

# Emotional Biases and Investment Performance: A Study of Retail Investors in Nepal's Chitwan District

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## Abstract

This paper discusses how emotional biases influence the performance of retail investors in the Nepali capital market, specifically in the Chitwan district. Using behavioral finance theory, the study examines four types of bias: loss aversion, regret aversion, self-control, and overconfidence. A quantitative research design was used, and primary data were collected using a structured questionnaire using Google Forms with 385 retail investors. Descriptive statistics were used to summarize demographic variables, while the relationships between emotional biases and investment performance were analyzed using Pearson correlation and multiple regression analysis. Cronbach's alpha ( $\alpha = 0.935$ ) was used to assess the reliability of the measurement scales. The results indicate that all four emotional biases are highly and positively correlated with investment performance and have a cumulative relationship amounting to 77.3 percent of the variance in performance ( $R^2 = 0.773$ ). The regression analysis revealed that loss aversion was the strongest predictor, followed by regret aversion, self-control, and overconfidence. Together, these behavioral variables account for a significant proportion of the variance in investment performance, confirming the strength of the proposed model. These findings challenge the assumptions of conventional rational finance and support the applicability of behavioral finance in emerging markets. Finally, the paper highlights the need to implement bias-mitigation measures and enhance financial literacy to improve market efficiency and investor performance in emerging economies.

**Keywords:** behavioral finance, emotional biases, investment performance, retail investors, Nepal

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## Introduction

The decision of how to invest is a critical process that determines an individual's financial stability and contributes to capital market growth. For retail investors, who typically invest small

amounts of capital with the expectation of earning returns, making optimal investment decisions is especially important. Traditional finance theory, which has dominated the field since the 1950s, assumes that investors are rational actors who

aim to maximize returns while minimizing risk. This notion underlies the Efficient Market Hypothesis (EMH), initially proposed by Fama (1970). According to the EMH, stock prices rapidly incorporate all available information, making it difficult to consistently outperform the market and earn above-average returns.

However, actual investor behavior often deviates from this ideal of rationality, resulting in market anomalies that cannot be fully explained by traditional financial models. To address these peculiarities, the field of behavioral finance emerged in the 1980s, drawing on insights from psychology and sociology. Behavioral finance, prominently advanced by Kahneman and Tversky (1979), argues that investors are cognitive and social beings whose decisions are influenced by emotions, perceptions, and mental shortcuts, often leading to irrational and biased outcomes. Similarly, Thaler (1980) emphasized that investors are subject to behavioral biases that frequently result in suboptimal judgments.

Behavioral biases refer to psychological errors arising from emotion-driven decision-making. Investment decisions are shaped by a complex interaction of emotional and rational factors that influence individual choices. Emotional biases play a significant role in shaping investment behavior and the future performance of retail investors, who are often less objective, knowledgeable, and experienced than institutional investors (Kyle, 1985); in other words, investors at the retail level (Bihari et al., 2025; Iqbal & Bilal, 2025). Herding behavior, self-control bias, regret aversion, loss aversion, and overconfidence are among the major emotional biases identified as influencing retail investors' performance (Singh et al., 2024; Sharma & Negi, 2025). These biases are particularly relevant because investors tend to rely on intuition and believe that their individual

actions determine market outcomes (Cottam & Jha, 2025; Annosi et al., 2024).

Understanding the effects of these emotional biases on investment performance is especially important in developing economies. The present study focuses on retail investors in the capital market of the Chitwan district, Nepal. Market trends significantly influence a country's economy and are largely shaped by investor behavior (Weixiang et al., 2022). Despite the valuable contributions of behavioral finance, a clear gap remains in the literature regarding its practical application in the Nepali context, particularly in Chitwan. This study, therefore, aims to address this gap, contribute to the expanding body of behavioral finance research, and provide practical recommendations for improving investment performance in localized and emerging market environments.

However, unlike the fundamental premises of traditional finance theory, the decision-making of retail investors is often influenced by psychological and emotional factors. Behavioral finance helps identify various biases—such as overconfidence, regret aversion, loss aversion, herding, and self-control—that prevent investors from making fully optimal decisions. These biases pose an even greater challenge to investment success in Chitwan, where financial markets are still emerging and financial literacy levels may be relatively low. As a result, emotionally driven and irrational decision-making often prevents retail investors in this region from achieving optimal returns.

