EFFECT OF BEHAVIORAL BIASES ON INVESTORS' INVESTMENT DECISIONS IN STOCK MARKET

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial fulfillment of the requirements for the Master's Degree

by

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **"Effect of Behavioral Biases on Investors' Investment Decisions in Stock Market"**. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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REPORT OF RESEARCH COMMITTEE

Mr. Manish Silwal has defended research proposal entitled **"Effect of Behavioral Biases on Investors' Investment Decisions in Stock Market"** successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestion and guidelines of supervisor Joginder Goet and submit the thesis for evaluation and viva-voce examination.

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APPROVAL SHEET

We, the undersigned, have examined the dissertation entitled **"Effect of Behavioral Biases on Investors' Investment Decisions in Stock Market"** presented by Manish Silwal, a candidate for the degree of Master of Business Studies (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the dissertation is worthy of acceptance.

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Manish Silwal
Date: …….

TABLE OF CONTENTS

LIST OF TABLES

Page No.

LIST OF FIGURE

Page No.

ABBREVIATIONS

%	:	Percentage
&	:	And
e.g.	:	Example
HDF	:	Herding Factors
HF	:	Heuristic Factors
i.e.	:	That is
IBM	:	International Business Machine Corporation
IDP	:	Investment Decision Performance
MF	:	Market Factors
MS. DO	:	Microsoft Disk Operating System
No.	:	Number
PF	:	Prospect Factors
Res	:	Respondents
SEM	:	Structural Equation Modeling
SPSS	:	Statistical Package for Social Sciences
T.U.	:	Tribhuvan University

ABSTRACT

The primary objective of this study was to examine the effect of behavioral biases on investors' investment decisions in the stock market. It aimed to understand how various behavioral factors influence decision-making processes among investors. The study employed a combination of descriptive and causal research designs. This research employed descriptive statistics, correlation analysis, and regression analysis to examine the data through SPSS version 26. This study indicates that investors believe that both herding factors and heuristic factors greatly influence their investment decisions, and they also perceive their decisions as highly significant. The correlation analysis reveals that the correlation analysis reveals that shows that there is significant position association between heuristic factors and investment decision. Similarly, prospect factors have significant positive relationship with investors' investment decision. At the same time, there is significant positive association between market factors and investment decision. Moreover, correlation value between herding factors and the investment decision is significant positive. The regression analysis shows that there is significant positive effect of heuristic factors on investment decision. Then, there is also significant positive effect of prospect factors on investment decision. At the meantime, market factors have significant positive impact on investment decision. Finally, herding factors have significant positive effect on investment decision. Therefore, all the behavioral factors have significant impact on investors' investment decision in stock market.

Keywords: Investment decision, heuristic factors, prospect factors, market factors, herding factors.

CHAPTER - I
INTRODUCTION

1.1 Background of the Study

Investors are the key players in the stock market and can be broadly classified into two groups: institutional investors and individual investors. Institutional investors are typically more knowledgeable and make well-informed investment choices due to their expertise. On the other hand, individual investors often lack experience and may be more prone to emotional and biased decision-making, leading them to engage in less informed trading. The investment choices of individual investors are frequently swayed by psychological biases, which affects their behavior and ultimately impacts market trends. Consequently, the decisions made by both types of investors significantly influence market trends and, in turn, the overall economy (Aziz & Khan, 2016).

Investment decisions can be shaped by various factors, including the investor's mindset and the broader investing environment. Investors typically rely on technical analysis, fundamental analysis, and personal judgment when evaluating investments. Utilizing decision-making tools is generally advantageous in the investment process. The performance of the market and the investment choices of individual investors are often impacted by factors such as information architecture, individual differences, and market-related challenges. Understanding why people buy or sell stocks involves examining investor behavior through psychological concepts of decision-making. As a result, behavioral finance has been employed to shed light on the motivations behind individuals' stock transactions and investment behaviors (Gyawali & Neupane, 2021).

Traditional financial theory assumes that investors are rational and aim to maximize their wealth by following fundamental principles, focusing solely on the balance between risk and return, and ignoring psychological factors. In contrast, behavioral finance offers a more contemporary approach to studying market behavior. It acknowledges that psychological factors can significantly influence individuals because market participants are human. Behavioral finance suggests that the psychological aspects of decision-making play a crucial role in how investors

interpret market activity and justify their stock purchases and sales (Sashikala & Chitramani, 2018).

Key factors in investment decisions include the type of security or asset to invest in, the amount to invest, the timing, and the investment duration. Investors may choose between shares, bonds, marketable securities, or other assets based on their risk tolerance, as these options offer different risk and return profiles. Each investor undergoes a complex cognitive process when making investment choices, and pinpointing the fundamental factors influencing individual decisions is challenging. Over recent decades, the process of selecting assets has evolved significantly, with many tools, methods, and traditional frameworks now in use. However, without understanding the behavioral and contextual aspects of individual investors and their investing environment, relying solely on these sophisticated tools and models is often inadequate (Subramaniam & Velnampy, 2017).

As a result, investors' decisions are sometimes influenced by psychological factors alongside rational considerations. Recently, behavioral finance has garnered significant attention for its ability to shed light on investor behavior and its impact on decision-making. Initial research into individual investor behavior began in the 1970s. Behavioral finance examines how psychological principles affect the process of buying and selling financial assets. This field of study primarily explores the psychological concepts that guide investors' investment choices. Behavioral finance argues that investors can act irrationally in their investment decisions, challenging the notion that they always make the most logical choices (Javed & Marghoob, 2017).

Shefrin (1999) noted that the field of behavioral finance, which explores how psychology influences financial decision-making, is growing rapidly. Numerous studies in this area have investigated the factors that impact individual investors' stock selection. Meriks et al. (2004) categorized these factors into five groups: specific financial needs of the investor, neutral information, personal or subjective factors, recommendations from advocates, and neutral information (repeated). Meanwhile, Nagy and Obenberger (1994) identified seven categories: accounting information, neutral information, recommendations from advocates, traditional wealth

maximization, alignment between personal and firm image, social significance, and individual financial desires.

This study focused on analyzing behavioral biases in the investment decisions of individual investors in Nepalese stock market. It aimed to explore how various aspects of individual behavior influence their investment choices and to examine the impact of general investment behavior on these factors. By integrating these elements, the research offers valuable insights into behavioral finance within developing countries, with a particular emphasis on the context of Nepal.

1.2 Problem Statement

Investor decisions significantly impact stock market trends, which in turn affect the economy. To thoroughly understand and explain the choices made by investors at the Nepal Stock Exchange (NEPSE), it's essential to examine the behavioral factors influencing these decisions. This information can also be valuable for securities firms, helping them gain insights into investor behavior for more accurate predictions and improved recommendations. Compared to affluent countries, there has been relatively little research on behavioral finance in Asia. Behavioral finance posits that the characteristics of market participants and the information they have consistently influence their investment judgments and the overall performance of the market (Barberis & Thaler 2003).

Aziz and Khan (2016) found a positive correlation between heuristic factors and investment performance. Javed and Marghoob (2017) identified four key components of the prospect factor mental accounting, regret aversion, and loss aversion that significantly impact investment decision-making. Meanwhile, Sashikala and Chitramani (2018) determined that prospect and herding variables were the most significant indicators of changes in investment intentions, while heuristics and market factors did not notably affect short-term investment intentions.

Rajeshwaran (2020) found that prospect, market, and herding variables had negative associations with investment success, while heuristic factors showed a strong positive correlation. Conversely, Baral and Pokharel (2020) reported no significant correlation between investment performance and heuristics (such as anchoring,

representativeness, overconfidence, availability bias, and gambler's fallacy), herding (buying and selling patterns, trading volume, speed of herding), or prospect factors (loss aversion, regret aversion, and mental accounting). Elhussein and Abdelgadir (2020) identified key factors impacting individual investment decisions, including representativeness, overconfidence, anchoring, historical stock costs, customer preferences, loss aversion, mental accounting, trading volume of other investors, and quick reactions to other investors' decisions. Factors with negligible impact included availability bias, changes in stock prices, regret aversion, and the decisions and choices of other investors.

Silwal and Bajracharya (2021) found that the prospect behavioral factor had a negative correlation with investment decisions, while herding, market variables, and heuristic factors (including overconfidence and anchoring bias) showed positive correlations with investment decisions. Kunwar (2021) discovered that herding and prospect variables had no significant connection to investment success, whereas market and heuristic factors had a strong positive relationship. Gyawali and Neupane (2021) highlighted the influence of overconfidence, herd mentality, and loss aversion on investment decisions, but found that anchoring, mental accounting, and regret aversion did not affect individual investors' decisions. Cao, Nguyen, and Tran (2021) reported that heuristic, prospect, market, and herding factors had a direct and positive impact on investment decision-making.

Ongeta (2021) found that investment decisions did not significantly mediate the relationship between behavioral factors such as herding, prospect (including loss aversion, regret aversion, and escalating commitment), and heuristic factors (such as availability bias and overconfidence) and individual investors' decisions at the Nairobi Securities Exchange. In contrast, Karmacharya et al. (2022) demonstrated that among the four behavioral variables studied, market, heuristic, and herding factors had significant effects on investment decisions. They suggested that increased investment, both foreign and domestic, in Nepal's stock market could contribute to the country's economic growth.

Dhungana et al. (2022) found that regret aversion and anchoring biases did not correlate with irrational investment decisions. Instead, they identified a relationship

between irrational financial decision-making and biases such as availability, overconfidence, and herding instinct. All these biases were positively associated with irrational investment choices. Hendrawaty (2022) revealed that heuristic and market behavioral biases positively influenced individual investors' decisions, while prospect and herding biases had a negative impact.

Anwar et al. (2023) found that loss aversion and mental accounting significantly and positively influenced investment decisions. Gurung et al. (2024) discovered that regret aversion, anchoring, and overconfidence biases significantly affected investment choices among Nepalese investors. However, they found no noticeable relationship between herding behavior and investment decisions, nor did representational bias play a role in any investment choices. The literature review indicates that there is limited research on individual investor behavior in the Nepalese context. Therefore, the findings of this study are expected to provide valuable insights into the factors influencing the behavior of Nepalese individual investors. This study addresses various issues relevant to the Nepalese investment environment.

- What are the behavioural biases influencing the investment decisions of individual investors?
- Is there any the relationship between behavioural biases and investment decisions of investors?
- What is the impact of behavioural biases such as heuristic, prospect, market and herding factors on the stock investment decision-making of individual investors in Nepalese share market?

1.3 Objectives of the Study

The primary goal of this study is to examine how behavioral biases influence investors' decisions in the stock market. Additionally, the study has several specific objectives:

- To examine the behavioural biases influencing the investment decisions of individual investors.
- To analyze the relationship between biases factors and investment decisions of investors.

- To assess the impact of behavioural biases such as heuristic, prospect, market and herding factors on the stock investment decision-making of individual investors in Nepalese share market.

