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Research Article

Evaluation of Behavioral Factors Influencing Investors' Investment Decisions in Nepal Stock Exchange (NEPSE)

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Abstract

This study investigates the behavioral factors influencing investment decisions among individual investors in the Nepal Stock Exchange (NEPSE), focusing on four key biases: risk perception, loss aversion, overconfidence bias, and representative bias. Employing a descriptive and causal research design, data were collected from 250 investors in Kathmandu using a structured questionnaire. The study utilized a 5-point Likert scale to measure variables, and data were analyzed using descriptive statistics, correlation analysis, and multiple regression analysis in SPSS and MS Excel. The findings reveal that overconfidence bias has the strongest influence on investment decisions ($\beta = 0.421$), followed by risk perception ($\beta =$ 0.183), representative bias ($\beta = 0.144$), and loss aversion ($\beta = 0.119$). All variables demonstrated significant correlations with investment decision-making, with overconfidence bias showing the highest correlation (r = 0.700). The regression model explained 59.1% of the variance in investment decisions, indicating a moderately strong relationship between the predictors and the dependent variable. The study highlights the pervasive impact of behavioral biases in shaping investment decisions, particularly in emerging markets like Nepal, where market inefficiencies and information asymmetries are prevalent. These findings contribute to the growing body of behavioral finance literature by providing empirical evidence from an under-researched context. Practical implications include the need for investor education programs to mitigate the effects of these biases, thereby promoting more rational and informed investment decisions. The study calls for further research to explore additional behavioral factors and their long-term impact on investment performance in NEPSE and similar markets.

Keywords: Behavioral finance, Risk perception, Loss aversion, Overconfidence bias, Representative bias, Nepal Stock Exchange (NEPSE)

Introduction

Investors are often perceived as rational decision-makers who base their investment choices on logical analysis and available information. However, empirical evidence and theoretical studies suggest that investors frequently deviate from rational decision-making due to cognitive biases and emotional influences (Bashir *et al.*, 2013; Chaudhary *et al.*, 2025). These deviations, often referred to as behavioral biases, challenge the traditional assumptions of financial theories and highlight the importance of understanding the

psychological and emotional factors that shape investment decisions. Behavioral finance, a relatively new field of study, seeks to explain these anomalies by integrating psychological theories with financial decision-making processes (Kumar & Goyal, 2015). This new field has drawn a lot of interest lately since it offers a more grounded framework for comprehending investor behaviour, especially when considering market inefficiencies and irrational decision-making.

Conventional financial theories, such the Modern Portfolio Theory (MPT) and the Efficient Market Hypothesis (EMH), make the assumptions that markets are efficient and investors are logical. According to these ideas, investors base their decisions on an unbiased evaluation of risk and reward, and stock prices represent all available information (Fama, 1970). However, because investors are impacted by social, emotional, and cognitive biases, real-world situations frequently defy these presumptions (Kahneman & Tversky, 1979). For instance, investors may overestimate their knowledge (overconfidence bias), avoid losses more than they seek gains (loss aversion), or make decisions based on recent information (representativeness bias). Both individual wealth and market efficiency may be impacted by these biases if they result in less-than-ideal investment choices (Barber & Odean, 2000). The growing body of literature in behavioral finance has demonstrated that these biases are pervasive across different markets and investor types, underscoring the need for a deeper understanding of their impact on investment outcomes.

Behavioral finance emerged as a response to the limitations of traditional financial theories, offering a more nuanced perspective on investor behavior. It combines insights from psychology, sociology, and cognitive science to explain why investors often act irrationally, even when they have access to complete information (Statman, 2014). For example, prospect theory, developed by Kahneman and Tversky (1979), posits that investors evaluate potential gains and losses differently, leading to decisions that deviate from the predictions of traditional utility theory. This theory has been instrumental in explaining phenomena such as the disposition effect, where investors hold onto losing investments for too long and sell winning investments too quickly (Shefrin & Statman, 1985). Similarly, herding behavior, where investors follow the actions of others rather than making independent decisions, has been widely documented in both developed and emerging markets (Waweru et al., 2008; Ghimire and Adhikari, 2023).

