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The Impact of Behavioral Factors on Stock Investment Decision: Evidence from Individual Investors in Nepal

Prakash Chand
Central Department of Management, Tribhuvan University, Kirtipur, Nepal

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Corresponding Author: *Prakash Chand; Email: prakashbahadurchand12@gmal.com*

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Abstract

Behavioral finance, a field integrating psychology into financial theory, explores how cognitive biases and emotional responses influence investor behavior and market dynamics globally, including in emerging markets like Nepal. This study focuses on key behavioral biases of the most influencing factor on stock investment decisions at NEPSE is herding behavior, as it exhibits the strongest impact with a beta coefficient of 0.463, indicating a substantial influence on investor behavior, overconfidence, loss aversion, herd behavior, anchoring, and risk perception and their impact on investment of Nepal stock exchange. Behavioral factors significantly influence stock investment decisions among Nepali investors, impacting market efficiency and growth potential at NEPSE. This study employs descriptive and analytical research to characterize investor behavior and assesses the relationships between biases and investment outcomes. A sample of 384 NEPSE investors was surveyed, using structured questionnaires and SPSS for analysis. Findings underscore the importance of enhancing financial literacy, investor education, and regulatory measures to mitigate biases' adverse effects, thereby improving market stability and efficiency. Despite its focus on NEPSE, limitations include the need for broader market generalizability and consideration of additional variables affecting market dynamics. Future research should expand scope and sample size to enhance reliability and applicability across diverse financial contexts.

Keywords: Behavioral finance, cognitive biases, emerging market, investor behavior, market dynamics, Nepal stock exchange

Introduction

Behavioral finance, integrating psychology into financial theory, examines how cognitive biases and emotional responses influence investor behavior and market dynamics (Areiqat et al., 2023). Unlike traditional finance, which assumes rational decision-making and efficient markets, behavioral finance acknowledges that investors often act irrationally due to psychological factors. One critical bias is overconfidence, where investors overestimate their abilities and knowledge, leading to excessive trading and suboptimal portfolio management (Smith & Lee, 2024). This behavior is observed globally and is relevant in Nepal's emerging market context, where Nepali investors may engage in frequent trading on the Nepal Stock Exchange (NEPSE), potentially increasing transaction costs and undermining investment returns (Kumar & Patel, 2023).

Loss Aversion: Investors experience the pain of losses more intensely than the pleasure of gains, leading to reluctance in selling underperforming stocks in hopes of recovery, which can impair market efficiency and stability (Kahneman & Tversky, 1979; Baral & Pokharel, 2019). Herd Behavior: Investors often follow trends set by influential figures or institutions, resulting in unjustified stock price movements detached from fundamental values, contributing to market volatility (Adhikari, 2010; Risal & Khatiwada, 2019). Anchoring: Investors rely excessively on initial information, such as historical prices, which can lead to mispricing and market inefficiencies by skewing perceptions of stock values (Tversky & Kahneman, 1974; Baral & Pokharel, 2019). Risk Perception: Nepali investors typically exhibit conservative risk perception, preferring safer investments like fixed deposits and government bonds over equities, which can limit capital inflows and impact market liquidity (Rijal, 2022).

Behavioral finance provides a framework to understand how psychological biases affect investment decisions and market outcomes. In Nepal's stock market, biases such as overconfidence, where investors overestimate their knowledge (Baral & Pokharel, 2019), loss aversion, where they fear losses more than they value gains (Kahneman & Tversky, 1979; Baral & Pokharel, 2019), herd behavior, where they follow trends set by others, causing volatility (Adhikari, 2010; Risal & Khatiwada, 2019), anchoring, where they rely too heavily on initial information leading to mispricing (Tversky & Kahneman, 1974; Baral & Pokharel, 2019), and risk perception, where conservative attitudes towards risk limit investment in equities and affect liquidity (Rijal, 2022), significantly impact investor behavior. Addressing these biases through financial literacy and regulatory measures can improve market stability and efficiency.

