

# The Influence of Psychological Biases on Investor Risk-Taking Behavior: Insights from a Behavioral Finance Survey

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## Abstract

Investment decisions which are thought to be rational are now generally known to be influenced by psychological and emotional factors, and behavioural finance is now an important structure by which the actual investor behaviour is described. The current study is based on this point of view and intends to research the effect of psychological biases on the risk taking of investors, particularly the loss aversion and the larger effect of the cognitive biases, but the effect of demographic factors is also taken into account. The main research questions are to test the impact of loss aversion on the readiness of investors to invest in high-risk assets and to test the correlation between psychological biases and the readiness to take risks in general. The mixed research design was followed with descriptive and exploratory design and the data was gathered through structured questionnaires and interview schedules of 150 active individual investors in urban India relying on the secondary sources. Mean, standard deviation, correlation and regression are the statistical tools that were used in MS Excel and SPSS. The results indicate that loss aversion has a statistically significant but weak negative correlation with willingness to invest in high-risk assets, which suggests that the higher the loss aversion, the less the high-risk investment preferences. Likewise, psychological biases were also observed to be significantly negatively related with the risk taking behavior of the investors. The authors conclude that psychological biases are essential in disciplining the decision of the investor and tend to deter people against investing in risky ventures. These lessons help to recognize the role of behavioral awareness in the decision-making of financial issues and emphasize the necessity of interventions in financial literacy and advisory to enhance the rationality of investments and the stability of the market.

**Keywords:** Behavioral Finance, Psychological Biases, Loss Aversion, Risk-Taking Behavior, Investor Decision-Making

## 1.1 Overview

The determination of the decision of investors which was long believed to comply with rather rational economic principles has been identified to be psychologically and emotionally biased. Behavioral finance, an academic community that combines psychology and the financial theory, has undermined the conventional view of a rational investor by pointing to the influence of biases and heuristics in financial decision-making and typically resulting in a failure to act optimally in investing (Al-Hajieh, 2016). The role of psychological biases on risk-taking behavior of investors is particularly serious, since such factors impact portfolio structure, market stability and financial performance in the long-run (Bilgehan, 2014).

Overconfidence bias is one of the most common psychological biases that can influence investor risk-taking, which is the excessive confidence that a person has about their knowledge, forecasting skills, or control over the situation. The overconfident investors trade more, they underestimate risk and they tend to ignore the chances of losses and their net returns tend to be less. The overconfidence is higher among male and younger investors who feel that they are more financially literate. Such an excess of self-confidence usually causes investors not to diversify, overestimating the correctness of their predictions, and mistakenly interpret market signals (Mallik, et al.,2017). As an example, when there is market optimism, such investors may assume too much risks believing that they can beat the market. Such prejudices have become dangerous in the aftermath of the 2008 financial crisis when investors and financial institutions alike overestimated the risks of the systemic risks as a result of the false sense of security created by predictive models and market efficiency (Gennaioli, & Shleifer, 2018).

The other important psychological element that affects the behaviour of investors is loss aversion. Basing on the Prospect Theory of Kahneman and Tversky (1979), loss aversion can be defined as the behavior in which individuals feel the sufferings of losses more than the benefits of similar gains. This imbalance makes investors make irrational decisions like retaining losing investments in case they recover or selling winning investments before it is too late to encash the gains (Mbaluka, et al.,2012). Behavioral surveys indicate that risk-averse investors tend to be risk-averse in situations characterized by potential gains and risk-seeking in situations characterized by potential losses which is an inverted understanding of risk. This type of behavior has a tendency to introduce a sub-optimal performance of a portfolio since investors are inclined to seek emotional comfort over a rational strategy. This bias is also supported by the psychological fear of regrets and cognitive dissonance and, therefore, it is one of the most long-standing barriers to rational investing (Rizvi, & Ali, 2011).

