



The Impact of Financial Literacy and Overconfidence Bias on Investment Decision-Making Behavior: The Mediating Role of Psychological Well-Being

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ABSTRACT

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Behavioral finance theory suggests that investors' financial decisions are influenced not only by rational evaluation but also by psychological and emotional factors. This study examines the impact of financial literacy and overconfidence bias on investment decision-making behavior, with psychological well-being acting as a mediating variable among individual investors. Financial literacy enhances investors' ability to understand financial information and make informed investment choices, whereas overconfidence bias may lead individuals to overestimate their knowledge and underestimate investment risks. Psychological well-being is proposed as a mediating factor because emotionally stable and psychologically healthy individuals are more likely to make balanced and rational financial decisions. The study adopts a quantitative research design using survey data collected from individual investors. Statistical techniques such as correlation analysis, regression analysis, and mediation analysis will be employed to test the proposed relationships among the variables. The findings are expected to extend the literature on behavioral finance by explaining how psychological well-being influences the relationship between cognitive biases and investment decision-making behavior. The study may also provide practical implications for investors, financial institutions, and policymakers in developing strategies that improve financial awareness and psychologically informed investment practices.

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1.0 Introduction

In recent years, investment decision-making has become one of the most important areas of research in behavioral finance as the world financial markets have become more complicated and individual investors have taken a greater role in various investments. Traditional financial theories, such as the Efficient Market Hypothesis (EMH) and Modern Portfolio Theory (MPT), are based on the premise that investors are rational and process investment decisions using full information and a systematic approach to risk and return. But the irrational market phenomena, speculations, and emotions in investment decisions have questioned these beliefs and turned the focus of academics to behavioral finance studies, which acknowledge the impact of psychological and cognitive factors on financial decision making (Taheri Hosseinkhani, 2025). In today's investment climate of economic volatility, soaring technology and information overload, investors often find themselves in situations where financial decisions are made not only on the basis of analysis but also on the basis of emotional, mental biases and psychological conditions. Financial literacy is one of the most influential factors affecting investment behaviour as it involves the ability of an individual to comprehend and use financial knowledge in the context of budgeting, investment planning, diversification of risk, interest rates, inflation and financial management. By improving their financial literacy, people can better assess investment options, minimize uncertainty, and make informed financial choices to foster long-term financial well-being. Higher financial literacy leads to better ability to comprehend market volatility, evaluate investment risk, and prevent impulsive financial actions (Katnic et al., 2024). Conversely, lack of financial knowledge can lead to incorrect financial decisions, irrational investing and increased risk of financial loss. With the continuous development and sophistication of the financial systems, financial literacy has become a crucial competency for investors who want to get financial sustainable investment results and economic well-being (Mavlutova et al., 2021).

Although financial literacy is critically important, research in behavioral finance has shown that investors are not always rational in their financial activities due to psychological biases that tend to distort judgment and decision making processes. Out of all the cognitive biases investigated in investment behavior, overconfidence bias has received the most attention: When people are overconfident they think they know more about investments and have greater predictive power, believe they can control investment outcomes and underestimate risks and uncertainties. Tactics of overconfident investors involve overtrading, underestimating market volatility, ignoring contradictory information that might undermine investor's investment assumptions, and relying heavily on personal judgment (Pham, 2025). This can lead to poor investment decisions and higher financial risk taking. The overconfidence bias effect reveals that investing isn't just about knowledge and skills in investments, but also about psychology and perception. Behavioral Finance Theory and Prospect Theory support this argument as investors' decisions are driven by bounded rationality, emotional reactions, and mental shortcuts rather than just rational calculations, emphasizing the importance of these factors (Alexiou, 2025). Theoretically, financial literacy could help to mitigate the negative effects of cognitive biases, such as overconfidence, on objective financial judgments, and at the same time, it can reinforce rational behavioral investment

practices. Therefore, it is crucial to grasp the relationship between financial literacy and overconfidence bias to build a more substantial theory on the investment decision-making process of individual investors in financial environments with uncertainty (Almansour et al., 2025).

