ACADEMIA International Journal for Social Sciences
Volume 5, Issue 3(s8), 2026 ISSN-L (Online): 3006-6638

Investigate the Impact of Behavioral Factors on Investment Decisions of Investors

Syeda Afshan Gillani
afshangillani29917@iqraisb.edu.pk
Senior Commerce Instructor, Fatima Jinnah Post Graduate College for Woman, Muzaffarabad, AJK

Dr. Muhammad Nawaz
Muhammad.nawaz@iqraisb.edu.pk
Associate professor Iqra University Islamabad

Corresponding Author: Syeda Afshan Gillani afshangillani29917@iqraisb.edu.pk

Received: 03-02-2026 **Revised:** 19-02-2026 **Accepted:** 08-03-2026 **Published:** 21-03-2026

ABSTRACT

Investment decision-making is not only based on financial information but is also influenced by psychological and behavioral factors. This study examines the impact of behavioral factors—overconfidence, herding, availability bias, self-control bias, and anchoring bias—on investors' investment decisions. The main objectives are to find the relationship between behavioral factors and investment decisions and to study how these factors affect investors' decisions. The study also tries to identify which behavioral factors have the strongest effect on investment decisions. The research questions are: (1) What is the relationship between behavioral factors and investment decisions of investors? and (2) How do behavioral factors affect investors' investment decisions? A quantitative research design was used, and data were collected through an online survey from retail investors of the Pakistan Stock Exchange (PSX). The population of the study was about 220,000 investors, and a sample of 506 valid responses was analyzed using convenience sampling. The results show that all behavioral factors have a positive and significant relationship with investment decisions. Regression analysis also shows that all behavioral factors significantly affect investment decisions, and overconfidence is the strongest factor. The model explains a good amount of change in investment decisions.

The study concludes that investors are strongly influenced by behavioral biases, which can lead to irrational decisions. It is recommended that investors improve their financial knowledge, and financial institutions should provide training and awareness programs to help investors make better and more rational investment decisions.

Keywords: *Behavioral finance, investment decision-making, overconfidence bias, herding behavior, availability bias, self-control bias, anchoring bias, investors, Pakistan Stock Exchange*

INTRODUCTION

Investment decision-making is a complex process in which investors choose financial assets to maximize returns while managing risk. Traditional financial theories assume that investors behave rationally and make decisions based on complete and accurate information (Lo, 2022). However, real market behavior shows that investors are often influenced by psychological and emotional factors that lead to irrational decisions. These influences are explained under Behavioral Finance, which studies how cognitive biases affect financial decision-making in real markets (Kumar & Prince, 2023).

Recent studies highlight that behavioral factors such as overconfidence, herding, anchoring, availability bias, and self-control problems significantly influence investor behavior. Overconfidence bias leads investors to overestimate their knowledge, resulting in excessive trading and higher financial risk (Kumar & Prince, 2023). Herding behavior encourages investors to follow others' decisions instead of conducting

independent analysis, which can create market bubbles and instability (Abideen et al., 2023). Anchoring bias occurs when investors rely heavily on initial price or information even when new data is available (Zhang et al., 2022).

Availability bias affects investment decisions when investors depend on recent or easily accessible information rather than complete financial analysis, leading to emotional and short-sighted decisions (Baron, 2021). Similarly, self-control problems cause investors to make impulsive decisions and fail to follow long-term investment plans (Thaler, 2020). These behavioral biases collectively reduce market efficiency and lead to irrational investment outcomes (Lo, 2022).

In emerging economies such as Pakistan, behavioral biases are more common due to limited financial literacy and high dependence on informal sources of information. Recent empirical studies show that investors in Pakistan often rely on social media, rumors, and peer influence rather than formal financial analysis (Abideen et al., 2023; Khan et al., 2022). This increases the likelihood of poor investment decisions and financial losses. Therefore, understanding behavioral factors is essential for improving investment decision-making and financial stability in developing markets.

Moreover, technological advancements and the rise of digital trading platforms have further influenced investor behavior**.** Easy access to mobile trading apps and online investment tools has increased market participation, but it has also intensified impulsive and emotion-driven trading decisions. Investors often react quickly to market fluctuations without proper analysis, which strengthens behavioral biases such as overtrading and herd behavior (Kumar & Prince, 2023).