1.4 Research Hypotheses

To meet the research objectives, the following hypotheses have been developed for the study:

H_1: Heuristic factors have significant impact on stock investment decision making in stock market.

H_2: Prospect factors have significant impact on stock investment decision making in stock market.

H_3: Market factors have significant impact on stock investment decision making in stock market.

H_4: Herding factors have significant impact on stock investment decision making in stock market.

1.5 Rationale of the Study

This research enhances our understanding of how behavioral factors influence investment decisions in Nepal's stock exchanges among government agencies, financial advisors, individuals, and listed corporations. Recognizing the factors that affect investor decision-making is crucial as they impact future financial goals. Identifying these key factors can shape a company's strategic planning and future direction. Financial advisors can provide more tailored investment recommendations by considering these factors. Additionally, pinpointing these influential elements helps the government in revising relevant laws and policies to better satisfy investors and improve market efficiency.

1.6 Limitations of the Study

This study has the following limitations:

- The responders get the questionnaires in person. As a result, answers could be biased.

- It might not be able to draw generalizations about all investors because the respondents were chosen from their own social circles, friends, and family, or from close networks.
- A survey of a chosen group of investors in the Kathmandu Valley was carried out. As a result, it's possible that the conclusions cannot be applied to all investors.
- Despite the relatively high sample size (N=400), a higher sample size would more truly reflect the circumstances of the investors.
- The foundation for evaluating the performance of investments is the perceptions of investors. It is assessed based on the subjective awareness of investors. However, some investors might not be aware of either their own projected return or the average return on the stock market.
- Throughout the whole investigation, just four independent variables—prospect, market, herding, and heuristic variables—have been taken into account.
- Only multiple regression analysis, correlation analysis, and descriptive analysis were employed in this study.

CHAPTER II
LITERATURE REVIEW

The primary goal of this section is to review relevant literature on how behavioral biases influence investors' decisions in the stock market. Research is built on historical knowledge and data, which serve as the study's foundation. This chapter is crucial for expanding the body of information and enhancing the analysis by providing essential feedback. It covers the research gap, offers a theoretical review, and presents an empirical review.

2.1 Theoretical Review

This section explores the theoretical frameworks underpinning the study, specifically focusing on heuristic theory, prospect theory, behavioral finance theory, and the theory of overconfidence.

2.1.1 Heuristic Theory

Behavioral economics recognizes that humans rely on heuristics to simplify decision-making in an increasingly complex world. Gigerenzer and Wolfgang (2011) stated that heuristics are strategies that streamline the decision-making process by omitting some information, allowing for quicker, more cost-effective, and often more accurate judgments than more complex methods. These simple, efficient rules are particularly useful in situations characterized by high uncertainty, limited time for decisions, and lower-quality information. Rather than seeking the optimal answer, heuristics aim to find a solution that best fits the specific context of the investor, balancing uncertainty, decision-making time, and the costs of acquiring additional information.

Heuristics are mental shortcuts based on our past experiences that help us make quick decisions. Developed over thousands of years, these shortcuts can sometimes lead us astray or introduce biases that cause us to misjudge outcomes (Ricciardi & Simon, 2001). Using an incorrect heuristic often results in mental mistakes. Stock prices today are influenced by market expectations for the future, which can lead to mispricing if those expectations are distorted. This research is relevant because heuristic theory explains how factors such as availability, overconfidence, and

anchoring bias affect investment decisions on the Nairobi Securities Exchange (Kimeu et al., 2016).

2.1.2 Prospect Theory

Kahneman and Tversky's foundational work from 1979 supported prospect theory, which examines how subjective decision-making affects investors' value systems in situations involving risk and uncertainty (Horvath & Filbeck, 2005). The theory posits that people often react differently to similar scenarios depending on whether they are framed as gains or losses. This happens because individuals tend to undervalue probable outcomes compared to specific ones. Essentially, the theory clarifies why people show inconsistent risk attitudes, being risk-averse when facing potential gains but risk-seeking when dealing with losses. It also explains why individual investors might prioritize stopping a loss over maximizing a profit.

Olsen (1997) argued that prospect theory highlights the cognitive limitations of human decision-makers, meaning that individual investors make decisions based on bounded rationality, as suggested by behavioral decision theory, rather than the rationality assumed by classical decision theory. Ritter (2003) added that prospect theory, which focuses on changes in wealth, serves as a descriptive theory under conditions of uncertainty. According to Kahneman and Tversky (1979), a key implication of prospect theory is that economic actors' satisfaction with their returns depends on how they perceive an outcome or transaction.

Prospect theory outlines a two-stage decision-making process: initially, decision-makers frame and edit the available options based on their prior perceptions; then, they evaluate these options according to their subjective likelihood of occurrence. The theory's utility function is concave for gains, meaning that people experience satisfaction from gains, but not proportionally greater satisfaction with larger gains. Conversely, the convex utility function for losses indicates that the pain of losing is not proportional to the amount lost, with each additional loss causing less additional distress. As a result, when given a choice between a certain gain and a gamble that could either increase or decrease that gain, people tend to prefer the certain gain. On the other hand, when choosing between a guaranteed loss and a gamble, they are more likely to take the risk. Prospect theory examines how emotional biases such as loss

aversion, regret aversion, and mental accounting influence investors' decision-making processes (Kengatharan, 2014).

2.1.3 Behavioral Finance Theory

Behavioral finance developed as a response to the limitations of classical finance (Statman, 1999). Linter (1998) defines behavioral finance as the examination of how individuals process and react to information in making financial decisions. The literature on behavioral finance typically consists of two main components: first, identifying deviations from the Efficient Market Hypothesis, and second, uncovering investor biases or behaviors that challenge traditional notions of rational financial and economic behavior.

Statman (1999) highlighted that behavioral finance aims to identify and explain how emotions and cognitive errors impact financial decision-making. By integrating classical finance concepts with psychology, behavioral finance offers insights into why investors often make seemingly irrational financial decisions. Barberis and Shleifer (2003) investigated various trading anomalies, such as herding behavior, overreaction, under reaction, and momentum strategies, and found that these anomalies challenge the Efficient Market Hypothesis's trading principles, making traditional finance models inadequate for explaining investment risk and returns. Essentially, the objective of behavioral finance is to elucidate potential market inefficiencies. In summary, behavioral finance applies insights from human behavior to financial theories and models, enhancing our understanding of investor behavior and real market dynamics.

Behavioral finance focuses on how human nature, including emotional responses and cognitive errors, affects individual investors' decision-making. Kenneth and Kim (2007) noted that behavioral finance helps us understand investor behavior and cognitive abilities, as investors are often constrained by cognitive biases that limit their intellectual capacity. Research globally has shown that retail investors frequently fail to capitalize on market developments and volatility fully. Behavioral factors significantly impact individual investors' performance and decision-making (Bilal,

2016). Emotional and behavioral elements, influenced by investors' biases, are key determinants in their investment choices.

2.1.4 Theory of Overconfidence

Overconfidence emerges when individuals have limited diversification and tend to invest heavily in areas they are familiar with (Ritter, 2003). Choosing common stocks that outperform the market is difficult because market feedback is often noisy and predictability is low. As a result, people tend to be most overconfident in their ability to select stocks (Barber & Odean, 2001).

Historically, investors had strong confidence in their own judgment and often neglected to review relevant literature or current events. This overconfidence leads them to make decisions without considering past information, which can jeopardize their long-term gains. In the past, investors often believed they could consistently outperform the market (Tapia & Yermo, 2007). Many individuals overestimate their abilities, skills, knowledge, and the accuracy of their information due to excessive self-confidence. Overconfidence is one of the most extensively studied phenomena in behavioral finance.

Overconfidence significantly influences investor behavior in financial markets. It's crucial to recognize that excess certainty stems from individuals, not the market itself. When investors view themselves as highly knowledgeable and capable, they are more likely to undertake actions they might otherwise avoid. Specifically, overconfidence affects the frequency with which investors buy and sell bonds; the more overconfident an investor is, the more frequently they will trade. Barber and Odean (2001) demonstrated that overconfidence in financial markets often leads investors to engage in unprofitable trading.

2.2 Empirical Review

Aziz and Khan (2016) examined the behavioral factors influencing individual investor’s investment decision and performance, evidence from Pakistan stock exchange. The main objective of the study was to explore the behavioral factors influencing individual investor choices and performance on the Pakistan Stock

Exchange. Key behavioral characteristics such as mental accounting, overconfidence, representativeness, anchoring, loss aversion, and regret aversion are considered as potential influences on investment decisions and outcomes. The study relies on primary data collected from 150 individual investors on the Pakistani stock exchange. Preliminary results show a strong positive correlation between heuristics and investment performance, though prospect theory does not appear to affect performance. Using SPSS for statistical analysis, the findings reveal that biases such as availability bias, anchoring, gambler's fallacy, overconfidence, and representativeness positively impact investment success.

Javed and Marghoob (2017) examined the effects of behavioural factors in investment decision making at Pakistan stock exchanges. The current study aims to examine how various behavioral factors, including market influences, overconfidence, prospect theory, anchoring, and other behavioral aspects, affect individual investors and institutional managers in Pakistan's stock markets. The study employs descriptive statistics, reliability tests, regression analysis, and correlation analysis. Among the prospect-related factors—mental accounting, regret aversion, and loss aversion—loss aversion is identified as the most significant in influencing investment decisions. Investors tend to seek greater risks after experiencing gains, while becoming more risk-averse following losses. It is suggested that individual investors at the Pakistan Stock Exchange should maintain a balanced level of overconfidence to leverage their skills and knowledge effectively. While overconfidence can aid investors in tackling complex tasks and predicting future trends during uncertain periods, it must be managed judiciously to enhance investment outcomes.

Subramaniam and Velnampy (2017) analyzed the role of behavioural factors in the investment decisions of household investors. The goal of this research is to identify which behavioral finance-related variables influence household investors' investment decisions in Sri Lanka's Northern Province. Data were collected from 1,810 household investors using a proportionate stratified random sampling technique. The analysis was conducted using both confirmatory factor analysis and exploratory factor analysis. The study concluded that household investors' investment decisions are significantly affected by biases such as representativeness, overconfidence, availability, regret, loss aversion, and other behavioral factors.

Sashikala and Chitramani (2018) investigated the impact of behavioural factors on investment intention of equity investors. The aim of this research was to identify the behavioral finance-related variables that influence household investors' investment decisions in Sri Lanka's Northern Province. The study utilized data from 1,810 household investors, selected through a proportionate stratified random sampling technique. Analytical methods included confirmatory factor analysis and exploratory factor analysis. The findings indicate that household investors' decisions are significantly affected by biases such as representativeness, overconfidence, availability, regret, and loss aversion. Heuristics and market conditions did not show a significant impact on short-term investment intentions. However, the regression analysis revealed that long-term investment intentions are notably influenced by prospect factors and market conditions.