Despite the growing interest and participation in the Nepal Stock Exchange (NEPSE), there is a limited understanding of how psychological factors influence investor behavior and market dynamics in Nepal's emerging market context. Behavioral finance theories suggest that cognitive biases and emotional responses can significantly impact investment decisions, leading to suboptimal market outcomes (Areiqat et al., 2019). However, empirical research specifically addressing these psychological factors in the context of NEPSE is sparse (Barber & Odean, 2001; Baral & Pokharel, 2019). This gap

in research hampers the development of effective strategies for improving investor decision-making and market efficiency.

The major objective of the study is to investigate the influence of psychological biases specifically overconfidence, loss aversion, herding, and risk perception on stock investment decision-making in the Nepal Stock Exchange (NEPSE). By addressing these objectives, the study aims to provide valuable insights into how these biases affect investor behavior in the Nepalese stock market. This understanding can enhance market dynamics knowledge in emerging economies and offer concrete benefits to stakeholders: investors can develop more informed strategies, financial advisors can better guide their clients, and policymakers can design targeted interventions to mitigate adverse effects and improve market stability and efficiency.

While behavioral finance has been extensively studied in developed markets (Tversky & Kahneman, 1974; Kahneman & Tversky, 1979), there is a lack of focused research on how psychological biases affect investment decisions in emerging markets like Nepal (Adhikari, 2010; Risal & Khatiwada, 2019). Existing studies on NEPSE predominantly rely on traditional financial theories that assume rational behavior (Rijal, 2022). This research will fill the gap by empirically examining how overconfidence, loss aversion, herding behavior, and risk perception impact investor decisions on NEPSE. By incorporating recent findings and contextual factors unique to Nepal, this study aims to provide a comprehensive understanding of behavioral influences in Nepal's stock market.

Literature Review

Behavioral finance has redefined stock investment strategies by revealing how psychological biases impact decision-making. Overconfidence, as noted by Barberis and Thaler (2003), leads to excessive trading and poor portfolio management. Loss aversion, identified by Kahneman and Tversky (1979), causes investors to hold onto losing stocks longer than rational models suggest. Herding behavior, highlighted by Bikchandani et al. (1992), drives investors to follow others' actions, often resulting in suboptimal decisions. These biases challenge traditional finance theories and explain anomalies like the preference for growth over value stocks, the post-earnings announcement drift, and the disposition effect, where investors prematurely sell winning stocks and retain losing ones (Fama & French, 1992; Lakonishok et al., 1994; Odean, 1998).

Behavioral finance has shifted the focus from purely rational economic models to a more nuanced understanding that includes both rational and irrational elements of human judgment (Hirshleifer, 2015). This field, emerging in the 1980s, challenges the assumptions of traditional theories like Modern Portfolio Theory and the Capital Asset Pricing Model, arguing that emotions, biases, and cognitive limitations often drive investor decisions (Almansour et al., 2023).

Behavioral finance categorizes biases into heuristic-driven and frame-dependent biases (Shefrin, 2000). Heuristic-driven biases, such as representativeness, anchoring, and availability biases, lead to systematic errors in decision-

making (Tversky & Kahneman, 1974). Frame-dependent biases, including loss aversion and mental accounting, affect how investors process and respond to information (Kahneman & Tversky, 1979; Antony, 2019). These insights have led to alternative investment strategies, such as behavioral portfolio theory (Shefrin & Statman, 2000) and sentiment analysis (Baker & Wurgler, 2006), which integrate psychological biases into asset allocation and market prediction. In markets like the Nepal Stock Exchange (NEPSE), behavioral finance is crucial for understanding investor behavior. Biases such as overconfidence, loss aversion, herding, and risk perception significantly impact investment decisions, often influenced by factors like political exposure and financial education (Adhikari, 2010; Kadariya, 2012; Pokharel, 2018). Empirical studies show that these biases can lead to frequent trading, mispricing, conservative investment choices, and reluctance to sell losing investments (Khan, 2017; Arik & Sri, 2021).

