Behavioral Biases of Individual Investors' Decision-Making in Emerging Markets: A Mediation Approach

Dilli Raj Sharma[1] , **Madhav Adhikari[2*]** , **Insha Khatun[3]**

[1] Professor, Faculty of Management, Tribhuvan University, Kathmandu, Nepal
Email: dr777sharma@gmail.com

[2] PhD Scholar, Faculty of Management, Tribhuvan University, Kathmandu, Nepal

[3] BBA Graduate, D.A.V. College, Tribhuvan University, Kathmandu, Nepal
Email: inshakhatun7860@gmail.com

* Corresponding Author:
PhD Scholar, Faculty of Management, Tribhuvan University, Kathmandu, Nepal
Email: adgmadhav@gmail.com

Abstract

Purpose – This paper investigates the interplay between behavioral biases, financial risk propensity, and investment decisions among individual investors in Nepal's emerging capital market. It explores how biases such as overconfidence, loss aversion, herding, experiential, disposition, and familiarity biases influence investment outcomes directly and through financial risk propensity as a mediator.

Design/methodology/approach – A structured questionnaire was used to collect data from 327 investors who were active in the Nepal Stock Exchange. The research employed causal-comparative research design to examine the interplay between behavioral biases, financial risk propensity and investment decisions. Mediation analysis was conducted to assess the role of financial risk propensity in between behavioral biases and investment decisions.

Findings – The results revealed that biases such as loss aversion, herding, and experiential bias have significantly impacted on investment decisions. Financial risk propensity, encompassing return expectations, diversification, and time horizon, mediates these effects. Young and novice investors have dominated the Nepal's share market, exhibiting heightened susceptibility to behavioral biases and limited portfolio diversification.

Implications – The findings emphasize the need for tailored financial literacy programs, regulatory measures promoting diversification, and strategies to mitigate behavioral biases. Policymakers and financial advisors can use these insights to foster more informed and rational investment behavior.

Originality/value – This research contributes to the behavioral finance literature by validating the mediating role of financial risk propensity in an emerging market context. It provides empirical insights into investor behavior in Nepal, offering valuable implications for other similar economies.

Keywords – Behavioral biases, Emerging markets, Financial risk propensity, Investment decision-making, Nepal Stock Exchange.

How to cite this paper:

1. Introduction

Investment decision-making is a multifaceted process deeply influenced by an investor's risk propensity and behavioral biases. The ability to allocate resources effectively to achieve financial goals, manage risk, and optimize returns not only determines individual or organizational financial growth but also impacts broader economic stability (Bodie et al., 2022). However, the emergence of behavioral finance challenges this premise, asserting that emotions, cognitive biases, and psychological limitations significantly influence investment behavior (Almansour & Arabyat, 2017). These factors often result in suboptimal investment decisions, particularly in volatile markets, where psychological responses to risk and uncertainty can dominate rational thought (Ahmed et al., 2022).

Behavioral biases are central to the field of behavioral finance, offering a framework to understand deviations from rationality. Biases such as overconfidence, disposition effect, experiential bias, familiarity bias, loss aversion, and herding have been extensively studied for their impact on investment decisions (Saivasan & Lokhande, 2022; Trifan, 2020). Overconfidence, for instance, leads investors to overestimate their knowledge and predictive capabilities, resulting in excessive trading and risk-taking (Barber & Odean, 2019). Similarly, herding bias, where individuals follow the majority, often leads to market inefficiencies and bubbles (Madaan & Singh, 2019). Loss aversion, a tendency to weigh losses more heavily than equivalent gains, drives investors to hold onto losing investments while prematurely selling profitable ones (Statman, 2010). These biases collectively illustrate the profound influence of psychological factors on decision-making.

Risk perception and risk propensity act as crucial mediators in understanding the relationship between behavioral biases and investment decisions. Risk perception, defined as an individual's subjective evaluation of risk, is influenced by emotional, cultural, and situational factors (Bhattacharjee et al., 2020). Unlike risk tolerance, which remains relatively stable, risk perception is dynamic, fluctuating with changes in Return market conditions and personal experiences (Cho & Lee, 2006). This dynamic nature often leads to behaviors such as increased trading frequency during high perceived risks or reduced market participation during downturns (Ahmed et al., 2022). Risk propensity, on the other hand, reflects an individual's willingness to engage in risky financial behavior, shaped by personality traits, demographic factors, and previous experiences (Pompian, 2018).

The interplay between behavioral biases, risk perception, and risk propensity highlights a complex decision-making process. expectations, diversification, and investment time horizon—the core components of financial risk propensity—serve as mediating variables that bridge the psychological and practical dimensions of investment decisions. Return expectations guide investors' choices by shaping their predictions of future performance, yet these are often distorted by overconfidence or herd mentality (Barber & Odean, 2019). Diversification, a foundational principle of modern portfolio theory, is influenced by familiarity bias, as investors disproportionately allocate funds to familiar or culturally significant assets, thereby undermining portfolio optimization (Statman, 2010; Sharma et al, 2021). Time horizon, a critical determinant of investment strategy, interacts with biases such as loss aversion, as investors with shorter time horizons prioritize capital preservation over long-term growth (Koijen et al., 2018).

The significance of the research lies in its focus on the unique context of Nepal's financial market. Nepal, with its growing yet relatively underdeveloped capital market, offers a fertile ground for exploring the influence of behavioral finance factors on investment decisions. The Nepal Stock Exchange (NEPSE), established in 1993, operates under distinct regulatory, cultural, and economic conditions, providing insights that are both regionally specific and globally relevant. The lack of widespread financial literacy and the prevalence of behavioral biases in emerging markets like Nepal underscore the need for targeted research to inform policy and practice (Ahmed et al., 2023). The aim of this research is to explore how behavioral biases, such as overconfidence, disposition bias, experiential bias, familiarity bias, loss aversion, and herding bias, impact investment

decisions, mediated by financial risk propensity variables—return expectation, diversification, and time horizon. By integrating insights from behavioral finance with empirical analysis of Nepal's capital market, this study seeks to contribute to the theoretical understanding of investor behavior while offering practical recommendations for improving investment outcomes. The findings are expected to advance knowledge in behavioral finance, enhance investor education, and inform the development of strategies to mitigate biases, thereby fostering a more rational and efficient investment environment.

