

Investment Decision Making of Individual Investors in India: An Integrative Review of Financial, Behavioural and Psychological Determinants

Dr. R. Nageswar Rao¹, Kannan D Pillai²

Sr. Professor, Retd., Department of Business Management, Osmania University, Hyderabad¹

Research Scholar, Osmania University, Hyderabad²

Abstract: Investment decision making is an important aspect of personal financial planning, but individual decisions cannot be explained solely by financial return and risk. Behavioural finance demonstrates that financial knowledge, personality, behavioural tendencies, risk perception, risk tolerance and previous investment experience influence how individuals evaluate and choose investment alternatives. This article presents an integrated review of these determinants in the Indian context by synthesising relevant theoretical frameworks and empirical themes from the literature on Indian retail investors. It proposes an integrated paradigm in which financial literacy, personality, behavioural tendencies, risk perception, risk tolerance and investment experience collectively influence investment decision making, rather than treating them as isolated determinants. The review highlights the fragmented nature of existing literature, particularly the limited concurrent consideration of financial, psychological, behavioural, risk-related and experiential factors, and presents a research paradigm that may subsequently be tested using Structural Equation Modelling on primary data. The integrated approach may offer useful insights for individual investors, financial advisers, educators, financial institutions and policy makers seeking to improve personal investment decisions in India.

Keywords: Behavioural finance, investment decision making, financial literacy, personality, behavioural inclinations, risk perception, risk tolerance, investing experience, Indian investors, integrative review.

1. INTRODUCTION

Investment decisions have emerged as an important component of household financial planning in India. Today, there are a number of investment options available to people ranging from equities shares, mutual funds, bonds, fixed deposit, insurance connected products and digitally enabled investing platforms. However, more access doesn't necessarily make investment decisions any easier. Individual investors need to examine the facts, recognise risk, compare alternatives and decide how much uncertainty they are ready and able to take.

Traditional finance assumes investors act rationally and consider the information available to them when making investment decisions. Modern Portfolio Theory, for example, highlights the risk-return relationship and the value of diversification (Markowitz, 1952). Behavioural finance expands this view by saying that psychological and behavioural factors might impact investing decisions. Kahneman and Tversky's (1979) Prospect Theory was especially significant in showing that individuals may assess gains and losses differently and may systematically stray from the assumptions of expected utility.

This is particularly crucial in the Indian investment environment. The expansion of financial markets, wider engagement of retail investors and proliferation of digital investing platforms have broadened the range of options available to individual investors. In contrast, recent literature in Indian context still continues to highlight significant contribution of behavioural biases and lack of financial literacy in investment decision making. Evidence has explored the effect of factors such as overconfidence, anchoring, herding and loss aversion as well as financial literacy and financial awareness. Other research has looked at the association between behavioural tendencies, investor experience and financial literacy.

But the current literature is still disjointed. The studies look at behavioural biases on one side and financial literacy or knowledge on the other. Similarly, risk tolerance, risk perception, personality traits and investment experience are routinely studied in isolation or in small combinations. Thus, there still exists a need for a wider framework incorporating the key aspects at the human level affecting investment decision making. This paper bridges this gap by combining these distinct strands of literature. It describes investment decision making as a multi-

dimensional process, impacted by an individual's knowledge and capacity, psychological features, behavioural tendencies, perception of risk, willingness to accept risk and previous investment experience.

2. OBJECTIVE OF THE REVIEW

This paper seeks to review and critically synthesise the evidence on six main drivers of individual investment decision making: financial literacy, personality characteristics, behavioural inclinations, perceived investment risk, risk tolerance and investing experience.

The aim is not just to review or summarise past research. Instead, the review aims to identify the dominant themes and areas of convergence or divergence and the linkages among these determinants. This synthesis is used to develop an integrated conceptual framework for understanding individual investment decision making in the Indian setting. It is expected that the suggested paradigm will offer a more holistic basis for future empirical studies. Specifically, it provides a framework within which the interactions between the discovered determinants can then be explored using multivariate techniques such as Structural Equation Modelling.