Theoretical Review

Prospect Theory: Developed by Kahneman and Tversky (1979), this theory explains how people perceive gains and losses, favoring options framed as gains over equivalent losses. It encompasses concepts like loss aversion, where the discomfort from losses is more pronounced than the pleasure from gains, and regret aversion, which can lead to suboptimal investment decisions due to fear of making poor choices (Jahanzeb et al., 2012). Prospect Theory can help explain why investors might avoid riskier stocks even if they have the potential for higher returns. For instance, if an investor has experienced significant losses in the past, they may be more reluctant to invest in stocks that have a similar risk profile, even if the potential gains are substantial. This theory is crucial for understanding how investors' psychological biases towards losses and regret influence their investment behaviors and decisions.

Behavioral Portfolio Theory (BPT): BPT posits that investors have dual goals: maximizing wealth and achieving personal satisfaction, which includes non-financial objectives like reducing anxiety (Chowdhury et al., 2024). This theory acknowledges that emotions and psychological biases, such as loss aversion and regret avoidance, influence portfolio choices beyond mere risk-return considerations (Antony, 2019). In NEPSE, BPT can explain why investors might construct their portfolios not just to maximize returns but also to meet personal emotional goals. For example, an investor might avoid high-risk stocks to reduce anxiety, even if those stocks have high return potential. This theory is relevant in understanding how investors' emotional and psychological needs shape their portfolio choices and investment strategies.

Behavioral Asset Pricing Theory: This theory explores how psychological factors like overconfidence and herding behavior influence asset prices, challenging the traditional assumptions of rationality and market efficiency (Barberis & Thaler, 2003). For NEPSE, this theory helps explain why market prices may deviate from their fundamental values due to psychological biases. For example, overconfidence may lead investors to overestimate their knowledge and underestimating risks, impacting stock prices. Similarly, herding behavior can lead to price bubbles or

crashes as investors collectively follow trends rather than making independent assessments. Understanding these behaviors is crucial for analyzing market dynamics and investor decision-making in NEPSE.

Empirical Review

Behavioral finance models have been effective in explaining stock price anomalies like overreaction, under-reaction, momentum strategies, herding behavior, and size effects (Barber & Odean, 1999; Kent & Titman, 1999). Various studies have explored these behaviors in different contexts. Barber and Odean (1999) identified common investor mistakes such as excessive trading and holding onto losing investments, attributing them to overconfidence and regret avoidance. Abhijeet (2011) and Chan et al. (2001) found evidence of overreaction and under-reaction in stock prices, influenced by herding behavior and investor psychology. In emerging markets like Nepal, factors such as capital structure, political and media exposure, financial education, and market dynamics significantly impact stock investment decisions (Adhikari, 2010; Kadariya, 2012; Pokharel, 2018; Rana, 2019). Psychological biases like loss aversion and overconfidence also play crucial roles, affecting investment behaviors and market outcomes (Khan, 2017; Arik & Sri, 2021).

Overconfidence

In behavioral finance, overconfidence refers to a psychological bias where individuals overestimate their own knowledge, abilities, or predictions about future outcomes, leading to potentially flawed decision-making in investment contexts. Overconfident investors often trade more frequently than necessary and may take on higher levels of risk without adequately assessing potential downsides (Madaan & Singh, 2019). This bias distorts perceptions of market information, contributing to market inefficiencies such as mispricing and increased volatility (Madaan & Singh, 2019). Research indicates that overconfidence is prevalent among both individual investors and financial professionals, including mutual fund managers, who may exhibit excessive trading behavior and underperform relative to more disciplined counterparts (Barber & Odean, 2000).

Loss Aversion

Loss aversion, rooted in prospect theory by Kahneman and Tversky (1979), describes the tendency for individuals to prefer avoiding losses over acquiring equivalent gains. This bias significantly influences investor behavior in financial markets, leading to conservative portfolio choices and reluctance to sell losing investments (Kalam, 2020). Loss aversion intensifies during bull markets when investors become overly optimistic about their investments and less likely to realize gains, fearing the potential regret of missing out on further profits (Kahneman & Tversky, 1979). Gender differences also play a role in loss aversion, with some studies suggesting that men and women exhibit varying degrees of risk tolerance and aversion to potential losses (Kalam, 2020).