In addition, global financial uncertainty and rapid information flow through social media have made investors more vulnerable to psychological biases. Continuous exposure to financial news, predictions, and online opinions can distort rational judgment and increase anxiety in decision-making. As a result, investors may rely more on short-term signals rather than long-term financial planning, making behavioral factors even more influential in shaping investment decisions (Zhang et al., 2022).

Statement of the Problem

Investment decisions play a vital role in determining the financial success and stability of investors. In an ideal situation, investors are expected to make rational decisions based on complete and accurate financial information. However, in real market conditions, investors often fail to behave rationally and instead rely on psychological and emotional influences. Behavioral factors such as overconfidence, herding, anchoring, availability bias, and self-control problems significantly affect how investors interpret information and make decisions.

These behavioral biases often lead to poor investment choices, excessive risk-taking, and inconsistent financial outcomes. Investors may follow market trends without proper analysis, rely on limited or recent information, or become overconfident in their own judgment. In developing countries like Pakistan, the situation is more critical due to low financial literacy, limited access to reliable financial information, and strong influence of social networks and informal advice.

Despite growing interest in behavioral finance, there is still insufficient empirical evidence on how multiple behavioral factors collectively influence investment decisions in emerging markets. Therefore, it is important to investigate the impact of behavioral factors on investment decisions of investors to better understand irrational behavior and improve the quality of financial decision-making.

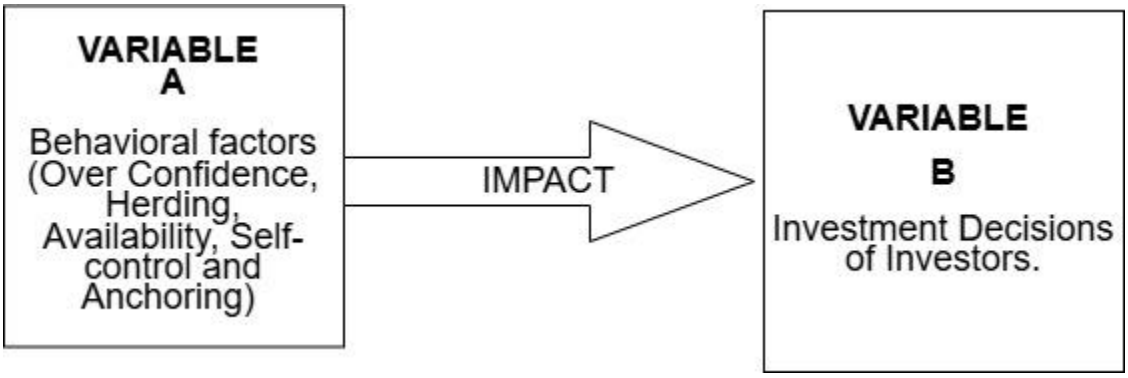

Figure 1. Variables of the study

Objective of the study

The main objectives of this study are:

- To determine the relationship between behavioral factors and investment decision of investors.
- To analyze the impact of behavioral factors on investment decision of investors.

Research question

- What is the relationship between behavioral factors and investors' investment decision-making?
- To what extent do behavioral factors predict investors' investment decision-making?

Significance of the Study

This study is significant because it provides a clear understanding of how behavioral factors influence investment decisions in real financial markets. It helps investors recognize the psychological biases such as overconfidence, herding, anchoring, availability bias, and self-control problems that often lead to irrational financial choices. By identifying these biases, investors can improve their decision-making process and avoid unnecessary financial losses. The study also contributes to improving financial awareness among individual and institutional investors in emerging markets.

Furthermore, this research is important for financial advisors and investment professionals as it provides insights into investor behavior, enabling them to design better investment strategies and guidance systems. It also supports policymakers and regulatory authorities in developing effective financial literacy programs to promote rational investment behavior in society. In addition, the study contributes to the field of behavioral finance by providing empirical understanding of how psychological factors shape investment behavior in developing economies like Pakistan. Overall, the findings of this study can help improve market efficiency, reduce irrational trading behavior, and promote stable financial decision-making**.**

METHODOLOGY

This study used a quantitative research design to examine the impact of behavioral factors on investors' investment decision-making. A cross-sectional survey method was applied to collect data at one point in

time. This design is appropriate because it helps in measuring relationships and testing hypotheses using statistical tools.