The relevance of behavioral finance is particularly pronounced in emerging markets, where market inefficiencies and information asymmetries are more prevalent. In these markets, investors often face unique challenges, such as limited access to reliable information, underdeveloped regulatory frameworks, and higher levels of market volatility (Almansour *et al.*, 2023). These factors can exacerbate the impact of behavioral biases, leading to more pronounced deviations from rational decision-making. For example, in the context of Nepal, the Nepal Stock Exchange (NEPSE) has experienced significant growth in recent years, attracting a diverse range of investors. However, the decision-making processes of these investors are often influenced by behavioral biases, which can lead to irrational investment choices (Gurung, 2004;

Ghimire and Adhikari, 2023). Understanding these biases is crucial for improving investment outcomes and fostering a more stable financial market.

The field of behavioral finance highlights the significance of cognitive psychology in financial decision-making. Emerging in the 1980s, behavioral finance incorporates psychological and behavioral insights into economic and financial theories, offering a more holistic understanding of investor behavior (Kumar & Goyal, 2015). This perspective challenges traditional financial theories by identifying various behavioral biases that shape individual investment decisions (Budhiraja et al., 2018). It explores how investors navigate financial markets and the potential impact of their decisions on market dynamics. As an interdisciplinary approach, behavioral finance integrates elements of economics, finance, and cognitive psychology to explain why individuals sometimes make irrational financial choices, particularly in stock market investments. It sheds light on why investors may buy or sell stocks impulsively without conducting fundamental analysis (Olsen, 1998). While extensive research on investor behavior has been conducted in well-established capital markets, there remains a gap in understanding such behavior in developing economies like Nepal. Therefore, this study aims to bridge that gap by comprehensively examining the investment behaviors of individual investors in Nepal's stock market, offering valuable insights into their decision-making processes.

Based on the behavioral finance literature, the purpose of this study is to identify the most prevalent behavioral biases that impact investment decisions among Nepal Stock Exchange investors and explore the relationship between psychological factors and investment decisions. Specifically, this research focuses on four key behavioral biases: risk perception, loss aversion, overconfidence bias, and representativeness bias. These biases have been widely studied in developed markets, but their impact in emerging economies like Nepal remains underexplored (Almansour et al., 2023). By examining these factors, this research seeks to provide insights into the psychological drivers of investment behavior in Nepal and contribute to the growing body of literature on behavioral finance in developing economies.

The findings of this study have both theoretical and practical implications. Theoretically, it contributes to the understanding of how behavioral biases manifest in emerging markets and how they differ from those in developed economies. For instance, while overconfidence bias has been extensively studied in Western markets, its manifestation in a culturally distinct context like Nepal may differ due to variations in financial literacy, market maturity, and investor demographics (Kumar & Goyal, 2015). Practically, the results can help investors recognize

and mitigate the impact of these biases, leading to more informed and rational investment decisions. Additionally, policymakers and financial advisors can use these insights to design educational programs and interventions that promote better financial decision-making among investors. For example, understanding the role of loss aversion in Nepalese investors could lead to the development of targeted financial products that address their risk preferences and investment goals.

This research seeks to fill a significant gap in the existing literature by exploring the behavioral factors that shape investment decisions in the Nepal Stock Exchange (NEPSE). By incorporating perspectives from behavioral finance and analyzing empirical data from Nepal, the study aims to deepen our understanding of investor behavior in emerging markets and offer practical recommendations for optimizing investment outcomes. Additionally, it underscores the necessity for further research in this domain, particularly in other emerging markets, to develop a more comprehensive framework for understanding the relationship between behavioral biases and investment decision-making.

Literature Review and Hypothesis Development

Investment decision-making is a critical process that involves allocating financial resources with the aim of maximizing future returns. Wang (2010) defines decisionmaking as the process of selecting the best course of action to achieve specific goals, given the constraints of limited resources, both tangible and intangible. Similarly, Laopodis (2020) describes investment as a present-day sacrifice of resources—such as time, money, and energy—with the expectation of obtaining greater resources in the future. Thus, investment decision-making is inherently tied to the efficient allocation of resources to achieve optimal outcomes. This process is influenced by a variety of factors, including personal needs, organizational demands, and external economic conditions, which collectively shape an individual's decision-making style (Ogarca, 2015). Rowe and Boulgarides (1983) further categorize decision-making approaches in a business environment into directive, analytic, conceptual, and behavioral styles, each reflecting different levels of rationality and emotional influence.