3. THEORETICAL BACKGROUND

The decision making process of investment cannot be explained by a single perspective of theory. Traditional finance offers us with an understanding of risk, return and portfolio choice, whereas behavioural and psychological theories explain deviations in actual investor behaviour from strictly rational assumptions. Therefore, in the present analysis we draw on complementary theoretical views to account for the roles of financial literacy, personality characteristics, behavioural tendencies, perceived risk, risk tolerance and investment experience in individual investment decision making.

Traditional Finance Perspective. Traditional finance offers the basic framework for understanding investment decisions under conditions of risk and uncertainty. **Modern Portfolio Theory** states that investors should examine the link between expected return and risk and employ diversification to improve the overall risk-return characteristics of their portfolios (Markowitz, 1952). Similarly, the **Expected Utility Theory** suggests that people assess uncertain alternatives and select the one that maximises their expected utility (von Neumann & Morgenstern, 1944). These viewpoints put risk, return and portfolio choice at the heart of investment decision making. However, their assumption of consistent rational behaviour has been progressively challenged by further behavioural research.

Behavioural Finance Perspective. Behavioural finance blends ideas from finance, economics and psychology to explain why investors may not behave rationally, as anticipated in traditional financial theories. When dealing with complex financial information, investors might make use of mental shortcuts, emotions and subjective judgements. Thus, traits such as overconfidence, anchoring, herding and loss aversion can affect investment choices and market behaviour (Barberis & Thaler, 2003; Shefrin, 2000). This perspective provides the main theoretical basis for the consideration of behavioural tendencies as a relevant driver of individual investment decision making.

Prospect Theory. An important explanation for decision making under risk and uncertainty is provided by Prospect Theory, which proposes that humans do not always assess outcomes according to expected value (Kahneman & Tversky, 1979). The hypothesis is based on the assumption that people evaluate gains and losses relative to a reference point and that losses tend to have a stronger psychological impact than similar gains. This idea of loss aversion is directly relevant to investment behaviour, since investors may react differently to wins and losses and may hold on to failing investments or sell profitable investments prematurely. Prospect Theory thus provides a theoretical relationship between behavioural tendencies, risk perception and investment decisions.

Risk Perception Approach. Investment risk is not only an objective financial feature but also a subjective judgement that could differ from individual to individual. The psychometric approach to risk posits that people's perception of risk is influenced by characteristics such as familiarity, knowledge, uncertainty and perceived implications of prospective losses (Slovic, 1987). Hence, two investors may react differently to the same investment opportunity. Thus, perceived risk matters in investment decision making since the decisions made could be influenced by the actual level of risk as well as by how that risk is understood and evaluated by the particular investor.

Risk Tolerance Viewpoint. Risk tolerance is the degree of risk or potential monetary loss that individual is willing to endure in anticipation of receiving a return. This is an essential factor of investment behaviour since investors vary widely in the amount of risk they are psychologically comfortable taking on. Risk tolerance was an essential element in financial and investment behaviour (Grable and Joo, 2004). Risk tolerance and risk capacity are not the same; risk capacity is the ability of an individual to afford to absorb losses financially. Therefore, incorporating risk

tolerance into the current framework explains why people with identical financial knowledge can yet make different investment decisions.

Theory of Personality Traits. Personality theories are a way of interpreting generally stable variances in individual behaviour and decision making. The Five Factor Model specifies five major aspects of personality; openness, conscientiousness, extraversion, agreeableness and neuroticism (Costa & McCrae, 1992). These qualities can affect how people process information, deal with uncertainty and make financial decisions. Personality qualities might influence confidence, the openness to investigate new financial opportunities, and sensitivity to prospective losses. Thus, personality traits provide a pertinent theoretical foundation for explaining the heterogeneity among individuals in terms of their investing choices and decisions under similar financial situations.