Several socio-economic factors further intensify this problem in the Chitwan district. Retail investors frequently lack access to professional financial advice, real-time market information, and comprehensive financial education. Such conditions increase the

likelihood that investment judgments will be dominated by emotional biases. For example, a regret-averse investor may avoid taking rational and potentially profitable risks, while a loss-averse investor may irrationally hold onto underperforming assets. Similarly, an overconfident investor with limited experience or anecdotal success may engage in excessive trading, leading to higher transaction costs and reduced returns.

Another closely related issue is the prevalence of herd behavior. In close-knit communities, social networks often influence investment decisions, discouraging independent analysis that is crucial for sound investing. Although following the crowd may provide psychological comfort, it can contribute to irrational market movements, including asset bubbles, which ultimately increase financial losses for average investors. The underlying problem lies in the persistent mismatch between natural behavioral tendencies and the requirements of rational investment behavior, compounded by limited financial literacy.

Since most behavioral finance studies have been conducted in developed countries—where financial market maturity and investor behavior differ significantly—there is a strong need for context-specific research in emerging market settings. This paper, therefore, seeks to examine the specific emotional biases that hinder effective investment decision-making among retail investors in Chitwan, thereby helping to fill this existing knowledge gap.

The study is thus designed in the following questions:

- o How do respondents feel about emotional biases and the investment performance of the Chitwan-based retail investors?

- o Are there any emotional biases linked to the investment performance of retail investors in Chitwan?
- o How do loss aversion, self-control, regret aversion, and overconfidence affect the performance of Chitwan retail investors in the stock market?

This research is essentially aimed at discussing the financial performance of retail investors in Chitwan who demonstrate important emotional biases: overconfidence, self-control, regret aversion, and loss aversion.

The specific objectives are:

- o To examine the perception of respondents concerning emotional biases and investment performance of retail investors at Chitwan.
- o To test the relationship between emotional biases and the investment performance of retail investors in Chitwan.
- o To test the effect of loss aversion, self-control, regret aversion, and overconfidence on the performance of retail investors in Chitwan.

The growing body of literature on behavioral finance has extensively examined the impact of psychological factors—particularly emotional and cognitive biases—on individual decision-making and investment performance across various global contexts. Numerous studies have challenged the assumption of the perfectly rational investor model proposed in traditional finance theory (Fama, 1970).

Overconfidence and herding biases are among the most frequently identified behavioral factors influencing investment decisions. In the context of capital market investment, Farooq & Sajid (2015) found that overconfidence and

herding biases exert a strong positive influence on investors' decision-making processes. Similarly, Pahlevi and Oktavian (2018) observed that overconfidence significantly strengthens investor sentiment. Local research by Rawat (2023) also reported that herd mentality and overconfidence significantly influence individual investment choices, suggesting that retail investors are prone to psychological errors.

Within the Nepali context, both Dhungana et al. (2022) and Gyawali and Neupane (2022) concluded that overconfidence and herding biases are major determinants of investor decision-making. Supporting this view, Kunwar (2021) observed that behavioral biases among Nepali investors are evident, and heuristic behaviors—closely linked with overconfidence—have the most substantial impact on investment success. However, some studies present contrasting findings. For instance, Akinkoye and Bankole (2020) reported negative effects of overconfidence on investment decisions in Nigeria, while identifying positive effects of loss aversion and herding behavior.

The effects of loss aversion and regret aversion vary across markets. Bouteska and Regaieg (2020) found that loss-aversion bias negatively affects financial stability in U.S. firms. In contrast, Elhussein and Abdelgadir (2020) reported that loss aversion positively and significantly influenced investment decision-making in the Sudanese stock exchange. Gyawali and Neupane (2022) similarly found that loss aversion affects investment decisions in Nepal, whereas regret aversion showed no significant influence—a result also noted by Elhussein and Abdelgadir (2020). Conversely, Rajeshwaran (2020) identified a negative relationship between investment success and both loss and regret aversion among Sri Lankan investors. These mixed findings suggest that the effects of

emotional biases are strongly shaped by cultural and institutional market contexts.