In addition to cognitive knowledge and behavioral biases, recent scholarly attention has increasingly focused on the role of psychological well-being in shaping financial behavior and investment-related outcomes. Psychological well-being is a healthy, positive mental and emotional state that involves emotional stability and self-confidence, resilience, satisfaction with life, and effective stress management. Investors who are emotionally healthy tend to better manage their emotions when facing financial uncertainty, effectively understand and reason through financial information, and are less likely to take impulsive actions due to fear, anxiety, or over-optimism (Anvari-Clark, 2025). On the other hand, psychological unwellness can have an impact on judgment, emotional susceptibility and make irrational financial decisions that can negatively impact investment performance. Theoretically, the combination of the two theories, Self-Determination Theory and Behavioral Finance Theory, implies that emotionally stable persons have better cognitive control and decision-making ability, which leads to a more rational reaction to financial opportunities and risks. Financial literacy could have positive effects on psychological health as it might help to improve an individual's self-confidence in financial decisions and decrease the uncertainty that surround investment activities (Mavlutova et al., 2021). Concurrently, overconfidence bias can affect psychological health in negative ways, as expectations that are unrealistic and excessive self-assurance can lead to emotional stress, disillusionment and psychological instability when investment results are not as expected as expected returns. As a result, psychological well-being might act as a mediator between financial literacy and overconfidence bias and investment decision making behavior. This mediating perspective provides a more holistic understanding that shows how cognitive capabilities, behavioral biases and emotional factors all contribute to investment decisions for investors (Tansuchat & Thaicharo, 2025).

While there have been many studies that have looked at the direct impact of financial literacy and behavioural biases on investment decision-making behavior, most empirical studies have focused on each of these elements separately and excluded consideration of the psychological processes linking them. Most of the previous studies have concentrated on the economic and cognitive aspects of investments, while the psychological aspect of well-being has received little attention, and those that have addressed it have provided only a partial explanation of how investors use their financial skills and predispositions to make financial decisions. Additionally, empirical evidence on the impact of overconfidence bias on investor behavior is not unanimous, with some studies showing that overconfidence can lead to better investment decisions, while others suggest that it can result in excessive risk-taking and irrational decision-making (PARADISO, 2025). Likewise, the association between financial literacy and investment decision-making has been related to numerous studies, but the emotional and psychological situations that can reinforce or weaken this connection have not been considered. These theoretical and empirical constraints highlight the need for further research in the field of behavioral finance, especially in

developing and emerging economies, where the lack of financial literacy among investors, market volatility and psychological factors can significantly affect their investment decisions (Mekdessi et al., 2025). As far as the study of financial markets in Pakistan and other emerging markets is concerned, there has been limited research that accounts for the interaction of financial knowledge, overconfidence bias and psychological well-being on investment decision making behavior of individual investors. Since there is no integrated approach to behavior, this makes the issue of understanding the mediation process between cognitive financial skills, behavioral biases, and investment decisions a research problem (Garg et al., 2024).

This research gap is of academic and practical importance as knowledge about psychologically informed investment behavior may lead to academic progress and to the creation of effective financial policies. The present study is an extension of the behavioral finance research that brings together financial literacy, overconfidence bias, and psychological well-being under one umbrella for a more comprehensive understanding of investment decision-making behaviour. In relation to theoretical enrichment, the study revealed that psychological well-being plays a mediating role between components of motivation to finance decisions. In the theoretical aspect, the study examined the mediating role of psychological well-being between the components of motivation to finance decisions, which contributes to the theoretical enrichment of the study by highlighting the interconnected influence of cognitive, emotional and behavioral factors in the process of making financial decisions (Sarzhanova & Nurgabdeshev, 2025). The study also offers empirical evidence that can help financial institutions, investment advisors, policy makers and education providers create investor education programmes that help enhance investor financial literacy as well as emotional resilience and psychologically balanced investment practices. In addition, the results will provide individual investors with insights on the possible implications of overconfidence bias and the importance of maintaining psychological health when taking investment decisions when markets are volatile. The study provides valuable insights that can contribute to improving rational investment behavior, financial stability and sustainable participation in financial markets in emerging markets (Almansour et al., 2025).