Theory of Planned Behaviour. The Theory of Planned Behaviour discusses how attitudes and perceptions can be converted into real behaviour. Ajzen (1991) claims that attitudes, subjective norms and perceived behavioural control affect behavioural intention. In an investing environment, an individual may have financial knowledge but may not invest unless they have a positive attitude toward investment, sense social support or influence and feel competent to make an informed investment decision. Therefore, the theory is applicable to the current framework since financial literacy and investing expertise may increase perceived behavioural control while behavioural and social variables may influence investment intents and decisions.

Financial Literacy and Financial Capability Perspective. Financial literacy refers to the information and understanding to make informed financial decisions. It includes a grasp of concepts such as risk, return, diversification and compounding. Financial competence builds on this through the recognition that information needs to be turned into the skill and confidence to properly make financial decisions (Lusardi & Mitchell, 2014). In the investment setting, a higher level of financial literacy may increase the individual's capacity to assess alternatives and comprehend potential dangers. Yet knowledge alone does not always translate into reasonable judgements, as psychological and behavioural elements can still impact investment behaviour.

Experiential Learning and Investment Experience. Experience in investing comes with repeated exposure to financial decisions, market moves, wins and losses. Knowledge and future behaviour can be developed by individuals through experience and reflection, according to experiential learning theory (Kolb, 1984). Experience in the past can help you to become more familiar with investing products and feel more confident in the decisions you make when you invest. But experience can also lead to overconfidence following positive successes or increased risk aversion after financial losses. As such, investment experience is included in the framework as a factor that may influence financial understanding, perceived risk, risk tolerance and eventual investment decisions.

Integration of theory. Together, these theoretical approaches support the concept that investment decision making is a multi-dimensional process. Traditional finance explains the relevance of risk and return, but behavioural finance and Prospect Theory explain departures from perfectly rational decision making. Personality theory explains individual differences, whereas risk perception and risk tolerance explain how individuals interpret and respond to uncertainty. The Theory of Planned Behaviour, financial capability and experiential learning provide other explanations of how knowledge, confidence and previous experience may influence real behaviour. Together, these views provide a theoretical basis for incorporating financial literacy, personality, behavioural tendencies, perceived risk, risk tolerance and investment experience into a single conceptual framework for individual investment decision making.

4. REVIEW MAJOR DETERMINANTS

The theoretical viewpoints described in the previous part give the basis for comprehending how individuals take investment decisions. However, the empirical evidence suggests that the relative importance of key factors differs across investors, investment settings and market circumstances. This section looks at the evidence for the six primary factors identified and considers how they relate to individual investment decision making.

Financial Literacy. Individual financial decision making has been found as being determined by financial literacy. Empirical evidence shows that persons with greater financial knowledge are more capable of understanding the investment possibilities, assessing risk-return relationships and making prudent financial decisions (Lusardi & Mitchell, 2014). In the investment context, financial literacy is related to increased participation in financial markets and increased capacity to evaluate investment products. However, the relationship need not be uniform. Additional knowledge may not entirely remove the impact of emotions or behavioural biases, and investors with financial understanding may still exhibit overconfidence or other systemic decision making tendencies. Financial literacy should therefore be seen as a significant, but not sufficient factor of investment decision making.

Personality Characteristics. Empirical study suggests that individual differences in personality may influence financial views, risk preferences and investment behaviour. Personality traits can influence how people search for information, how they respond to ambiguity and how they estimate prospective rewards and costs. Research based on the Five-Factor Model has shown relationships between personality qualities and financial risk-taking, investment preferences and financial behaviour (Costa & McCrae, 1992). But the effect of individual characteristics can be different in different socio-cultural and socio-economic environments. Personality is therefore unlikely to be a determinant of investment decisions in itself, but could impact other elements such as risk tolerance, confidence and behavioural propensities. Personality thus becomes an aspect of an integrated framework and not a separate explanation.