Keswani et al. (2019) examined the impact of behavioral factors in making investment decisions and performance: study on investors of National stock exchange. The primary goal of this research is to examine how the four factors—heuristic, prospect, market, and herding—affect investment decisions at the NSE. Data were collected using a Likert scale questionnaire, with the reliability of the questionnaire assessed through a Cronbach alpha coefficient of 0.728. Multiple regression analysis and exploratory factor analysis (EFA) were employed for the study. Cronbach’s alpha was used to assess the internal consistency of each factor, including heuristic, prospect, market, herding, investment performance, and investor judgments. The study found that these four factors significantly impact both investment choices and rates of return. All behavioral variables were shown to strongly influence investors' decision-making processes, supporting the hypothesis that behavioral elements play a crucial role in shaping individual investment decisions.

Adhikari (2020) examined the factors influencing investment decisions of individual investors at Nepal stock exchange. The primary objective of this analysis is to identify the factors that influence individual investors' decisions to invest in the Nepal Stock Exchange. The study utilizes a random sampling technique and analyzes 214 responses from individual investors. Data were collected using a structured questionnaire with thirty-five items. The data analysis includes frequencies, mean scores, standard deviations, percentages, and factor analysis techniques. The research

confirms that there is a correlation between the behavioral finance characteristics typically associated with equity investors and existing empirical data. The study explores various factors affecting individual investment decisions, including government statements, anticipated capital increases, the company's industry reputation, diversification goals, appeal of non-stock investments, ease of borrowing funds, opinions of major shareholders, family opinions, recent stock price movements, stock index fluctuations, rumors, expected corporate earnings, stock marketability, technical analysis results, dividend payments, perceived ethics of the company, reputation of shareholders, and sentiment towards the company's products and services.

Rajeshwaran (2020) analyzed the performance of CSE investors in eastern province of Sri Lanka. The primary goals of this study are to analyze the investment behaviors of CSE investors in Sri Lanka's Eastern Province and to assess how these behaviors impact their investment returns. The research uses a cross-sectional approach to collect data through surveys. A total of 374 CSE investors from the province filled out questionnaires for this purpose. Data analysis involves multiple regression, correlation, mean, and standard deviation techniques. The findings reveal that both investment performance and all four behavioral traits have decreased to moderate levels. Heuristic factors indicate that investors rely on their personal experience, expertise, and skills. Prospect theory suggests that most investors avoid losses and regrets when making stock investments. Besides considering market factors, investors moderately evaluate company client preferences and closely observe stock price fluctuations. Consistent with herding behavior, investors tend to follow the investment choices of others. While prospect, market, and herding variables negatively impact investment success, heuristic variables show a positive correlation with it.

Baral and Pokharel (2020) investigated the behavioral factors and investment decision: a case of Nepal. The main aim of this research is to explore the beliefs and behaviors of investors in the Nepalese stock market. Drawing on a substantial body of literature, the study examines four independent variables—heuristic, prospect, market, and herding—and their effect on the dependent variable, which is the success of investments on the Nepal Stock Exchange. Using primary data collected from 120 investors in NEPSE-listed companies, this empirical study finds that the market factor

has a significant impact on investment performance. However, the findings indicate that there is no significant relationship between investment performance and the heuristic factors (such as anchoring, representativeness, overconfidence, availability bias, and gambler's fallacy), herding behavior (including buying and selling patterns, trading volume, and speed of herding), or prospect theory (including loss aversion, regret aversion, and mental accounting).

Elhussein and Abdelgadir (2020) examined the behavioral bias in individual investment decisions: is it a common phenomenon in stock markets? This study aims to examine the behavioral factors influencing individual investment decisions in the Sudanese Stock Exchange Market, which operates in a developing country. Using a cross-sectional survey design and various analytical techniques, the research collects data and assesses the correlations between different variables. A structured questionnaire was administered to 203 individual investors, with the resulting data analyzed through correlation and regression techniques. The findings reveal that, despite the stock market's developmental stage, behavioral biases significantly impact individual investment decisions. Specifically, the study identifies market and heuristic factors as crucial in decision-making on the Khartoum Stock Exchange. Key influencing factors include representativeness, overconfidence, anchoring, historical stock prices, customer preferences, loss aversion, mental accounting, trading volume, and responsiveness to other investors' actions. Conversely, factors such as the choices of other investors, availability bias, stock price fluctuations, and regret aversion have minimal impact on decision-making.

Silwal and Bajracharya (2021) investigated the behavioral factors influencing stock investment decision of individuals. The study aims to identify the behavioral factors influencing individual investment decisions and to analyze their relationship with investment performance. Both exploratory and confirmatory factor analysis are employed, along with structural equation modeling to test the hypotheses. The findings indicate a negative relationship between investment performance and prospect-related behavioral factors. Conversely, there is a positive correlation between investment performance and herding behavior, market characteristics, and heuristic factors such as anchoring bias and overconfidence. The study provides

substantial evidence that heuristic strategies and herding behavior contribute positively to investment performance.

Ongeta (2021) examined the controlling effect of investment decisions on the behavioral factors influencing investment performance of individual investors in Nairobi Security Exchange. The primary goal of this study is to explore how investment decisions influence the behavioral factors affecting the success of individual investors on the Nairobi Securities Exchange. The researchers hypothesized that the connection between investment performance and various behavioral factors—such as herding, prospect theory (including loss aversion, regret aversion, and escalation of commitment), and heuristic biases (like availability bias and overconfidence)—is not significantly affected by the investment decisions themselves. To reach a population of 1,196,995 individual investors on the Nairobi Securities Exchange, the study used a survey design. The sample size was determined using Slovin's formula, leading to a selection of 400 investors out of a maximum of 500. A structured questionnaire was employed to gather primary data. The results indicate that investment decisions do not significantly influence the relationship between investment performance and the behavioral factors of herding, prospect theory, and heuristics.

Kunwar (2021) analyzed the relationship of behavioral factors with investment performance of individual investors in the Nepali stock market. The study aims to explore how individual investors on the Nepal Stock Exchange understand and exhibit behavioral biases, and to empirically analyze how these biases affect investment success. Correlation analysis is used to examine the relationship between investment performance and the independent variables representing heuristics, prospect theory, market factors, and herding behavior. The results indicate that individual investors in Nepal display biases related to all four factors. Among these, heuristics and market factors are found to influence investment performance, with heuristic behaviors having the strongest and most positive effect on investment success. The study also reveals that following market trends (herding) and prospect-based biases do not improve investment outcomes. These findings contribute to a better understanding of how investor behavior impacts the stock market and can help in developing strategies to mitigate the negative effects of behavioral biases on market performance.

Gyawali and Neupane (2021) analyzed the individual investors psychology and investment decision in NEPSE. This study investigates the psychological factors influencing individual investors' decisions on the Nepal Stock Exchange (NEPSE) to determine if these factors and their biases impact decision-making. The sample consisted of 347 participants selected from the Butwal City broker office. The psychological factors examined include herding, anchoring, mental accounting, overconfidence, regret aversion, and loss aversion. These factors are categorized into emotional biases (overconfidence, regret aversion, and loss aversion) and cognitive biases (anchoring, herding, and mental accounting). Data was collected using self-administered questionnaires, and both analytical and descriptive research designs were utilized for analysis. The results from multiple regression analysis show that while anchoring, mental accounting, and regret aversion did not significantly influence investment choices, overconfidence, herding, and loss aversion did. Overall, the findings indicate that both cognitive and emotional biases have a significant and positive impact on individual investors' decisions in the Nepalese stock market.

Cao et al. (2021) examined the behavioral factors on individual investors' decision making and investment performance: a survey from the Vietnam stock market. The aim of this study is to explore the relationship between financial behavior and investment decisions, and to examine how these decisions impact investment outcomes. The study focuses on understanding how behavioral factors affect stock market performance and the investing decisions of individual investors in Vietnam. A sample of 250 investors was surveyed. The study employs three main analytical techniques: Confirmatory Factor Analysis (CFA), Structural Equation Modeling (SEM), and Exploratory Factor Analysis (EFA). The findings reveal that investment decision-making is directly and positively influenced by heuristics, prospect theory, market factors, and herding behavior. All these elements also directly and positively affect investment success. Among these factors, prospect theory has the most significant impact on both investment choice and performance, with a standardized coefficient (β) of 0.275. Heuristics follow with a coefficient of $\beta = 0.257$, herding with $\beta = 0.202$, and market factors with $\beta = 0.189$, showing the least influence. Overall, the study underscores the importance of heuristics, prospect theory, market factors, and herding behavior in shaping investment performance and decision-making, with prospect theory exerting the greatest influence.

Karmacharya et al. (2022) investigated the effect of perceived behavioral factors on investors' investment decisions in stocks: evidence from Nepal Stock Market. This study examines whether the performance of the Nepal Stock Exchange (NEPSE) is affected by perceived behavioral characteristics that influence individual investors' decisions. The research, based on a sample of 350 randomly selected investors from various brokerage firms in five major cities in 2018, focuses on four key behavioral variables: market factors, heuristics, and herding behavior. The structural model analysis reveals that these factors have significant effects on investment performance. The findings suggest that investors increasingly rely on market sentiment and information. To achieve better returns, the study indicates that investors should consider both the fundamentals of the stocks and their own behavioral tendencies.

Sapkota (2022) analyzed the behavioural finance and stock investment decisions. This study explored the impact of behavioral finance on the stock investment decisions of master's level students in the Chitwan district, addressing a gap in relevant research. Utilizing a quantitative approach and analytical research design, the study surveyed 284 students, achieving a usable response rate of 60.21 percent. The research employed reliability analysis, descriptive statistics, and multiple regression analysis to evaluate the data. The findings indicate that stock investment decisions are significantly affected by factors such as risk tolerance, overconfidence, loss aversion, and herd mentality. The study concludes that behavioral finance plays a crucial role in shaping students' investment decisions. It is recommended that investors become more aware of financial behavior biases to improve their decision-making. Additionally, understanding one's risk propensity can help investors manage fears and uncertainties associated with stock investments.

Dhungana et al. (2022) investigated the effect of cognitive biases on investment decision making: A case of Pokhara Valley, Nepal. The purpose of this study is to explore how cognitive biases impact investment decisions in Nepal's Pokhara Valley. Specifically, it assesses the influence of five cognitive biases—regret aversion, overconfidence, availability bias, anchoring, and herd instinct—on rational investment decision-making. The study involves 179 investors from seven brokerage firms in the Pokhara Valley. Data is analyzed using both descriptive and inferential methods. The results indicate that regret aversion and anchoring biases do not

significantly affect irrational investment decisions. However, availability bias, overconfidence, and herd instinct are associated with irrational financial decision-making, with overconfidence bias having the strongest influence. Among the biases studied, regret aversion had the least impact on investment choices.

Septian et al. (2022) investigated the impact of behavioral factors among Indonesian individual investor towards investment decisions during Covid-19 pandemic. The primary goal of this study is to analyze how behavioral factors influence investment decisions among individual investors in Indonesia. The study begins with a review of behavioral finance theory and then tests hypotheses using data collected from 295 respondents via questionnaires. Data analysis is conducted using the structural equation modeling (CB-SEM) approach, with LISREL 8.80 software. The results reveal that during the COVID-19 pandemic in Indonesia, heuristic and market behavioral biases positively affect individual investors' decisions. In contrast, biases related to prospect theory and herding behavior negatively impact investment decisions.