Herding

Herding behavior in financial markets refers to the tendency of investors to mimic the actions or decisions of a larger group, often ignoring their own independent analysis or private information (Antony,

2019). This behavior can lead to collective movements in asset prices that deviate from fundamental valuations, contributing to market bubbles and crashes (Madaan & Singh, 2019). Herding behavior is driven by the desire for safety in numbers and the fear of missing out on potential gains or avoiding losses. Research indicates that herding behavior can amplify market volatility and lead to suboptimal outcomes for individual investors who follow the crowd rather than making independent decisions based on thorough analysis (Antony, 2019).

Risk Perception

Risk perception in financial decision-making refers to an individual's subjective assessment or interpretation of risk, which may differ from objective measures of risk (Ainia & Lutfi, 2019). This perception is influenced by personal experiences, cognitive biases, and emotional responses to potential losses or gains. Understanding risk perception is crucial in evaluating investor behavior and decision-making strategies, as it shapes how investors allocate capital and manage their portfolios (Ainia & Lutfi, 2019). Financial professionals must consider both objective risk factors and subjective risk perceptions when advising clients or designing investment products to ensure they align with investors' risk tolerance and financial goals. By addressing investors' risk perceptions, financial advisors can enhance client satisfaction and trust, ultimately improving investment outcomes and long-term financial stability.

Stock Investment Decision

Stock investment decision-making involves evaluating various investment opportunities based on financial analysis, market sentiment, and individual risk preferences (Malkiel, 2015). Investors utilize fundamental and technical analysis to assess companies and market trends, seeking to maximize returns while managing risks (Graham & Dodd, 1934; Murphy, 1999). Effective decision-making requires awareness of behavioral biases such as overconfidence and herd mentality, which can distort perceptions and lead to suboptimal investment outcomes (Tversky & Kahneman, 1981; Shiller, 2015). Implementing risk management strategies like diversification and asset allocation is crucial in mitigating potential losses and achieving long-term investment objectives (Markowitz, 1952; Sharpe, 1964). Successful stock investment decision-making combines disciplined analysis with prudent risk management practices, adapting to changing market conditions and investor preferences to optimize portfolio performance (Abhijeet, 2011).

Behavioral variables significantly shape individual investors' decisions at the Nepal Stock Exchange (NEPSE), with notable influences including herding behavior, heuristic biases like anchoring, and risk perceptions. Nepalese investors exhibit tendencies to follow others' actions (Adhikari, 2010; Risal & Khatiwada, 2019), anchor decisions based on irrelevant initial prices (Baral & Pokharel, 2019), and maintain a conservative risk perception favoring safer investments (Rijal, 2022). These behavioral biases contribute to market volatility and inefficiencies, influencing trading behaviors and portfolio allocations. However, there remains a research gap in understanding the interplay of these biases and their specific implications within the NEPSE context,

suggesting a need for targeted empirical studies to better inform investment strategies and market policies. Overall, the literature underscores the importance of understanding behavioral biases in investment decision-making. Recognizing these biases can help investors, financial advisors, and policymakers make more informed decisions, ultimately enhancing market efficiency and stability.

Theoretical Framework

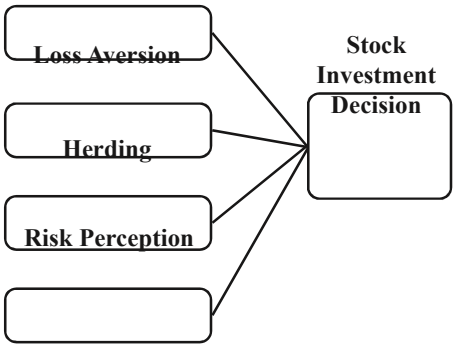
In behavioral finance, a synthesized framework from existing literature highlights several key psychological biases that significantly influence investment decision-making. Overconfidence represents investors' tendency to overestimate their knowledge and predictive abilities, which often leads to excessive trading and heightened risk exposure without thorough consideration of potential downsides (Madaan & Singh, 2019). Loss aversion, rooted in Kahneman and Tversky's prospect theory, explains investors' preference for avoiding losses over acquiring equivalent gains, which influences their portfolio decisions and risk management strategies (Kahneman & Tversky, 1979). Herding behavior manifests when investors follow the crowd rather than making independent decisions, contributing to market volatility and deviations from fundamental values (Antony, 2019). Additionally, risk perception shapes investors' subjective assessments of risk, impacting their investment behavior and the efficacy of risk management approaches (Ainia & Lutfi, 2019). Understanding these behavioral biases is crucial in financial markets to mitigate inefficiencies and enhance investment outcomes by aligning strategies with investor psychology.