Behavioral finance offers a critical lens through which to examine the psychological mechanisms underlying investment decisions. By emphasizing the mediating role of financial risk propensity, this research bridges the gap between behavioral theory and practical application, shedding light on the factors that drive investment behavior in emerging markets. As global financial systems become increasingly interconnected, understanding these dynamics is essential for fostering sustainable and resilient markets. This study, therefore, contributes to the growing body of literature that seeks to align theoretical advancements in behavioral finance with the real-world challenges faced by investors and policymakers.

2. Literature Review and Hypotheses Development

Behavioral finance has redefined investment decision-making by challenging the rational assumptions of traditional financial theories such as Modern Portfolio Theory (MPT) and the Efficient Market Hypothesis (EMH). MPT emphasizes diversification to manage risk, while EMH posits that markets are efficient and stock prices reflect all available information (Fama & French, 2018). However, behavioral finance demonstrates that cognitive biases, emotions, and social influences significantly affect investment decisions, often leading to irrational and suboptimal choices (Ahmed et al., 2022; Almansour et al., 2023). Biases such as overconfidence, loss aversion, and herding are particularly influential. Overconfidence causes investors to overtrade and underestimate risks, resulting in higher transaction costs and increased exposure to market volatility (Barber & Odean, 2019; Thaler & Sunstein, 2021). Similarly, loss aversion, a central tenet of prospect theory, explains why individuals tend to fear losses more than they value equivalent gains, leading to behaviors such as holding onto losing stocks and prematurely selling profitable ones (Kahneman & Tversky, 2021). Herding, the tendency to mimic the behavior of the majority, is especially prevalent in markets with limited financial literacy and access to information, such as Nepal (Madaan & Singh, 2019; Saivasan & Lokhande, 2022).

Risk perception and risk propensity are critical constructs that mediate the impact of these biases on investment decisions. Risk perception is a subjective evaluation influenced by cognitive and emotional factors, market conditions, and past experiences (Ahmed et al., 2022; Bhattacharjee et al., 2020). It differs from risk tolerance, which is relatively stable, as it is more dynamic and situationally dependent (Cho & Lee, 2006; Shiller, 2015). For example, during periods of high market volatility, elevated risk perception can deter market participation and increase trading frequency as investors react to perceived threats (Ahmed et al., 2022). On the other hand, risk propensity reflects an individual's willingness to engage in risky financial activities and is shaped by demographic traits, personality factors, and cultural influences (Pompian, 2018; Saivasan & Lokhande, 2022). Together, these constructs provide a nuanced understanding of how biases influence investment decisions through psychological mechanisms.

The mediating role of financial risk propensity, encompassing return expectations, diversification, and time horizon, is essential to bridge behavioral biases with investment outcomes. Return expectations are frequently influenced by overconfidence and representativeness bias, leading investors to rely excessively on past performance while overlooking broader market dynamics (Barberis & Thaler, 2003). Diversification, a cornerstone of risk management, is often undermined by familiarity and herding biases, as investors prefer known assets or popular investment trends, which reduces portfolio efficiency and increases exposure to systematic risk (Saivasan

& Lokhande, 2022; Statman, 2010). Time horizon is another critical determinant of investment strategies; while long-term investors prioritize growth and wealth accumulation, those with shorter horizons often prioritize capital preservation, which can be skewed by loss aversion or overconfidence (Almansour et al., 2023; Koijen et al., 2018).

Empirical evidence supports the intricate interplay between behavioral biases, risk perception, and investment decisions. Almansour et al. (2023) identified that risk perception mediates the relationship between biases and risk-taking behaviors, highlighting how individual cognitive evaluations influence financial decisions. Similarly, Saivasan and Lokhande (2022) demonstrated that variables like return expectations and diversification mediate the impact of biases, providing insight into how investors navigate complex market environments. These findings emphasize the importance of integrating behavioral finance principles into financial education, policy interventions, and decision aids to mitigate biases and promote rational investment behavior (Ahmed et al., 2022; Thaler & Sunstein, 2021).

In the context of Nepal's financial market, these theoretical constructs acquire unique significance. The Nepal Stock Exchange (NEPSE) operates in an environment characterized by limited financial literacy, inadequate access to diversified investment options, and a high susceptibility to herd behavior (Saivasan & Lokhande, 2022). These conditions amplify the effects of behavioral biases, resulting in inefficiencies and suboptimal investment decisions. Understanding the dynamics of behavioral biases, risk perception, and financial risk propensity in Nepal's context is critical for designing effective interventions, such as improving financial literacy and offering tools to assist investors in making informed decisions. By addressing these challenges, the market can move toward greater efficiency and resilience, benefiting both individual investors and the broader economic ecosystem (Ahmed et al., 2022; Bhattacharjee et al., 2020).

This theoretical review underscores the necessity of incorporating behavioral insights into investment decision models, particularly in emerging markets. By examining the mediating role of risk perception and financial risk propensity, this research advances the understanding of how psychological factors influence financial behavior. Furthermore, it highlights the practical implications for fostering a more rational and efficient investment environment through targeted education, regulatory interventions, and the adoption of decision aids. These contributions are essential for developing sustainable and inclusive financial markets in Nepal and similar economies.

Behavioral Bias and Investment Decision

Behavioral biases significantly influence investment decision-making, often leading to deviations from rational behavior. Investors are subject to a range of biases, including overconfidence, loss aversion, herding, and familiarity bias, all of which can distort their decision-making processes. Overconfidence bias leads investors to overestimate their knowledge and abilities, resulting in excessive trading and heightened exposure to risk (Barber & Odean, 2019; Saleem et al., 2023). Loss aversion, derived from prospect theory, explains why investors disproportionately fear losses compared to equivalent gains, often causing them to hold onto losing investments while prematurely selling winning ones (Kahneman & Tversky, 2021). Herding bias, the tendency to follow the actions of the majority, is prevalent in uncertain market environments and can exacerbate market inefficiencies and volatility (Madaan & Singh, 2019). Familiarity bias drives investors to favor well-known or culturally significant investments, leading to reduced diversification and heightened portfolio risks (Statman, 2010; Ventre et al., 2023). These biases collectively demonstrate the profound impact of psychological factors on investment decisions, underscoring the need for interventions to mitigate their effects (Almansour et al., 2023).