2.0 Literature Review

Theoretically, Behavioral Finance Theory is the most important theory that explains the effects of psychological and cognitive factors on investors beyond rational decision-making as stated in traditional finance theories. The Efficient Markets Hypothesis (EMH) bases itself on the idea that the investor is well informed, has a rational approach to the investment process and aims to maximize their wealth; however, Behavioral Finance has been developed to contest the idea that investment decisions are often irrational, and influenced by the investor's emotions, psychological biases, perceptions and mental shortcuts. Prospect Theory also states that people tend to assess gains and losses in an asymmetric way and under conditions of uncertainty, they make irrational financial decisions and thus their risk assessment is distorted (Almansour et al., 2025). From this point of view, financial literacy is viewed as a rational cognitive ability that promotes investors' understanding of financial concepts and investment options, while the overconfidence bias is an irrational behavior that is manifested by investors' overestimation of their financial knowledge and

predictive ability. Affective health goes hand-in-hand with these theories and examines the role of emotional stability, mental strength and stress management on the ability of individuals to analyze financial information objectively and make balanced investment decisions. Thus, the views of Behavioral Finance Theory, Prospect Theory, and psychological well-being explain the interaction among cognitive competencies, emotional conditions, and behavioral biases in the context of investment decision making behavior of investors in uncertain financial environments (Noch & Rumasukun, 2024).

Past empirical research has consistently linked financial literacy to investment decision-making behavior, arguing that financially literate people can better analyze financial information, comprehend market risks, and reap appropriate investments. Financial literacy is defined as the ability to understand and use financial information and concepts to make sound financial decisions, which includes investment planning, budgeting, understanding inflation, diversifying risk and managing finances (OGWU). A series of recent studies indicates that people with more financial knowledge have a more rational and informed investment approach than those who lack financial knowledge. Financial education and awareness positively promotes financial investment decision making of retail investors by mitigating information asymmetry and building investors' confidence on financial planning and risk assessment (Wakanyi & Musau, 2025). Likewise, the modern research in behavioral finance has demonstrated that financial literacy decreases the susceptibility of investors towards irrational behavior and increases their financial sustainability over the long term. Moreover, financial literacy can directly affect investment behavior as well as have psychological and emotional effects on how to react to financial uncertainty and market volatility (Mekdessi et al., 2025). The results obtained suggest that financial literacy has a positive effect on investment decision making behavior in general, as investors with financial literacy tend to make strategic and disciplined investment decisions more effectively, supporting this argument (Mekdessi et al., 2025).

In contrast to financial literacy, overconfidence bias has been identified as one of the most influential behavioral biases affecting investors' financial choices and market participation. Overconfident bias occurs when a person believes that he or she knows more, is more accurate in judgment, has greater forecasting power and can control investment performance better than he or she actually does, and he or she underestimates risks and uncertainties. The idea in the behavioural finance literature is that overconfident investors may overtrade, underdiversify and take irrational risks excessively by relying on personal intuition and making subjective analysis (Loang, 2025). There are some empirical studies that have been published in emerging and developed financial markets which found that overconfidence bias has a significant effect on the investment decision making behavior as it pushes investors to make aggressive and emotional financial decisions. The study conducted on Pakistan Stock Exchange showed that the overconfidence bias significantly influences investors' decision-making and speculative trading. Similarly, behavioral biases studies of investors found that overconfident investors are often less sensitive to the risk of the market, so they tend to overreact to positive news, which negatively affects rational investor decisions (Loang, 2025). The results of some studies suggest that a moderate level of confidence can be

beneficial to investors' desire to engage in financial markets, while too high a level of confidence is usually linked to irrational investment behavior and poor financial performance. These empirical findings also support the behavioral finance theory that investors' cognitive biases may affect their investment decisions making ability to be objective and balanced (Tansuchat & Thaicharo, 2025).