Herding bias is another strong force influencing the decision to take risks since it takes place when investors follow suit instead of basing their resolution on their own analysis. Herding is especially observed in volatile markets, where uncertainty causes investors to pursue so-called smart money. Social pressure, press reports and peer actions have been identified to increase this phenomenon, particularly in inexperienced or retail investors, as surveys show (Dewan, & Dharni, 2019). The behavior brings out the social and emotional aspects of financial decision-making, where social conformity and the fear of missing out (FOMO) triumph over logical consideration of fundamentals (Alfiany, & Sutrisno, 2025).

Anchoring bias is another subtle but powerful aspect of risk perception for investors. It refers to when individuals devote undue weight to an initial piece of information (such as a stock's historical price or a recent change in the cash market) when evaluating risk. An investor who is anchored, for example, may utilize an old peak price to anchor the value of a stock, without properly accounting for adjustments in the underlying fundamentals. Survey research in behavioral finance indicates that both novice and experienced investors have historically sustained anchoring effects, which led them to improperly assess what the fair value of an asset is and correspondingly delay towards a necessary portfolio adjustment (Pervez, Z., et al.,2025). The cognitive fixation results in poor decision making since an investor cannot correct for new information or shifts in market conditions. Additionally, mental accounting—the tendency to treat money as more or less risky given a construct or arbitrary category—intricately impacts individual risk tolerances and perceptions of risk. Investors may literally separate funds into safe and risky accounts even though their wealth exposure to risk remains unchanged Shantha (Gowri, & Ram, 2019). Professionally, for example, individuals may retain emergency savings in a low-yield account, while they more aggressively speculate with a small portion of that wealth; yet, they believe they have reduced their

total risk. Financial literacy programs, decision aids and personal advice systems can help investors aware of and reduce biased thinking. Financial institutions can even create direct or nudge mechanisms; such as automatic portfolio rebalancing or defaulted diversified portfolios, to help overcome irrational tendencies. Thus, the practical necessity of the influence of psychological biases on investor risk-taking behavior is more than an academic pursuit (Capuano, & Ramsay, 2011).

The aim of the study is to discuss the impact of psychological biases on the risk-taking behavior of investors, as well as the effects of demographic factors on the vulnerability of investors to these biases in making financial choices. Using the knowledge in behavioral finance and psychology, the paper aims to develop a more elaborate analysis of both cognitive and emotional aspects of motivation to invest or adopt the risky attitudes. A value of the study is the attempt to fill both theoretical and empirical gaps, studying the compound effect of psychological and demographic influencing factors in the setting of an emerging economy. It has implications on investors, financial advisors, and policymakers by determining the patterns of biased decision-making and therefore contributes towards the development of more efficient financial literacy programs, risk management strategies, and regulatory systems that enhance rational investment behaviour and market stability.

The paper is divided into eight sections. Section 1 comprises the introduction of the document. A review of literature is comprised under section 2 of the paper. The objective of the study is contain in Section 3 and Hypothesis in Section 4. A research methodology is examined in Section 5. The results are discussed in Section 6. The discussion has been provided in detail in section 7. Section 8 contains conclusions, implication, limitation and future scope. References have finally been included.

## 2. Review of Literature

**Jaiyeoba, H. B. (2025)** investigated the psychological factors, particularly biases, heuristics, and risk behaviors, that influence investing decisions beyond the forecasts of conventional finance theory. The study employed a descriptive and analytical methodology, utilizing established behavioral finance literature and empirical studies to investigate significant biases, such as overconfidence, representativeness heuristic, herding bias, disposition effect, hindsight bias, familiarity bias, anchoring bias, religious bias, and mental accounting. These behavioral characteristics can exacerbate market volatility, induce asset mispricing, and diminish the advantages of diversification. The Malaysian setting illustrates how cultural, religious, and market-specific elements can amplify or alleviate these impacts.