Population of the Study

In research, population refers to the total group of individuals who share common characteristics and from whom a researcher draws conclusions. According to Sekaran (2003), it is the complete set of elements from which a sample is selected. In this study, the population consists of retail investors of the Pakistan Stock Exchange (PSX)**.** The total number of retail investors in Pakistan is approximately 220,000**,** as reported by the Pakistan Bureau of Statistics (2023) and PSX Annual Report (2023). These investors form the target group for examining behavioral factors in investment decision-making.

Sample and Sampling Technique

A sample is a smaller group selected from the population that represents the whole group. It is used to make general conclusions about the population. Selecting a proper sample is important because it ensures the accuracy and reliability of research findings. In general, larger samples are needed for diverse populations, while smaller samples may be enough for more similar (homogeneous) groups.

In this study, the sample size was determined using the Krejcie and Morgan (1970) table, which is widely used in social science research for sample size estimation. Based on a population of 220,000 retail investors**,** the minimum required sample size was 384 respondents at a 95% confidence level and 5% margin of error. To collect data, 1000 questionnaires were distributed among investors using the survey method. Respondents were assured that their information would remain confidential and used only for research purposes.

Out of the total distributed questionnaires, 506 valid responses were received and used for data analysis. This represents a response rate of 63.2%**,** which is considered sufficient for statistical analysis and ensures the reliability of the study results.

Instrumentation

Data were collected through a structured questionnaire based five point Likert scale containing different indicators. Instrument was validated through expert opinion and pilot study was conducted to ensure the reliability of the instrument. The reliability value of each and every indicator of the instrument was above 0.800 which fall under acceptable range.

Data Collection

In this study, data were collected through an online survey method. A structured questionnaire based on a Likert scale was developed to measure behavioral factors (overconfidence, herding, availability bias, self-control bias, anchoring bias) and investment decision-making. The questionnaire was distributed electronically among retail investors of the Pakistan Stock Exchange (PSX) using social media platforms, email, and investor groups. This method was selected because it allows easy access to a large number of respondents within a short period of time. Respondents were informed about the purpose of the study and assured that their responses would remain confidential and be used only for academic research.

A total of 1000 questionnaires were distributed**,** and 506 valid responses were received and used for analysis. The online data collection method helped in reaching investors from different regions of

Pakistan, ensuring better representation of the target population. The collected data were then screened for completeness and accuracy before proceeding to statistical analysis.

Data Analysis

The collected data were analyzed using statistical techniques to achieve the research objectives. First, descriptive statistics were used to examine the mean, standard deviation, minimum, and maximum values of all study variables to understand the general response pattern of respondents. Second**,** reliability analysis (Cronbach's Alpha) was conducted to check the internal consistency of the measurement scales, and all variables showed acceptable reliability.

Third, a correlation analysis was performed to examine the relationship between behavioral biases and investment decision-making. The results showed that all variables were positively and significantly correlated. The multiple regression analysis was used to determine the impact of behavioral factors on investment decisions. The findings revealed that all five behavioral biases significantly predict investment decision-making, with overconfidence being the strongest predictor. The detailed analysis is given below

Ethical Considerations

1. All respondents were clearly informed about the purpose of the study before participating. Their participation was completely voluntary, and they were free to withdraw at any time without any pressure.

2. The privacy of all participants was strictly maintained. No personal identification information was collected, and all responses were kept confidential and used only for academic research purposes.

3. The collected data were used only for research analysis and were not manipulated or misused in any form. The study ensured honesty, transparency, and accuracy in reporting the findings.