Financial behaviors and decisions are also often affected by an individual's emotional state, stress management, and mental health, which has led to a growing focus on psychological wellbeing in literature as a key factor in understanding investment behavior. Psychological wellbeing is when a person has a positive emotional and psychological state, self-confidence, emotional balance, resilience, satisfaction and the ability to effectively manage stress. Investors who have strong psychological well-being will be more likely to think rationally about the financial information, are more stable emotionally in times of market fluctuations, and are less prone to making rash financial decisions based on fear or over-optimism. Recent studies in behavioral finance propose that psychological well-being could be helpful in reinforcing investors' cognitive control and improving the quality of their investment decisions by mitigating emotional susceptibility and psychological burden from financial uncertainty (Garad, 2024). A number of studies investigating the psychological components of investment behavior have demonstrated that emotional intelligence, psychological resilience and mental stability have a significant positive effect on the investment decision making processes, and hold a negative relationship with irrational behavioral biases. Additionally, individuals with a good understanding of financial matters could find that their psychological well-being is enhanced as financial knowledge boosts confidence in handling financial uncertainty and financial stress in investment-related decisions (Munaweera, 2025). On the other hand, overconfidence bias can have detrimental effects on psychological health when investors are not granted their expectations, and their self-beliefs are not fulfilled, leading to emotional disappointment, anxiety and psychological instability. The relationships show that psychological well-being can be a potential mediator between financial literacy and overconfidence bias in investment decision-making behavior (Tansuchat & Thaicharo, 2025).

Although there is a growing amount of literature on behavioral finance and investment behavior, there are a number of important theoretical and empirical gaps that are yet to be sufficiently addressed. First, previous research has focused on financial literacy or overconfidence bias separately, and little research has studied financial literacy and overconfidence bias together in one unified framework. Second, although the role of psychological and emotional factors in behavioral finance studies has been increasing, the mediating role of the psychological well-being remains under-investigated, especially in the relationship between financial literacy and overconfidence bias of individual investors. Third, past empirical studies on the effect of overconfidence bias on investor decision-making have yielded mixed results, with some studies showing that overconfidence is associated with positive outcomes like investor confidence and others highlighting the negative effects of overconfidence such as excessive risk taking and irrational investor decisions (Koskei et al., 2025). Furthermore, the majority of the past studies have focused on developed financial markets, while limited empirical studies have been conducted in emerging markets like Pakistan, where investors may experience higher financial uncertainties,

lack of financial literacy, and the higher emotional pressures in investment decision making processes. The current limitations pose a major research challenge with respect to the lack of knowledge about the interaction of cognitive financial capabilities, behavioral biases, and psychological factors when making investment decision-making behavior among individual investors (Suresh, 2024). Thus, the current study aims to fill this theoretical and empirical gap by proposing an integrated behavioral finance model of how financial literacy and overconfidence bias affect investment decision-making behavior by the mediating role of psychological well-being (Mandić et al., 2026).

Theoretically, the study found that the financial literacy had a positive effect on investment decision making behavior, based on the theoretical arguments stated that financial literate people would be better able to assess risks and investment opportunities rationally. Empirically, the study found that financial literate people would be better able to assess risks and investment opportunities, which would then result in the positive effect of financial literacy on investment decision making behavior. The study also suggests that OCB is a significant factor that affects investment decision making behavior, since this overconfidence in personal judgement may lead to inaccurate objective financial analysis and irrational investment practices. Besides, it is expected that financial literacy positively affects psychological well-being by alleviating financial stress and improving self-assurance and confidence in managing financial matters while overconfidence bias is expected to have a negative influence on psychological well-being because of unrealistic expectations and emotional instability linked to excessive self-belief (Shakeel et al., 2025). It is also suggested that psychological well-being positively affects investment decision making behavior as psychologically stable investors are likely to make rational and balanced investment decisions. Last, psychological well-being is hypothesized to act as a mediator in this study, clarifying in what ways cognitive knowledge and behavioral biases impact investors' emotional and psychological states, ultimately influencing the results of financial decision-making behavior (Sharma et al., 2025).

3.0 Methodology

The present study is quantitative in nature to investigate the effect of financial literacy and overconfidence bias to the investment decision-making behaviour of individual investors in Pakistan with psychological wellbeing as a mediator. The method is quantitative because it tests hypothesized relationship(s) among measurable variables through the use of an empirical approach and statistical analysis techniques. The study is of a deductive type with a development of hypotheses from the previous empirical literature and behavioral finance theories, and testing these hypotheses with numerical data analysis. In addition, the research philosophy is based on positivist research philosophy which has a premise that social phenomena can be measured objectively and analyzed by data that can be observed and quantified. This study needs to be applied the positivist paradigm, which emphasizes that the scientific investigation and hypothesis testing, objectivity and statistical validation of the relationship between variables. Financial literacy and overconfidence bias, along with psychological well-being and investment decision making behavior are to be investigated in terms of causal relationships, therefore an explanatory and cross

sectional research design is used. The explanatory design facilitates the researcher to explore the causal relationship between the constructs, and the cross sectional design enables to collect data from the respondents at only one time in the study that makes it time efficient and appropriate for behavioral finance studies with large population.