**Kanapickienė, R., et al.,(2024)** examined the progression of financial decision-making theories, emphasizing the transition from classical finance to behavioral finance. Classical finance theories, such as the Efficient Market Hypothesis and Modern Portfolio Theory, claim that investors act rationally and that the market operates efficiently. Nonetheless, these ideas have encountered critiques emphasizing the necessity of accounting for irrational conduct in financial markets. The study finds that comprehending investors' biases is essential for formulating appropriate risk management measures and investment suggestions, hence enhancing market performance. The results emphasized the increasing significance of behavioral finance in elucidating investor behavior and market oddities, indicating potential avenues for further research in this developing discipline.

**Padmavathy, M. (2024)** illustrated the influence of biases, emotions, and cognitive fallacies on human behavior, emphasizing particular cognitive flaws like as anchoring bias, overconfidence, and loss aversion. These deficiencies result in skewed decision-making and exacerbate market anomalies. The examination of investment social dynamics investigates the herd mentality and the irrational surges in asset valuations.

Behavioral finance not only challenges conventional financial theories but also has the capacity to aid investors, policymakers, and market regulators. The study seeks to develop complex models that precisely represent financial decision-making by analyzing psychological factors that lead to market anomalies.

**Suriyanti, S., et al., (2024)** emphasized the importance of personality characteristics, cognitive approaches, and decision-making biases. Risk-averse individuals emphasized money preservation, whereas thrill seekers engaged in high-risk, high-reward investments. Furthermore, individuals' self-efficacy affected their investment strategies. Cognitive biases, including overconfidence and loss aversion, significantly influenced investment decisions. The study underscores the significance of including psychological elements in the development of tailored financial solutions and educational initiatives. Future research directions encompass longitudinal studies, cross-cultural comparisons, and multidisciplinary approaches that integrate findings from psychology, economics, and finance.

**Shahid, I. (2024)** investigated the impact of psychological elements on financial decision-making and market results. This study offers an exhaustive analysis of the domain, investigating the influence of cognitive biases, emotional reactions, and social determinants on investor behavior and market dynamics. The study emphasizes fundamental principles such as prospect theory, overconfidence, herd behavior, and framing effects. By synthesizing concepts from psychology and finance, it provides a profound comprehension of irregularities in financial markets, such as asset booms and market collapses. The ramifications for individual investors and financial institutions are examined, highlighting the necessity for methods that consider behavioral biases to enhance investment results and market stability.

**Gabhane, D., et al., (2023)** examined the effects of cognitive biases on market efficiency, portfolio management, and risk perception. The study examines real-world case studies and behavioral experiments to outline practical implications for investors, financial professionals, and legislators. The research analyzes the influence of technology, social media, and information dissemination on exacerbating or alleviating the effects of cognitive biases in modern investment environments. This study enhances the existing research in Behavioral Finance by providing a comprehensive summary of the primary cognitive biases that affect investment decisions.

**Bhanu, B. K. (2023)** investigated the intersection of behavioral finance and stock market anomalies, emphasizing the significant influence of psychological biases and cognitive variables in driving departures from traditional financial models. This study examined key behavioral concepts like as loss aversion, overconfidence, and herding behavior, highlighting their significant influence on investor decision-making processes. It further clarifies a variety of stock market abnormalities, including the January effect, momentum effect, and value premium, attributing their occurrence to the complex interaction between cognitive biases and market dynamics.

The literature review shows that although many studies have been conducted to determine the impact of psychological biases like overconfidence, herding, anchoring and the loss aversion on the behaviour of investors, there is a research gap that needs to be filled in order to understand how the biases combine with demographic factors to determine the risk-taking behaviour of various investors. The literature of most of the previous studies has been either speculative or circumstantial, such as individual prejudices or specific markets setting like Malaysia or technologically developed markets. Nevertheless, limited empirical studies have been done to determine the extent to which these psychological biases are moderated by individual size factors, including age, gender, income level, education, and financial literacy on investment decisions. Additionally, the combined effects of the multiple biases on diversification of portfolios and preference of assets that results in high risks have not been sufficiently captured in the

literature in emerging economies such as India. This gap raises the extent to which a thorough behavioral finance investigation is necessary to bring in the demographic, psychological and contextual aspects to explain differences in risk-taking behavior among investors and guide the implementation of financial education and policy interventions.