Behavioral Bias and Financial Risk Propensity

Behavioral biases also play a critical role in shaping financial risk propensity, influencing how investors perceive and respond to risk. Risk propensity, defined as an individual's willingness to

engage in risky financial activities, is not merely a reflection of stable personality traits but is also shaped by cognitive and emotional biases (Pompian, 2018). Overconfidence bias, for example, increases risk-taking behaviors as investors overestimate their ability to predict market outcomes (Barberis & Thaler, 2003). Loss aversion bias, on the other hand, reduces risk propensity by amplifying the fear of losses, leading to overly conservative investment strategies (Kahneman & Tversky, 2021). Herding behavior influences risk propensity by encouraging investors to follow the crowd, often disregarding their own risk assessments (Saivasan & Lokhande, 2022). Additionally, familiarity bias leads to overinvestment in known assets, creating a false sense of security while neglecting opportunities for diversification (Statman, 2010). These findings highlight the complex interplay between biases and risk propensity, where cognitive distortions can either amplify or suppress an investor's willingness to take risks.

Financial Risk Propensity and Investment Decision

Financial risk propensity is a key determinant of investment decisions, acting as a bridge between psychological tendencies and practical financial behavior. Risk propensity influences critical aspects of investment decision-making, such as return expectations, portfolio diversification, and investment time horizon (Saivasan & Lokhande, 2022). Investors with high risk propensity are more likely to pursue aggressive strategies, prioritizing high returns despite greater volatility. Conversely, low-risk propensity leads to conservative choices, often favoring capital preservation over growth (Ahmed et al., 2022). Return expectations, influenced by risk propensity, guide investment choices by shaping beliefs about potential gains. However, these expectations are often skewed by biases such as overconfidence or representativeness, resulting in suboptimal decisions (Barberis & Thaler, 2003). Diversification, a critical risk management strategy, is also affected by risk propensity, with higher propensity correlating with broader asset allocations (Pompian, 2018). Time horizon further interacts with risk propensity, influencing whether investors focus on short-term liquidity or long-term growth (Koijen et al., 2018). Together, these dimensions underscore the central role of financial risk propensity in shaping investment decisions.

Financial Risk Propensity as a Mediator Between Behavioral Bias and Investment Decision

Financial risk propensity mediates the relationship between behavioral biases and investment decisions by translating cognitive and emotional distortions into actionable financial behavior. Behavioral biases such as overconfidence, loss aversion, and herding influence how investors perceive and approach risk, which in turn shapes their investment choices (Saivasan & Lokhande, 2022). For instance, overconfidence increases risk propensity, leading to aggressive investment strategies characterized by high trading frequency and reduced diversification (Barber & Odean, 2019). Conversely, loss aversion reduces risk propensity, encouraging conservative strategies that prioritize stability over returns (Kahneman & Tversky, 2021). Herding bias, mediated by risk propensity, results in collective market behavior, often amplifying market trends and volatility (Madaan & Singh, 2019). Empirical studies confirm that risk propensity acts as a critical intermediary, explaining how biases translate into specific investment behaviors (Almansour et al., 2023). By incorporating financial risk propensity into the analysis, researchers gain a deeper understanding of the mechanisms underlying investment decisions, providing valuable insights for developing targeted interventions to improve financial outcomes. Thus, based on the literature, the hypotheses have been developed as;

H1: There is a significant influence of Overconfidence Bias on Investment Decision-Making.
H2: There is a considerable influence of Disposition Bias on Investment Decision Making.
H3: There is a significant influence of Experiential Bias on Investment Decision Making.
H4: There exists a marked influence of familiarity Bias on Investment Decision Making.
H5: There exists a marked influence of Loss Aversion Bias on Investment Decision Making.

H6: There exists a marked influence of Herding Bias on Investment Decision Making.

H7: There is a marked influence of Financial Risk Propensity on Investment Decision making.

H8: Financial Risk Propensity significantly mediates the relationship between overconfidence bias and the investor's decision-making.

H9: Financial Risk Propensity significantly mediates the relationship between Disposition Bias and the investor's decision-making.

H10: Financial Risk Propensity significantly mediates the relationship between Experiential Bias and the investor's decision-making.

H11: Financial Risk Propensity significantly mediates the relationship between Familiarity Bias and the investor's decision-making.

H12: Financial Risk Propensity significantly mediates the relationship between Loss Aversion Bias and the investor's decision-making.

H13: Financial Risk Propensity significantly mediates the relationship between Herding Bias and the investor's decision-making.

3. Methods

The target population for this research consists of individual investors actively engaged in trading stocks on the Nepal Stock Exchange (NEPSE). These investors participate in stock market activities, making them ideal for exploring investment behavior, particularly in terms of risk propensity and behavioral biases that influence decision-making. Identifying the appropriate population is essential to ensure that the study findings are both relevant and impactful (Hair et al., 2015).

These individuals represent a subset of the target population and provide a rich source of data for understanding investment behavior. Drawing from Hair et al. (2016), the recommended sample size range from 5 to 10 times the number of items in the survey instrument. Based on this guidelines, a sample size between 280 and 560 participants was deemed sufficient for robust analysis. Ultimately, data were collected from 327 respondents, exceeding the minimum threshold required to address potential nonresponse bias and ensure reliable insights. To achieve this, the research employed a non-probability convenience sampling method. This approach was chosen for its practicality and cost-effectiveness, particularly when targeting a large and diverse group like individual stock investors (Fama, 1998). Data collection was facilitated through an online questionnaire, distributed via Google Forms. This method allowed the researchers to efficiently reach participants while ensuring a broad representation of the investor community. Respondents were selected based on their willingness to participate and their involvement in the Nepalese stock market.

