# Impact of Behavioral Factors on Investors' Decisions in the Companies Listed in Nepal Stock Exchange

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## Abstract

This study investigates the relationship between the behavioral characteristics (sentiment, overconfidence, overreaction and underreaction, and herd behavior) and the decisions made by investors when they are investing in businesses listed on the Nepal Stock Exchange (NEPSE). The 384 randomly chosen investors provided information via a structured questionnaire survey. Multiple regression analysis was used to achieve the study's goal of analyzing the behavioral factors that impact investors' decisions to invest in companies listed on the NEPSE and investigating the relationship between behavioral factors and investors' decisions to invest in the security market. All of the behavioral elements that were chosen have a considerable impact on investment decisions, according to data analysis. Consequently, the results of the study shed light on typical investor behavior and offer recommendations for the growth of the Nepalese stock market.

# Introduction

Investor behavior has a significant influence on the stock market's trajectory. Classical financial theories have historically been used to examine investment decisions. These theories assume that investors act rationally and update and digest information logically before making judgments. But in recent years, especially after the government established the Nepal Stock Exchange (NEPSE) in 2006, the knowledge of financial decision-making has changed. NEPSE was established to control and expedite the securities trading, selling, transferring, and issuing procedures. Despite its regulatory role, behavioral influences continue to make many Nepalese investors reluctant to engage in the stock market. These trends can be better understood through behavioral finance, which combines sociological and psychological elements. The functioning of NEPSE has given Nepal's institutional and individual investors additional investment opportunities, and the capital market is essential to a country's economic development (Kadariya et al., 2012).

Conventional theories of investment assume that investors behave rationally, seeking to minimize risk and maximize rewards. These presumptions are contested by more modern viewpoints, which acknowledge that market results and investor behavior are not necessarily efficient or logical. Fear, greed, and prior experiences are just a few examples of psychological factors that can have a big impact on investing decisions. An investor may be discouraged from investing by emotional reactions such as fear of losing money or hearing about a peer's bad stock market experience, even when logical analysis may suggest that participating in the stock market is appropriate for that investor type. These behavioral patterns have a direct impact on investors' performance and decision-making (Dhungana et al., 2018). Thus, the primary research question of this study is: How do behavioral factors influence the investment decisions of investors in companies listed on the Nepal Stock Exchange (NEPSE)? The study's objective is to investigate the behavioral factors that influence such decisions.

# Literature Review

Asaad (2012) recommends a research approach that combines different dimensions that affect behavior of decision-makers' while making financial decisions. This section focuses at four key behavioral factors: investor sentiment, overconfidence,

overreaction and under reaction, and herd behavior hat influence investment choices.

## Investor Sentiment

Investor sentiment refers to the overall attitude, mood, or emotion of investors toward financial markets, influencing asset prices beyond fundamental factors. It reflects investors' collective expectations and psychological biases, leading to market inefficiencies (Tetlock, 2007).

Investor sentiment can be driven by various factors such as media coverage, macroeconomic conditions, and market trends (Da, Engelberg, & Gao, 2011). The study discusses different methods to quantify investor sentiment, emphasizing the challenges in distinguishing sentiment-driven market movements from fundamental factors. The authors analyze the relationship between investor sentiment and short-term market movements, showing that high sentiment leads to overvaluation, while low sentiment results in undervaluation.

## Investor Overconfidence

Studies in behavioral finance suggest that individuals generally overestimate their likelihood of success while underestimating risks and the possibility of failure (Metawa et al., 2019). Overconfidence often leads investors to overrate their own skills, judgment, and future prospects, influencing their investment behavior. Research by Pandey et al. (2020) in an experimental setting found that overconfidence is linked to suboptimal investment decisions and complex choices. Their findings also indicate that overconfidence tends to decrease with age and increases in decision uncertainty.

Kadariya (2012) examined investor survivability using an evolutionary game theory approach, concluding that moderately overconfident investors can sustain themselves or even dominate in high-risk environments. Conversely, pessimistic investors are less likely to survive in competitive financial markets.

## Overreaction and Under-reaction

Easley, López de Prado, and O'Hara (2011) found that algorithmic trading reduces the impact of investor overreaction by improving market efficiency. Social media-driven sentiment can cause both overreaction and underreaction, influencing stock price movements significantly.