Sapkota and Chalise (2023) assessed the investors' behavior and equity investment decision: an evidence from Nepal. This study explored the impact of investor behavior on equity investment decisions using a quantitative research approach and a descriptive-analytical research design. The sample consisted of 400 individual investors from the top 10 brokerage firms, with 40 participants selected on a first-come, first-served basis who were willing to complete the survey. Data was gathered from 293 respondents through a self-administered, closed-end structured questionnaire using a 5-point Likert scale. Analysis was conducted using descriptive statistics, multiple regression, and correlation coefficients. The findings indicate that neutral information, accounting information, and self-image significantly positively influence equity investment decisions. Additionally, advocate recommendations and personal financial needs also have a significant positive impact on investment decisions. However, gender was not found to be a significant influencing factor.

Dhakal and Lamsal (2023) investigated the impact of cognitive biases on investment decisions of investors in Nepal. This study aimed to assess how cognitive biases impact investment decisions among participants in the Nepalese stock market, using a

self-administered questionnaire as the primary data collection method. The research involved a sample of 234 respondents and examined the effects of six cognitive biases: overconfidence, herding, representativeness, anchoring, loss aversion, and confirmation bias. Both descriptive and inferential statistical techniques were applied to analyze the data. The findings reveal that a significant portion of respondents exhibited high or moderate levels of these biases, highlighting a potentially concerning issue. Specifically, anchoring and herding biases were found to have a lesser impact on investment decisions compared to representativeness bias. The results suggest that cognitive biases can adversely affect investment decisions and returns for Nepalese investors. The study recommends that investors become aware of these biases and take steps to mitigate their influence on decision-making.

Nepal and Gyawali (2023) examined the behavioral biases and portfolio strategies: analyzing the impact on investor decision making in the Nepalese stock market. This study explored how demographic factors influence behavioral biases among Nepalese portfolio investors during their decision-making processes. It examined five common biases: overconfidence, anchoring, herding, loss aversion, and hindsight, and analyzed their relationships with variables such as age, gender, and experience. The research utilized a range of statistical methods, including a weighted scoring system, discriminant analysis, descriptive analysis, and the chi-square test for independence. The findings indicate that demographic factors affect the prevalence of these biases. Specifically, female investors exhibited higher levels of overconfidence and anchoring biases, while male investors were more prone to loss aversion, herding, and hindsight biases. Experienced investors showed greater overconfidence in their analytical abilities, whereas younger investors were more prone to overconfidence and loss aversion.

Anwar et al. (2023) investigated the behavioural bias in investment decisions: moderate role of self-control. This study investigated the impact of loss aversion and mental accounting on investment decisions, with self-control as a moderating variable influencing these effects. The sample consisted of 137 Small and Medium Footwear Industries (SMIs) in Mojokerto City, selected through simple random sampling. The respondents were either owners or managers of these industries. Data was collected via questionnaires and analyzed using Structural Equation Modeling-Partial Least

Squares (SEM-PLS). The findings revealed that both loss aversion and mental accounting have a significant positive effect on investment decisions. However, while self-control does not moderate the relationship between loss aversion and investment decisions, it does moderate the effect of mental accounting on investment decisions. Additionally, the study noted that managers or owners of SMIs recognize accounts receivable as a key source of income for their businesses, reflecting the psychomotor aspects of mental accounting.

Gurung et al. (2024) investigated the unraveling behavioral biases in decision making: a study of Nepalese investors. The main aim of this study was to assess the impact of behavioral biases on investment decisions among active traders in the Nepalese stock market. The study focused on several explanatory variables: overconfidence, representativeness, anchoring, regret aversion, and herding biases, with investment decisions as the response variable. Data was collected through a structured questionnaire, yielding 379 observations, and analyzed using a linear regression model to identify correlations. The results indicated that regret aversion, anchoring, and overconfidence biases significantly influenced investment decisions among Nepalese investors. However, no significant relationship was found between herding behavior and investment decisions, and representativeness bias did not appear to affect investment choices.

Table 1

Summary of Empirical Review

S. N.	Authors	Title	Methodology	Dep./Indep. Variables	Major Findings
1	Aziz and Khan (2016)	Behavioral factors influencing individual investor's investment decision and performance, Evidence from Pakistan Stock Exchange.	This research utilized regression analysis to examine the data using the statistical software SPSS.	Dep. = Investment Performance Indep. = Heuristic theory (Over confidence, representativeness, anchoring, gambler's fallacy and availability bias) and Prospect theory (Loss aversion, regret aversion and mental accounting).	i. The results found a positive relationship between heuristics and investment performance. ii. Prospect variables did not affect investment performance. iii. Representativeness, overconfidence, anchoring, availability bias, and the gambler's fallacy all had a positive impact on investment performance.

2	Javed and Margho ob (2017)	The effects of behavioural factors in investment decision making at Pakistan stock exchanges.	The present research utilized descriptive statistics, reliability testing, regression analysis, and correlation analysis.	Dep. = Investor Decision Indep. = Behaviroul factors, prospect, market, overconfidence and anchoring factors.	i. The result found that prospect factor possesses four variables that had significant impacts on the investment decision making: loss aversion, regret aversion, and mental accounting. ii. Loss aversion ranks as the variable having the highest impact on the decision making of the investors. iii. Since overconfidence had positive impacts on the investment decision.
3	Subrama niam and Velnamp y (2017)	The role of behavioural factors in the investment decisions of household investors.	Analytical techniques such as confirmatory factor analysis and exploratory factor analysis are used to analyze the data.	Dep. = Investment Decision Indep. = Representativenes s, overconfidence, availability bais, loss aversion, risk aversion and herding.	i. The study revealed that representativeness, overconfidence, and availability bias significantly affected investment decisions. ii. Additionally, loss aversion, risk aversion, and herding had a significant impact on the investment decisions of household investors.
4	Sashikal a and Chitram ani (2018)	The impact of behavioural factors on investment intention of equity investors.	Descriptive statistics and regression were employed to analyze the data in the study.	Dep. = Investment Decision Indep. = heuristic, prospect, Hearding and market factors.	i. This study found that prospect factors and herding factors were the strongest predictors of variations in short term investment intention. ii. The other factors namely, heuristics and market factors did not have a significant effect on short term investment intentions. iii. On the other hand, the regression findings found that prospect factors. iv. Market factors had a great impact on long term investment intention.
5	Keswani et al. (2019)	Impact of behavioral factors in making investment decisions and	Both multiple regression analysis and exploratory factor analysis have	Dep. = Investment Decision Indep. = heuristic variables, prospect variables, Hearding variables	i. The study found that heuristic and prospect variables had a significant positive effect on investment decisions.

		performance: Study on investors of National stock exchange.	been utilized.	and market variables.	ii. Similarly, herding and market variables also had a significant positive effect on investment decisions.
6	Adhikari (2020)	Factors influencing investment decisions of individual investors at Nepal stock exchange.	In this research, the data were examined through frequencies, average scores, standard deviations, percentages, and factor analysis methods.	Dep. = Investment Decision Indep. = Accounting information, self-image/firm image coincidence, advocate recommendation, personal financial needs and neutral information.	i. This study found that accounting information was the most significant factors on individual investment decisions. ii. Self-image/firm image, advocate information and Neutral information are the second, third and fourth factors respectively that influence individual investors investment decisions. iii. Finally, personal financing needs was the last influencing factors.
7	Rajeshwaran (2020)	Performance of CSE investors in eastern province of Sri Lanka.	Mean, standard deviation, correlation and multiple regression were applied.	Dep. = Investment Performannce Indep. = Herding, prospect, heuristic and market factors.	i. The results indicated that all four behavioral factors and investment performance had decreased to moderate levels. ii. Heuristic variables were positively associated with investment performance. iii. In contrast, prospect variables, market variables, and herding variables were negatively related to investment performance.
8	Baral and Pokharel (2020)	Behavioral factors and investment decision: A case of Nepal.	Correlation analyses were used to analyze the data.	Dep. = Investment PerformanceIndep. = Herding, prospect, heuristic and market factors.	i. This study showed that market factor had significant impact on the investment performance. ii. The findings of the study suggested that heuristic had no significant relationship with investment performance. iii. Herding variables had no significant relationship with investment performance. iv. Moreover, prospect

					(loss aversion, regret aversion, and mental accounting) had no significant relationship with investment performance.
9	Elhusseiin and Abdelgadir (2020)	Behavioral bias in individual investment decisions: Is it a common phenomenon in stock markets?	Correlation and Regression methods are used to conduct the analysis	Dep. = Investment Decision Indep. = Herding, prospect, heuristic and market factors.	i. The study showed that heuristic and market factors were the primary influences in individual decision-making at the Khartoum Stock Exchange. ii. Key factors significantly affecting individual investment decisions included representativeness, overconfidence, anchoring, historical stock costs, and customer preferences. iii. Additionally, loss aversion, mental accounting, other investors' trading volumes, and quick reactions also had a significant impact on investment decisions.
10	Silwal and Bajracharya (2021)	Behavioral factors influencing stock investment decision of individuals.	The study employed exploratory and confirmatory factor analysis. In addition, structural equation modeling is applied for the testing of the hypotheses.	Dep. = Investment Decision Indep. = Herding, prospect, heuristic and market factors.	i. This study found that prospect behavioral factor was seen to have negative correlation to investment performance. ii. Herding and market variables were found to have positive correlation to investment performance. iii. Heuristic (including overconfidence and anchoring bias) had positive correlation to investment performance.
11	Ongeta (2021)	The controlling effect of investment decisions on the behavioral factors influencing investment	This study used multiple regression analysis to analyze the data.	Dep. = Investment performance Indep. = Herding, prospect and heuristic factors.	i. The study found that the herding factor had a significant negative impact on investment performance. ii. The prospect factor, on the other hand, had a significant positive impact on investment performance.

