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From Behavior to Performance: Exploring the Link Between Individual Financial Literacy, Risk Perception, and Investment Decisions

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ABSTRACT

This study examines the relationship between individual financial behavior, risk perception, and investment decisions, focusing on the mediating role of financial literacy. Using a quantitative approach, data were collected from 217 investors in companies listed on the Tehran Stock Exchange. Structural Equation Modeling (SEM) was employed to analyze the direct and indirect effects of financial behaviour, overconfidence, and risk perception on investment decisions, with financial literacy as a mediating variable. The findings reveal that individual financial behaviour, overconfidence, and risk perception significantly influence direct and indirect investment decisions. Financial literacy partially mediates these relationships, highlighting its importance in bridging psychological factors and investment outcomes. The study emphasizes the need for enhancing financial literacy to mitigate the adverse effects of behavioural biases, such as overconfidence and risk misperception, thereby promoting more informed and effective investment decisions. The research contributes to the theoretical understanding of behavioural finance by elucidating the psychological mechanisms underlying investment decisions. It also offers practical insights for financial advisors, wealth managers, and policymakers, emphasizing the need for educational programs and interventions to improve financial literacy and decision-making. Recommendations for future research include exploring additional behavioural financial factors, cultural differences, and the impact of different investment types on risk perception and decision-making. By addressing these gaps, future studies can further advance the understanding of financial behaviour and its implications for investment performance.

1. Introduction

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Financial sciences continually evolve and expand into new domains, including integrating psychological and cultural aspects in accounting. The behavioural finance paradigm, which emerges from the intersection of psychology and finance, posits that psychology plays a crucial role in financial decision-making (Zohdi et al., 2021). Individual financial and personal finance are significant aspects of social behaviour that substantially influence both personal lives and broader societal outcomes. Despite the efforts of many individuals, economic and financial well-being is often elusive; it is frequently observed that even those with high incomes or wealth experience financial dissatisfaction and ongoing financial struggles. The roots of this pervasive issue in contemporary society may lie in individuals' inability to manage their financial matters effectively. Failures in personal financial management can lead to long-term consequences for individuals and society as a whole. Consequently, the study of personal financial management behavior has recently garnered increasing interest from researchers (Gheisari et al., 2021). Recent studies have also explored the role of social media in shaping organizational agility and innovation capability, which in turn influence firm performance (Tehranian et al., 2024). These findings underscore the importance of integrating technological and behavioural perspectives in understanding financial decision-making processes.

Investors typically aim to grow and develop their capital while benefiting from its returns in the future. Recent studies, such as Izadian et al. (2024), have shown that market reactions to capital increases, particularly in pharmaceutical sectors, can significantly influence investor behavior and decision-making processes. This underscores the importance of understanding how financial behaviours and market dynamics shape investment outcomes. They often hold their investments over extended periods, sometimes years or decades, to reap the rewards. Investment in various sectors can take on different meanings; for example, corporate finance entails establishing and providing initial capital or increasing equity in anticipation of business growth and higher profits. The greater a company's capital, the better it can develop its activities and achieve higher profits and revenues (Darvishan et al., 2025; Flamarzi & Hoshiyarzadeh, 2024).

Suboptimal investment decisions represent a critical issue that leads to poor returns for investors in the stock market. Specifically, investors tend to overreact to negative news and underestimate the likelihood of rare events, resulting in inefficient markets and undesirable investment decisions (Roshdieh and Farzad, 2024). Higher levels of financial literacy equip investors to understand better and assess the risks associated with their investments (Almansour et al., 2023). Financial statements significantly influence investor decision-making and the proper functioning of capital markets. This is evident from multiple financial scandals and market performance issues stemming from inaccurate reporting of economic transactions. A literature review indicates that studying the financial status of affiliated entities solely based on consolidated financial statements is inadequate. To better understand the financial status of relevant individuals, it is crucial to consider the financial information of all entities within the group. Today, groups of companies operate as independent entities, not only transferring goods and services but also financing each other's activities (Yanti and Endri, 2024). Research on investor decision-making has focused on classic finance, neoclassical finance, behavioural finance, and neurofinance, each concentrating on specific dimensions over different periods. While discussions are justified based on the concepts of the respective eras, it is crucial to recognize that the evolution of financial and investment theories necessitates diverse and complementary perspectives on investor decision-making. Examining the comprehensive structure of investor decision-making, considering various aspects of the subject, can provide researchers with a broader understanding of how decisions are made (Jalilvand and Rostami Noroozabad, 2018). Risk perception as a mediating variable is essential for establishing a common thread between behavioral finance, risk understanding, and investment decision-making. Behavioral finance acknowledges that cognitive biases and emotional responses can influence investment decisions. In this context, risk perception is a critical mediating variable that helps explain how individuals comprehend and interpret risks, subsequently impacting their investment decisions (Jalilvand and Rostami Noroozabad, 2018).