The questionnaire was carefully designed, adapting questions from established studies such as Saivasan and Lokhande (2022) and Ahmed et al. (2023). This ensured that the instrument was both reliable and relevant, addressing the specific objectives of the research. The sample size of 327 responses provides a robust foundation for analyzing the investment behavior of participants in Nepalese stock market.

Instruments

The primary instrument for data collection was a structured online questionnaire. This questionnaire was designed to capture relevant information about individual investors' decision-making processes, focusing on behavioral biases, risk propensity, and investment decisions. The questions were developed based on validated scales from existing literature, ensuring both content validity and reliability. The questionnaire was divided into sections addressing key constructs such as overconfidence bias, loss aversion, herding bias, risk propensity, return expectations, diversification, and time horizon. The instrument's reliability was assessed using Cronbach's Alpha, which indicated high internal consistency across the constructs. This approach was in line

with previous research methodologies used by Saivasan and Lokhande (2022) and Ahmed et al. (2023), which focused on behavioral finance and investor decision-making.

Measurements

The research used standardized measurement scales to assess the key variables: Behavioral Biases, Financial Risk Propensity, and Investment Decision. Behavioral biases were measured using questions based on overconfidence, loss aversion, and herding bias, with items adapted from Saivasan and Lokhande (2022) and Ahmed et al. (2023). Financial risk propensity was assessed through constructs such as return expectation, diversification, and time horizon, which are critical elements in understanding an investor's willingness to take risks (Saivasan & Lokhande, 2022). Investment decision-making was measured by assessing participants' actual investment behavior, focusing on their choice of assets, investment strategies, and portfolio construction. Each of the constructs was assessed using a Likert scale, where participants rated their agreement with specific statements ranging from "strongly disagree" to "strongly agree." This type of measurement allowed for a nuanced understanding of the degree to which investors exhibit certain biases or risk behaviors in their decision-making processes.

Data Analysis

Data were entered into SPSS and analyzed to explore the relationships between behavioral biases, financial risk propensity, and investment decision-making. Descriptive statistics were used to summarize the demographic characteristics of the sample, while inferential statistics, including correlation and regression analyses, were employed to test the hypothesized relationships between the variables. For example, the correlation analysis was used to examine the strength and direction of the relationships between risk propensity and behavioral biases, while regression analysis was employed to determine the mediating role of financial risk propensity in the relationship between behavioral biases and investment decisions. The significance level for all tests was set at 0.05, and the model's fit was evaluated using R-squared and adjusted R-squared values.

The findings from the data analysis were used to draw conclusions about how behavioral biases influence investment decisions and how financial risk propensity mediates these effects, providing valuable insights into the decision-making process of investors in the Nepalese equity market.

Figure 1

Research Framework
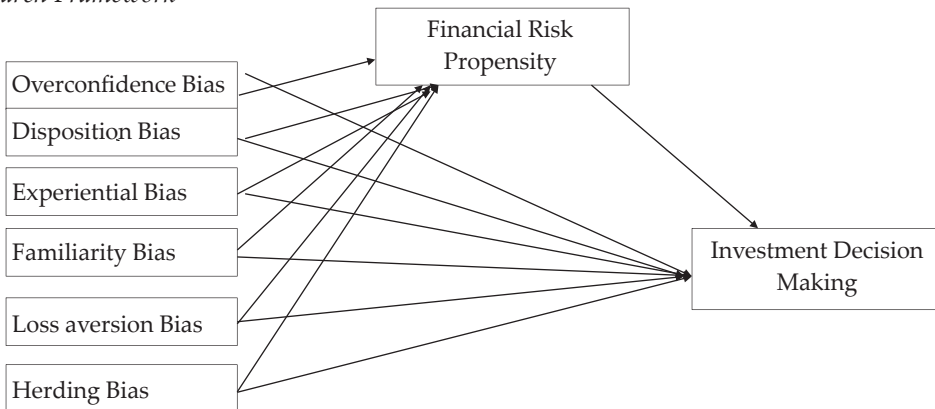
Source: (Ahmed et al., 2023; Saivasan & Lokhande, 2022)

4. Results
Table 1

Demographic Characteristics

S.N	Particulars		Frequency (N)	Percentage
1	Gender	Male	123	37.61
		Female	204	62.39
		Total	327	100
2	Age	Under 25	213	65.14
		25-35	104	31.80
		36-45	8	0.245
		Above 45	2	.006
		Total	327	100
3	Education Level	Upto+2	40	12.23
		Bachelor	203	62.1
		Masters	84	25.7
		Total	327	100
4	Occupation	Student	131	40.06
		Employee	196	59.94
		Retired	0	0.00
		Total	327	100
5	Years of experience in Investment	Less than a year	119	36.39
		1-5 years	174	53.21
		6-10 years	26	7.95
		Above 10 years	8	2.45
		Total	327	100
6	Frequency of stock trading	Daily	116	35.47
		Weekly	86	26.3
		Monthly	101	30.9
		Yearly	24	7.34
		Total	327	100

The Table 1 socio-demographic profile of the respondents provides valuable insights into the composition of individuals actively participating in the Nepal Stock Exchange. The sample consists of 327 respondents, with a notable representation of women (62.39%), surpassing men (37.61%), indicating a strong female presence in the investment landscape. Age distribution highlights a predominantly young demographic, with 65.14% under 25 years old and 31.80% between 25–35 years, collectively forming a vibrant, youthful investor base. Older age groups (36–45 and above 45) are minimally represented, suggesting that investment interest in this market is primarily driven by younger individuals.

In education variable, the respondents display a strong academic background, with the majority (62.1%) holding a bachelor's degree, 25.7% a master's degree, and 12.23% having completed education up to the higher secondary (+2) level. Occupation data further supports this, with 40.06% identifying as students and 59.94% as employees, while no retirees are included, emphasizing an active and working-age participant base.