Figure 1: Theoretical Framework

Research Hypotheses

For this research work, the following are the research hypotheses:

H1: There is an effect of overconfidence on stock investment decision-making at NEPSE.



H2: There is an effect of loss aversion on stock investment decision-making at NEPSE.

H3: There is an effect of herding on stock investment decision-making at NEPSE.

H4: There is an effect of risk perception on stock investment decision-making at NEPSE.

Research Methodology

The research methodology for this study employs a quantitative approach to investigate the impact of behavioral finance on stock market decision-making at the Nepal Stock Exchange (NEPSE). The study utilizes both descriptive and analytical research designs to achieve its objectives. Descriptive research design is employed to characterize investor behavior concerning behavioral finance factors such as overconfidence, loss aversion, herding, and risk perception.

Analytical research, on the other hand, seeks to explore the relationships between these behavioral factors and actual investment outcomes, employing statistical methods to assess their significance and impact on stock market decisions.

The population for the study comprises all individual investors participating in NEPSE, with a sample size of 384 determined using Yamane's formula (Yamane, 1967). Purposive sampling was utilized to ensure that the study captures a diverse range of investor perspectives by targeting individuals with varying investment strategies, experience levels, and portfolio sizes. This approach provides a comprehensive understanding of how different behavioral biases impact investment decisions across different investor profiles. By focusing on specific criteria, the sampling method enhances the relevance and depth of the study's findings. Data collection involved a combination of primary and secondary sources. Primary data was gathered through structured questionnaires distributed online via platforms like Google Forms, email, and social media channels. The questionnaire used in the study was designed to capture a comprehensive view of investor behavior and included sections on demographic information and behavioral finance factors. Specifically, it comprised 4 items measuring overconfidence, 4 items assessing loss aversion, 4 items evaluating herding behavior, and 4 items related to risk perception. These constructs were developed based on established scales in behavioral finance literature (Kahneman & Tversky, 1979; Tversky & Kahneman, 1974; Adhikari, 2010). The detailed itemization ensures that each aspect of behavioral finance is thoroughly examined, contributing to a robust analysis of its impact on investment decisions, utilizing a Likert scale to measure respondents' perceptions. Data analysis utilized the Statistical Package for the Social Sciences (SPSS) for descriptive statistics such as frequency counts, percentages, means, and standard deviations. Additionally, regression analysis will be used to assess the impact of behavioral finance factors on stock market decision-making at NEPSE. Key assumptions, such as linearity, independence, homoscedasticity, and normality of residuals, will be tested to ensure accuracy. The reliability and validity of measurement instruments will be evaluated using reliability testing (Cronbach's alpha) and validity assessments (content and construct validity) to ensure the constructs accurately capture the intended factors, enhancing the study's robustness and credibility.

Results and Discussion

The researchers thoroughly analyzed demographic characteristics among the 388 investors sampled from the Nepal Stock Exchange (NEPSE). The distribution by age groups shows that the majority of respondents, 63.9%, fall within the 25-35 age, indicating a predominantly young to middle-aged investor profile. Regarding educational qualifications, 58% of respondents hold a Master's degree, highlighting a highly educated investor base. Furthermore, in terms of investment experience in NEPSE, 65.4% of investors have 10 or more years of experience, suggesting a significant number of seasoned participants in the market.

Additionally, the frequency distribution based on investor perception of behavioral

factors reveals that 57% of respondents consider these factors to be very significant in their investment decisions, underscoring the awareness and impact of behavioral biases on investment behavior. Lastly, an examination of the financial dependence of respondents' families shows that 43% of families are partially financially dependent on the investors, emphasizing the broader socioeconomic implications of their investment activities. These insights provide a nuanced understanding of the investor demographics, perceptions, and familial responsibilities within the NEPSE context, which are crucial for interpreting the study's findings on behavioral finance in stock market decision-making.