Existing studies also emphasize the moderating role of financial literacy and demographic factors. Siddiqui (2021) demonstrated that investors' financial capabilities significantly influence their decision-making behavior. Pramita et al. (2023) confirmed that financial knowledge and overconfidence bias directly affect investment decisions among Indonesian millennials. Furthermore, Imran and Hunjra and Rehman (2016) found that risk aversion has a positive and significant effect on investment decisions and fully mediates the relationship between financial expertise and investment behavior. Pahlevi and Oktavian (2018) identified age, occupation, and financial literacy level as key determinants influencing individual investors.

Although extensive research exists, much of the literature focuses on developed financial markets, creating a clear research gap regarding the applicability of these findings to emerging economies. As Elhussein and Abdelgadir (2020) concluded, behavioral biases remain relevant regardless of stock market development levels. Therefore, a localized study in a relatively under-researched setting such as Chitwan is necessary to better understand how emotional biases influence investment performance in a less developed financial system. This study addresses that need by employing a large sample size and rigorous research methodology, thereby extending and strengthening previous Nepali studies conducted with smaller samples.

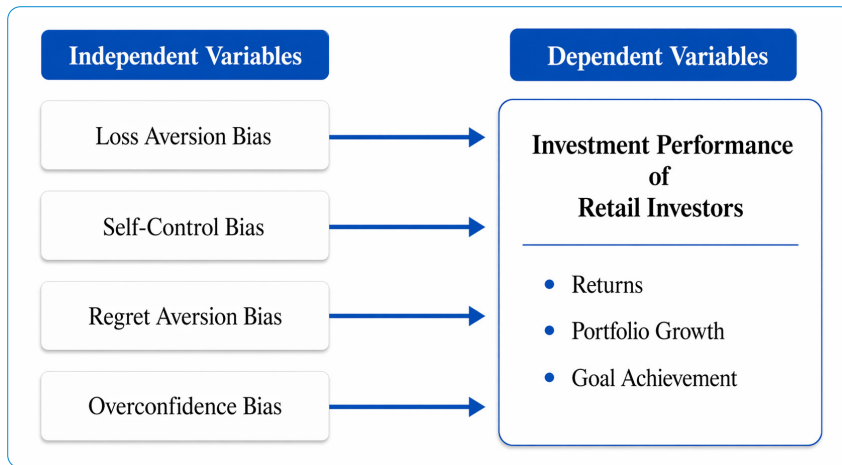
The paper analyzes the effects of emotional biases on the investment performance of retail investors in Chitwan. The dependent variable is investment performance, measured through self-reported returns, portfolio growth, and the

achievement of investment objectives. The independent variables consist of emotional biases, namely self-control, regret aversion, loss aversion, and overconfidence. The study employs Structural Equation Modeling (SEM), following the frameworks proposed by Luong and Ha (2011) and Akinkoye and Bankole (2020). This model enables the researcher to

examine the relationships between behavioral variables and investment decisions and outcomes. The framework emphasizes the importance of behavioral finance in interpreting investment performance in Nepal's developing economic context, and the study aims to provide evidence useful for investor education and policy formulation.

**Figure 1**

*Conceptual Framework of the Study*



*Note.* Akinkoye and Bankole (2020)

The hypothesis in the research is as follows:

- H1: There is a significant and positive influence of Loss Aversion on the Investment Performance.
- H2: The positive influence of the Regret Aversion Bias on the Investment Performance is positive and significant.
- H3: Self-control Bias positively and significantly affects the Investment Performance.
- H4: Overconfidence Aversion positively affects and significantly influences the Investment Performance of Retail Investors.

## Methodology

The present study adopts a quantitative research design, employing both descriptive and causal-comparative approaches to analyze the effects of emotional biases on the investment performance of retail investors in Chitwan. Primary data were collected using a structured questionnaire administered through Google Forms. The demographic characteristics of the respondents were summarized using descriptive statistics (frequency, percentage, mean, and standard deviation), which were also used to assess general trends in emotional biases and returns on investment. Inferential statistics, including correlation and multiple regression analyses, were applied to examine

the relationships between emotional biases and investment performance.

The target population consisted of retail investors participating in the secondary market in Chitwan. To ensure representativeness and minimize bias, a simple random sampling technique was employed. The sample was drawn from the official registration lists of local brokerage firms as the sampling frame. Using this approach, 385 valid responses were analyzed, enhancing the generalizability of the findings across the investor community in Chitwan. The questionnaire comprised two parts; the first covered demographic information, while the second measured emotional biases—loss aversion, regret aversion, self-control bias, and overconfidence bias—along with investment performance. All items were measured using a five-point Likert scale adapted from previously validated instruments in the behavioral finance literature.