Investment decisions in financial markets are inherently complex and require investors to carefully balance risk and return. Traditional financial theories, such as the Efficient Market Hypothesis (EMH) and Modern Portfolio Theory (MPT), assume that investors act rationally, making decisions based on an objective assessment of available information (Fama, 1970). However, empirical research indicates that investors often stray from purely rational decision-making due to cognitive biases and emotional influences, which can result in less-than-optimal investment

choices (Barber & Odean, 2000). This recognition of investor irrationality has led to the development of behavioral finance, a field that explores the psychological factors shaping financial decision-making.

Behavioral finance is a multidisciplinary field that combines principles from psychology, sociology, and cognitive science to examine how investors make financial decisions. In contrast to traditional finance, which assumes rational investor behavior and efficient markets, behavioral finance recognizes that investment decisions are frequently shaped by cognitive biases and emotional influences, often resulting in irrational choices (Statman, 2014; Sharma *et al*, 2024). According to Ricciardi and Simon (2000), behavioral finance seeks to explain the "what, why, and how" of investment decisions from a human perspective, focusing on the psychological and emotional processes that drive investor behavior.

The foundations of behavioral finance can be traced back to the work of Amos Tversky and Daniel Kahneman, who introduced prospect theory in 1979. Prospect theory challenges the traditional utility theory by proposing that investors evaluate potential gains and losses differently, leading to decisions that deviate from rationality (Kahneman & Tversky, 1979). This theory has been instrumental in explaining phenomena such as loss aversion, where investors prioritize avoiding losses over achieving gains, and the disposition effect, where investors hold onto losing investments for too long and sell winning investments too quickly (Shefrin & Statman, 1985). These behavioral biases have significant implications for investment outcomes, as they can lead to suboptimal portfolio performance and market inefficiencies.

Behavioral Finance and Investment Decision Making:

Behavioral finance has revolutionized the way we understand investment decision-making by highlighting the role of psychological factors in shaping investor behavior. Traditional financial theories assume that investors make decisions based on rational analysis of risk and return, but behavioral finance demonstrates that cognitive biases and emotions often play a more significant role (Kumar & Goyal, 2015). For example, overconfidence bias leads investors to overestimate their knowledge and underestimate risks, resulting in excessive trading and poor investment performance (Barber & Odean, 2000). Similarly, representativeness bias causes investors to make decisions based on recent information or stereotypes, rather than objective analysis (Tversky & Kahneman, 1974).

One of the key contributions of behavioral finance is its ability to explain market anomalies that cannot be accounted for by traditional financial theories. For instance, herding behavior, where investors follow the actions of others rather than making independent decisions, has been widely documented in both developed and emerging

markets (Waweru *et al.*, 2008). This behavior can lead to market bubbles and crashes, as investors collectively overreact to market trends. Behavioral finance also provides insights into the role of risk perception in investment decision-making, demonstrating that investors' subjective assessment of risk often differs from objective measures (Ricciardi & Rice, 2014).

Risk Perception and Investment Decision Making

Risk perception is a critical factor in investment decision-making, as it reflects how investors subjectively assess the level of risk associated with an investment. Unlike traditional finance, which assumes that risk can be objectively measured, behavioral finance recognizes that risk perception is influenced by cognitive biases and emotional factors (Ricciardi & Rice, 2014). For example, investors may perceive certain investments as riskier than they objectively are due to recent negative experiences or media coverage, leading to overly conservative investment decisions (Tversky & Kahneman, 1974).

Prospect theory provides a framework for understanding how risk perception influences investment decisions. According to Kahneman and Tversky (1979), investors evaluate potential gains and losses differently, with losses having a greater emotional impact than gains. This phenomenon, known as loss aversion, leads investors to prioritize avoiding losses over achieving gains, even when the latter may offer higher expected returns. Loss aversion can result in suboptimal investment decisions, such as holding onto losing investments for too long or avoiding risky but potentially profitable opportunities (Shefrin & Statman, 1985). Thus, it can be hypothesized as;

H1: Risk perception has a significant association with investment decision making.

Representative Bias and Investment Decision Making

Representativeness bias, also known as availability bias or recall bias, is another cognitive bias that significantly impacts investment decision-making. This bias occurs when investors make decisions based on recent or easily accessible information, rather than conducting a thorough analysis of all available data (Hayibor & Wasieleski, 2009). For example, investors may overestimate the potential of a stock based on its recent performance, without considering its long-term fundamentals (Harris & Raviv, 2005). This can lead to overreaction to short-term market trends and poor investment outcomes.