The primary focus of this research is to investigate the impact of individual financial behaviours on investment decisions, emphasizing risk perception. Behavioural finance factors have been shown to influence individual investment decisions across various domains, yet the interaction between these factors and risk perception in the market remains unclear. Risk perception is a critical component in the financial decision-making process and plays a significant role in shaping financial and investment behaviours. Individuals and investors evaluate risk differently, and these differences can lead to varying financial behaviours. For instance, some individuals may refrain from investing in volatile markets due to a heightened perception of risk, while others may choose to invest despite the high risk. Such discrepancies can significantly affect their financial performance and result in different financial outcomes. This study aims to explore how financial behaviors and investment decisions are influenced by risk perception and how these influences can impact individuals' investment financial performance decisions. By analyzing these relationships, the main objective of the research is to determine the effect of financial behaviours on investment financial performance decisions of individuals, with a particular focus on risk perception. This research could assist financial managers and investors in making better decisions by fostering a deeper understanding of risk perception and its influence on financial behaviours, ultimately leading to improved investment financial performance decisions of individuals. Additionally, it may aid investors in making more informed investment decisions, while regulators could leverage the findings to develop policies that promote a stable and sustainable stock market.

2. Theoretical Foundations of the Research

2.1.Financial Behavior

The concept of financial behaviour is relatively new compared to other financial theories. In developing countries, financial behaviour is widely applied to uncover the behaviours influencing investment decisions. However, financial behaviour has a more limited application in the markets of developing countries. Most modern financial theories are based on two fundamental assumptions: the rationality of investors and market efficiency. In recent years, behavioural finance researchers have built their theories on hypotheses that contrast with the foundational assumptions of modern finance by studying behavioural science, psychology, sociology, decision-making patterns, and behavioural models. They argue that modern finance alone cannot adequately explain certain phenomena in financial markets. Consequently, proponents of behavioural finance firmly believe that understanding individuals' behavioural and psychological aspects and recognizing decision-making patterns, behavioural models, and sociological factors is essential for making sound financial decisions (Zohdi et al., 2021). For instance, Hatameh and Khalilnezhad (2022) highlight the importance of explorative learning and strategic agility in driving business model innovation, underscoring the role of adaptive and learning-oriented behaviours in financial decision-making.

2.2.Investment

Jorgenson (1963) developed a neoclassical investment theory that explains investment behaviour concerning business investment. This theory also posits that profit maximization is achieved through the optimization of capital stock. The primary goal of a business is to increase profit, which is defined as gross income minus input costs and the value of capital rental. The neoclassical investment model further indicates that the cost of capital primarily influences investment decisions and that firms' real and financial decisions are distinct (Quddus et al., 2022).

Investment in financial markets is one of the most crucial factors for economic growth and development in any country. Efforts must be made in the capital market of each country to cultivate a culture of investment. Since the objective of any investment is to achieve the expected return and even to enhance it, appropriate decision-making must be undertaken by the individual investor, who should also exhibit sound financial behaviour (Gheisari et al., 2021).