		performance of individual investors in Nairobi Security Exchange.			iii. Lastly, heuristic factors were found to have a significant positive impact on the investment performance of individual investors in the Nairobi Securities Exchange.
12	Kunwar (2021)	The relationship of behavioral factors with investment performance of individual investors in the Nepali stock market.	The correlation analysis was conducted to identify an association of investor performance	Dep. = Investment Decision Indep. = Herding, prospect, heuristic and market factors.	i. The results revealed that behavioral biases like heuristics, prospects, market factor and herding effect were present among individual investors in Nepal. ii. Among the factors, the investment performance of investors was found to be influenced by heuristics and market factors. iii. The heuristic behaviors were found to have the highest and positive influence on the investment performance.
13	Gyawali and Neupane (2021)	Individual investors psychology and investment decision in NEPSE.	Descriptive and multiple regression analysis were used to analyze the data	Dep. = Investment Decision Indep. = Overconfidence, herding, anchoring, regret aversion, mental accounting and loss aversion.	i. The study indicated that overconfidence, herding, and loss aversion influenced investment decisions. ii. Conversely, anchoring, mental accounting, and regret aversion did not affect individual investors' decisions. iii. Additionally, the results revealed that both cognitive and emotional biases had a positive and significant impact on investment decisions among investors in the Nepalese stock exchange.
14	Cao et al. (2021)	This study aimed to clarify the relationship between financial behavior and investment	The main analytical methods used are Exploratory Factor Analysis (EFA),	Dep. = Investment Decision Makings Indep. = Herding, prospect, heuristic and market factors.	i. Research results showed that heuristic, prospect, market, and herding directly and positively affect investment decision-making. ii. Besides, the above factors had a

		decisions as well as its impact on investment results.	Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM).		direct and positive effect on investment performance. iii. In particular, the Prospect factor had the strongest influence on investment decision-making and investment performance.
15	Karmacharya et al. (2022)	Effect of perceived behavioral factors on investors' investment decisions in stocks: Evidence from Nepal Stock Market.	The statistical techniques used are descriptive, confirmatory factor analysis, and structural equation modeling.	Dep. = Investment Performance Indep. = Herding, prospect, heuristic and market factors.	i. The study found that the prospect variable had an insignificant negative impact on investment performance. ii. In contrast, market, heuristic, and herding factors were found to significantly affect investment performance. iii. The study also observed that investors show a greater reliance on market information and sentiments.
16	Sapkota (2022)	Behavioural finance and stock investment decisions.	This study used descriptive statistic and multiple regression analysis to analyze the data.	Dep. = Stock Investment Decision Indep. = Herding, loss aversion, overconfidence and risk propensity.	i. This study found herding factors and loss aversion had significant positive effect on stock investment decision. ii. Further, overconfidence and risk propensity had significant positive impact on stock investment decisions.
17	Dhungana et al. (2022)	Effect of cognitive biases on investment decision making: A case of Pokhara Valley, Nepal.	Both descriptive and inferential analyses were made to analyze the data.	Dep. = Investment Decision Indep. = Availability bias, anchoring bias, overconfidence, herd instinct, and regret aversion. .	i. The study identified a connection between irrational financial decision-making and biases related to availability, overconfidence, and herd instinct, while anchoring and regret aversion biases did not affect irrational investment decisions. ii. Despite this, all biases were positively associated with irrational investment decisions. iii. Furthermore, overconfidence bias had the most significant impact.
18	Septian	Impact of	Data were	Dep. = Investment	i. The results found that

	et al. (2022)	behavioral factors among Indonesian individual investor towards investment decisions during Covid-19 pandemic.	analyzed using a structural equation model (CB-SEM) with the help of LISREL 8.80 software.	Decision Indep. = Heuristic, prospect, herding and market factors.	heuristic bias had a positive influence on investors' investment decisions. ii. Likewise, market bias had a positive influence on investors' investment decisions. iii. Moreover, behavioral bias factors such as prospects and herding negatively influence individual investors' investment decisions during the COVID-19 pandemic in Indonesia.
19	Sapkota and Chalise (2023)	Investors' behavior and equity investment decision: An evidence from Nepal.	Two instances of descriptive and inferential statistics that were employed in the data analysis multiple regression analysis and the correlation coefficient	Dep. = Investment Decision Indep. = Neutral information, accounting information and self-image, advocate recommendation, personal financial needs and gender.	i. The study found that neutral information, accounting information, and self-image significantly and positively influenced equity investment decisions. ii. Similarly, recomm-enddations from advocates and personal financial needs also had a significant positive impact on investment decisions. iii. However, gender did not appear to be a factor influencing investment decisions.
20	Dhakal and Lamsal (2023)	Impact of cognitive biases on investment decisions of investors in Nepal.	This study evaluated how cognitive biases affect Nepalese stock market participants' investing decisions was a self-administered questionnaire.	Dep. = Investment Decision Indep. = Overconfidence bias, herding bias, representativeness bias, anchoring bias, loss aversion bias and confirmation bias.	i. The results showed that a sizable fraction of respondents showed signs of high or moderate prejudice, indicating that this is a worrying problem. ii. the study discovered that the biases of anchoring and herding had a lesser influence on investing decision-making than representativeness bias.
22	Anwar et al. (2023)	Behavioural bias in investment decisions: Moderate	This study aimed to analyze the effect of loss	Dep. = Investment Decision Indep. = Loss aversion, mental accounting and self-control	i. The results showed that loss aversion and mental accounting have a significant positive effect on

		role of self-control.	aversion and mental accounting on investment decisions		investment decisions. ii. Self-control is not moderate the effect of loss aversion on investment decisions but moderates the effect of mental accounting on investment decisions.
23	Gurung et al. (2024)	Unraveling behavioral biases in decision making: A study of Nepalese investors.	A structured questionnaire containing 379 observations was used in the study to establish correlations using a linear regression model	Dep. = Investment Decision Indep. = Regret aversion, anchoring, and overconfidence biases, representative bias and herding.	i. The study discovered that among Nepalese investors, regret aversion, anchoring, and overconfidence biases had a significant impact on their investment decisions. ii. Conversely, herding behavior did not show a significant correlation with investment decisions. iii. Finally, represent-tational bias did not affect investment decisions.

Source: Authors' Construct

2.3 Research Gap

The literature review provided several key insights for the study, including theoretical frameworks and empirical evidence relevant to investment decisions and the indicators of various variables. However, it also highlighted several gaps in existing knowledge that this research aimed to address. Firstly, previous studies often adopted a broad approach, examining a range of behavioral and economic factors rather than focusing on specific, isolated issues. Additionally, while earlier research tended to address behavioral variables in a general sense, this study specifically tested individual behavioral components within their subcategories. This focused approach allowed for a more detailed analysis of how specific biases influence investment decisions. Due to variations in culture, environment, investment types, and gaps in existing research, findings from studies conducted in one country may not be directly applicable to another. Earlier research often focused on specific variables, while this study emphasizes behavioral issues. As a result, it seeks to address these research gaps. Additionally, prior studies have generally not utilized inferential statistics to

explore the relationships between investment decisions and the identified behavioral factors. Against this backdrop, the proposed study aims to investigate how behavioral factors influence equity stock investment decisions among retail investors at the Nepal Stock Exchange.

CHAPTER III
RESEARCH METHODOLOGY

Research methodology refers to the systematic process of addressing a problem through structured information gathering, recording, analysis, interpretation, and reporting on various aspects of the phenomenon under investigation. This chapter outlines the research methodology employed in the study, detailing the research design, population and sample, sampling techniques, nature and sources of data, analytical methods, research framework, and definitions of key variables.

3.1 Research Design

This study utilizes both descriptive and causal comparative research designs to address key issues related to the behavioral biases affecting stock investment decisions among Nepalese investors. The descriptive research design is employed to examine the characteristics and current status of these behavioral biases, aiding in investment decisions within the Nepalese stock market. Meanwhile, the causal comparative research design investigates the relationships between behavioral biases and their impact on investors' decisions.

3.2 Population and Sample, and Sampling Design

A sample is a smaller subset that represents a larger whole, while sampling refers to the process of choosing a portion of the population at random. In this study, the population comprises all investors in various companies listed on NEPSE, including commercial banks, development banks, finance companies, insurance firms, manufacturing businesses, hydropower companies, and others. Out of 500 distributed questionnaires, 426 were returned, with 400 responses are valid. Therefore, the sample size consists of 400 potential investors, selected using convenience sampling technique to gather the necessary information.

3.3 Nature and Sources of Data, and the Instruments of Data Collection

Primary data are utilized to gather information from investors about behavioral biases and their effects on investment decisions in the Nepalese stock market. A structured questionnaire using a 5-point Likert scale is distributed directly to investors in person.

3.4 Method of Analysis

Various statistical techniques are employed in the research. The following subsections describe the statistical tools used in this study to analyze and evaluate the data findings:

Mean

The arithmetic mean, or simply the mean, is a measure of central tendency calculated by summing all values in a dataset and then dividing by the total number of values. It provides an average that reflects the central point of the data. The arithmetic mean is a widely used and straightforward metric for determining the central tendency of a dataset. In this study, the mean is used to calculate the average responses of participants to various Likert scale questions. Specifically, the mean value of responses for each sample is computed to analyze the data.

$$\text{Mean } (\bar{X}) = \frac{\Sigma X}{n}$$

Where,

$\sum X$= Value of responses of each independent or dependent variable

n = No. of statements

Standard Deviation

The standard deviation measures the extent of variability or dispersion within a set of data values. It is the square root of the variance, providing a measure of how much individual data points deviate from the mean. One key advantage of the standard deviation over variance is that it is expressed in the same units as the data, making it more interpretable. A higher standard deviation indicates greater variability among the data points from the mean. In this study, the standard deviation is calculated for each sample based on responses to the Likert scale questions.

$$\text{Standard Deviation (S.D.)} = \sqrt{\frac{\Sigma(X - \bar{X})^2}{n}}$$

Where,

X = Value of responses of each dependent or independent variable

$\bar{X}$ = Mean value of responses of each dependent or independent variable

n = No. of responses

Variance

Variance measures the dispersion within a dataset by quantifying how much each data point deviates from the mean. To calculate variance, you find the difference between each value and the mean, square these differences, sum them up, and then divide by the total number of values. In this study, the variance of the Likert scale responses for each sample is computed. Variance provides a statistical measure of how much individual observations in a dataset differ from each other. It is used in statistics to assess variability and is fundamental in probability distributions.

ANOVA

ANOVA, or Analysis of Variance, is a statistical technique used to assess differences in group averages within a sample. Unlike tests that compare individual means, ANOVA evaluates whether there are overall differences among means across multiple groups. It examines variations in a dependent variable by using a nominal variable with two or more categories. Essentially, ANOVA extends the t-test's capability, which is limited to comparing two groups, to accommodate comparisons among three or more groups. It provides a statistical method to determine if the means of multiple populations are significantly different from one another. ANOVA, also known as Fisher's Analysis of Variance, is particularly useful for testing the significance of differences among the means of three or more groups.

Correlation Coefficient (r)

The correlation coefficient measures the strength and direction of the relationship between an independent variable and a dependent variable. It helps determine how changes in the independent variable are associated with changes in the dependent variable. A high correlation coefficient indicates a strong relationship, where variations in the independent variable significantly affect the dependent variable. In this study, the correlation coefficient is calculated to assess the degree of relationship between independent and dependent variables based on responses to the Likert scale for each sample.

$$\text{Correlation Coefficient (r)} = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

Where,

X = Value of independent variable

Y = Value of dependent variable

n = Number of responses

t- Statistics

In hypothesis testing using Student's t-test, the t-statistic is utilized to decide whether to support or reject the null hypothesis. The process involves setting up the following hypotheses:

Null hypothesis (H_0); $\rho = 0$ i.e. There is no correlation between the considered variables.