Waweru *et al.* (2008) found that institutional investors are particularly susceptible to representativeness bias, as they often rely on heuristics and shortcuts when making investment decisions. This bias can result in the mispricing of assets, as investors overreact to new information and ignore longer-term trends. Representativeness bias also contributes to the formation of market bubbles, as investors collectively overestimate the potential of certain assets based on recent performance (Tversky & Kahneman, 1992).

H2: Representative bias influences the investment decisions of the investors.

Overconfidence Bias and Investment Decision Making

Overconfidence bias is a well-documented cognitive bias that leads investors to overestimate their knowledge and abilities, while underestimating risks. This bias is particularly prevalent among individual investors, who often believe they can outperform the market despite evidence to the contrary (Barber & Odean, 2000). Odean (1999) found that overconfident investors engage in excessive trading, resulting in higher transaction costs and lower returns. This behavior is driven by the belief that they possess superior information or analytical skills, leading them to take on excessive risk.

Overconfidence bias also contributes to the disposition effect, where investors hold onto losing investments for too long in the hope of recovering their losses, while selling winning investments too quickly to lock in gains (Shefrin & Statman, 1985). This behavior is driven by the desire to avoid regret, as investors seek to avoid the emotional pain of realizing a loss. Overconfidence bias has significant implications for investment outcomes, as it can lead to poor portfolio performance and increased market volatility.

H3: Overconfidence bias has a significant relationship with investment decision making.

Loss Aversion and Investment Decision Making

Loss aversion is a fundamental concept in behavioral finance that describes the tendency of investors to prioritize avoiding losses over achieving gains. According to prospect theory, the emotional impact of a loss is approximately 2.5 times greater than that of an equivalent gain (Tversky & Kahneman, 1992). This bias leads investors to make overly conservative investment decisions, as they seek to minimize the risk of losses rather than maximize potential returns.

Loss aversion also contributes to herding behavior, as investors seek safety in numbers by following the actions of others rather than making independent decisions (Koening, 1999). This behavior can lead to market inefficiencies, as investors collectively overreact to negative information and avoid risky but potentially profitable opportunities. Odean (1999) found that loss aversion is a common trait among individual investors, leading to suboptimal investment decisions and reduced wealth accumulation over time.

H4: Loss aversion significantly impacts the investment decision making of individual investors.

The existing literature on behavioral finance offers valuable perspectives on the psychological factors that influence investment decision-making. Cognitive biases such as risk perception, representativeness bias, overconfidence bias, and loss aversion significantly shape investor behavior, often resulting in less-than-optimal investment choices. While these biases have been extensively analyzed in

developed financial markets, their impact in emerging economies like Nepal remains relatively unexplored. This study aims to bridge this research gap by investigating the behavioral factors that influence individual investors' decisions in the Nepal Stock Exchange (NEPSE). By integrating insights from behavioral finance with empirical data from Nepal, this research seeks to enhance the understanding of investor behavior in emerging markets and offer practical recommendations for improving investment outcomes.

Research Methodology

Conceptual Framework

Conceptual Framework is shown in Fig 1.

Research Design

This study utilizes a descriptive and causal-comparative research design to examine the behavioral factors influencing investment decisions among individual investors in the Nepal Stock Exchange (NEPSE). The descriptive approach is employed to outline the characteristics of the sample and explore the relationships between key variables, while the causal-comparative method is used to assess the cause-and-effect dynamics between behavioral biases and investment decisions. As a cross-sectional study, data is collected at a single point in time, and the research follows a correlational framework to analyze the relationships between independent variables—such as risk perception, loss aversion, overconfidence bias, and representativeness bias—and the dependent variable, investment decision-making.

Population and Sample

The population of this study comprises all individual investors actively participating in the Nepal Stock Exchange (NEPSE) within the Kathmandu district. Given the large and diverse nature of the population, a non-

probability sampling method was deemed appropriate for this study. Specifically, convenience sampling was used to select participants who were readily available and willing to participate in the survey (Chaudhary *et al.*, 2024). This sampling method is particularly suitable for exploratory studies where accessibility and feasibility are key considerations (Etikan *et al.*, 2016).

The sample size for this study was determined based on the recommendation by Hair *et al.* (2006), who suggest that the minimum sample size should be at least five times the number of variables being analyzed. Since this study examines four independent variables (risk perception, loss aversion, overconfidence bias, and representativeness bias), a sample size of 250 active investors was selected to ensure adequate statistical power and reliability of the results. The sample includes both male and female investors across different age groups, educational backgrounds, and occupational categories to ensure diversity and representativeness.