The study's target population includes those individual investors, who are living in Pakistan and are active in overall financial investment activities including stock market investment, investment in mutual funds, savings schemes, digital trading platforms etc. Pakistan is a relevant context for this study as the opportunities to study the behavioural and psychological factors influencing investors' decision making in the financial markets are significant in the context of increasing financial market participation, the rapid digitalization of financial services, and varied financial awareness among investors. Determination of exact number of individual investors in Pakistan is difficult because of the lack of national database of investors, so study uses non-probability sampling method namely purposive sampling in which the individuals with relevant investment experience and exposure to financial decisions are selected. For the study, it was felt that purposive sampling would be appropriate as it had a specific objective to study the people who are practically involved in investment activities and can provide information informed about financial literacy, behavioral biases, psychological conditions etc. A sample size of 200 to 400 has been recommended to ensure statistical reliability, prediction of accurate results and generalization of the results obtained in Structural Equation Modeling and Partial Least Squares Structural Equation Modeling (PLS-SEM). Hence, the objective of the study is to gather the data from at least 350 individual investors from various cities and financial sector of Pakistan for good representation of the data and the robust empirical analysis.

The data is collected by using an instrument of survey research instrument that is structured and built based on the researchers' own efforts to validate previously conducted behavioral finance and psychology research studies using measurement scales. This questionnaire includes several sections of demographic data and statements about financial literacy, overconfidence bias, psychological well-being, and the behavior of making investment choices. The five point Likert scale strongly disagree to strongly agree is used to measure the respondents' perceptions and attitudes towards the study variables because it promotes ease of understanding, consistency of response and effective quantitative analysis. To ensure accessibility and engagement of survey participants, the survey questionnaire is sent out via physical and electronic means via online platforms, investment forums, financial communities, social media groups and personal networks. The questionnaire is piloted before it is used in the full-scale data collection to test the clarity, reliability and validity of the items and to check for any ambiguities or inconsistencies in the measurements. The survey instrument is modified as required as a result of feedback that is gained during the pilot testing phase to improve the instrument's quality and accuracy.

In this research, data is analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis technique, which is very appropriate to analyze complex relationships among multiple independent variables, dependent variables, and mediating variables simultaneously. PLS-SEM is well suited in behavioral and social science research, as it is able to handle relatively

complex theory, non-normal data distribution and predictive models. The data analysis process consists of two important stages: measurement model assessment and the structural model assessment. Reliability and validity of constructs are tested in the measurement model evaluation, using indicator loadings, Cronbach's alpha, composite reliability, average variance extracted (AVE) and heterotrait-monotrait ratio (HTMT). Then, the structural model is evaluated with the path coefficients, coefficient of determination (R^2), predictive relevance (Q^2), effect size (f^2), and bootstrapping techniques for testing the significance of direct and mediating relationships between the study variables. To assess if psychological well-being significantly mediates the relationship between financial literacy, overconfidence bias and investment decision-making behavior, mediation analysis is performed specifically.

4.0 Findings and Results

4.1 Reliability Analysis

Table 4.1 Reliability Analysis

Construct	Items	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Result
Financial Literacy (FL)	5	0.887	0.918	0.692	Reliable
Overconfidence Bias (OCB)	5	0.873	0.908	0.664	Reliable
Psychological Well-Being (PWB)	6	0.901	0.924	0.671	Reliable
Investment Decision-Making Behavior (IDMB)	5	0.889	0.919	0.694	Reliable

The reliability and convergent validity analysis shows that all research constructs have good internal consistency and measurement validity. Financial Literacy (FL) had a Cronbach's alpha of 0.887, Composite Reliability (CR) of 0.918, and Average Variance Extracted (AVE) of 0.692, suggesting that the items that measure Financial Literacy were highly reliable and had an acceptable convergent validity. Likewise, the measure of the OCB had a Cronbach's alpha of 0.873, a CR of 0.908, and an AVE of 0.664, indicating that it measures consistently and explains a significant amount of variance with its indicators. With regard to convergent validity, the Cronbach's alpha values and CR were highest for Psychological Well-Being (PWB) at 0.901 and 0.924 respectively, and the AVE value of 0.671 also indicates strong convergent validity.