ANALYSIS AND INTERPRETATION

Table 1: ***Descriptive Statistics of Study Variables***

Sr.	variables	N	Mean	SD	minimum	maximum
1	Overconfidence	506	3.89	0.71	1.00	5.00
2	Herding	506	3.72	0.76	1.00	5.00
3	Availability Bias	506	3.68	0.73	1.00	5.00
4	Self-Control Bias	506	3.81	0.69	1.00	5.00
5	Anchoring Bias	506	3.75	0.74	1.00	5.00
6	Investment Decision	506	3.84	0.70	1.00	5.00

This table1 shows the basic summary of all study variables, including their mean, standard deviation, minimum, and maximum values. The mean values of all behavioral factors range from 3.68 to 3.89**,** which indicates that respondents show a moderate to high level of behavioral biases**.** Among all variables, overconfidence has the highest mean (3.89)**,** showing it is the most common bias among investors. The investment decision mean (3.84) also shows that respondents are generally active in making investment decisions. The standard deviation values are close to each other, meaning responses are not widely spread and are fairly consistent. Overall, this table shows that behavioral biases are commonly present among investors.

Table 2: ***Relationship analysis between behavioral factors and investment decisions of investor***

Sr.	Hypothesis	Relationship	Correlation (r)	P value
1	H1	Overconfidence → Investment Decision	.58**	.000
2	H2	Herding → Investment Decision	.49**	.000
3	H3	Availability Bias → Investment Decision	.47**	.000
4	H4	Self-Control Bias → Investment Decision	.55**	.000
5	H5	Anchoring Bias → Investment Decision	.51**	.000

This table 2 shows the correlation results between behavioral factors and investment decision-making. All correlation values are positive and statistically significant at the 0.01 level**,** which confirms strong relationships among variables. Overconfidence shows the highest correlation with investment decisions **(**r = .58**),** indicating it has the strongest association. Self-control bias also shows a strong relationship **(**r = .55**),** suggesting its important role in decision-making behavior. Anchoring bias, herding, and availability bias also show moderate positive correlations. These results indicate that when behavioral biases increase, investment decision-making is also influenced positively. The significance value (.000) confirms that all relationships are statistically reliable. Overall, the table supports that behavioral factors are strongly related to investment decisions

Table 3: ***Regression analysis between behavioral factors and investment decisions of investor***

Sr.	hypothesis	Predictor → Investment Decision	Beta (β)	t-value	P value
1	H1	Overconfidence → Investment Decision	.354	8.12	.000
2	H2	Herding → Investment Decision	.231	5.34	.000
3	H3	Availability Bias → Investment Decision	.226	4.98	.000
4	H4	Self-Control Bias → Investment Decision	.254	6.11	.000

This table 3 presents the regression results showing the impact of behavioral factors on investment decisions. All predictors are statistically significant with p-values of .000, confirming strong effects. Overconfidence has the highest beta value **(**β = .354**),** making it the strongest predictor of investment decision-making. Self-control bias **(**β = .254**)** and anchoring bias **(**β = .237**)** also show strong positive effects. Herding **(**β = .231**)** and availability bias **(**β = .226**)** have slightly lower but still significant impacts. The t-values are all above 4, indicating strong statistical strength of results. These findings show that all behavioral factors independently influence investment decisions. Overall, the table confirms that psychological biases significantly shape investor behavior

Table 4:***Overall relationship analysis between all behavioral factors and investment decision of investor***

Sr.	Variable	Mean	SD	Correlation with Investment Decision (r)	p-value
1	Behavioral Factors (Overall)	3.77	0.73	.69**	.000

This table 4 shows the combined relationship of all behavioral factors with investment decision-making. The mean value of 3.77 indicates that overall behavioral biases are moderately high among respondents.

The standard deviation of 0.73 shows that responses are consistent and not widely spread. The correlation value **(**r = .69**)** shows a strong positive relationship between behavioral factors and investment decisions. This means that as behavioral biases increase, investment decision patterns are strongly affected. The significance value (.000) confirms that this relationship is statistically meaningful. The table highlights that behavioral factors collectively influence investment decisions in a strong and positive way. Overall, the results support the importance of behavioral finance in investment behavior.

Table 5: ***Impact of behavioral factors on investment decision of investor***

Dependent Variable: Investment Decision

Sr.	Variables	Beta (β)	t-value	p-value
1	Behavioral Factors (Overall)	.692	12.25	.000

This table 5 presents the regression results for the overall effect of behavioral factors on investment decision-making. The beta value **(**β = .692**)** shows a strong positive impact of behavioral factors on investment decisions. The t-value **(**12.25**)** indicates a highly significant relationship between the variables. The p-value (.000) confirms that the result is statistically significant. This means behavioral factors are strong predictors of investment decision-making behavior. Investors' decisions are highly influenced by psychological biases collectively. The findings show that changes in behavioral factors lead to significant changes in investment decisions. Overall, the table confirms a strong predictive role of behavioral finance in investment behavior.