Measurement and Data Collection Procedure

Primary data was collected using a self-administered questionnaire survey. The questionnaire was designed to evaluate the influence of behavioral factors on investment decisions and was adapted from established studies in the field, including Tanzina and Siddiqua (2022), Almansour *et al.* (2023), and Sharma *et al.* (2024). The questionnaire consisted of two main sections: Demographic Information and Behavioral Factors and Investment Decisions. The variables were measured using a 5-point Likert scale, ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). This scale is widely used in behavioral finance research due to its ability to capture the intensity of respondents' attitudes and perceptions (Boone & Boone, 2012).

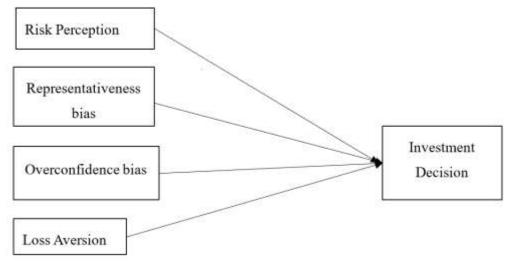


Fig. 1: Conceptual Framework (Source: Hossain & Siddiqua, 2022; DeBondt & Thaler, 1995)

Data Analysis

The collected data was analyzed using Microsoft Excel and SPSS (Statistical Package for Social Sciences) software, incorporating both descriptive and inferential statistical techniques to interpret findings and derive meaningful conclusions. Descriptive statistical methods, including mean, standard deviation, and frequency distribution, were employed to summarize the demographic characteristics of respondents and assess the central tendencies of key variables. These measures provided a comprehensive overview of the sample and response distribution.

To examine the relationships between the independent variables and the dependent variable, Pearson's correlation coefficient was utilized. This analysis helped determine the strength and direction of associations between variables. Additionally, multiple regression analysis was conducted to assess the extent to which these independent variables influence investment decision-making, offering deeper insights into the behavioral factors shaping investment choices..

Reliability and Validity

To ensure the reliability of the measurement scales, Cronbach's alpha was computed for each construct. A value above 0.70 is generally considered acceptable, indicating a satisfactory level of internal consistency (Nunnally & Bernstein, 1994). The validity of the questionnaire was maintained by adapting items from well-established studies and conducting a pilot test with a small group of investors to identify and resolve any ambiguities or inconsistencies. The study adhered to ethical research principles, including obtaining informed consent from participants, maintaining the confidentiality of responses, and using the data strictly for academic purposes. Participants were fully informed about the study's objectives and their right to withdraw at any stage without any consequences.

The research methodology adopted in this study follows a rigorous and systematic approach to examining the behavioral factors influencing investment decisions among individual investors in NEPSE. By integrating both descriptive and inferential statistical tools, the study aims to produce reliable insights that contribute to the expanding body of literature on behavioral finance in emerging markets.

Results and Discussion

A structured questionnaire was formed and distributed to the respondents for the purpose of this research. The data obtained from the enrolled respondents has been properly arranged, tabulated, and analyzed for proper understanding and analysis of the study.

Table 1 shows the personal profiles of the respondents. Regarding the gender of respondents, the majority, i.e., 67.6 percent, are female, followed by 32.4 percent of male respondents. The age of the respondent is divided into five

groups. The majority of respondents are from the age group of Below 30 years, i.e., 42.0 percent, followed by the age group of 31-40 years, i.e., 38.4 percent. Respondents in the age group 41-50 are 14.4 percent, whereas 51-60 years are 7.1 percent, and the least number of respondents are from the age group of above 60 years with 0.8 percent. The age group of below 30 years is larger because most of the respondents are students at the Mater's and above level. Considering educational qualification, the majority of the respondents have done their master's degree, i.e., 45.6 percent, followed by the intermediate (+2) pass outs with 22.3 percent. 12.5 percent of the respondents have studied bachelors, whereas 4.8 percent have done their informal education. In the category of occupation, the majority of respondents (47.2 percent) are job holders, followed by own business owners (22.8 percent). 18.0 percent of the respondents are involved in self-employment, 10.4 percent are on other occupation, followed by retirement benefits with 1.6 percent.