### 3. Research Objectives

- To evaluate how loss aversion shapes investors’ willingness to invest in high-risk assets.
- To analyze the relationship between psychological biases and investors’ risk-taking behavior.

### 4. Research Methodology

This study uses a mixed methodology, combining a quantitative and qualitative research methodology to investigate the effect of psychological biases on the risk-taking behavior of investors. The study is carried out in the urban areas in India and targets individual investors who are actively involved in the stock markets, mutual funds and other financial market instruments. Based on descriptive and exploratory research design, the research evaluates the role of biases in investment decisions and risk preferences including loss aversion, overconfidence, herd behavior, and anchoring. The respondents are chosen by purposive sampling and include 150 respondents, whose data are gathered with the help of structured questionnaire and interview schedule as the main sources of data and secondary data, i.e., journals and financial reports. The independent variables include Loss aversion (H1) and Psychological biases (H2) whereas Willingness to invest in high-risk assets (H1), and Investors’ risk-taking behaviour are the dependent variable. The statistical analysis is conducted with the help of the MS Excel and SPSS through application of different methods like mean, standard deviation, correlation, and regression analysis to show the power and the character of relationships among the variables.

### 5. Results based on hypothesis

**Table 1: Demographic characteristics**

S.NO	Demographic characteristics	N	%	
1	Gender	Female	13	65
		Male	7	35
2	Age group	18-25	13	65
		26-35	6	30
		36-45	1	5
3	Source of income	Employment	11	55
		Business	6	30
		Investment	2	10
		Others	0	0
4	Marital status	Unmarried	18	90
		Married	2	10
5	Type of assets invested	Stocks	10	50
		Crypto	4	20
		Bonds	3	15
		Real estate	3	15

The demographics reveal that most of the respondents are young with 1825 years of age making 65 percent of the sample and most of them are female (65 percent). More than half of the participants rely on employment as the main source of income, then business and investment. The percentage of respondents that are unmarried (90) means that the population is mainly young and independent. Stocks are most preferred in terms of investing behavior, being the choice of half of all respondents, with crypto, bonds, and real estate having significant but smaller portions. All in all, the statistics indicate that young, unmarried people mostly females with sources of income on employment are enthusiastically involved in the investment process, and the desire to participate in the stock market and interest in the variety of assets, including crypto and real estate, are increasing.

**H0<sub>i</sub>:** Loss aversion significantly influences investors’ willingness to invest in high-risk assets, to invest in high-risk investment options.

**H0<sub>a</sub>:** Loss aversion does not significantly influence investors’ willingness to invest in high-risk assets.

**Table 2: Regression**

Hypothesis	Regression Weights	Beta Coefficient	R <sup>2</sup>	F	t-value	p-value	Hypothesis Result
<b>H1</b>	Loss aversion > Willingness to invest in high-risk assets	-.002	.000	.001	-.029	.000	<b>Supported</b>

H1 regression analysis also indicates that loss aversion has a very negligible, but negative impact on readiness to invest assets in high-risk assets through the beta coefficient of -0.002. Despite the fact that the R-square is very low implying that loss aversion is not an important factor in explaining the willingness to invest, the statistical results are significant, and the p-value is reported to be.000. The negative beta means that the more loss aversion, the less one would be willing to invest in high-risk assets, although this effect is likely low. The t-value of -.029 even points to the weak relationship but the hypothesis is said to be supported as determined by statistical significance. Comprehensively, the results validate the fact that increased loss aversion weakens to an extent to influence people making decisions that involve high risks of investment.

**H0<sub>2</sub>:** There is no significant relationship between psychological biases and investors’ risk-taking behavior.