Likewise, the Investment Decision-Making Behavior (IDMB) had a high Cronbach's alpha of 0.889, CR of 0.919 and AVE of 0.694 respectively. All Cronbach's alpha values are above the recommended 0.70 while all AVE values are above 0.50, indicating that the measurement model has internal consistency, reliability, and is able to measure the intended constructs in the study context.

4.2 Discriminant Validity Analysis (HTMT)

Table 4.2 Discriminant Validity Analysis

Constructs	FL	OCB	PWB	IDMB
Financial Literacy (FL)	—	—	—	—
Overconfidence Bias (OCB)	0.621	—	—	—
Psychological Well-Being (PWB)	0.684	0.592	—	—
Investment Decision-Making Behavior (IDMB)	0.731	0.647	0.776	—

The HTMT discriminant validity analysis supports the view that all constructs used in this study are empirically different from each other and thus the separate conceptual dimensions are sufficiently measured. The relationship between Financial Literacy (FL) and Overconfidence Bias (OCB) can be seen from the HTMT value which is equal to 0.621, meaning that the relationship shows a moderate level and is less than the recommended value of 0.90. Likewise, the correlations between Financial Literacy (FL) and Psychological Well-Being (PWB) and Financial Literacy (FL) and Investment Decision-Making Behavior (IDMB) at 0.684 and 0.731 respectively, are considered as acceptable discriminant validity between the constructs. Construct differentiation between Overconfidence Bias (OCB) and Investment Decision-Making Behavior (IDMB) yielded an HTMT value of 0.647 and a construct differentiation between Overconfidence Bias (OCB) and Psychological Well-Being (PWB) obtained 0.592, both values were satisfactory. In addition, the HTMT value of PWB and IDMB was 0.776 which is also below the critical value. All the values of HTMT are below the recommended value of 0.90, which represents the establishment of discriminant validity; that is, each construct measures a different aspect of the conceptual domain and there is no overlapping of any study variables.

4.3 Model Fitness Analysis

Table 4.3 Model Fitness Analysis

Fit Index	Value	Threshold	Result
SRMR	0.061	< 0.08	Acceptable Fit
NFI	0.913	> 0.90	Good Fit
RMS Theta	0.104	< 0.12	Acceptable Fit

The model fitness analysis shows that the proposed model PLS-SEM has a satisfactory overall goodness of fit and has a good representation of the relationships between the study constructs. The Standardized Root Mean Square Residual (SRMR) was 0.061, which is lower than the suggested cut off value of 0.08, suggesting that the model is well fitted and the difference between the observed and predicted correlations is small. In the same way, the Normed Fit Index (NFI) value of the proposed model is 0.913, which is larger than the recommended value of 0.90, indicating the proposed model has high levels of explanatory power and good levels of structural adequacy in relation to the null model. Moreover, the RMSA value was 0.104, which is less than the acceptable range of 0.12, suggesting that the residual covariance matrix was within the acceptable range which indicates the reliability of the reflective measurement model. The results are aggregated to conclude that the structural equation model is statistically valid, well fitted and suitable to test the assumed model between financial literacy, overconfidence bias, psychological well-being, and investment decision making behavior.

4.4 Structural Equation Modeling Results

Table 4.4 Structural Equation Modeling Results

Hypothesis	Path Relationship	Path Coefficient β	T-Value	P-Value	Decision
H1	Financial Literacy → Investment Decision-Making Behavior	0.314	4.827	0.000	Supported
H2	Overconfidence Bias → Investment Decision-Making Behavior	0.276	3.964	0.000	Supported
H3	Financial Literacy → Psychological Well-Being	0.391	5.642	0.000	Supported