Table 2 provides information on the Cronbach's Alpha coefficients of the five variables related to decision making, indicating the internal consistency and reliability of each variable. The variables risk perception, loss aversion, and representative bias demonstrate acceptable levels of internal consistency, with Cronbach's alpha coefficients of 0.751, 0.759, and 0.712 respectively. On the other hand, the variables overconfidence bias and investment decision making indicate higher levels of internal consistency reliability, with Cronbach's alpha coefficients of 0.833 and 0.840 respectively. These findings suggest that the items within each variable are consistently measuring the intended components. Overall, the survey provides reliable measures for assessing participants' risk perception, loss aversion, overconfidence bias, representative bias, and investment decision making tendencies.

Table 3 presents the mean and standard deviation values for different variables related to investment decision making. The mean represents the average level of each variable, while the standard deviation indicates the level of variability or dispersion in the responses. Analyzing the mean values, it is observed that risk perception has a mean of 3.5312, indicating a relatively lower level of importance in investment decision making. Loss aversion also holds high importance, with a mean of 3.6313. Overconfidence bias has a mean value of 3.4627, which suggests that respondents exhibit a relatively lower level overconfidence in their investment decision making. Representative bias, with a mean of 3.3147. Overall, investment decision making, as a variable, has a mean of 3.5680, indicating a moderate level of importance. This means that respondents consider multiple factors and considerations when making investment decisions.

In summary, the mean and standard deviation values across these variables provide insights into the average levels and the degree of variability in respondents' risk perception, loss aversion, overconfidence bias, representative bias, and investment decision making.

Table 1: Demographic Characteristics of the Respondents

Respondents Character	No. of Response	
Gender		
Male	81	32.4
Female	169	67.6
Age (in years)		
Below 30 years	105	42.0
31-40 years	96	38.4
41-50 years	36	14.4
51-60 years	11	4.4
Above 60 years	2	0.8
Educational Qualification		
Bachelor	103	12.5
High School	21	22.3
Informal Education	12	4.8
Master and above	114	45.6
Nature of Occupation		
Business/Own Business	57	22.8
Full Employment/ Job Holder	118	47.2
Other	26	10.4
Retirement Benefits	4	1.6
Self-Employments	45	18.0

(Source: Questionnaire Survey, 2025)

Table 2: Reliability Analysis

Variables	Cronbach's Alpha	No. of items
Risk Perception	.751	7
Loss Aversion	.759	6
Overconfidence Bias	.833	6
Representative Bias	.712	6
Investment Decision Making	.840	9

(Source: SPSS Output, 2025)

 Table 3: Descriptive Statistics of independent and dependent variables

1 3		
Variables	Mean	Std. Deviation
Risk Perception	3.5312	.71171
Loss Aversion	3.6313	.74099
Overconfidence Bias	3.4627	.83937
Representative Bias	3.3147	.73045
Investment Decision Making	3.5680	.72962

(Source: SPSS Output, 2025)

Table 4 provides a correlation matrix that indicates the relationships between risk perception, loss aversion, overconfidence bias, representative bias, and investment decision making. Risk perception has a positive correlation of 0.623 with investment decision making, suggesting that individuals who perceive higher levels of risk tend to make cautious investment decisions. Loss aversion also shows a positive correlation with investment decision making, i.e., 0.557 indicating that individuals who are more averse to losses tend to make more conservative investment choices. Overconfidence bias has a positive correlation of 0.700 with investment decision making, implying that individuals exhibiting overconfidence bias are more likely to take higher risks in their investment decisions. Representative bias has the strongest positive correlation of 0.508 with investment decision making. It indicates that those who reflect this bias and make judgments based on stereotypes or prior experiences are more likely to be influenced by their investment decisions. Thus, these correlations provide

insights into the psychological biases that can impact investment decision making. All the independent variables are found to be significant at the 1% and 5% levels of significance.

The regression model presented in the table 5 provides information on the relationship between the predictor variables and the dependent variable. At confidence level 95%, the model R of 0.769 indicates that there is a substantial correlation between the four predictors (risk perception, loss aversion, overconfidence bias, and representative bias) and the dependent variable (investment decision making). The R² value of 0.591 represents that approximately 59.1% of the variance in the dependent variable is described by the four attributes. Thus, the regression model shows a moderately positive relationship between the predictor variables and the dependent variable. The model explains approximately 59.1% of the variance in the dependent variable (Table 5).