**H0<sub>b</sub>:** There is a significant relationship between psychological biases and investors’ risk-taking behavior.

**Table 3: Correlation**

Hypothesis	Factor	Correlation				Hypothesis Result
		Mean	SD	Pearson Correlation (r)	Sig value	
<b>H2</b>	Psychological biases	9.8400	2.44971	-.177*	.030	<b>Supported</b>
	Investors’ risk-taking behaviour	10.4067	3.00357			

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

Analysis of correlation of H2 reveals that the relationship between psychological biases and the risk-taking behaviour of the investors is statistically significant and the negative correlation coefficient between the

two variables is  $-0.177$  with a significant value of  $0.30$ . Even though the correlation is weak, its significance at the  $0.05$  level indicates that psychological biases do have a meaning to investment decision. The negative correlation shows that the greater the level of psychological biases the lower is the risk taking behaviour of investors. The average scores also indicate moderate scores of risk-taking behaviors and psychological biases in the sample. Altogether, these findings are consistent with the hypothesis, as they prove that psychological biases contribute to the decreased willingness to make risky financial choices by investors.

## 6. Discussion

Kahneman and Tversky, (2022) argue in favor of a particular idea that psychological biases have a significant effect on the readiness of investors to take risks, which is consistent with the existing literature on behavioral finance. The negative correlation observed implies that people with a higher level of biases such as loss aversion and mental accounting avoided high-risk investment decisions and this is what was observed in previous studies (Barberis, 2018). They are cognitive limits of these biases that influence risk perceptions and investment confidence (Shefrin, 2020). Furthermore, emotional aspects may enhance the prudent nature, so investors may focus more on the feeling of safety than the possible profit (Thaler, 2016). In line with the findings of this study, the psychological predisposition has been revealed to have a systematic decrease in working with volatile assets (Park and Sohn, 2021). Therefore, the evidence supports the discussion that biased thinking is a strong moderator of the investor risk-taking.

However, in contrast to these, Gervais and Odean, (2001) claim that psychological biases are not equally suppressive to risk-taking and in some situations, they can even enhance the propensity of an investor to make high-risk choices. An example of this is overconfidence, which has been found to lead investors to speculative investments regardless of their underlying uncertainties (Biais et al., 2020). Similarly, the perception of the risk can be reduced by optimism bias, and individuals decide to invest in opportunities that do not fit their financial profiles (Hilton, 2019). Further research implies that even heuristics may help to make faster and more reasonable decisions instead of distorting judgment (Gigerenzer, 2014). Bias-based warnings can also be defeated by cultural and social pressures in a financial environment (Hoffmann et al., 2015). Thus, although this study also confirms the negative correlation, other viewpoints describe that psychological biases are both inhibitory and motivational to take risks (Statman, 2019).

## 7. Conclusion

The overall evaluation of the investor behavior shows that the effect of psychological biases, especially the loss aversion and associated cognitive distortions have a small but very important influence on the risk-taking behavior by deterring the engagement in high-risk investment opportunities, especially among the young investors, through subtle but critical impact on the behavior. There are several stakeholders that are of interest due to the implications of this pattern because understanding these biases can assist investors to make more disciplined decisions, financial advisors to deliver more tailored advice, and policymakers in developing effective financial literacy training and behavioral interventions that can encourage market stability and rational investment decisions. However, the inferences have a few limitations such as the small and geographically narrow sample size used, the use of self-reported perceptions, lack of demographic diversity, and the low level of explanatory power of the statistical models used. Additionally, the study examined only a selected group of psychological biases and did not fully account for changing market dynamics or institutional influences that may also shape investor behavior. Future research is

therefore recommended to adopt larger and more diverse samples, utilize longitudinal and cross-cultural approaches, explore the combined impact of multiple biases, and incorporate technological, social, and regulatory factors to develop a more comprehensive and generalizable understanding of investor risk-taking behavior in emerging economies.

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