Behavioural Tendencies. Behavioural tendencies are one of the most researched subjects in investment research. Empirical research has found several biases that might affect investor decisions including overconfidence, anchoring, herding and loss aversion (Barberis & Thaler, 2003; Shefrin, 2000). However, their influence may vary according to market conditions, characteristics of the investor and the nature of the investment decision. Some of the biases may interact with financial knowledge and previous investment experience. For example, more experience may reduce reliance on some heuristics but may concurrently lead to over confidence. The literature therefore indicates that behavioural tendencies should not be evaluated in isolation, but as part of a wider set of effects, individual and situational influences.

Perceived Investment Risk. Empirical studies tend to support the idea that investing decisions are affected by the way individuals perceive risk and not only by objective assessments of risk. The same investment opportunity could be seen differently by investors given their knowledge, familiarity, prior experiences and psychological qualities. Perceived risk has been proven to affect desire to participate in financial markets and preferences for particular investment alternatives. Perceived risk, however, may be affected by other factors, notably financial knowledge and investment expertise. Thus, perceived risk may be a key mechanism of interpretation between an investment's features and the final decision an individual makes.

Risk Tolerance. Risk tolerance is always related to investment preferences and portfolio decisions. People who are more comfortable with uncertainty and more prepared to take risks are usually more willing to put their money in assets with greater expected volatility. Those who have less risk tolerance may prefer to invest in relatively safe places. Research also suggests that risk tolerance is influenced by a number of individual attributes including financial conditions, demographics, personality, financial knowledge and past experience (Grable & Joo, 2004). Risk tolerance may therefore be an essential method by which other individual qualities affect investing decisions, not merely as an independent factor.

Investment Experience. Prior investment experience influences subsequent investment behaviour via familiarity with financial products and exposure to market swings. Empirical research implies that experienced investors are more confident and understand the investment process better. But experience doesn't always translate into better decisions. Another factor is that past success can lead to overconfidence and unpleasant experiences might make investors more risk-averse or impact their future investment decisions. Thus, investment experience has both positive and negative implications, depending on the nature of past outcomes and the way those experiences are interpreted. This is significant for its inclusion in the framework since investment behaviour evolves over time rather than being determined by knowledge or steady personal qualities alone.

5. SYNTHESIS OF THE LITERATURE

The review suggests that there is no one factor that provides a thorough explanation of individual investment decision making. Dimensionality of decision making process under consideration is varied but complimentary, which includes financial literacy, personality characteristics, behavioural inclinations, perceived risk, risk tolerance and investment experience; Hence it is more useful to think of investment behaviour as the product of an interplay between an individual's knowledge, psychological features, assessment of risk and accumulated experience.

Financial literacy gives the mental building blocks to evaluate different investment options and understanding the relationship between risk and return. However, information does not always result in rational behaviour, since even financially aware investors may be subject to biases like overconfidence or loss aversion. Likewise, personality traits can influence confidence, receptivity to new opportunities and responses to uncertainty, while behavioural traits can influence how financial information is processed and used in decision making.

The literature differentiates between perceived risk and risk tolerance. Perceived risk is how an individual understands the uncertainty connected with an investment. Risk tolerance is the willingness to accept the uncertainty.

Investment experience could also further change these associations by affecting familiarity, confidence, knowledge and subsequent reactions to wins and losses.

The six determinants taken collectively are likely to be interrelated rather than autonomous. Most of the previous research has focused on one or two aspects in isolation and offered useful explanations for investor behaviour. The present review thus proposes an integrated strategy combining these determinants in a wider framework of individual investment decision making. This synthesis constitutes the basis of the proposed conceptual framework.

6. INDIAN CONTEXT

India provides an important context in which to analyse individual investment decision making as financial involvement has grown alongside digital access, greater product availability and rising investor knowledge. Indian investors are at the same time a diversified population in terms of financial knowledge, experience, income, geographical location and attitude toward risk.