Microsoft Excel and SPSS software were used for data coding and analysis. Pearson

correlation analysis was conducted to examine the strength and direction of relationships among the study variables. Multiple regression analysis was used to determine the impact of emotional biases on investment performance, assuming a linear relationship between dependent and independent variables. Cronbach's alpha was used to assess the reliability of the measurement scales, indicating acceptable internal consistency. Although the study provides empirical evidence, its findings may be limited by the use of self-reported data and the focus on selected emotional bias variables.

### Results and Discussion

Table 1 presents the descriptive statistics of the respondents' demographic characteristics. These demographic variables are important for understanding the perspectives and reliability of retail investors in relation to emotional biases. Accordingly, the following section outlines the respondents' profiles based on gender, age group, marital status, educational level, monthly income, and employment status.

**Table 1**

*Demographic Characteristics*

| S.N. | Variable          | Category                     | Frequency (n) | Percentage (%) |
|------|-------------------|------------------------------|---------------|----------------|
| 1    | Gender            | Male                         | 250           | 64.94          |
|      |                   | Female                       | 135           | 35.06          |
|      |                   | Total                        | 385           | 100.00         |
| 2    | Age Group         | Below 20 years               | 13            | 3.38           |
|      |                   | 20–39 years                  | 349           | 90.65          |
|      |                   | 40–59 years                  | 18            | 4.67           |
|      |                   | Above 59 years               | 5             | 1.30           |
|      |                   | Total                        | 385           | 100.00         |
| 3    | Educational Level | Secondary level and below    | 37            | 9.61           |
|      |                   | Graduate level               | 75            | 19.48          |
|      |                   | Postgraduate level and above | 273           | 70.91          |
|      |                   | Total                        | 385           | 100.00         |

| S.N. | Variable                       | Category                            | Frequency (n) | Percentage (%) |
|------|--------------------------------|-------------------------------------|---------------|----------------|
| 4    | Monthly Income                 | Less than Rs. 20,000                | 34            | 8.83           |
|      |                                | Rs. 20,000–40,000                   | 82            | 21.30          |
|      |                                | Rs. 40,000–60,000                   | 145           | 37.66          |
|      |                                | Rs. 60,000–80,000                   | 53            | 13.77          |
|      |                                | More than Rs. 80,000                | 71            | 18.44          |
|      |                                | Total                               | 385           | 100.00         |
| 5    | Occupation                     | Student                             | 20            | 5.19           |
|      |                                | Businessperson                      | 88            | 22.86          |
|      |                                | Professional                        | 62            | 16.10          |
|      |                                | Retired personnel                   | 14            | 3.64           |
|      |                                | Employee                            | 201           | 52.21          |
|      |                                | Total                               | 385           | 100.00         |
| 6    | Marital Status                 | Unmarried                           | 115           | 29.87          |
|      |                                | Married                             | 270           | 70.13          |
|      |                                | Total                               | 385           | 100.00         |
| 7    | Source of Investment Knowledge | Formal education                    | 101           | 26.23          |
|      |                                | Family and friends                  | 88            | 22.86          |
|      |                                | Books and articles                  | 62            | 16.10          |
|      |                                | Self-learning/online courses        | 114           | 29.62          |
|      |                                | Financial advisors                  | 20            | 5.19           |
|      |                                | Total                               | 385           | 100.00         |
| 8    | Investment Experience          | Less than 1 year                    | 45            | 11.69          |
|      |                                | 1–3 years                           | 132           | 34.29          |
|      |                                | 4–7 years                           | 148           | 38.44          |
|      |                                | 7–10 years                          | 43            | 11.17          |
|      |                                | More than 10 years                  | 17            | 4.41           |
|      |                                | Total                               | 385           | 100.00         |
| 9    | Preferred Investment Types     | Primary stocks                      | 180           | 46.75          |
|      |                                | Mutual funds                        | 78            | 20.26          |
|      |                                | Bonds/debentures                    | 60            | 15.58          |
|      |                                | Real estate                         | 45            | 11.69          |
|      |                                | Others                              | 22            | 5.72           |
|      |                                | Total                               | 385           | 100.00         |
| 10   | Preferred Investment Strategy  | Short-term trading (active trading) | 154           | 40.00          |
|      |                                | Long-term investing (buy-and-hold)  | 128           | 33.25          |
|      |                                | Mixed strategy                      | 103           | 26.75          |
|      |                                | Total                               | 385           | 100.00         |