Alternative Hypothesis (H_1); $\rho \neq 0$ i.e. There is significant correlation between the considered variables.

Test statistic under H_0;

$$t_{cal.} = \frac{r}{\sqrt{1 - r^2}} \times \sqrt{n - 2}$$

Where,

r = Sample correlation between two variables

r^2 = Coefficient Determination

n = No of Pair of observations

Level of significance: Level of significance $\propto$ = 5 percent

Critical Value: Tabulated or critical value of t at $\propto$ percent level of significance for (n - 2) degree of freedom obtain from 't' tables.

Decision

i. If the calculated t-value is less than or equal to the tabulated t-value, it falls within the acceptance region, and the null hypothesis is accepted. Conversely, if the calculated t-value exceeds the tabulated t-value, the null hypothesis is rejected.

ii. If the calculated p-value is less than the level of significance (e.g., 5 percent), the null hypothesis is rejected. If the p-value is greater than the level of significance, the null hypothesis is accepted.

Regression

Regression is a statistical tool used to evaluate the strength and nature of the relationship between one dependent variable and one or more independent variables. It includes various methods for modeling and analyzing how variables relate to each

other. In this study, regression analysis is employed to determine the direction of the relationship between independent and dependent variables based on Likert scale responses for each sample. The analysis compares the dependent variable (investment decisions) with the explanatory variables. The theoretical model describing this relationship is expressed in the following equation:

$ID = \beta_0 + \beta_1 HF + \beta_2 PF + \beta_3 MF + \beta_4 HF + \varepsilon$

Where,

ID= Investment Decision

HF= Heuristic Factors

PF= Prospect Factors

MF = Market Factors

HDF = Herding Factors

β_0 = The intercept (constant)

β_1, β_2, β_3, β_4= Coefficient of variables

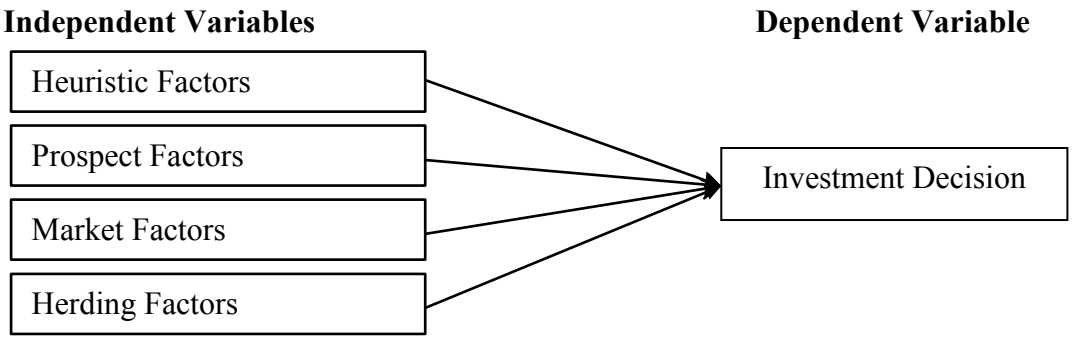
ε = Error term.

3.5 Theoretical Framework

Based on the theoretical and empirical literature reviews, the researcher has developed the following research framework for the study:

Figure 1

Research Framework of the Study



Source: Silwal and Bajracharya (2021); Pokharel and Baral (2020); Ongeta (2021) and Karmacharya et al. (2022)

Independent Variables

Heuristics Factors

Heuristics are essential guidelines used to make decisions, especially in complex and uncertain situations. They simplify decision-making processes by reducing complexity and utilizing various probabilities to predict outcomes. While heuristic methods can lead to biases, they are useful when time is limited (Waweru et al., 2008). Common heuristics include overconfidence, availability bias, anchoring, and the Gambler's fallacy (Pokharel & Baral, 2020; Karmacharya et al., 2022).

Prospect Factors

Expected Utility Theory (EUT) and Prospect Theory are two distinct decision-making approaches within the field. EUT focuses on rational decision-making, while Prospect Theory emphasizes the internal value systems of investors (Filbeck et al., 2005). Prospect Theory explores the psychological factors influencing decision-making, such as mental accounting, loss aversion, and regret aversion. However, research by Pokharel and Baral (2020) found no significant correlation between these prospect factors and investment decisions. Additionally, Silwal and Bajracharya (2021) identified a negative relationship between investment decisions and prospect behavioral factors.

Market Factors

Ongeta (2021) noted that investors might react irrationally to news or price changes, misapply historical trends to future prices, struggle with fundamental analysis of stocks, or focus on popular stocks. Waweru et al. (2008) identified various market factors influencing investor decision-making, including price fluctuations, market information, historical stock trends, consumer preferences, overreaction to price movements, and the fundamentals of the underlying equities.

Herding Factors

The tendency of investors to mimic the actions of others is referred to as the herding factor in financial markets (Pokharel & Baral, 2020). Investors often prioritize the decisions of the majority to ensure their investment aligns with the market value. This behavior can influence various investment opportunities based on prevailing

knowledge. Silwal and Bajracharya (2021) found that the herding factor has a positive correlation with investment decisions.

Dependent Variable

Investment Decision

Investment decisions are often guided by the return on an investment portfolio. A portfolio that delivers the highest return for a given level of risk is considered to have outperformed. Traditional finance theory suggests that portfolio performance is driven by rational decision-making. However, recent research on financial behavior indicates that emotional preferences, entrenched cognitive patterns, and psychological biases significantly influence how individuals perceive and make investment decisions (Elhussein & Abdelgadir, 2020). Therefore, for evaluating investment performance, this study uses variables such as satisfaction with current returns, excess return over the market, and historical return trends. In the structural model, investment choice is treated as the dependent variable, while behavioral factors such as prospect theory, market influences, herding behavior, and heuristics are considered independent variables.

CHAPTER – IV
RESULTS AND DISCUSSION

The primary aim of this study is to assess the impact of behavioral biases on investment decisions in the Nepalese stock market. This chapter focuses on the statistical analysis of the research findings. The data are analyzed using SPSS, with descriptive statistics, correlation analysis, and regression analysis employed to summarize the results. The findings are presented in tabular form.

4.1 Results

4.1.1 Demographic Information

The study analyzed various background information about the respondents to evaluate the accuracy and reliability of the data they provided. These demographic variables included gender, age, educational levels, and years of experience of the investors. The responses have been taken from Kathmandu valley.

Table 2

Gender Specification

Gender	No. of Respondents	Response (percent)
Male	264	66
Female	136	34
Total	400	100

Source: Opinion Survey, 2024

Table 2 presents the gender distribution of the respondents. The study, which focuses on the Kathmandu Valley, gathered and analyzed data from 400 respondents. Of these, 66.00 percent were male, indicating that the majority of investors are likely men. The remaining 34.00 percent of respondents were female. This distribution suggests that men are more prevalent among stock market investors in the research area, although both male and female respondents contribute to the sample.

Table 3

Age Description of Respondents

Age	No. of Respondents	Response (percent)
18-25	62	15.50
26-35	242	60.50
36 and above	96	24.00
Total	400	100

Source: Opinion Survey, 2024

According to Table 3, which details the age distribution of the respondents, 60.50 percent are in the 26–35 age range in the Kathmandu Valley. The age group of 36 and older represents the smallest percentage of stock market investors. However, a significant majority of respondents are relatively young. Specifically, 15.50 percent fall within the 18–25 age group, while 24.00 percent are 36 or older. This indicates that 76.00 percent of stock market investors in Nepal are young, active individuals, suggesting a strong presence of younger investors in the market.

Table 4

Education Level of the Respondents

Education	No. of Respondents	Response (percent)
PCL and below	23	5.75
Bachelor	273	68.25
Masters and above	104	26.00
Total	400	100

Source: Opinion Survey, 2024

Table 4 shows the educational background of the respondents. Among the 400 investors surveyed, 273 (68.25 percent) hold a bachelor's degree, 104 (26.00 percent) have a master's degree or higher, and 23 investors (5.75 percent) have a PCL or lower qualification.

These results indicate that most respondents are well-educated and capable of understanding the questionnaires used in this study. Consequently, they are likely to provide accurate responses and demonstrate an understanding of how behavioral factors impact stock market investment decisions.

Table 5

Year of Experience of Investors

Year of Investment	No. of Respondents	Response (percent)
Fresher	15	3.75
1-5 years	140	35.00
5-10 years	180	45.00
10 years and above	65	16.25
Total	400	100

Source: Opinion Survey, 2024

Table 5 also included details on the respondent's stock market investment background. 180 (45.00%) of the 400 respondents have been investing for five to ten years, and 140 (35.00%) have been investing for one to five years. It is also discovered that 15 respondents, or 3.75 percent, have been investors for less time than 65 respondents, or 16.25 percent, who have been investors for ten years or more.

4.1.2 Reliability Test

When discussing tests, observations, questionnaires, and other methods of measurement, consistency and reliability are synonymous. Research requires accurate measurement. Random factors can cause discrepancies in measurements between events or scenarios, which is known as measurement error. Repeatability is the main factor that determines measurement dependability. Reliability is the extent to which an examination assesses the items it is intended to assess consistently. Sekaran (2003) proposed that a Cronbach's Alpha coefficient of less than 0.6 is considered "poor," higher than 0.6 but less than 0.8 is considered "acceptable," and more than 0.8 is considered "good." For the reliability test, Cronbach's Alpha is calculated for this questionnaire. The outcome of the reliability test is shown in Table 3.

Table 6

Reliability analysis

Code	Variables	No. of Items	Cronbach’s Alpha
HF	Heuristic Factors	5	0.804
PF	Prospect Factors	3	0.807
MF	Market Factors	4	0.827
HDF	Herding Factors	3	0.734
ID	Investment Decision	3	0.784

Source: Appendix-I

Table 6 presents the calculation of Cronbach's Alpha for various variables related to behavioral biases and investment decisions. It is observed that Heuristic Factors has Cronbach's Alpha of 0.759, Prospect Factors has Cronbach's Alpha of 0.717, Market Factors has Cronbach's alpha of 0.778, Herding Factors has Cronbach's Alpha of 0.771 and Investment Decision has the Cronbach's Alpha of 0.811.

As shown in the table, all Cronbach's Alpha values exceed 0.7, which is considered acceptable. This indicates that the statements related to heuristic factors, prospect factors, market factors, herding factors, and investment decisions exhibit good internal consistency, validating their reliability.

4.1.3 Descriptive Statistics Analysis

The data in this study are analyzed using mean and standard deviation methods. A higher mean value suggests that a greater number of respondents believe the variable significantly impacts investment decisions.

Heuristic Factors

This section employs descriptive analysis to explore the impact of behavioral biases on stock market investment decisions. Heuristic factors in the study are assessed through five statements measured on a five-point Likert scale, where 1 represents strong disagreement and 5 represents strong agreement.

The mean and standard deviation of the responses are calculated to gauge respondents' opinions. The mean value reflects the average sentiment of the respondents, while the standard deviation indicates the degree of variation from this average. The following information demonstrates how behavioral variables influence investment decisions made by investors.