Sharma and Agrawal (2022) investigated post-pandemic stock market behavior and concluded that retail investors exhibited extreme overreaction due to uncertainty and herd mentality. Researcher analyzed machine learning models predicting stock movements and found that AI-based trading systems can exploit human overreaction and underreaction for profitable trading strategies. The literature consistently finds that both overreaction and underreaction impact stock markets, driven by psychological biases, sentiment, and information processing inefficiencies.

**Herd Behavior**

Herd Behavior theory states that individuals act according to the actions of others rather than use their personal information to act. Chang, Cheng, and Khorana (2000) demonstrated that herd behavior is more prevalent in Asian stock markets, likely due to cultural and regulatory factors.

Some studies indicated the impact of social media on herd behavior and retail investors tend to follow online market sentiment rather than fundamental analysis. Sharma and Agrawal (2022) analyzed herd behavior in post-pandemic markets and found that retail investors exhibited extreme herd tendencies due to heightened uncertainty and media influence.

# Research Hypothesis

Based on the four behavioral factors following four hypotheses were formulated:

H1: There is a significant and positive impact of investor sentiment on investment decision in the companies listed in NEPSE.

H2: There is a significant and positive impact of investor overconfidence on investment decision of NEPSE.

H3: There is a significant and positive impact of over/under reaction on investment decision of NEPSE.

H4: There is a significant and positive impact of herd behavior on investment decision of NEPSE.

**Conceptual Framework**

The dependent variable in this analysis is the investment decision, which is determined, among others, behavioral factors. A similar approach to measuring trade volume was used by Glaser and Weber (2007). The research also investigates the role of behavioral factors as mediator variables, which are anticipated to influence investors' decision-making processes. Drawing from existing literature, the study explores four key behavioral factors: investor sentiment, overconfidence, overreaction and underreaction, and herd behavior and their extent effect on the investment decision of the investors in the companies listed in NEPSE.

**Figure1**

*Conceptual Framework*
Independent Variables            Dependent Variable
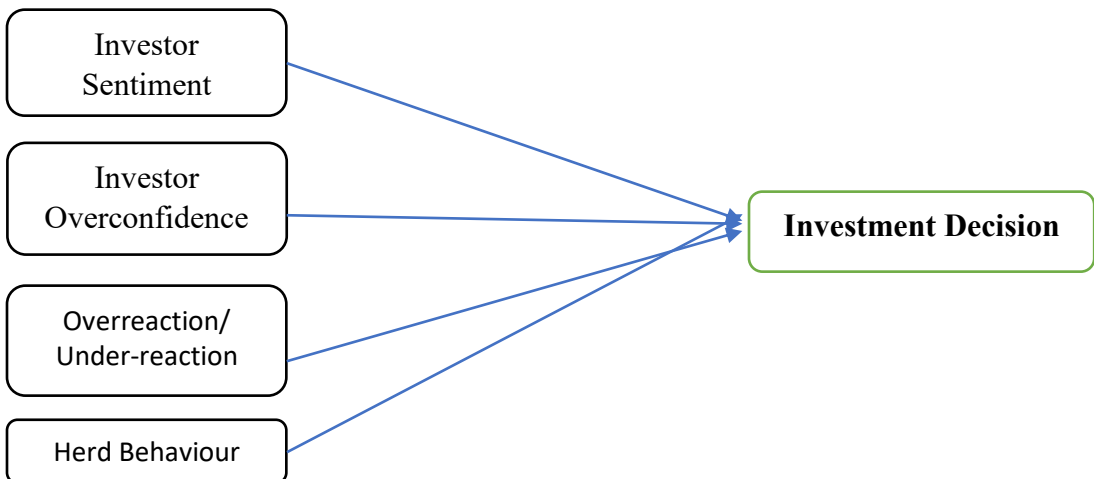