Investment experience reveals a novice investor group, with 36.39% having less than a year of experience and 53.21% reporting 1–5 years. This suggests that the market attracts individuals in the early stages of their financial journeys, with only a small fraction (10.4%) having over six years of experience. Trading frequency patterns further highlight the diversity in investment strategies. A substantial portion (35.47%) trades daily, reflecting high engagement levels and short-term trading goals. Monthly trading accounts for 30.9% of the sample, while 26.3% trade weekly. Only 7.34% engage in yearly trading, indicating a minority focused on long-term investment strategies. Together, these findings paint a picture of a dynamic and evolving investor base in Nepal, characterized by youth, educational attainment, and early-stage market experience. The data underscores the growing interest in financial markets among diverse groups, presenting opportunities for tailored financial literacy programs and policy interventions to support informed decision-making in this emerging market.

Table 2

Reliability Statistics and Descriptive Statistics

Variables	No. of Items	Cronbach's Alpha	Mean	Std. Deviation
Disposition Bias	6	.733	2.574	.747
Over confidence bias	7	.747	2.511	.709
Experiential bias	7	.834	2.478	.701
Familiarity bias	7	.740	2.480	.700
Loss Aversion Bias	7	.846	2.476	.710
Herding Bias	7	.743	2.501	.694
Financial Risk Propensity	8	.827	2.436	.650
Investment Decision	7	.867	2.449	.720

Table 2 presents the reliability statistics for the variables examined in the study, offering insights into the internal consistency and descriptive characteristics of the measurement items. The reliability of the constructs was assessed using Cronbach's Alpha. All variables exhibit high reliability, with Cronbach's Alpha values exceeding the recommended threshold of 0.7, indicating robust consistency across items (Nunally, 1970).

The mean scores for the variables range between 2.436 and 2.574, suggesting a moderate level of agreement among respondents across the measured constructs. The highest mean is observed for Disposition Bias (2.574), indicating a slightly stronger presence of this bias compared to others. On the other hand, Financial Risk Propensity has the lowest mean (2.436), suggesting relatively lower levels of risk-taking behavior among participants. Standard deviations for the variables range between 0.650 and 0.747, reflecting a moderate dispersion of responses around the mean. This indicates that while there is some variability in individual perceptions or behaviors, the responses are generally consistent. Notably, Disposition Bias exhibits the highest standard deviation (0.747), signaling greater variability in how this bias is expressed among respondents, whereas Financial Risk Propensity has the lowest standard deviation (0.650), indicating relatively uniform responses. These reliability and descriptive statistics affirm the robustness of the measurement scales used in the study, providing a solid foundation for subsequent analyses. The results highlight the nuanced expression of biases and financial risk propensity, enabling a deeper exploration of their relationship with investment decisions.

Table 3

Correlation Matrix

	DB	OCB	EB	FB	LAB	HB	FRP	ID
DB	1							
OCB	.545*	1						
EB	.521**	.590**	1					
FB	.722**	.684**	.727**	1				
LAB	.737**	.685**	.711**	.615**	1			
HB	.730**	.679**	.634**	.727**	.626**	1		
FRP	.737**	.699**	.636**	.720**	.603**	.719**		
ID	.431*	.513*	.644**	.730**	.731**	.743**	.818**	1

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed). N=327

Note: ID= Investment decision, RE= Return Expectation, D/ IS= Diversification/ Investment Style, TH= Time Horizon, DB= Disposition Bias, OCB= Over Confidence Bias, EB= Experiential Bias, FB= Familiarity Bias, LAB= Loss Aversion Bias and HB= Herding Bias.

The correlation matrix in Table 3 reveals significant relationships between behavioral biases, financial risk propensity (FRP), and investment decisions (ID) among investors in emerging markets. All correlations are statistically significant at the 0.01 level, highlighting their reliability. Behavioral biases such as Disposition Bias (DB), Overconfidence Bias (OCB), Experiential Bias (EB), Familiarity Bias (FB), Loss Aversion Bias (LAB), and Herding Bias (HB) show strong positive correlations with ID, with Experiential Bias (r = .644) emerging as the most influential. FRP also demonstrates a strong correlation ID (r = .818), indicating its mediating role in linking biases to decision-making. These findings suggest investors' risk propensity serves as a key factor in translating psychological tendencies into financial behavior.

Additionally, the biases are not only individually impactful but also highly interrelated, reflecting a collective influence on investment decisions. For example, Herding Bias and Familiarity Bias show a strong correlation (r=.727), while Loss Aversion Bias is linked with both Familiarity Bias (r=.615) and Herding Bias (r=.626). This interconnectedness underscores the importance of

considering multiple biases simultaneously, rather than in isolation, when analyzing investor behavior. Together, these results provide an understanding of how behavioral biases and risk propensity shape decisions in the volatile context of emerging markets, offering valuable insights for future research and practical applications.

Table 4

Direct Effect

Hypothesis	Regression Weights	B	t	p-value	Remarks
H_1	OCB-> ID	-.040	-1.136	.147	Fail to accept
H_2	DB-> ID	-.038	-1.455	.257	Fail to accept
H_3	EB-> ID	.192	4.015	.000	Accepted
H_4	FB-> ID	.085	1.926	.050	Accepted
H_5	LAB-> ID	.218	5.275	.000	Accepted
H_6	HB-> ID	.234	4.964	.000	Accepted
H_7	FRP-> ID	.389	8.246	.000	Accepted
R	.872	Adjusted R Squared		.843	
F (319,7)	676.64	P-Value		.000	

The regression analysis provides significant insights into the relationship between behavioral biases, financial risk propensity (FRP), and investment decisions (ID). The model exhibits strong explanatory power, with an adjusted R2value of 0.843, indicating that 84.3% of the variation in investment decisions is explained by the predictor variables. The overall model is statistically significant, as evidenced by the F-statistic of 676.64 (p<0.001), confirming its robustness.

Among the behavioral biases, Overconfidence Bias (OCB) and Disposition Bias (DB) do not significantly predict investment decisions, with p-values of 0.147 and 0.257, respectively. This suggests that these biases may not have a direct influence in this context. In contrast, Experiential Bias (EB) is a significant predictor (B=0.192, p<0.001), highlighting the importance of past experiences in shaping investor behavior. Familiarity Bias (FB) also has a significant but modest effect on investment decisions (B=0.085, p=0.050), reflecting investors' preference for familiar assets.