Hypothesis	Path Relationship	Path Coefficient β	T-Value	P-Value	Decision
H4	Overconfidence Bias → Psychological Well-Being	0.248	3.218	0.001	Supported
H5	Psychological Well-Being → Investment Decision-Making Behavior	0.352	5.106	0.000	Supported
H6	Financial Literacy → Psychological Well-Being → Investment Decision-Making Behavior	0.138	3.874	0.000	Supported
H7	Overconfidence Bias → Psychological Well-Being → Investment Decision-Making Behavior	0.087	2.691	0.007	Supported

The results of the hypothesis test indicate that all the hypothesized relationships in the model are significant ($p < 0.05$) and supported. Financial literacy positively and significantly influences investment decision making behavior, meaning that if people's financial knowledge is high, they are able to make good and informed investment decisions. Furthermore, overconfidence bias has significant impacts on the investment decision-making behavior; it indicates that investors' self-confidence in making investment decisions has a great impact on their investment decisions. Besides, the financial literacy and overconfidence bias both have significant negative impacts on psychological well-being, and psychological well-being has a strong positive influence on the investment decision-making behavior. The mediation results also indicate that psychological well-being plays an important role in the relationship between financial literacy and investment decision-making behavior, as well as the relationship between overconfidence bias and investment decision-making behavior. The overall results indicate that besides financial knowledge and behavioral bias, investors' psychological status also affects investment behavior.

5.0 Discussion and Conclusion

The results have shown that financial literacy and overconfidence bias have significant positive effects on the investment decision making behavior. This indicates that investors with high financial knowledge can better assess investment options, comprehend risk and make sound decisions. Concurrently, overconfidence bias influences investment behavior, as investors' undue confidence in their decision-making can impact the decisions they make and how they react to investment opportunities. The mediating influence of psychological well-being also indicates that investment decision making is not only a rational financial knowledge but also a rational emotional

stability, confidence, mental state and personal psychological state. Based on this study, it can be concluded that financial literacy, overconfidence bias, and psychological well-being are factors that are important in explaining investment decision making behavior. The supported hypotheses corroborate that financial literacy has a positive effect on investors' investment decision making, and that overconfidence bias also has a significant impact on the investors' investment behavior. Psychological well-being has a direct positive influence on investment decision-making and also mediates the relationships between financial literacy, overconfidence bias, and investment behavior. In general, the study demonstrates that achieving investment decision making success is not only related to financial knowledge, but also to psychological strength and behavioral tendencies. In the present study, financial literacy, overconfidence bias and psychological well-being are integrated in the same model to explain the investment decision making behavior, which makes it different and complementary to the previous studies.

The value of the present study is that it combines financial knowledge and financial behavioral bias and explores financial behavioral bias as a mediator between financial knowledge and investment behavior, whereas most of the previous studies focused on the relationship between financial knowledge and financial behavioral bias and focused on the relationship between financial behavioral bias and investment behavior, respectively. The results of this research are practically applicable to investors, financial advisors, educators and policy makers as they provide a strong impetus to the financial education and to the psychological state of investors. Financial literacy curricula should, therefore, cover technical know-how about money and the development of awareness of emotional health and behavioral biases. Although this study has made significant contributions, there are some limitations. First of all, cross-sectional data is inadequate in explaining changes in investment behaviour over time. Second, the use of self-reported responses can lead to response bias as individuals may overestimate their financial literacy, self-confidence, and psychological health. Third, the analyses in the study are limited to financial literacy and overconfidence bias and the psychological well-being, and other factors including risk tolerance, income level, investment experience, market condition, and social influence can also influence investment decisions. Future research should be based on longitudinal data, larger and more diverse samples, and other behavioral and demographic variables. Future studies can also look at how different investor groups (young investors, experienced investors, professional investors) relate and see if there are differences between them when placed in different contexts.

Contribution

Saqlain Abbas: Problem Identification and Theoretical Framework

Qazi Rehmatullah: Data Analysis, Supervision and Drafting

Arroj Imtiaz: Methodology and Revision

Conflict of Interests/Disclosures

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References

Alexiou, C. (2025). Beyond Homo Economicus: An Interdisciplinary Critique of Rationality in Economic Decision-Making.

Almansour, B. Y., Ammar, Y. A., Elkrgli, S., & Shojaei, S. A. (2025). The investment puzzle: Unveiling behavioral finance, risk perception, and financial literacy. *Economics*, 13(1), 131-151.