Table 7

Heuristic Factors

Scale Items of Heuristic Factors	Mean	Std. Dev.
HF1 I invest in stocks that are doing well and avoid those that have lately underperformed.	3.8000	1.05963
HF2 I use trend analysis of certain representative stocks to guide my investment decisions for all the stocks I invest in	3.8600	.97096
HF3 I am confident that my skills and understanding of the stock market will enable me to achieve returns that exceed the market average	3.8200	.99503
HF4 I predict future stock price movements by analyzing recent stock prices	3.8800	1.01399
HF5 I am generally able to predict when positive or negative market returns will come to an end	3.6700	1.07889

Source: Appendix-II

Table 7 provides descriptive statistics for five scale items related to heuristic considerations used by stock market investors. Among these items, HF4, "I predict future stock price movements by analyzing recent stock prices," received the highest mean score. Conversely, the lowest mean score, 3.6700, was for HF5, "I am generally able to predict when positive or negative market returns will come to an end." This suggests that investors are more confident in their ability to predict future stock price changes based on current prices and believe their expertise can help them outperform the market. The standard deviation for these scale items ranges from 0.97096 to 1.07889, indicating relatively low variance among responses, which implies that the answers are fairly consistent.

Prospect Factors

This section employs descriptive analysis to assess the impact of prospect factors on stock market investment decisions. The study examines three statements related to prospect factors, measured using a five-point Likert scale, where 1 indicates strong disagreement and 5 indicates strong agreement. The mean and standard deviation of the responses are calculated to understand respondents' opinions. The mean value represents the average sentiment of the respondents, while the standard deviation reveals the degree of variation from this average. The following information provides insights into how prospect factors influence investment decisions made by investors.

Table 8

Prospect Factors

Scale Items of Prospect Factors	Mean	Std. Dev.
PF1 After experiencing a prior gain, I tend to take on more risk than usual	3.7400	1.02715
PF2 I avoid selling shares that have lost value and am quick to sell shares that have gained in value	3.7500	1.03449
PF3 I tend to handle each component of my investment portfolio individually.	3.8100	1.01808

Source: Appendix-II

Table 8 presents descriptive statistics for three scale items related to prospect factors affecting stock market investors. Among these items PF3, "I tend to handle each component of my investment portfolio individually," received the highest mean score of 3.8100. PF1, "After experiencing a prior gain, I tend to take on more risk than usual," had the lowest mean score of 3.7400. The table suggests that investors generally manage each part of their investment portfolio separately and are cautious about selling shares that have gained value, while they might act more quickly on shares that have declined. The standard deviation for these items ranges from 1.01808 to 1.03449, indicating relatively low variation among responses, which implies that opinions are fairly consistent across the sample.

Market Factors

This section utilizes descriptive analysis to illustrate how market factors influence investors' stock market investment decisions. Four distinct statements related to market factors are assessed using a five-point Likert scale, where 1 represents strong disagreement and 5 represents strong agreement. The mean and standard deviation of the responses are calculated to gauge the respondents' opinions. The mean value reflects the average sentiment of the respondents, while the standard deviation indicates the extent of variation from this average.

Table 9

Market Factors

Scale Items of Market Factors	Mean	Std. Deviation
MF1 I take into account the price fluctuations of stocks I plan to invest in	3.5400	1.09150
MF2 I tend to overreact to fluctuations in stock prices.	3.5900	1.06052
MF3 Market information plays a crucial role in my stock investment decisions	3.7600	.99240
MF4 I take past stock trends into account when making my investment decisions	3.6300	1.01769

Source: Appendix-II

Table 9 provides descriptive statistics for four distinct market factors related to stock market investors. Among these items MF3, "I take into account the price fluctuations of stocks I plan to invest in," achieved the highest mean score of 3.7600. MF1, "I consider the price changes in stocks that I intend to invest in," had the lowest mean score of 3.5400. The data indicate that investors place significant emphasis on market information and historical stock trends when making investment decisions. The standard deviation for these items ranges from 0.99240 to 1.09150, suggesting minimal variation among responses and indicating that the opinions of respondents are relatively consistent.

Herding Factors

This section uses a descriptive approach to examine herding factors. The study includes three statements related to herding behavior, measured using a five-point Likert scale, where 1 indicates strong disagreement and 5 indicates strong agreement. The mean and standard deviation of the responses are calculated to assess respondents' opinions. The mean value represents the average sentiment of the respondents, while the standard deviation reveals the extent of variation from this average. The following information demonstrates how these behavioral factors influence stock market investment decisions.

Table 10

Herding Factors

Scale Items of Herding Factors	Mean	Std. Dev.
HDF1 The choices other investors make regarding stock types influence my own investment decisions	3.7400	1.02715
HDF 2 The stock volume decisions made by other investors affect my own investment choices	3.8500	1.02476
HDF3 The investment decisions of other investors, including their choices to buy or sell stocks, influence my own investment decisions	3.8750	1.03782

Source: Appendix-II

Table 10 provides descriptive statistics for three scale items related to herding factors among stock market investors. Among these items HDF3, "The investment decisions of other investors, including their choices to buy or sell stocks, influence my own investment decisions," received the highest mean score of 3.8750. HDF1, "The choices other investors make regarding stock types influence my own investment decisions," had the lowest mean score of 3.7400. The data indicate that investors believe both their own stock decisions and those of other investors, including buying and selling actions, significantly impact their investment choices.

The standard deviation for these items ranges from 1.02476 to 1.03782, suggesting minimal variation among responses and indicating that opinions are relatively consistent.

Investment Decision

This section uses descriptive analysis to explore the state of investment decisions. Three statements related to investment decisions are assessed using a five-point Likert scale, where 1 indicates strong disagreement and 5 indicates strong agreement. The mean and standard deviation of the responses are calculated to understand respondents' opinions. The mean value reflects the average sentiment of the respondents, while the standard deviation shows the degree of variation from this average.

Table 11

Investment Decision

Scale Items of Investment Decision	Mean	Std. Deviation
ID1 The return rate on my recent stock investment has met my expectations	3.6800	1.14055
ID2 My rate of return is at least equal to or exceeds the market's average return	3.7400	1.03686
ID3 I am pleased with the investment choices you made over the past year, including your decisions on buying, selling, selecting stocks, and determining the amount of each stock	3.7800	1.05564

Source: Appendix-II

Table 11 presents the descriptive statistics for individual scale items related to investment decisions. Among the three items ID3, "I am pleased with the investment choices you made over the past year, including your decisions on buying, selling, selecting stocks, and determining the amount of each stock," achieved the highest mean score of 3.7800, with a standard deviation of 1.05564. ID1, "The return rate on my recent stock investment has met my expectations," received the lowest mean score of 3.6800 and a standard deviation of 1.14055. The findings suggest that investors are generally satisfied with their investment decisions over the past year, including their choices regarding purchases, sales, stock selection, and investment volume. However, the return on their recent investments has been somewhat less consistent in meeting their expectations compared to the market average.

4.1.4 Summary of Descriptive Analysis

The impact of behavioral variables on stock market investment decisions is assessed using the mean value and standard deviation of each dimension. Creswel (2012) provided trustworthy sources from which the decision rule (cut-off point) for the mean values was derived and interpreted. According to Creswel (2012), a mean value of less than 1.5 denotes extreme low, 3.5–4.5 high, 2.5–3.5 moderate, and 4.5+ very high. Based on this mean score evaluation, the researcher gave the participants' mean score for each category of variable descriptions.

Table 12

Summary of Descriptive Analysis

Study Variables	Mean	Std. Deviation	Evaluation of Mean Score
Heuristic Factors (HF)	3.8060	.76696	High
Prospect Factors (PF)	3.7667	.87223	High
Market Factors (MF)	3.6300	.84477	High
Herding Factors (HDF)	3.8217	.83229	High
Investment Decision (ID)	3.7333	.79682	High

Source: Appendix-II

The results of the research indicate that, as Table 12 illustrates, the investment decisions have a mean score of 3.7333, which indicates a high level. It demonstrates that every behavioral aspects element is at a high level, with the exception of the herding components, which range from 3.6300 to 3.8217. The elements with the highest mean score value of 3.8217 is the herding factors, followed by heuristic factors, prospect factors, and market factors. The highest mean score of 3.8217 indicates that the herding factors are the primary focus of this investigation. The total value of the highest mean score of 3.8217 suggests that the herding factors is the main element in this study. Then, it's clear that the majority of investors feel that their level of investment decision-making is high and that herding factors have a significant impact on their performance. A total mean score of 3.7333 was obtained by the investment decision (ID), while heuristic factors (HF), prospects factors (PF), market factors (MF), herding factors (HF) received scores of 3.8060, 3.7667, 3.6300, and 3.8217, respectively.

4.1.5 Correlation Analysis

Correlation analysis is used to examine the impact of behavioral biases on stock market trading decisions. The following tables illustrate the relationship between the dependent and independent variables, investment choice performance and behavioral characteristics. In this study, correlation analysis was employed to ascertain the relationship between the variables. The researcher calculated the correlation coefficient value in this analysis using the SPSS program. The correlation analysis's primary focus was the broad relationship between behavioral traits and investors' decision-making abilities.

Table 13

Pearson Correlation Coefficients of Study Variables

	HF	PF	MF	HDF	ID
Heuristic Factors (HF)	1				
Prospect Factors (PF)	.734**	1			
	(.000)				
Market Factors (MF)	.390**	.286**	1		
	(.000)	(.000)			
Herding Factors (HDF)	.499**	.409**	.385**	1	
	(.000)	(.000)	(.000)		
Investment Decision (ID)	.717**	.635**	.554**	.591**	1
	(.000)	(.000)	(.000)	(.000)	

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

Source: Appendix-III

The results of the correlation test for both dependent and independent variables are displayed in Table 13, using a correlation coefficient matrix. The correlation analysis indicates that heuristic factors have a strong positive correlation with investment decisions, with a significant value of 0.000 and a coefficient of 0.717. Similarly, the correlation between factors influencing prospects and investment decisions is 0.635, which is statistically significant at 0.000. Therefore, it is clear that prospect factors and investment decisions are positively related in a significant manner ($P<0.05$). Moreover, there is a notable positive correlation ($P<0.05$) between market variables and investment choices, shown by the correlation coefficient of 0.554, with a significant P-value of 0.000. A noteworthy finding is that there is a strong positive correlation ($P<0.05$) between herding elements and investment decisions, with a correlation coefficient of 0.591 and a significant value of 0.000.

4.1.6 Multiple Regression Analysis

A variety of modeling and analytical tools are employed to explore the relationship between the independent variables (market factors, prospect factors, heuristic factors, and herding factors) and the dependent variable (investment decision), which represents the investment choices. These tools are used to evaluate how each behavioral biases influences the decisions investors make regarding their investments.