Recent Indian research has investigated the impact of behavioural biases, financial literacy, financial awareness and investment experience in affecting investor behaviour (Adil et al., 2021; Gupta et al., 2025; Mohta, 2024; Palanichamy et al., 2024; Roychowdhury, 2025; Sanyal et al., 2026). However, the research available is still scattered and is generally based on certain investment groups, localities or individual characteristics. Studies on investors in particular locations or market segments offer helpful insights, but their findings may not fully explain the larger range of individual investing behaviour in India.

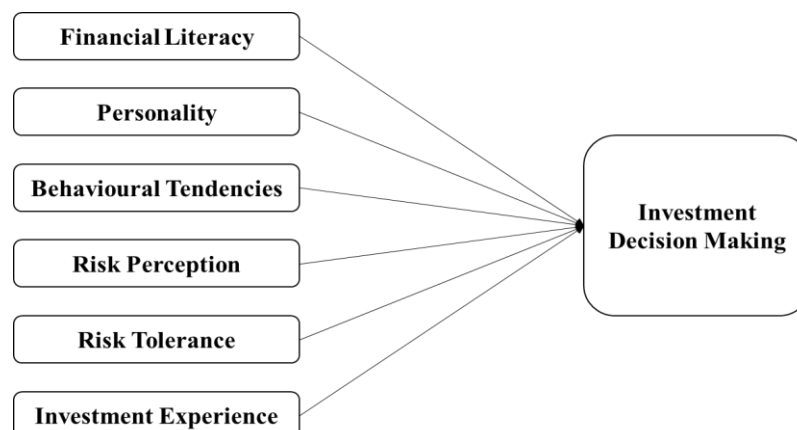
The Indian context, therefore, supports the necessity of a larger framework, including logical as well as behavioural explanations of investment decision making. Although prior research has provided useful insights into individual variables such as financial literacy, behavioural biases, risk and investment experience, less emphasis has been dedicated to the integration of these elements within a common framework. Also, the diversity of individual investors in India means that investment decisions are unlikely to be effectively explained by any one cause in isolation. This forms the basis for the integrated conceptual framework presented in the following part.

7. INTEGRATED CONCEPTUAL FRAMEWORK

The suggested approach is grounded on the assumption that investment decision making is not a result of any single cognitive, psychological or financial element. Instead, it is a broader decision making process where an individual's knowledge, personality traits, behavioural responses, perception of risk, tolerance for uncertainty and previous investment experience can all play a role in investment decisions.

As shown in **Figure 1**, the suggested framework considers the investment decision making of a person as the result of the interplay of these six variables. The approach is founded on the idea that investment decisions are not the consequence of a single cognitive, psychological or financial aspect. Instead, they are a reflection of a wider decision making process where an individual's knowledge, personal qualities, behavioural responses, interpretation of risk, willingness to accept uncertainty and accumulated investment experience may all combine to impact investment decisions.

Figure 1
 Proposed Integrated Conceptual Framework of Investment Decision Making



The framework does not operate on the assumption that all six factors have an equal effect or that each interaction is direct and independent. Some factors might interact with each other or influence investing decisions through relevant mechanisms. Figure 1 consequently represents a combined picture of the main factors discovered in the present analysis and their potential relationship with individual decision making on investment.

The proposed framework should be seen as a literature based conceptual model, not an empirically validated causal model. Its main contribution is to group the key cognitive, psychological, behavioural and experiential characteristics found in prior research into a single structure. The integrated method provides a framework for future empirical inquiry, including an analysis of the relative influence and interrelations among the six variables using appropriate multivariate approaches such as Structural Equation Modelling.

8. FUTURE RESEARCH PROPOSITION

The theoretical and empirical research examined in this article reveals that the individual investment decision making is a complex process and cannot be sufficiently explained by any one determinant. Figure 1 illustrates the proposed framework which integrates financial knowledge, personality characteristics, behavioural tendencies, perceived investment risk, risk tolerance and investing experience. These categories capture complimentary cognitive, psychological, behavioural, risk-related and experience variables that may jointly determine how individuals make investing decisions.