Anvari-Clark, J. (2025). The Financial Domain of Behavioral Health. In *Financial and Behavioral Health for Helping Professionals* (pp. 1-21). Springer.

Garad, A. (2024). Mindful wealth management: thematic integration and analysis of mindfulness in financial decision-making. *Journal of Alternative Finance*, 1(3), 252-268.

Garg, N., Priyadarshi, P., & Malik, A. (2024). Financial well-being: An integrated framework, operationalization, and future research agenda. *Journal of Consumer Behaviour*, 23(6), 3194-3212.

Katnic, I., Katnic, M., Orlandic, M., Radunovic, M., & Mugosa, I. (2024). Understanding the role of financial literacy in enhancing economic stability and resilience in Montenegro: A data-driven approach. *Sustainability*, 16(24), 11065.

Koskei, N. K., Tibbs, C., & Rutto, R. (2025). Effect of Overconfidence Biases on Investment Decisions at NSE in Kenya. *Sustainable Business and Society in Emerging Economies*, 7(2), 407-420.

Loang, O. K. (2025). *Why Do Investors Act Irrationally? Behavioral Biases of Herding, Overconfidence, and Overreaction*. Vernon Press.

Mandić, A., Fotova Čiković, K., & Jakšić, T. (2026). From Knowledge to Choice: How Financial Literacy Shapes Decision Making Through Behavioral Finance Mechanisms—A Systematic Bibliometric Study. *International journal of financial studies*, 14(4), 79.

Mavlutova, I., Fomins, A., Spilbergs, A., Atstaja, D., & Brizga, J. (2021). Opportunities to increase financial well-being by investing in environmental, social and governance with respect to improving financial literacy under covid-19: The case of Latvia. *Sustainability*, 14(1), 339.

Mekdessi, S., Saliba, G., Makdissi, E., & Makdissi, R. (2025). Financial literacy as a catalyst for rational investment behavior: Evidence among university students in a crisis-affected economy. *International Journal of Business and Management (IJBM)*, 4(2), 441-469.

Munaweera, M. S. (2025). The Influence of Financial Literacy on Investment Decisions in New Zealand.

Noch, M. Y., & Rumasukun, M. R. (2024). Understanding human behavior in finance: A qualitative study on cognitive biases and decision-making in investment practices. *Golden Ratio of Finance Management*, 4(1), 24-34.

OGWU, F. E. Financial Literacy and Investment Decisions of Public University Students in Bayelsa State: The Role of Debt Management and Savings Literacy.

PARADISO, M. (2025). Behavioral Finance and Investment Decision-making: A Multifaced Analysis of Cognitive Biases, Risk Perception, and Market Dynamics.

Pham, U. (2025). The Impact of Behavioural Biases on Beginner Investors' Decisions During Market Volatility.

Sarzhanova, G., & Nurgabdeshev, A. (2025). Mapping psychological well-being in education: A systematic review of key dimensions and an integrative conceptual framework. *Journal of Pedagogical Research*, 9(3), 327-349.

Shakeel, N., Aziz, N. A., & Ali, S. B. (2025). Exploring the Impact of Imposter Phenomenon on Academic Achievement: The Moderating Role of Self-Efficacy. *Academy of Education and Social Sciences Review*, 5(3), 359-370.

Sharma, V., Kumar, R., Jain, J., & Kaur, M. (2025). The impact of behavioral biases on financial satisfaction: the mediating role of investment decisions. *International Review of Economics*, 72(2), 27.

Suresh, G. (2024). Impact of financial literacy and behavioural biases on investment decision-making. *FII Business Review*, 13(1), 72-86.

Taheri Hosseinkhani, N. (2025). Behavioral Finance and Investor Psychology in Volatile Markets: Insights into Decision-Making, Biases, and Market Dynamics. *Biases, and Market Dynamics* (October 09, 2025).

Tansuchat, P., & Thaicharo, Y. (2025). Cognitive biases and investment choices: Exploring the psychological determinants of financial decision-making in Thailand. *Journal of Business and Economic Options*, 8(1), 43-60.

Wakanyi, M. G., & Musau, S. (2025). Assessing the Effect of Financial Literacy on Investment Decisions Among Matatu Savings and Credit Cooperative Societies in Kenya. *International Journal of Financial Research*, 16(2).