the adverse impact of cognitive biases on investment behavior. The p-values for all coefficients are statistically significant ($p < 0.05$), leading to the rejection of the null hypothesis H_0 , which posits that financial literacy does not mediate the

association between availability bias and investment decisions. These findings align with behavioral finance theories, which argue that financial literacy diminishes reliance on heuristic-driven decision-making, leading to more rational investment choices. Consequently, policymakers and financial educators should prioritize enhancing financial literacy measures to reduce biases that may negatively impact investment decisions.

These findings correspond with the behavioral finance literature, including Polychronakis (2023) and Salman *et al.*, (2024), which associate biases such as availability bias with suboptimal financial behavior, particularly in the context of market uncertainty, and with Nguyen *et al.*, (2023), Suresh (2024), and Ranaweera & Kawshala (2022), who emphasize financial literacy as a moderating variable. Conversely, Wikartika *et al.*, (2023) found no significant effect of availability bias on financially knowledgeable young investors, reinforcing the idea that education can mitigate heuristic-driven inclinations. The findings highlight the essential role of financial education in reducing cognitive biases and improving investing results.

This study's findings have substantial theoretical implications for Heuristics Theory, BPT, and HCT. The observed impact of availability bias on investment decisions empirically supports Heuristics Theory, which asserts that humans employ mental shortcuts to navigate decision-making under uncertainty (Arnott & Gao, 2022). This study confirms that these heuristics can lead to suboptimal investment decisions among SME decision-makers, especially when time, cognitive capacity, and information are limited (Doyle *et al.*, 2021). The recognition of financial literacy as a mediating variable underscores a theoretical shortcoming in Heuristics Theory, which has inadequately addressed how cognitive advancement via financial education may alleviate these biases.

Further, the results reinforce BPT by demonstrating that investors, particularly SME proprietors, do not invariably seek optimal returns; rather, they organize their portfolios to correspond with multifaceted objectives and emotional inclinations (Majewski & Majewska, 2022). Behavioral biases, including availability bias, align with BPT's focus on bounded rationality and psychological factors affecting portfolio decisions (Akkaya, 2021). However, the mediating effect of financial literacy identified in this study exposes a theoretical deficiency in BPT. Moreover, the findings confirm HCT's claim that education and skills development, especially in financial literacy, improve individuals' economic and decision-making abilities (Hung & Ramsden, 2021). This study demonstrates that financial literacy mediates the connection between behavioral biases and investment decisions, so reinforcing the HCT notion that investments in human capital enhance cognitive processing and economic outcomes.

CONCLUSION

Study results demonstrated that both availability bias and financial literacy significantly affected investment decisions of SMEs in Nairobi County, with financial literacy significantly decreasing the effects of availability bias. Further, financial literacy demonstrated a strong positive association with investment decisions, indicating that persons with greater financial literacy were more adept at making sound investment decisions. The mediation role of financial literacy in the relationship between availability bias and investment decisions was significant, however insufficient to entirely alleviate the effects of availability bias on investment decisions.

Based on the findings, this study recommends that SMEs should come up with a structured way of making investment decisions to mitigate the influence of availability bias. Moreover, the government of Kenya and financial institutions focus on improving financial literacy of SMEs to alleviate the effects of availability bias on investment decisions by developing and implementing comprehensive financial literacy programs. Implementing comprehensive financial education programs designed for SMEs could enhance their capacity to make informed, rational decisions, while including decision-making frameworks that promote critical thinking and diminish dependence on easily accessible information. Moreover, targeted training should focus on cognitive biases such as availability bias to improve investment results.

Future research may investigate the effect of other behavioral biases, including overconfidence, herding effect, confirmation bias, and anchoring bias among others on investment decisions. Also, further research can evaluate the efficacy of diverse financial literacy programs, and analyze the impact of demographic factors on the correlation between cognitive biases and investment choices. Broadening research across various areas or sectors and integrating behavioral finance concepts into business training may provide enhanced understanding for better decision-making in SMEs.

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