Loss Aversion Bias (LAB) and Herding Bias (HB) show stronger effects on investment decisions, with (B=0.218, p<0.001) and (B=0.234, (p<0.001) respectively. These findings underline the critical roles of emotional responses to potential losses and social influences on decision-making. FRP emerges as the most influential predictor (B=0.389, p<0.001), underscoring its central role in shaping investment behavior and potentially mediating the relationship between behavioral biases and investment decisions.

Overall, the results suggest that while not all biases directly impact investment decisions, those that do—such as LAB, HB, and EB—play significant roles. FRP stands out as a pivotal factor, linking biases to investment outcomes and highlighting the importance of risk tolerance in decision-making processes. These findings offer valuable contributions to understanding investor behavior, particularly in emerging markets, and provide a foundation for further exploration of FRP's mediating role.

Table 5

Mediation Effect

Relationship	Total Effect	Direct Effect	Indirect Effect	Confidence Interval		t-statistics	Conclusion
				Lower Bound	Upper Bound		
OCB-> FRP -> ID	0.896	0.160	0.735	0.611	0.865	4.031	Partial Mediation
	(0.000)	(0.001)					
DB-> FRP -> ID	0.791	0.087	0.704	0.617	0.786	5.046	Partial Mediation
	(0.000)	(0.004)					
EB-> FRP -> ID	0.964	0.463	0.500	0.343	.652	10.478	Partial Mediation
	(0.000)	(0.000)					
FB-> FRP -> ID	0.952	0.383	0.569	0.357	0.695	9.372	Partial Mediation
	(0.000)	(0.000)					
LAB-> FRP -> ID	0.945	0.410	0.534	0.403	0.629	11.772	Partial Mediation
	(0.000)	(0.000)					
HB-> FRP -> ID	0.976	0.478	0.597	0.316	0.656	12.683	Partial Mediation
	(0.000)	(0.000)					

Note: OCB=Overconfidence Bias, DB= Disposition Bias, EB= Experiential Bias, FB= Familiarity Bias, LAB= Loss Aversion Bias, HB= Herding Bias, FRP= Financial Risk Propensity and ID= Investment Decision-making

The mediation analysis in Table 5 confirm the significant mediating role of Financial Risk Propensity (FRP) in the relationship between behavior biases and investment decision-making (ID). Each behavioral bias shows a significant total effect on ID, and the indirect effects mediated through FRP are statistically robust, with confidence intervals that exclude zero, confirming partial mediation.

For example, Overconfidence Bias (OCB) demonstrates a significant total effect (0.896, p<0.001), with a direct effect of 0.161 (p=0.001) and an indirect effect of 0.735, mediated by FRP. Similarly, Disposition Bias (DB) shows a total effect of 0.791 (p<0.001), with a direct effect of 0.087 (p=0.004) and an indirect effect of 0.704. Both results underscore that while these biases directly influence ID, the majority of their impact is transmitted through FRP.

The mediating role of FRP is particularly evident for biases such as Experiential Bias (EB), which has a significant total effect (0.964, p<0.001), a direct effect (0.463, p<0.001), and an indirect effect (0.500). Similarly, Familiarity Bias (FB), Loss Aversion Bias (LAB), and Herding Bias (HB) show strong mediation effect. For instance, HB demonstrates the highest total effect (0.976), with a substantial indirect effect (0.597), highlighting the interplay between collective market behavior and risk propensity.

These findings emphasize FRP's critical role as a psychological bridge that translates cognitive and emotional distortions into actionable investment behaviors. The results reinforce the

idea that while biases exert direct influences on decision-making, their effect are significantly amplified or mediated by an investor's risk propensity. This nuanced understanding of the interconnectedness between biases, risk propensity, and investment decisions provide valuable insights into behavioral finance, particularly in the context of emerging markets like Nepal.

5. Discussion

This paper aims to investigate the interplay between behavioral biases, financial risk propensity, and investment decision-making among individual investors in the Nepalese capital market. Behavioral biases such as overconfidence, loss aversion, herding, and experiential bias emerged as significant predictors of investment behavior. Loss aversion, a well-documented phenomenon in behavioral finance, leads investors to prioritize avoiding losses over achieving equivalent gains (Ghimire & Adhikari, 2023; Kahneman & Tversky, 2021). This emotional aversion to loss often results in holding onto underperforming stocks and too early selling profitable ones, undermining potential long-term gains (Adhikari et al, 2024; Ahmed et al., 2023). Similarly, herding bias was found to influence collective decision-making, encouraging investors to follow market trends rather than relying on independent analysis, which can exacerbate market volatility (Chaudhary et al., 2023; Madaan & Singh, 2019). Experiential bias raised out as a critical factor, emphasizing the role of past experiences in shaping current investment decisions. Investors tend to extrapolate future outcomes based on personal financial successes or failures, which can distort their risk assessment and decision-making processes (Saivasan & Lokhande, 2022). While overconfidence and familiarity biases influence decision-making by encouraging excessive trading and portfolio concentration, their effects were less pronounced (Combrink & Lew, 2020; Giri & Adhikari, 2023). The variation may be attributed to the specific demographic and economic context of Nepal, where many investors lack the extensive experience or market access that could amplify such biases.

The mediating role of financial risk propensity was confirmed, demonstrating its importance in linking behavioral biases with investment decisions. Financial risk propensity encompasses return expectations, portfolio diversification, and time horizon, all of which shape how biases are translated into actionable investment strategies. For instance, overconfidence increases risk-taking tendencies by inflating return expectations, while familiarity bias leads to concentrated portfolios due to a preference for known assets (Bayar et al., 2020; Statman, 2010). Moreover, the significant mediation effects observed in herding and loss aversion biases underscore how risk propensity bridges emotional and cognitive distortions with practical financial behavior.

The Nepalese capital market's unique demographic profile further contextualizes these findings. With a predominance of young, novice investors, the market exhibits heightened susceptibility to behavioral biases and limited diversification. These characteristics underscore the need for targeted interventions to enhance financial literacy and encourage informed decision-making. The findings align with broader behavioral finance literature while offering valuable insights into the specific challenges and opportunities in emerging markets like Nepal.