Table 14

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816[a]	.665	.662	.46344

a. Predictors: (Constant), HDF, MF, HF, PF

Source: Appendix-IV

The R-squared (R^2) value is 0.612, indicating that 61.20 percent of the variation in the dependent variable (investment decision) is explained by the independent variables (heuristic factors, prospect factors, market factors, and herding factors). Then, the R-value is 0.783, suggesting a strong relationship between the study variables. This indicates that the independent variables have a significant impact on investment decisions. As regards standard error of estimate this value is closely related to regression analysis and reflects the accuracy of the predictions made by the regression model. In summary, the high R-squared value and the strong R-statistic indicate that the independent variables collectively account for a substantial portion of the variability in investment decisions, demonstrating their significant influence.

Table 15

Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	168.496	4	42.124	196.128	.000[b]
	Residual	84.837	395	.215		
	Total	253.333	399			

a. Dependent Variable: ID
b. Predictors: (Constant), HDF, MF, HF, PF

Source: Appendix-IV

The findings suggest that investment decisions are significantly impacted by the independent variables. This is evidenced by the F-value of 149.659 ($p = 0.000 < 0.05$), which indicates a statistically significant relationship between heuristic factors, prospect factors, market factors, and herding factors with the dependent variable (investment decision). The low p-value confirms that the overall model is highly significant and that these behavioral factors collectively have a strong effect on investment decisions.

Table 16

Regression Coefficient of Independent Variables on Investment Decision

Variables	Coefficients	t-statistics	Sig. or p-value
(Constant)	-.114	-.817	.414
Heuristic Factors (HF)	.352	7.331	.000
Prospect Factors (PF)	.196	4.976	.000
Market Factors (MF)	.257	8.373	.000
Herding Factors (HDF)	.219	6.601	.000

a. Dependent Variable: ID

Source: Appendix-IV

Table 16 shows the regression coefficient for heuristic factors, prospect factors, market factors, and herding factors, as well as the intercept value for the dependent variable of investment decision. The regression coefficient β for heuristic factors is 0.352. Based on the results, an increase of 0.352 units in heuristic factors leads to an increase in investment decisions by one unit. The heuristic factors have a p value of 0.000, indicating statistical significance at the 5 percent level. Heuristic elements play a crucial role in impacting the decisions made regarding investments. The regression coefficient β for prospect factors is 0.196. Based on the data, the investment choices rise by 0.196 units with each unit alteration in prospect variables. Moreover, the shift shows statistical significance at the five percent significance level, with a p value of 0.000 attributed to the prospect factors. Therefore, prospect factors have a notable positive impact on investment decision.

The beta coefficient for market factors in regression is 0.257. These figures indicate that each one unit rise in a market factor results in a 0.157 unit increase in investment decisions. At the 5 percent significance level, a p value of 0.000 for the market factors shows they are statistically important. Hence, market conditions greatly benefit the investment decision. Finally, in terms of herding components, the regression coefficient β equals 0.219. The investment decision shows an increase of 0.219 units with each additional herding factor, as indicated by the data. The herding factors have a p value of 0.000, demonstrating statistical significance at the five percent level. Consequently, the influence of herding factors on investment choices is significant positive.

4.2 Discussion

The main purpose of this study is to evaluate the impact of behavioral biases on investors' decisions in the stock market. This investigation focuses on several key behavioral factors: heuristic factors, prospect factors, market factors, and herding factors. This study also emphasizes the connection between various behavioral biases and investment choices. Research and past studies confirm the link between heuristic, prospect, market, and herding factors and investment decisions. The research literature confirms that these factors impact investment decisions directly.

The data analysis reveals that heuristic factors have a positive and significant relationship with investment decisions. This finding aligns with Rajeshwaran (2020), who also reported a positive and significant link between heuristic factors and investment decisions, and is supported by Baral and Pokharel (2020), Elhussein and Abdelgadir (2020) and Kunwar (2021). Similarly, prospect factors show a positive and statistically significant relationship with investment decisions. This is consistent with Baral and Pokharel (2020), who found a positive relationship between prospect factors and investment decisions, and is also corroborated by Elhussein and Abdelgadir (2020) and Kunwar (2021). However, this finding contrasts with Rajeshwaran (2020), who reported a negative relationship between prospect factors and investment.

There is significant positive relationship of market factors and investment decision. The result is line with the findings of Baral and Pokharel (2020) mentioned that market factors have positive and significant positive relationship with investment decision. The result is also consistent with Elhussein and Abdelgadir (2020); Kunwar (2021). However, it contradicts with the finding of Rajeshwaran (2020) which observed that market factors have insignificant negative relationship with investment decision. At the same time, there is positive and significant relationship of herding factors and investment decision. This finding is similar with the previous study of Baral and Pokharel (2020) concluded that herding factors has positive relationship with investment decision. The result is also consistent with Elhussein and Abdelgadir (2020); Kunwar (2021). However, it contradicts with the finding of Rajeshwaran (2020) which observed that herding factors have insignificant negative relationship with investment.

The multiple regression analysis found that heuristic factors have significant positive impact on investment decision in stock market. This is consistent with the finding of Sashikala and Chitramani (2018). The result is also consistent with Rajeshwaran (2020); Septian et al. (2022). Likewise, the prospect factors have significant positive impact on investment decision in stock market. This finding is similar with the prior study of Ongeta (2021). This result is also consistent with the finding of Sashikala and Chitramani (2018) found that prospect factors had significant positive impact on investment decision. The result is also consistent with Ongeta (2021). However, it contradicts with the finding of Rajeshwaran (2020); Septian et al. (2022) which observed that prospect factors have negative effect on investment decision. Further, the market factors have significant positive impact on investment decision. This result is consistent with the finding of Sashikala and Chitramani (2018). Moreover, this study also line with the prior study of Septian et al. (2022) mentioned that market factors had significant positive influence on investment decision but opposite to the finding of Rajeshwaran (2020). Finally, the herding factors have significant positive impact one investment decision. This is consistent with the finding of Sashikala and Chitramani (2018); Nepal and Gyawali (2023). However, this is inconsistent with the findings of Rajeshwaran (2020), Ongeta (2021), and Septian et al. (2022), who observed that herding factors negatively impact investment decisions.

CHAPTER – V
SUMMARY AND CONCLUSION

5.1 Summary

The emergence of behavioral finance has resulted in the recognition of numerous ideas that cause individuals to act irrationally and make bad choices when faced with uncertain situations. Investors may decide to purchase, retain, or dispose of assets without conducting a thorough analysis because asset prices can deviate from their true value, which goes against the concept of market efficiency. Each investor builds their portfolio based on their unique investment goals and level of risk they are comfortable with. These expected decision-making procedures and the information collected from market participants are becoming increasingly unrealistic in today's worldwide financial markets. Rational decision-making is an additional factor of behavioral finance that influences decision-making. During this procedure, people respond to potential opportunities and dangers in the market by evaluating various market scenarios and selecting a specific course of action following in-depth analysis. The goal of this study was to analyze the factors that affect the decisions made by individual investors in the Nepali stock market. The research also aims to examine how different factors impact individuals' investment behaviors and how those behaviors are shaped by individuals. The research also investigated how investors' total investment behavior impacted each individual element.

The main goal of this research is to examine how behavioral biases affect investors' investment decision in the stock market. The additional aims include recognizing the psychological biases that affect individual investors' investment choices, examining the connection between these biases and investor decisions, and evaluating how these biases impact Nepalese investors' stock market choices. This study utilizes descriptive and causal research designs to examine the behavioral factors influencing stock investment decisions made by Nepalese investors. This research utilizes a descriptive research design to examine the characteristics and current status of behavioral factors that aid in making investment decisions in the Nepalese stock market. Causal research design is utilized to determine how behavioral factors impact investors' investment decision-making process. Although all investors in Kathmandu Valley from various sectors listed in NEPSE are considered part of the population, only 400 investors were

sampled for this study. Primary data is utilized to gather information from investors about their behavioral factors and how it influences their investment decisions in the Nepalese stock market. This study utilizes SPSS version 26 to conduct descriptive analysis, correlation analysis, and multiple regressions. This research takes investment decision as the dependent variable and considers heuristic factors, prospect factors, market factors, and herding factors as independent variables.

This research showed that investors believe that both herding factors and heuristic factor strongly influence their investment decisions and they also perceive their decisions as significant. The correlation analysis indicates a strong relationship between heuristic factors and investment decision. Likewise, variables related to potential outcomes are closely correlated with investors' choices on investing. Simultaneously, market factors have a strong positive relationship with investment decisions. Furthermore, there is a strong positive correlation between herding factors and the investment decision. The regression analysis indicates a substantial beneficial impact of heuristic factors on investment decisions. Furthermore, prospect factors also have a significant positive impact on investment decisions. In the meantime, market elements greatly influence investment choices in a positive manner. In conclusion, the influencing factors greatly impact the decision to invest. Nevertheless, all behavioral factors greatly affect investors' decisions when investing in the stock market.

5.2 Conclusion

This research investigated how behavioral biases impact investors' choices when investing in the stock market. The research found that heuristic, prospect, market, and herding factors are the primary influences on investors' decisions in the stock market of Nepal. This study specifically found that investors believe that herding and heuristic factors have a strong impact on their investment decisions in the stock market compared to other factors.

The correlation analysis concluded that heuristic factors have significant position relationship with investment decision. Likewise, prospect factors have significant positive relationship with investors' investment decision. At the meantime, there is significant positive association between market factors and investment decision.

Finally, correlation value between herding factors and the investment decision is significant positive.

The regression results further concluded that the effect of heuristic factors on investment decision is significant positive. Then, there is also significant positive effect of prospect factors on investment decision. At the meantime, market factors have significant positive impact on investment decision. Moreover, herding factors have significant positive effect on investment decision. Therefore, all the behavioral factors are the major indicators of investment decision of investors because these factors have significant impact.

5.3 Implications

The study has the following implications;

- This study found that heuristic factors, prospect factors, market factors and herding factors have the significant positive influence on investment decision. The results of the study prompted the Nepal Stock Exchange to increase their efforts in informing investors, as it is essential in preventing negative investing outcomes caused by behavioral factors. Participating in seminars on accounting and finance is crucial for enhancing accounting skills, consequently enhancing the ability to evaluate securities before investing in them.
- This research incorporated new factors identified through face-to-face interviews that impact Nepalese shareholders' investment choices, in addition to the variables previously studied from established behavioral finance theories. These factors appear to have the greatest impact on the stock investor who invests individually.
- This study may include the latest information, statistics, and concerns about the behavioral characteristics and investment decision-making of investors. Therefore, this research will appeal to investors, upcoming academics, and students as well.
- The results of the analysis will ultimately benefit the government as they will help improve market efficiency and meet investor demands by identifying key factors and revising relevant laws and policies.

- The study enhances the existing knowledge in the finance field. In the future, researchers and scholars interested in delving into behavioral finance can utilize this study as a point of reference. The researcher has pinpointed subjects that need further examination upon the conclusion of the study. This will serve as the basis for future academics and scholars.

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