Table 4: Correlation between independent and dependent variables

	Risk	Loss	Overconfidence	Representative	Investment
	Perception	Aversion	Bias	Bias	Decision
					Making
Risk Perception	1				
Loss Aversion	.700**	1			
Overconfidence	.569**	.472**	1		
Bias					
Representative	.580**	.566**	.395**	1	
Bias					
Investment	.623**	.557**	.700**	.508**	1
Decision Making					

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

(Source: SPSS Output, 2025)

Table 5: Regression between independent and dependent variables

Model	R	\mathbb{R}^2	Adjusted R ²	Std. Error of the Estimate
1	.769ª	.591	.584	.47032

(Source: SPSS Output, 2025)

Table 6: Regression Coefficient

Model	Unstandardized Coefficients				Collinearity Statistics	
	В	Std. Error	_ t	Sig.	Tolerance	VIF
(Constant)	.553	.173	3.201	.002		
Risk Perception	.183	.066	2.785	.006	.405	2.471
Loss Aversion	.119	.059	2.016	.045	.466	2.146
Overconfidence Bias	.421	.044	9.651	.000	.663	1.509
Representative Bias	.144	.052	2.767	.006	.611	1.637

(Source: SPSS Output, 2025)

Table 6 provides information on the unstandardized coefficients, t-values, and significance levels for the predictor variables: risk perception, loss aversion, overconfidence bias, and representative bias. It also includes collinearity statistics such as tolerance and variance inflation factor (VIF) to assess multicollinearity. Based on the beta values of unstandardized coefficients, it can be shown that overconfidence bias has a stronger impact on investment decision making than other variables like risk perception, loss aversion, and representative bias, with a beta value of 0.421. As the VIF of all the variables is less than 10, or (VIF<10), the collinearity statistics indicate that there is no multicollinearity and it is not a major concern among the predictor variables.

Thus, all the variables taken into account for the study are the statistically significant predictors of the dependent variable, as indicated by their significant coefficients and low p-values. From Table 6, the significance level of risk perception is 0.006, which is lessr than the alpha value of 0.05 (p<0.05). As a result, the alternative hypothesis (H1) is accepted. The significance level of representative bias is 0.000, which is less than the alpha value of 0.05. As a result, the alternative hypothesis (H2) is accepted. The significance level of overconfidence bias is 0.001, which is less than the alpha value of 0.05. As a result, the alternative hypothesis (H3) is accepted. The significance level of loss aversion is 0.045, which is less than the alpha value of 0.05, and as a result, the alternative hypothesis (H4) is not accepted. The findings reveal that risk perception has a significant association with investment decision making, and the hypothesis is accepted. It is accepted that representative bias and overconfidence bias influence the investment decisions of investors. Similarly, the hypothesis suggesting that loss aversion impacts investment decision making is accepted. Overall, the study suggests that representative bias and overconfidence bias, risk perception and loss aversion play significant roles.

Discussion

The primary objective of this paper was to identify the most prevalent behavioral biases influencing investment decisions among individual investors in the Nepal Stock Exchange (NEPSE) and to explore the relationship between psychological factors and investment decision-making. Drawing on behavioral finance theory, this research examined the impact of four key behavioral biases—risk perception, loss aversion, overconfidence bias, and representative bias—on investment decisions. The findings reveal that these biases significantly influence investment decision-making, aligning with prior research in both developed and emerging markets (Kahneman & Tversky, 1979; Barber & Odean, 2000; Kumar & Goyal, 2015).

The study demonstrates that overconfidence bias exerts the strongest influence on investment decision-making, as evidenced by the highest beta coefficient ($\beta = 0.421$) in the

regression analysis. This finding is consistent with the work of Barber and Odean (2000), who argue that overconfident investors tend to overestimate their knowledge and analytical skills, leading to excessive trading and suboptimal investment outcomes. Overconfidence bias is particularly prevalent among individual investors, who often believe they can outperform the market despite empirical evidence to the contrary (Odean, 1999). In the context of NEPSE, this bias may be exacerbated by the relatively nascent nature of the market, where information asymmetry and limited financial literacy are more pronounced (Gurung, 2004).

Risk perception also emerged as a significant predictor of investment decisions, with a positive correlation (r = 0.623) and a significant beta coefficient ($\beta = 0.183$). This aligns with prospect theory, which posits that investors evaluate potential gains and losses differently, often prioritizing the avoidance of losses over the pursuit of gains (Kahneman & Tversky, 1979). In the context of NEPSE, where market volatility and regulatory uncertainties are prevalent, investors may exhibit heightened risk aversion, leading to more conservative investment strategies (Almansour *et al.*, 2023). This finding is consistent with Hossain and Siddiqua (2022), who found that risk perception significantly influences investment decisions in the Dhaka Stock Exchange (DSE).