The framework is a synthesis of the literature and is offered as a conceptual foundation for future empirical research. In this study, it is not an experimentally verified causal model, nor does it assume that all six dimensions have equal or independent impacts. Instead, the main argument is that their combined effect offers a more complete explanation of individual investment decision making than approaches that treat these drivers independently. Thus, the following research proposition is put forward:

Individual investment decision making is affected by the combined impacts of financial knowledge, personality traits, behavioural tendencies, perceived investment risk, risk tolerance, and investment experience.

9. DISCUSSION AND IMPLICATIONS

The integrated approach provided in this article has consequences for the way in which individual investment decision making is understood and encouraged. The review shows that investment decisions should not be considered as a mere financial or technical decision based on availability of information. The quality of decisions will also depend upon how individuals evaluate information, perceive ambiguity, respond to wins and losses, and draw upon previous experience. Therefore, the focus should be on a more holistic strategy to improving investing decision making, taking into account all determinants that contribute to the decision making process.

Individual Investor Implications. For individual investors, the proposed framework points to the need for a more self-awareness and intentional approach to investing decision making. However, access to financial knowledge and investment opportunities does not guarantee wise decisions. Investment choices are also influenced by human preferences, responses to uncertainty, behavioural tendencies and previous experiences. Investors would thus benefit from periodically reflecting on their own decision making patterns, particularly following significant gains or losses, and from aligning investment choices with their financial objectives and personal circumstances rather than primarily relying on market sentiment, recent outcomes or the behaviour of others.

Implications for Financial Advisors and Investment Professionals. The framework indicates that for financial counsellors and investment professionals the range of factors to consider in assessing investors should be wider than the usual indications such as age, income, wealth and declared financial aspirations. A more holistic picture of the investor could comprise financial literacy, comfort with ambiguity, previous investment experience and any behavioural factors, as well as financial conditions and ambitions. Such an approach will assist generate suggestions that are not only financially acceptable, but also more aligned with the investor's capacity to understand, accept and remain committed to the chosen investment strategy.

Implications for Financial Literacy and Investor Awareness. The assessment also has ramifications for financial education and investor awareness programs. While knowledge of investment products, diversification, returns and risk remains crucial, investor education will be more effective if it also addresses the process of making investment decisions in practice. Therefore, programs can help people to detect frequent decision making mistakes, to think about their reactions to uncertainty and to examine the impact of emotions and past experiences on investing choices. A broader strategy will help bridge the gap between understanding about investments and making sound investment choices.

Directions for Future Work. The integrated methodology described in this paper can be empirically examined in future research with a broad sample of individual investors across distinct demographic, geographical and investment circumstances in India. Structural Equation Modelling could be employed to examine the combined effect and relative contribution of the six dimensions and to investigate any interrelations between them. Future research might also explore how investment experience, financial literacy or personality as determinants impact investment decisions indirectly through behavioural responses, perceived risk or risk tolerance. A longitudinal study might extend this by looking at how the investment behaviour and these correlations change over time as investors gain experience and react to changing financial situations and market conditions.

10. CONCLUSION

Financial expertise or any other single determinant cannot effectively explain individual investment decision making, which is too complex. However, the facts discussed in this article suggests that the investment choices are influenced by a wider range of cognitive, psychological, behavioural, risk and experience aspects. This article provides a more integrated framework for understanding how individual investment decisions may be understood. By bringing financial literacy, personality characteristics, behavioural tendencies, perceived investment risk, risk tolerance and investment experience into a single framework, this article offers a more integrated perspective on how individual investment decisions may be understood, particularly within the diverse and evolving Indian investment environment.