**Table 2***Reliability Test of the Study*

| Code  | Statements and Variables                                                                                                                | Cronbach's Alpha |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|
| LAB1  | I do not do high-risk investments to avoid the possible losses.                                                                         | 0.936            |
| LAB2  | I also experience stress when my investments are depreciated.                                                                           | 0.937            |
| LAB3  | I would rather have little profit than risk greater profits.                                                                            | 0.938            |
| LAB4  | I concentrate more on the prevention of loss than on gaining.                                                                           | 0.938            |
| LAB5  | The investments that I have are always influenced by losses in the long term.                                                           | 0.938            |
| LAB   | Loss Aversion Bias                                                                                                                      | 0.936            |
| SCB1  | I have specific financial objectives that I have when investing.                                                                        | 0.939            |
| SCB2  | I do not make impulsive decisions about the investment.                                                                                 | 0.942            |
| SCB3  | I am always a saver and an investor.                                                                                                    | 0.938            |
| SCB4  | I do not succumb to the urge to pull out the investments at an earlier age.                                                             | 0.942            |
| SCB5  | I uphold diversification in my investment.                                                                                              | 0.938            |
| SCB   | Self-Control Bias                                                                                                                       | 0.936            |
| RAB1  | I do not take risky investments because I do not want to regret it in the future.                                                       | 0.938            |
| RAB2  | My decision-making regarding investments is subject to second-guessing.                                                                 | 0.938            |
| RAB3  | The fear of regret is a factor that affects my investment strategy.                                                                     | 0.938            |
| RAB4  | I will invest in securities where it is certain to get returns as opposed to situations where there is a possibility of disappointment. | 0.937            |
| RAB5  | My present decision is informed by prior investment regrets.                                                                            | 0.937            |
| RAB   | Regret Aversion Bias                                                                                                                    | 0.936            |
| OB1   | I suppose that my knowledge about investing is on a higher level than that of an average investor.                                      | 0.938            |
| OB2   | I am sure I will be able to regularly beat the market with my investments.                                                              | 0.936            |
| OB3   | I would not consider financial advice very often since I have more faith in my judgment.                                                | 0.937            |
| OB4   | In my view, my past investment successes were mainly because of my skill, and not because of market conditions.                         | 0.936            |
| OB5   | I am also prone to the underestimation of risks during investment decision-making.                                                      | 0.937            |
| OB    | Overconfidence Bias                                                                                                                     | 0.935            |
| IPRI1 | I am not dissatisfied with my investments.                                                                                              | 0.935            |
| IPRI2 | The financial growth in my investment choice is always determined.                                                                      | 0.936            |
| IPRI3 | In my opinion, my investment strategy is good.                                                                                          | 0.936            |
| IPRI4 | My investments are sufficient for my financial objectives.                                                                              | 0.937            |
| IPRI5 | I make greater returns than the other retail investors in my region.                                                                    | 0.936            |
| IPRI  | Investment Performance of Retail Investors                                                                                              | 0.934            |

The Cronbach's alpha for loss aversion bias, self-control bias, regret aversion bias, and overconfidence bias are presented in Table 2, indicating high internal consistency among the measurement items. The alpha coefficients range between 0.936 and 0.938, 0.938 and 0.942, 0.937

and 0.938, and 0.936 and 0.938, respectively, all exceeding the recommended threshold of 0.70. These findings confirm that the items comprising each construct are highly consistent and reliably measure the same underlying concept.

**Table 3**

*Descriptive Analysis of Investment Performance of Retail Investors*

| Code | Variables                                  | Mean | Std. Deviation |
|------|--------------------------------------------|------|----------------|
| LAB  | Loss Aversion Bias                         | 3.99 | 0.636          |
| SCB  | Self-Control Bias                          | 4.03 | 0.705          |
| RAB  | Regret Aversion Bias                       | 4.04 | 0.721          |
| OB   | Overconfidence Bias                        | 4.06 | 0.762          |
| IPRI | Investment Performance of Retail Investors | 4.03 | 0.712          |

Table 3 shows that the degrees of emotional biases are rather high among retail investors, and the overconfidence bias has the maximum mean. The average investment performance is also high, which indicates that there is a positive self-evaluation among the respondents. The standard

deviations of the moderate values suggest that there is an acceptable degree of consistency in the answers, which helps to emphasize the importance of emotional biases in investment performance.