2.3.Relationship between Financial Behavior and Investment

Financial behaviour refers to the set of decisions and actions that individuals undertake in managing their finances. This behaviour is influenced by psychological, social, and economic factors, which can significantly affect how individuals make investment decisions. For instance, investors may make irrational choices driven by fear of loss or the excitement of potential gains. Such behaviour can lead to poor and unstable investment choices, particularly in volatile market conditions. Understanding financial behaviour can help investors identify their decision-making patterns and develop better investment strategies. Moreover, financial behaviour can directly impact the performance of investments. Investors with varying perceptions and beliefs about risk and return may gravitate toward different asset classes. For example, individuals interested in investing in high-risk markets may make unstable investment decisions due to overconfidence or a lack of awareness regarding the associated risks. Consequently, financial behaviour and investment decisions mutually influence each other. Understanding this relationship can assist investors in improving their financial performance and managing risk effectively (Sepehri and Asgari, 2023).

2.4.Investment Decisions

Investment decisions are considered one of the influential factors affecting corporate performance. Consequently, every company strives to make better investments; however, asymmetric information due to conflicts of interest between shareholders and managers can lead companies away from optimal investment efficiency. Investment activities in the capital market are closely linked to investors' determination of investment decisions. An investment decision is a policy adopted regarding two or more alternative options for investment, hoping to achieve future returns (Razak et al., 2023; Hariharan et al., 2020). In making investment decisions, investors seek to make rational choices.

Nevertheless, over time, psychological factors also influence investors' decisions. Investors are expected to be capable of making logical decisions to achieve returns in line with their expectations (Yanti et al., 2024). Investment decisions have a significant impact on accounting performance rather than market performance. Therefore, companies should prefer internal financial resources for investment purposes. Given that external financial costs are typically higher than internal budgets, companies must consider this aspect during investment, emphasizing the theory of investment profitability using internal budgets over external financing (Jahani, 2023). Investment decisions are always directly related to the manager's primary question: "What should be done?" These decisions are important due to limited investment resources, diverse investment opportunities, and the long-term effects of investment decisions on shareholder wealth. Consequently, investment decisions should be made based on scientific principles and with appropriate diligence (Flamarzi and Hoshiyarzadeh, 2024).

Managers analyze numerous factors for investment and financial decision-making. Managerial decisions are influenced by various factors, including external factors (economic, political, cultural conditions, advertising levels, intra-company issues, etc.) and internal factors (psychological factors). This situation resembles an iceberg, where only the tip (external factors) is visible above the water's surface, while most of the iceberg (internal factors) remains hidden beneath the surface. Therefore, predicting and analyzing managers' decisions based on external factors is typically easier than relying on internal factors, even though managers often make decisions under the influence of internal factors (Zohdi et al., 2021). Factors affecting investment decisions can be categorized into four groups (Rostami Jaz & Bahreman, 2021): individual mindsets (psychological perceptions) affecting investment decision-making, accounting information influencing investment decisions, economic information relevant to investment decisions, and personal financial needs.

Meanwhile, traditional pricing models utilize a standard pricing equation derived from maximizing expected profits based solely on risk. While much of the literature on financial behaviour has focused on psychological and sociological factors, there is growing recognition of the importance of ecological contexts in shaping human actions. For instance, Ghorashi et al. (2025) explored small urban environments as living ecologies, emphasizing the interplay between individuals and their surroundings. Similarly, Manshour (2025) highlights the role of public spaces in promoting leisure and tourism activities, suggesting that urban environments can also influence financial decision-making by affecting individuals' lifestyles and priorities. This perspective could enrich our understanding of how external environments influence financial decision-making.

2.5.Risk Perception

Risk can be defined as the probability of an event occurring and its subsequent consequences. It can manifest in various aspects of business and daily life (Mennati & Barzegari, 2023). Internal and external factors influence risk perception, including economic policies and market uncertainties (Gudarzi Farahani et al., 2026). For instance, Roshdieh (2024) demonstrated that monetary policy uncertainty significantly impacts stock market uncertainty, affecting investors' risk perception and decision-making processes. Internal and external factors influence risk perception, including cultural norms and societal expectations. For example, Avar and Karimi (2025) demonstrated how cultural contexts shape women's safety experiences in public spaces, suggesting that similar cultural influences may also affect how individuals perceive financial risks. Understanding these cultural dimensions could enhance our comprehension of the complex interactions between risk perception and investment decision-making. Risk can be characterized as fundamental or non-fundamental, or even significant or insignificant, depending on its magnitude and nature. By considering risk perception as a mediating factor, one can explore the complex interactions between behavioural factors, risk perception, and investment decision-making, thereby providing a comprehensive understanding of the decision-making process in financial matters (Elshandidy et al., 2018). Risk perception offers valuable insights into the cognitive and psychological mechanisms underlying investment decisions within the behavioural finance framework. Azimi Asmaroud (2022) emphasizes the role of categorical reasoning in shaping individuals' understanding of complex concepts, which can be extended to how investors categorize and perceive financial risks. An overconfident investor may perceive a high-risk investment as less risky than it truly is, leading to a higher likelihood of making inappropriate investment choices that do not align with their risk profile. Conversely, a loss-averse investor may view a low-risk investment as riskier than it is, resulting in missed opportunities for capital gains (Taftiyan et al., 2022).