6. Conclusions

This paper explores the relationship between behavioral biases, financial risk propensity, and investment decisions within Nepal's emerging capital market. By integrating theoretical frameworks from behavioral finance with empirical analysis, the research underscores the significant influence of cognitive and emotional biases—such as experiential bias, loss aversion, and herding—on investment decisions. Financial risk propensity is validated as a pivotal mediator, translating biases into practical investment behaviors and offering nuanced insights into the psychological mechanisms shaping investor decision-making.

The research's focus on Nepal's unique market, characterized by young and novice investors with limited financial literacy, provides context-specific findings that also resonate with broader emerging markets. The identification of financial risk propensity as a critical mediating factor contributes to behavioral finance literature by bridging psychological tendencies with actionable investment strategies. These insights offer practical implications for policy-makers and educators, emphasizing the need for tailored financial literacy programs, market transparency, and strategies promoting portfolio diversification. By shedding light on the interplay of biases, risk propensity, and investment decisions, this research not only advances theoretical understanding but also addresses practical challenges in fostering efficient and rational investment behaviors. Future studies could build on these findings by exploring cross-cultural comparisons or the role of Fintech innovations in mitigating biases, thereby extending the applicability of this research to a global context.

7. Implications

This paper contributes to the behavioral finance literature by validating the mediating role of financial risk propensity in the relationship between behavioral biases and investment decisions. It provides empirical evidence from an emerging market, offering insights into the psychological factors that shape investor behavior in underdeveloped financial systems. Future research can expand these findings by examining the interplay of cultural and economic factors, facilitating comparative studies across diverse markets to enhance generalizability.

For individual investors, the findings underscore the need to recognize and mitigate behavioral biases that mislead rational decision-making. Financial advisors can utilize these insights to offer tailored guidance, enabling clients to align their investment strategies with long-term goals while minimizing the impact of biases. Promoting awareness of financial risk propensity can empower investors to make balanced decisions, optimizing risk-return trade-offs.

From a regulatory perspective, the research provides actionable insights for market authorities in Nepal and similar emerging economies. Initiatives such as targeted investor education programs, digital financial literacy tools, and transparency-promoting policies can address knowledge gaps and enhance informed decision-making among novice investors. Encouraging diversification and reducing the prevalence of speculative behavior can mitigate the adverse effects of biases like herding and loss aversion, thereby fostering more efficient markets. Finally, by addressing behavioral biases and enhancing financial literacy, this research advocates for a more equitable and resilient financial system. Empowering underrepresented groups, such as women and younger investors, can promote inclusivity and harness untapped economic potential. A well-informed investor base contributes to sustainable economic growth by reducing systemic risks and channeling resources into productive investments.

8. Limitations and Direction for the Future Research

This research has several limitations that warrant consideration. First, the reliance on a non-probability convenience sample of individual investors in Nepal limits the generalizability of the findings to other demographic or geographic contexts. The unique cultural, economic, and regulatory characteristics of the Nepalese capital market may restrict the applicability of results to more developed or differently structured markets. Additionally, the use of self-reported data introduces potential biases, such as social desirability or recall errors, which might affect the accuracy and reliability of the responses. The cross-sectional design of the research captures investor behavior at a single point in time, potentially overlooking dynamic changes influenced by market conditions or broader economic shifts. Future research could address these limitations by adopting a longitudinal design to examine how behavioral biases and risk propensity

evolve over time and across varying market conditions. Comparative studies across different cultural and regulatory environments could provide deeper insights into the universality or variability of these behaviors. Furthermore, exploring the role of emerging technologies, such as Fintech platforms, in moderating or amplifying behavioral biases offers a promising avenue for advancing the understanding of investor decision-making in rapidly evolving financial landscapes.

Conflict of Interest

Authors declare no conflict of interest while preparing this article.

References

Abul, M. S. (2019). Herding is the psychological factor that affects the investors' decisions. *International Journal of Economics, Commerce and Management, 7*(4), 76-89.

Adhikari, M., Ghimire, D. M., & Lama, A. D. (2024). FinTech and Financial Inclusion: Exploring the Mediating Role of Digital Financial Literacy in Enhancing Access to Financial Services. *Journal of Emerging Management Studies, 1*(2), 117–136. https://doi.org/10.3126/jems.v1i2.71512

Ahmed, S. U., Ahmed, S. P., Abdullah, M., & Karmaker, U. (2022). Do socio-political factors affect investment performance? *Cogent Economics & Finance, 10*(1). https://doi.org/10.1080/23322039.2022.2113496

Ahmed, Z., Rasool, S., Saleem, Q., Khan, M. A., & Kanwal, S. (2022). Mediating role of risk perception between behavioral biases and investor's investment decisions. *SAGE Open, 12*(2), 215824402210973. https://doi.org/10.1177/21582440221097394

Almansour, B. Y., & Arabyat, Y. A. (2017). Investment decision making among gulf investors: Behavioral finance perspective. *Journal of International Management Studies, 24*(1), 41–71.

Almansour, B. Y., Elkrghli, S., & Almansour, A. Y. (2023). Behavioral finance factors and investment decisions: A mediating role of risk perception. *Cogent Economics & Finance, 11*(2). https://doi.org/10.1080/23322039.2023.2239032

Baker, H. K., Filbeck, G., & Ricciardi, V. (2022). Behavioral finance: What everyone needs to know. Oxford University Press.

Barber, B. M., & Odean, T. (2018). All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors. *Review of Financial Studies, 21*(2), 785-818.

Barber, B. M., & Odean, T. (2019). The Behavior of Individual Investors. In Handbook of Behavioral Economics: *Foundations and Applications 2*(2), 195-241.

Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. *Handbook of the Economics of Finance, 1*, 1053-1128.

Bayar, Y., Sezgin, H. F., Öztürk, Ö. F., & Şaşmaz, M. Ü. (2020). Financial literacy and financial risk tolerance of individual investors: Multinomial logistic regression approach. *SAGE Open, 10*(3), 215824402094571. https://doi.org/10.1177/2158244020945717

Bhattacharjee, J., Singh, R., & Kajol, K. (2020). Risk perception in respect of equity shares: A Literature review and future research agenda. *DLSU Business & Economics Review, 30*(1), 101–120.