Reliability test

A reliability test in research assesses the consistency and stability of measurements or survey instruments used to collect data. It helps researchers determine the extent to which the instrument yields consistent results over time and across different conditions.

Table 1:
Reliability Test

Reliability tests of the model variables		
Variables	No of items	Cronbach's Alpha
Overconfidence	4	0.914
Loss Aversion	4	0.917
Herding	4	0.929
Risk Perception	4	0.982
Investment Decision	4	0.973
General rate	20	0.978

The reliability tests (as shown in Table 1) conducted on the model variables indicate strong internal consistency among the measured constructs. Each variable, including overconfidence, loss aversion, herding behavior, risk perception, investment decision, and the overall scale (General Rate), demonstrated high Cronbach's Alpha coefficients ranging from 0.914 to 0.982. These coefficients suggest that the items within each variable reliably measure the intended psychological constructs or decision-making aspects in the context of behavioral finance. High Cronbach's Alpha values generally signify that the items in a scale are highly interrelated and reliably measure the underlying constructs with minimal measurement error. This enhances the validity and reliability of the research findings by ensuring that the items consistently reflect the intended factors (Cronbach, 1951; Tavakol & Dennick, 2011). According to Cronbach (1951), a high alpha coefficient indicates good internal consistency, making it a key indicator of the reliability of a measurement instrument. Tavakol and Dennick (2011) further emphasize that reliable scales with high alpha values contribute to more accurate and credible research outcomes.

Table 2:
Descriptive Statistics for Investment Behavior

Variable		Standard Deviation
Overconfidence		
I think that I am an experienced investor.	3.01	1.01
I feel more confident in my own investment opinions over opinions of my colleagues or friends	3.54	1.18
I don't consult others (family, friends, or colleagues) before making stock investment decisions	3.76	1.15
I believe that my skills and knowledge of the stock market can help me to outperform the market	3.61	1.34
General average for overconfidence	3.48	1.06
Loss Aversion		
I am more concerned about a large loss in my stock than missing a substantial gain (profits)	3.61	1.34
I will not increase my investment when the market performance is poor	3.19	1.03
I feel nervous when large price drops happen in my invested stocks	3.52	1.10
When it comes to investment, no loss of capital (invested money) is more important than returns (profits)	3.75	1.23
General average for loss aversion	3.51	1.06
Herding Behavior		
Other investors' decisions of choosing stock types have an impact on my investment decisions	3.00	1.08
Other investors' decisions on the stock volume don't have an impact on my investment decisions	3.50	1.22
Other investors' decisions on buying and selling stocks have an impact on my investment decisions	3.37	1.09
I usually react quickly to the changes of other investors' decisions and follow their reactions to the stock market	3.72	1.16
General average for herding	3.40	1.03
Risk Perception		
I am hopeful when undertaking investment in stocks that have exhibited a sure loss	3.48	1.08
I am cautious about stocks which show sudden changes in price or trading activity	3.61	1.12
I usually have worry investing in stocks that have had a past negative performance in trading	3.52	1.09
I usually don't have a fear of investing in stocks that have a sure gain	3.76	1.19

Variable		Standard Deviation
General average for risk perception	3.50	0.96

Table 2 presents the descriptive statistics for various investment behavior statements. It shows that respondents have a moderate level of overconfidence, with the highest mean score indicating they rely heavily on personal judgment without consulting others. In terms of loss aversion, respondents prioritize avoiding capital loss over maximizing gains, as indicated by the highest mean score for the relevant statement. Herding behavior is moderately present, with a strong tendency to react to other investors' decisions. Finally, risk perception shows that respondents are confident in investing in stocks with guaranteed gains, despite concerns about stocks with past negative performance. Each category of behavior has been rated for importance, and the ranking is provided based on the mean scores.

Regression Analysis

In the multiple regression analysis conducted to examine the impact of behavioral finance on stock investment decisions, all selected independent variables were assessed for their significance in explaining variations in the dependent variable, which is Stock Market Investment Decision.