Representative bias was another significant factor, with a positive correlation (r=0.508) and a significant beta coefficient ($\beta=0.144$). This bias occurs when investors rely on stereotypes or recent information rather than conducting a thorough analysis of all available data (Tversky & Kahneman, 1974). In the context of NEPSE, this may manifest as investors overreacting to short-term market trends or recent stock performance, leading to suboptimal investment decisions. This finding is consistent with Waweru *et al.* (2008), who found that institutional investors in emerging markets are particularly susceptible to representativeness bias.

Loss aversion, while significant (p < 0.05), had a relatively weaker impact (β = 0.119) compared to the other biases. This finding is consistent with prospect theory, which suggests that the emotional impact of losses is approximately 2.5 times greater than that of equivalent gains (Tversky & Kahneman, 1992). However, the weaker influence of loss aversion in this study may be attributed to the unique characteristics of the Nepalese market, where investors may be more influenced by other biases such as overconfidence or representativeness. This finding contrasts with Hossain and Siddiqua (2022), who identified loss aversion as one of the most influential factors in the DSE, suggesting that cultural and market-specific factors may play a role in shaping the relative importance of behavioral biases.

The findings of this study are consistent with prior research in both developed and emerging markets. For instance, Noah and Lingga (2020) found that behavioral factors such as overconfidence, loss aversion, and availability bias significantly influence investment decisions in the Indonesian Stock Exchange (IDX). Similarly, Sattar *et al.* (2020) concluded that heuristic behaviors, including overconfidence and representativeness, have a stronger influence on investment decisions than personality traits or market prospects. These findings underscore the universality of behavioral biases in shaping investment decisions, while also highlighting the need for context-specific analyses, particularly in emerging markets like Nepal.

Conclusion

In conclusion, this study highlights the significant influence of behavioral biases—particularly overconfidence bias, risk perception, and representative bias-on investment decision-making in the Nepal Stock Exchange. The findings underscore the importance of understanding psychological factors that shape investor behavior, particularly in emerging markets where market inefficiencies and information asymmetries are more pronounced. By recognizing and addressing these biases, investors can make more informed and rational decisions, ultimately leading to better financial outcomes. The study also calls for further research to explore the role of other behavioral factors and to examine the long-term impact of these biases on investment performance in NEPSE and other emerging markets.

Implication

Theoretically, this study contributes to the growing body of literature on behavioral finance by providing empirical evidence of the impact of behavioral biases in an emerging market context. While much of the existing research has focused on developed markets, this study highlights the unique manifestations of behavioral biases in Nepal, where market inefficiencies, information asymmetry, and limited financial literacy are more prevalent (Kumar & Goyal, 2015). The findings suggest that behavioral finance theories, such as prospect theory and heuristic-driven bias models, are equally applicable in emerging markets, albeit with some context-specific variations.

From a practical perspective, the findings have important implications for investors, financial advisors, and policymakers. Investors can benefit from recognizing and mitigating the impact of behavioral biases, particularly overconfidence and representativeness, which were found to have the strongest influence on investment decisions. Financial advisors and policymakers can use these insights to design educational programs and interventions aimed at improving financial literacy and promoting more rational decision-making. For instance, targeted training programs could help investors understand the pitfalls of overconfidence and the importance of conducting thorough analyses before making investment decisions.

Limitations and Future Research Directions

While this study provides valuable insights, it is not without limitations. First, the use of convenience sampling limits the generalizability of the findings to the broader population of NEPSE investors. Future research could employ more robust sampling methods, such as stratified or random sampling, to enhance the representativeness of the findings. Second, the study focused on only four behavioral biases, leaving other potentially influential factors, such as herding behavior and mental accounting, unexplored. Future research could expand the scope of analysis to include these and other biases, providing a more comprehensive understanding of the factors influencing investment decisions in NEPSE.

Additionally, the cross-sectional design of the study limits the ability to draw causal inferences. Future research could adopt a longitudinal approach to examine how behavioral biases influence investment decisions over time, particularly in response to market fluctuations or regulatory changes. Finally, the study was limited to the Kathmandu district, which may not fully capture the diversity of investor behavior across Nepal. Future research could expand the geographical scope to include other regions, providing a more holistic understanding of investment behavior in the country.

Authors' Contribution

Conception and Design: Madhav Adhikari, Prerana Sharma

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Conflict of Interest

The authors have no conflicts of interest to disclose.

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