**Table 4**

*Pearson's Correlation Coefficients of Study Variables*

| Variables | IPRI   | LAB    | SCB    | RAB    | OB |
|-----------|--------|--------|--------|--------|----|
| IPRI      | 1      |        |        |        |    |
| LAB       | .615** | 1      |        |        |    |
| SCB       | .649** | .526** | 1      |        |    |
| RAB       | .754** | .464** | .494** | 1      |    |
| OB        | .605** | .405** | .515** | .541** | 1  |

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

Table 4 illustrates the relationships between the independent and dependent variables. The independent variables—overconfidence bias, self-control bias, regret aversion, and loss aversion—are compared with the investment performance of retail investors. The correlation coefficients for overconfidence bias, self-control bias, regret aversion, and loss aversion are 0.615, 0.649, 0.754, and 0.605, respectively. The

table indicates that these variables are strongly and positively correlated with investment performance. Accordingly, higher scores in overconfidence, self-control, regret aversion, and loss aversion are generally associated with higher scores in investment performance measures, and vice versa. This relationship is statistically significant at the 0.01 level.

**Table 5***Regression Model Summary of Study Variables*

| Model | R      | R <sup>2</sup> | Adjusted R <sup>2</sup> | Std. Error of the Estimate |
|-------|--------|----------------|-------------------------|----------------------------|
| 1     | 0.851a | 0.773          | 0.751                   | 0.403                      |

Note. (a) Predictors: (Constant), LAB, RAB, SCB, OB

Table 5 presents the regression model of the study variables, in which retail investors' investment performance is taken as the dependent variable. The results show an R-squared value of 0.773, indicating that 77.3 percent of the variation in investment performance (IPRI) is explained by the independent variables included in the model. This reflects a strong explanatory power of the model. The remaining 22.7 percent of the variation is attributed to other relevant factors not considered in this study.

The adjusted R-squared is 0.751, suggesting that the independent variables collectively account for 75.1 percent of the variation in the dependent variable (IPRI). The standard error of the estimate is 0.403, representing the average deviation between the observed values of the dependent variable and the values predicted by the regression model. Overall, the regression analysis demonstrates a strong and meaningful relationship between the independent variables and investment performance.

**Table 6***ANOVA of the Study*

| Model |            | Sum of Squares | df  | Mean Square | F       | Sig.   |
|-------|------------|----------------|-----|-------------|---------|--------|
| 1     | Regression | 161.322        | 5   | 40.331      | 248.545 | 0.000b |
|       | Residual   | 61.662         | 380 | 0.162       |         |        |
|       | Total      | 222.984        | 385 |             |         |        |

Table 6 presents the ANOVA test for the significance of the findings. ANOVA is used to determine whether the regression model is generally significant and applicable to the study. The model is significant at the 1 percent level, as indicated by the table, where the regression

equation shows Sig = 0.000—meaning the p-value is less than  $\alpha$  ( $0.000 < 0.01$ ). Additionally, the F-value of 40.331 confirms that the regression model is statistically well-fitted. Therefore, the data can be appropriately analyzed using the specified linear regression model.

**Table 7***Regression Coefficients of Behavioral Biases on Investment Performance*

| Variables | B (Unstandardized) | t-value | Sig. (p-value) | Tolerance | VIF   |
|-----------|--------------------|---------|----------------|-----------|-------|
| Constant  | -0.609             | -3.934  | 0.000          | -         | -     |
| LAB       | 0.451              | 4.838   | 0.000          | 0.621     | 1.610 |
| RAB       | 0.268              | 6.660   | 0.000          | 0.663     | 1.507 |
| SCB       | 0.243              | 6.409   | 0.000          | 0.591     | 1.693 |
| OB        | 0.166              | 13.067  | 0.000          | 0.611     | 1.636 |

Note. Dependent Variable: IPRI

Table 7 presents the results of the multiple regression analysis examining the effects of behavioral biases on the investment performance of retail investors. All independent variables—loss aversion bias, regret aversion bias, self-control bias, and overconfidence bias—have positive regression coefficients, indicating a positive relationship with investment performance. Among them, loss aversion bias ( $B = 0.451$ ) has the strongest effect, followed by regret aversion bias ( $B = 0.264$ ), self-control bias ( $B = 0.243$ ), and overconfidence bias ( $B = 0.166$ ).