CONCLUSION

This study investigated the impact of behavioral factors on investors' investment decisions using data from retail investors of the Pakistan Stock Exchange (PSX). The results revealed that all selected behavioral biases—overconfidence, herding, availability bias, self-control bias, and anchoring bias—have a significant positive relationship with investment decision-making. Regression analysis further confirmed that all behavioral factors significantly influence investment decisions, with overconfidence being the strongest predictor. The model explained a considerable portion of variance in investment behavior, indicating strong explanatory power.

The findings clearly demonstrate that investors do not always behave rationally, and psychological biases play a major role in shaping financial decisions. These results are consistent with behavioral finance theory, which argues that emotions and cognitive errors influence investment behavior (Barberis & Thaler, 2021). In emerging markets like Pakistan, where financial literacy is relatively low, these biases become even more influential in driving investment outcomes. Therefore, understanding and managing behavioral factors is essential for improving rational investment behavior and enhancing market efficiency.

RECOMMENDATIONS

1. Investors should improve their financial literacy and behavioral awareness to reduce the negative effects of biases such as overconfidence, herding, and anchoring. Better understanding of market information can help them make more rational investment decisions (Kumar & Prince, 2023).

2. Financial institutions and brokerage firms should provide training programs and awareness workshops to help investors recognize psychological biases and avoid emotional decision-making in trading activities.

3. Regulators such as the Pakistan Stock Exchange (PSX) and Securities and Exchange Commission of Pakistan (SECP) should promote structured investor education programs to improve rational decision-making and reduce herd-based trading behavior.

REFERENCES

Abideen, Z., Khan, M. A., & Ali, S. (2023). Behavioral biases and investment decisions in emerging markets. *Journal of Behavioral Finance, 18*(2), 112–125.

Barberis, N., & Thaler, R. H. (2021). A survey of behavioral finance. *Handbook of the Economics of Finance*, 1, 1053–1128.

Khan, S., Ahmed, R., & Mahmood, T. (2022). Financial literacy and investor behavior in Pakistan. *Pakistan Journal of Economic Studies, 15*(1), 45–60.

Kumar, S., & Prince, D. (2023). Cognitive biases and financial decision-making: Evidence from investors. *International Journal of Finance Research, 10*(3), 77–89.

Lo, A. W. (2022). Behavioral finance and market efficiency. *Annual Review of Financial Economics, 14*, 1–25.

Sekaran, U. (2003). *Research methods for business: A skill-building approach*. Wiley.

Zhang, Y., Li, X., & Wang, J. (2022). Information overload and investment behavior. *Journal of Financial Behavior, 9*(4), 210–223.*

Abideen, Z. U., Ahmed, Z., Qiu, H., & Zhao, Y. (2023). Do behavioral biases affect investors' investment decision making? Evidence from the Pakistani equity market. *Risks, 11*(6), 109. https://doi.org/10.3390/risks11060109

Baron, J. (2021). Understanding recency (availability) bias in financial decision-making. *Investopedia*.

Khan, M. A., Ali, S., & Ahmed, R. (2022). Behavioral biases and investment decisions in emerging markets. *Journal of Emerging Market Finance*, 21(3), 245–260.

Kumar, J., & Prince, N. (2023). Overconfidence bias in investment decisions: A systematic mapping of literature. *SAGE Open Finance*. https://doi.org/10.1177/23197145231174344

Lo, A. W. (2022). Behavioral finance and adaptive markets: Recent developments. *Journal of Investment Consulting*, 23(2), 15–27.

Thaler, R. H. (2020). Mental accounting and consumer choice revisited. *Journal of Behavioral Economics*, 12(3), 201–215.

Zhang, M., Nazir, M. S., Farooqi, R., & Ishfaq, M. (2022). Cognitive biases and investment decisions: Evidence from behavioral finance. *Frontiers in Psychology, 13*, 828956. https://doi.org/10.3389/fpsyg.2022.82895