The originality of the paper is the shift of focus from isolated consideration of individual factors to the general comprehension of their combined impact. The suggested framework is intended as a conceptual synthesis rather than evidence of established causal relationships and its validity must be examined through future empirical research using appropriate measures and actual investor data. Nevertheless, the framework provides a structured foundation for such investigation and offers a basis for developing a more comprehensive understanding of individual investment decision making and the factors that shape it.

11. Limitations

This article is an integrated literature review and makes no claims of the comprehensiveness or procedure-based rigour associated with a PRISMA based systematic review. The proposed framework is a synthesis of the selected literature and has not been empirically confirmed in the present study. Therefore, the proposed relationships should be interpreted as a conceptual basis for future research and not as established causal effects. Furthermore, the paradigm is developed primarily with reference to individual investors in the Indian context and may need adaption and further validation before being applied to institutional investors or other national, cultural and financial situations.

REFERENCES

- [1]. Adil, M., Singh, Y., & Ansari, M. S. (2021). How financial literacy moderate the association between behaviour biases and investment decision? *Asian Journal of Accounting Research*, 6(2), 154–166. <https://doi.org/10.1108/AJAR-09-2020-0086>
- [2]. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- [3]. Barberis, N., & Thaler, R. H. (2003). A survey of behavioral finance. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the economics of finance* (Vol. 1, Part B, pp. 1053–1128). Elsevier. [https://doi.org/10.1016/S1574-0102\(03\)01027-6](https://doi.org/10.1016/S1574-0102(03)01027-6)
- [4]. Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional manual*. Psychological Assessment Resources.
- [5]. Grable, J. E., & Joo, S.-H. (2004). Environmental and biopsychosocial factors associated with financial risk tolerance. *Financial Counseling and Planning*, 15(1), 73–82.
- [6]. Gupta, N., Rana, R., & Tandon, D. (2025). Financial literacy as a moderator in behavioral biases and investor decisions. *Indian Journal of Finance*, 19(5). <https://doi.org/10.17010/ijf/2025/v19i5/175045>
- [7]. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291. <https://doi.org/10.2307/1914185>
- [8]. Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- [9]. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
- [10]. Markowitz, H. (1952). Portfolio selection. *The Journal of Finance*, 7(1), 77–91. <https://doi.org/10.1111/j.1540-6261.1952.tb01525.x>

- [11]. Mohta, A. (2024). Moderating role of millennials' financial literacy on the relationship between risk tolerance and risky investment behavior: Evidence from India. *International Journal of Social Economics*, 51(3), 422–440. <https://doi.org/10.1108/IJSE-12-2022-0812>
- [12]. Palanichamy, N. V., Kumar, M. S., & Kalpana, M. (2024). Effect of behavioral biases and financial literacy on investors' investment decision-making in Kerala, India. *Advances in Research*, 25(3), 213–226. <https://doi.org/10.9734/air/2024/v25i31066>
- [13]. Roychowdhury, S. (2025). The effect of behavioural biases in investment decision making: A study of investors in Kolkata. *PRAGATI: Journal of Indian Economy*, 12(1), 49–64. <https://doi.org/10.17492/jpi.pragati.v12i1.1212504>
- [14]. Sanyal, U., Uddin, F., Razi-ur-Rahim, M., Islam, A., Kuriyodath, R., & Hossain, M. B. (2026). Behavioral biases and retail investment decisions in India: The moderating role of financial literacy and financial awareness. *Analytics*, 5(3), Article 26. <https://doi.org/10.3390/analytics5030026>
- [15]. Shefrin, H. (2000). *Beyond greed and fear: Understanding behavioral finance and the psychology of investing*. Oxford University Press.
- [16]. Slovic, P. (1987). Perception of risk. *Science*, 236(4799), 280–285. <https://doi.org/10.1126/science.3563507>
- [17]. Suresh, G. (2024). Impact of financial literacy and behavioural biases on investment decision-making. *Vision*, 13(1). <https://doi.org/10.1177/23197145211035481>
- [18]. von Neumann, J., & Morgenstern, O. (1944). *Theory of games and economic behavior*. Princeton University Press.