## Research Methodology

This study employs a causal-comparative research design to investigate the influence of behavioral factors on investment behavior in the Nepalese stock market. This study is based on primary sources of data. Thus, a pilot tested structured questionnaire through Cronbach's alpha was used both through physical and online (social media) means to reach the target investors- the investors who have ever been involved in or are being involved in the activities of investment in

the securities market operated by NEPSE. The sample size was determined by applying formula of Cochran (1963). For this, 460 questionnaires were sent to the investors located in different part of the country. Only 400 respondents give response to given questionnaire while 60 respondents did not give any response to given questionnaires. Thus, among the 400 responses only 384 responses of the respondents were considered for the study as the sample size of the study. The questionnaire consists of closed-ended questions measured in 5-point Likert scale. The first section of the questionnaire deals with the demographical information of respondents such as gender, age, occupation, marital status, academic qualification, experience on investment, investment ideas. This part of information has been used for the descriptive analysis of the respondents. The second part deals on the responses on the dependent and independent variables that constitute construct of the study.

## Results and Discussion

Data has been analyzed with references to the objectives and hypotheses of the study. The collected data are presented in tabular form in order to facilitate to reach to conclusion. For data analysis, firstly descriptive statistics is used. Then, correlation is used to analyze the relationship between investment decision and declared independent variables which is followed by regression analysis.

## Correlation Analysis

Correlation analysis is a statistical technique used to examine the strength and direction of the relationship between two or more variables. It measures how closely two variables move in relation to each other.

**Table 1**

*Correlations Coefficient between Independent and Dependent Variable*

|  |  | ID | IO | OU | IS | HB |
|---|---|---|---|---|---|---|
| ID | Pearson Correlation | 1 |  |  |  |  |
|  | Sig. (2-tailed) |  |  |  |  |  |
| IO | Pearson Correlation | .222** | 1 |  |  |  |
|  | Sig. (2-tailed) | .000 |  |  |  |  |
| OU | Pearson Correlation | .188** | .327** | 1 |  |  |
|  | Sig. (2-tailed) | .000 | .000 |  |  |  |

| | | | | | | |
|---|---|---|---|---|---|---|
| IS | Pearson Correlation | .248** | .105** | .365** | 1 | |
| | Sig. (2-tailed) | .000 | .036 | .000 | | |
| HB | Pearson Correlation | .322** | .234** | .325** | .765** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | |

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

The correlation between investor overconfidence and investment decisions was identified as 0.222, indicating a low but positive association. The corresponding p-value was 0.000, which is below the 0.01 threshold, signifying a statistically significant relationship ($r = 0.222^*$, $p = 0.000 < 0.01$). Similarly, the connection between over/under-reaction and investment decisions yielded a correlation coefficient of 0.188, also reflecting a weak positive relationship. The p-value of 0.000, being less than 0.01, confirms the statistical significance of this result ($r = 0.188^{**}$, $p = 0.000 < 0.01$). Investor sentiment showed a correlation of 0.248 with investment decisions, suggesting a mild positive relationship. This association was statistically significant as well, with a p-value of 0.000 ($r = 0.248^{**}$, $p = 0.000 < 0.01$). Finally, herd behavior demonstrated the strongest correlation among the variables, at 0.322, indicating a moderate positive link with investment decisions. With a p-value of 0.000, this relationship is also statistically significant ($r = 0.322^{**}$, $p = 0.000 < 0.01$).

## Regression Analysis

Regression analysis is a statistical method for examining the relationship between one or more independent variables and a dependent variable. Hence here regression analysis is used to find the effect of investor overconfidence, over/under-reaction, investor sentiment, herd behavior on investment decision.

**Table 2**

*Multiple Regression Analysis*

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 3.482 | .161 | | 21.604 | .000 |
| IO | .079 | .028 | .143 | 2.797 | .005 |
| OU | .103 | .029 | .246 | 3.251 | .002 |
| IS | .232 | .045 | .272 | 3.267 | .000 |
| HB | .111 | .032 | .259 | 3.450 | .001 |

a. Dependent Variable: ID

Based on the SPSS output, the following multiple linear regression equation was formed:

$$Y = \beta0 + \beta1\,(IO) + \beta2\,(OU) + \beta3\,(IS) + \beta4\,(HB) \ldots\ldots\ldots\ldots\ldots\ldots i$$
$$Y = 3.482 + 0.79IO + 0.103OU + 0.232IS + 0.111HB$$