Table 3:
Model Summary

Statistic	Value
Adjusted R Square	0.854
F-Value	567.10
Sig	0.001

The model summary (as shown in Table 3) presents an adjusted R-squared value of 0.854, indicating that approximately 85.4% of the variance in stock investment decisions can be explained by the variables included in the model. The F-value of 567.10 with a significance level of 0.001 confirms the model's strong statistical significance. This suggests that the behavioral finance factors under consideration overconfidence, loss aversion, herding behavior, and risk perception are highly effective in explaining stock investment decisions, reinforcing the robustness and reliability of the model.

Table 4:
Coefficient

	Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
1	(Constant)	.645	.071		9.133	<.001		
	Overconfidence	.154	.037	.170	4.179	<.001	.229	4.364
	Loss aversion	.108	.037	.119	2.930	.004	.230	4.343
	Herding	.431	.033	.463	13.255	<.001	.309	3.239
	Risk perception	.231	.030	.262	7.614	<.001	.321	3.119

a. Dependent Variable: Stock Market Investment Decision

The regression analysis (as shown in Table 4) examining the impact of behavioral finance factors overconfidence, loss aversion, herding behavior, and risk perception on stock investment decisions reveals significant findings. The individual coefficients show that all factors are significantly related to stock investment decisions. Herding behavior has the strongest influence, with a beta coefficient of 0.463, followed by risk perception at 0.262, overconfidence at 0.170, and loss aversion at 0.119. These coefficients illustrate the direction and magnitude of each factor's impact. Collinearity diagnostics reveal acceptable tolerance values (> 0.1) and moderate variance inflation factors (VIF < 5), indicating no significant multicollinearity issues. Overall, the analysis highlights the crucial role of behavioral finance in shaping stock investment decisions, offering valuable insights for investors, analysts, and policymakers.

H1: There is an effect of overconfidence on stock investment decision-making at NEPSE. Firstly, concerning overconfidence, the analysis indicates a beta coefficient of 0.154, suggesting a positive relationship between overconfidence and stock investment decisions.

H2: There is an effect of loss aversion on stock investment decision-making at NEPSE. Secondly, regarding loss aversion, the beta coefficient of 0.108 and the R-square of 0.662 highlight a notable influence of loss aversion on investment decisions. This comprehensive statistical evidence underscores that loss aversion plays a significant role in shaping stock investment decisions at NEPSE.

H3: There is an effect of herding on stock investment decision-making at NEPSE. Thirdly, the analysis provides strong support for the alternative hypothesis (H3), indicating that herding behavior significantly affects stock investment decision-making at NEPSE. The substantial beta coefficient of 0.431 underscores the strong influence of herding on investor decisions within the market.

H4: There is an effect of risk perception on stock investment decision-making at NEPSE. Lastly, regarding risk perception, the beta coefficient of 0.231 and the R-square value of 0.679 indicate a

considerable influence of risk perception on investment decisions. This analysis underscores that investors' perceptions of risk significantly shape their decisions in the NEPSE market, highlighting the importance of risk assessment in investment strategies.

Thus, each statistical analysis provides robust evidence supporting the rejection of the respective null hypotheses, affirming that overconfidence, loss aversion, herding behavior, and risk perception have significant impacts on stock investment decision-making at NEPSE. These findings underscore the multidimensional influences that psychological factors and perceptions can exert on financial decision-making in real-world market contexts.

Discussion

The regression analysis conducted to explore the influence of behavioral finance factors on stock investment decisions at NEPSE yielded compelling insights that align closely with the study's hypotheses. Each hypothesis, whether examining the effects of overconfidence, loss aversion, herding behavior, or risk perception, was supported by robust statistical evidence. Significant beta coefficients and high R-square values across all variables suggest substantial explanatory power of the model, with overconfidence, loss aversion, herding behavior, and risk perception collectively explaining a large portion of the variability in stock investment decisions. These findings confirm the presence of these behavioral biases in investor decision-making and underscore their critical role in shaping market dynamics. Moreover, reliability tests on model variables demonstrated strong internal consistency, enhancing the credibility of the results. This analysis provides valuable insights into how psychological factors contribute to financial decision-making processes, emphasizing the importance of understanding behavioral finance in market analysis and investment strategies at NEPSE.