Bodie, Z., Kane, A., & Marcus, A. J. (2022). Investments (12th ed.). McGraw-Hill Education.

Chaudhary, M. K., Dhakal, A. P., & Adhikari, M. (2021). An Investors' Interest towards Mutual Funds: A Study of Kathmandu Valley, Nepal. *Information Technology in Industry, 9*(1), 877-884.

Cho, J., & Lee, J. (2006). An integrated model of risk and risk-reducing strategies. *Journal of Business Research, 59*(1), 112–120. https://doi.org/10.1016/j. jbusres.2005.03.006

Combrink, S., & Lew, C. (2020). Potential underdog bias, overconfidence and risk propensity in investor decision-making behavior. *Journal of Behavioral Finance, 21*(4), 337–351.

Dangol, J., & Manandhar, R. (2020). Impact of heuristics on investment decisions: the moderating role of locus of control. *Journal of Business and Social Sciences Research, 5*(1), 1-14.

Dewing, I. P. (2021). Investment valuation and real options: Valuing flexibility and strategic investment decisions. *Journal of Financial Management, Markets and Institutions, 9*(2), 175-194.

Duxbury, H., Hayley, R., & Hudson, T. (2017). Loss Aversion Bias and Investment Decision-Making: A Longitudinal Study. *Journal of Behavioral Finance, 12*(3), 245-261.

Fama, E. F. (1998). Market efficiency, long-term returns, and behavioral finance. The comments of Brad Barber, David Hirshleifer, S.P. Kothari, Owen Lamont, Mark Mitchell, Hersh Shefrin, Robert Shiller, Rex Sinquefield, Richard Thaler, Theo Vermaelen, Robert Vishny, Ivo Welch. *Journal of Financial Economics, 49*(3), 283–306. https://doi. org/10.1016/S0304-405X(98)00026-9

Fama, E. F., & French, K. R. (2018). Choosing Factors. *Journal of Financial Economics, 128*(2), 234-252.

Ghimire, D. M., & Adhikari, M. (2023). Impact assessment of investment motivation toward mutual funds. *Journal of Emerging Management Studies, 1*(1), 37–51. https://doi. org/10.3126/jems.v1i1.60161

Giri, B., & Adhikari, S. (2023). The influence of conservatism and overconfidence on investment decisions among investors in Nepali stock market. *Journal of Emerging Management Studies, 1*(1), 20–36. https://doi.org/10.3126/jems.v1i1.60160

Hair, J. F., Celsi, M. W., Money, A. H., Samouel, P., & Page, M. J. (2015). Essentials of business research methods (2nd ed.). Routledge.

Kahneman, D., & Tversky, A. (2021). Prospect Theory: An Analysis of Decision under Risk. *Econometrica, 47*(2), 263–291. https://doi.org/10.2307/1914185

Koijen, R. S., Van Nieuwerburgh, S., & Yogo, M. (2018). Health and Mortality Delta: Assessing the Welfare Cost of Household Insurance Choice. *Journal of Finance, 73*(2), 957-1010.

Madaan, G., & Singh, S. (2019). An analysis of behavioral biases in investment decision-making. *International Journal of Financial Research, 10*(4), 55–67. https:// doi.org/10.5430/ijfr. v10n4p55

Mahapatra, M. S., & Mishra, R. (2020). Behavioral influence and financial decision of individuals: A study on mental accounting process among Indian households. *Cogent Economics and Finance, 8*(1), 1827762. https://doi.org/ 10.1080/23322039.2020.1827762

Pompian, M. M. (2018). Behavioral Finance and Wealth Management: How to Build Optimal Portfolios That Account for Investor Biases. John Wiley & Sons.

Reiffen, D., & Zou, L. (2019). FinTech and Financial Innovation: Drivers and Depth. *Journal of Financial Regulation and Compliance, 27*(2), 291-313.

Saivasan, R., & Lokhande, M. (2022). Influence of risk propensity, behavioural biases and demographic factors on equity investors' risk perception. *Asian Journal of Economics and Banking, 6*(3), 373–403. https://doi.org/10.1108/ajeb-06-2021-007

Saleem, S., Mahmood, F., Usman, M., Bashir, M., & Shabbir, R. (2023). Determinants of investment behavior in mutual funds: Evidence from Pakistan. *Frontiers in Psychology, 12*, Article 666007. https://doi.org/10.3389/fpsyg.2023.666007

Sharma, D., Misra, V., & Pathak, J. P. (2021). Emergence of behavioral finance: A study on behavioral biases during investment decision-making. *International Journal of Economics and Business Research, 21*(2), 223–234. https://doi.org/10.1504/IJEBR.2021.113140

Shiller, R. J. (2015). Irrational Exuberance. Princeton University Press.

Singh, H. P., Goyal, N., & Kumar, S. (2016). Behavioral biases in investment decisions: An exploration of the role of gender. *Indian Journal of Finance, 10*(6), 51–62. https://doi.org/10.17010/ijf/2016/v10i6/94879

Statman, M. (2010). Behavioral Finance: Past Battles and Future Engagements. *Financial Analysts Journal, 66*(2), 20–27.

Statman, M. (2017). Finance for Normal People: How Investors and Markets Behave. Oxford University Press.

Statman, M., & Thorley, S. (2018). Familiarity Bias. Encyclopedia of Behavioral Finance and Investment Strategies. Academic Press. https://doi.org/10.1016/B978-0-12-804541-5.00192-2

Thaler, R. H., & Sunstein, C. R. (2021). Nudge: The final edition. Penguin Books.

Trifan, R. (2020). Behavioral biases and stock market reaction: Evidence from six post-communist countries. *Journal of Economics, 68*(8), 811–826.

Ventre, V., Martino, R., Castellano, R., & Sarnacchiaro, P. (2023). The analysis of the impact of the framing effect on the choice of financial products: An analytical hierarchical process approach. Annals of Operations Research. Advance online publication. https://doi.org/10.1007/S10479-022-05142-Z/TABLES/2