Table 2 presents the results of the multiple regression analysis. A p-value of 0.05 or lower indicates statistical significance. Based on the findings:

- **Investor Overconfidence (IO)** has a statistically significant influence on investment decisions, with a p-value of 0.005 (B = 0.079, Beta = 0.143, t = 2.797), which is below the 0.05 threshold. This supports the acceptance of **Hypothesis H1**, indicating that IO has a meaningful impact on investment decisions (ID). The beta coefficient of 0.143 suggests that a one-unit increase in IO leads to a 0.143-unit increase in ID, implying a positive relationship.
- **Over/Under-Reaction (OU)** also shows a significant effect on investment decisions, with a p-value of 0.002 (Bu = 0.103, Beta = 0.246, t = 3.251). Thus, **Hypothesis H2** is accepted. The beta value of 0.246 implies that a one-unit rise in OU results in a 0.246-unit increase in ID. This positive beta further confirms a direct relationship between OU and ID.
- **Investor Sentiment (IS)** demonstrates a statistically significant impact on investment decisions as well, with a p-value of 0.000 (Bu = 0.232, Beta = 0.272, t = 3.267). Hence, **Hypothesis H3** is accepted. The beta coefficient of 0.272 indicates that each unit increase in IS corresponds to a 0.272-unit rise in ID. This positive and relatively high beta suggests that among all the

independent variables analyzed, IS has the strongest influence on investment decisions.

- **Herd Behavior (HB)** is also found to significantly affect investment decisions, with a p-value of 0.001 (Bu = 0.111, Beta = 0.259, t = 3.450), confirming the acceptance of **Hypothesis H4**. A one-unit increase in HB leads to a 0.259-unit increase in ID, highlighting a positive and substantial relationship between HB and investment behavior.

| Model Summary | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .724$^a$ | .524 | .523 | .50082 |
| a. Predictors: (Constant), HB, IO, OU, IS | | | | |

From the above table, we can see that R-square value is 0.524, which means that our independent variables i.e. HB, IO, OU, IS causes 52.40% change in the dependent variable i.e. ID where remaining are caused by other external factors than mentioned independent variables.

## Conclusion and Implication

This study underscores the considerable impact of behavioral factors on investment decisions within the framework of the Nepal Stock Exchange (NEPSE). Psychological elements including investor sentiment, overreaction, underreaction, overconfidence, and herd behavior have been identified as influential in shaping how investors make financial choices. Additionally, demographic attributes such as age, gender, and educational background significantly influence both investment decisions and associated behavioral patterns. Interestingly, the findings suggest that investment experience does not significantly affect these behavioral factors or the decision-making process. As investors become more seasoned, they appear to be less susceptible to emotional biases, gradually transitioning toward more rational and informed investment behavior.

These insights contribute to a deeper understanding of typical investor behavior in the NEPSE, offering implications for enhancing market transparency and growth. Recognizing the psychological dimensions of investing can aid in interpreting market dynamics and improving investor engagement. For

policymakers and market participants, addressing these behavioral influences is critical for fostering a more efficient and stable trading environment. In particular, behavioral traits such as overconfidence and herd mentality may lead investors to take unwarranted risks, heightening market volatility. To counteract these tendencies, it is essential to ensure that investors have access to accurate, transparent, and timely information, empowering them to make better-informed financial decisions.

Moreover, promoting financial literacy is vital for strengthening the quality of investment decisions. Policymakers should prioritize the integration of behavioral finance principles into financial education initiatives. Tailoring educational resources to address the specific psychological profiles and preferences of diverse investor groups, developing diagnostic tools to assess behavioral biases, and improving communication strategies to facilitate practical application are all necessary steps. Similar recommendations have been made by Garcia (2013), who emphasizes the value of aligning financial education with investor psychology.

This research also embraces practical significance for portfolio managers, who must consider investor sentiment when assessing stock performance and managing portfolio risk. Stabilizing investor sentiment is crucial for reducing volatility in the market—a persistent challenge within the NEPSE. By acknowledging and addressing behavioral dimensions, stakeholders can contribute to the evolution of a more stable, rational, and efficient capital market in Nepal.

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