All t-values and p-values show that the explanatory variables are statistically significant at the 5% level ( $p < 0.05$ ), confirming that behavioral biases significantly influence the investment performance of retail investors. Furthermore, multicollinearity diagnostics indicate that the tolerance values are above 0.10 and the variance inflation factor (VIF) values are well below the critical threshold of 10, suggesting the absence of multicollinearity and supporting the robustness of the regression model (Gujarati, 2003).

**Table 8**

*Summary of Hypothesis Testing*

| Predictor            | Expected Direction | Observed Direction | P        | Hypothesis Decision |
|----------------------|--------------------|--------------------|----------|---------------------|
| Loss Aversion Bias   | Positive (+)       | Positive (+)       | $< .001$ | Supported           |
| Regret Aversion Bias | Negative (-)       | Positive (+)       | $< .001$ | Supported           |
| Self-Control Bias    | Positive (+)       | Positive (+)       | $< .001$ | Supported           |
| Overconfidence Bias  | Positive (+)       | Negative (-)       | .001     | Supported           |

*Note.* p-values below .05 show statistical significance. The decision of the hypothesis indicates the empirical support of every proposed relationship.

This research paper examines the effects of behavioral biases—self-control, overconfidence, loss aversion, and regret aversion—on the investment performance of retail investors in the Nepali capital market. Primary data were collected from a sample of 385 individual investors, of whom 65 percent were male and 35 percent female. The majority of respondents (91.95%) were aged 20 to 40 years, while the remaining 4.68% were aged 40 to 60 years. The measuring scale demonstrated excellent reliability, with a Cronbach's alpha of 0.935.

The findings indicate that behavioral biases strongly influence the investment performance of retail investors. Pearson correlation analysis shows a strong positive relationship between investment performance and loss aversion bias

( $r = 0.754$ ), regret aversion bias ( $r = 0.649$ ), self-control bias ( $r = 0.615$ ), and overconfidence bias ( $r = 0.605$ ). Consistent with prior Nepali studies (Gyawali & Neupane, 2022; Dhungana et al., 2022), these results confirm the presence of emotional biases among Nepali retail investors.

Regression analysis further reveals that loss aversion and overconfidence positively and significantly impact investment performance, aligning with findings from other studies (e.g., Gyawali & Neupane, 2022; Rooh et al., 2021; Poudel et al., 2024). Conversely, regret aversion negatively affects investment performance, supporting some prior research while contradicting others. Self-control bias also exhibits a positive effect on investment performance, consistent with previous empirical

evidence. Overall, the study supports the significant role of behavioral variables in shaping investment outcomes in emerging capital markets like Nepal.

## Conclusion

This paper presents an empirical study examining the impact of major emotional biases—loss aversion, regret aversion, self-control, and overconfidence—on the performance of retail investors in Chitwan, Nepal. Anchored in behavioral finance theory, the study explored investors' perceptions of emotional biases, assessed their relationship with investment performance, and tested the directional effect of each bias using correlation and regression analyses. The results provide empirical support for all proposed hypotheses (H1–H4).

The findings demonstrate that emotional biases are strongly correlated with and have a significant effect on retail investors' investment performance. Loss aversion emerged as the most influential predictor, reflecting investors' heightened sensitivity to potential losses. Overconfidence and self-control also showed significant positive effects, suggesting that confidence and disciplined behavior can enhance performance when balanced appropriately. Regret aversion was found to have a notable influence on performance, confirming the impact of emotional responses to past outcomes on investment decisions.

Collectively, the behavioral variables explain a significant portion of the variance in investment performance, validating the explanatory power of the proposed model. These results challenge the assumptions of standard rational finance and confirm the applicability of behavioral finance in emerging markets. By providing context-specific evidence from Nepal,

the study contributes to the behavioral finance literature and underscores the importance of financial education, investor awareness, and bias-mitigation strategies in improving retail investment outcomes and enhancing market efficiency.

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