The regression analysis showed that overconfidence, loss aversion, herding behavior, and risk perception significantly influence stock investment decisions at NEPSE, with herding behavior exhibiting the strongest effect. The strong influence of herding behavior aligns with Hirshleifer and Welch's (1992) findings, which suggest that social influence can amplify market trends and investor behavior. Their research highlighted the role of herding in driving market movements, consistent with the observed impact in NEPSE. While Barber and Odean (2001) found that overconfidence leads to excessive trading, this study confirms its positive association with investment decisions in the NEPSE context. However, the impact of overconfidence in this study is less pronounced compared to herding behavior, which could be attributed to different market dynamics or investor characteristics. The agreement with Tversky and Kahneman's (1992) loss aversion theory may be due to similar risk-averse tendencies observed in emerging markets. Their work on how investors prioritize avoiding losses over acquiring equivalent gains is reflected in the behavior of NEPSE investors, potentially influenced by economic uncertainties.

The relatively lower impact of overconfidence compared to other biases might be explained by the relatively higher financial literacy and experience levels among NEPSE investors. As noted by Barber and Odean (2001), overconfidence often leads to excessive trading, but the more knowledgeable investor base in NEPSE might mitigate this effect. The significant impact of risk perception on investment decisions

supports Prospect Theory, which posits that individuals evaluate potential losses and gains differently, influencing their risk-taking behavior (Kahneman & Tversky, 1979). The findings align with the theory's premise that risk perception significantly affects decision-making processes.

Herding behavior's dominant influence in NEPSE might stem from the collectivist culture in Nepal, where individuals are more likely to follow group norms and decisions, especially in uncertain financial markets (Hirshleifer & Welch, 1992). This cultural aspect could explain the stronger impact of herding behavior compared to other biases. These findings underscore the crucial role of behavioral finance in shaping stock investment decisions at NEPSE. By understanding how overconfidence, loss aversion, herding behavior, and risk perception influence investor decisions, stakeholders, including investors, policymakers, and market analysts, can better navigate the complexities of financial decision-making. This knowledge can inform strategies to mitigate the adverse effects of these biases and enhance market efficiency (De Bondt & Thaler, 1985; Kumar & Lee, 2006).

Conclusion and Further Implications

The study provides strong evidence of how behavioral finance factors overconfidence, loss aversion, herding behavior, and risk perception impact stock investment decisions at NEPSE, explaining 85.4% of the variance in decisions. Each factor significantly influences investor behavior, with herding behavior and risk perception having the most substantial effects. Practically, investors should be aware of biases like overconfidence and loss aversion to make more rational choices. Financial advisors can use these insights to guide clients better, while policymakers might focus on financial literacy programs and market transparency to mitigate biases and improve investment practices. Theoretically, the study supports the relevance of behavioral finance theories, challenging the efficient market hypothesis and underscoring the need for models that consider psychological biases. It enriches the behavioral finance framework by providing empirical evidence from an emerging market, broadening the applicability of these theories. Further research could explore additional psychological factors and their interactions, extend the study to other emerging markets, and investigate how changes in market conditions affect behavioral biases over time.

Limitations and Future Research Directions

The study's limitations significantly constrain its applicability and reliability. By focusing exclusively on the NEPSE (Nepal Stock Exchange), findings may not generalize to other financial markets, limiting broader relevance. Additionally, the narrow concentration on specific behavioral factors risks neglecting other variables crucial to understanding market dynamics. Moreover, the use of a small sample size compromises reliability, as findings may not accurately reflect broader investor behavior or market conditions. To strengthen the study, future research should explore diverse markets and include additional factors such as socio-economic and cultural influences to gain a fuller understanding of investor behavior. Employing longitudinal data will help track changes over time and assess the stability of biases, while qualitative and mixed-method approaches can provide

deeper insights into the evolution and interaction of psychological factors with market dynamics.

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