2.6.Individual Overconfidence

Overconfidence is a psychological trait where individuals have an unrealistic confidence level in their abilities and judgments. This type of confidence can lead to misjudgment of risks and opportunities, resulting in poor decision-making and risk-taking behaviours (Smith & Johnson, 2024). This phenomenon is particularly significant in economic and financial contexts, as individuals may engage in irrational investments based on this misguided perception, ultimately facing financial losses. Furthermore, individual overconfidence can also impact social and professional relationships. Excessively self-assured individuals may encounter difficulties in social interactions, as this overconfidence can manifest as self-centeredness and a disregard for others' opinions (Brown & Taylor, 2024). Consequently, this trait influences individual decision-making and can harm interpersonal relationships and group performance.

3. Background of the Research

Yanti et al. (2024) conducted a study to examine and analyze financial behaviour, overconfidence, and risk perception effects on financial literacy and investment decisions among millennials in Jakarta. This quantitative study utilized SEM with the Smart PLS 4.0 software, engaging 100 respondents aged 25-35 year old. The structural model was evaluated using R-squared for dependent constructs, the Stone-Geisser Q-square test for predictive relevance (Q2), and the significance of path coefficients. The findings of this study could contribute to the development of investment behaviour theory, particularly regarding investment decision-making and the mediating role of financial literacy among individual millennial investors in Jakarta. The study revealed that financial behaviour and overconfidence significantly impact the financial literacy of millennials in Jakarta, while overconfidence itself showed no significant effect.

Sadeghi et al. (2022) employed the Markowitz Mean-Semivariance model to develop an optimal portfolio selection framework, emphasizing the role of risk management in achieving superior investment outcomes. Their study aligns with the growing body of literature integrating behavioural finance with traditional financial theories, offering valuable insights for investors and policymakers in emerging markets.

Mioduchowska-Jaroszewicz (2023) investigated investment decisions based on the financial performance of related parties. This article aimed to identify and differentiate the financial outcomes of related parties (holding companies and corporate groups) presented in separate and consolidated financial statements. In the first phase of the research, six financial ratios were calculated based on 94 separate and consolidated financial statements from 2009 to 2019, focusing on the financial results of subsidiaries listed on the Warsaw Stock Exchange. In the second phase, descriptive statistical methods were employed for analysis. The third phase involved measuring correlations using Pearson's correlation coefficient, while the final phase utilized F-tests, Levene's test, Brown-Forsythe test, t-tests, and U-tests (independent variable tests). The research findings indicated that the null hypothesis was accurate at a 95% confidence level, suggesting that the financial performance of holding companies influences the financial performance of the group, while the financial results of subsidiaries positively affect the overall financial results of the group. This was confirmed by the synergistic effect that drives the formation of capital groups, providing opportunities for making sound investment decisions based on the financial outcomes of subsidiaries.

Olayinka et al. (2022) analyzed financial statements as tools for investment decision-making and evaluating corporate performance. The primary objective of this study was to determine how companies could utilize financial statement analysis and interpretation to inform investment decisions and prevent low profitability or poor investment returns. The annual reports of Nestlé Nigeria Plc were used to analyze and interpret financial ratios through descriptive statistical analytical tools. The study concluded that financial statement analysis is sufficient for effective decision-making, emphasizing that companies should pay close attention to employing financial statement analysis as a vital tool and utilize a combination of various ratios in assessing a company's financial performance. Proper financial statement analysis should not only be confined to investment but also extend to other decision-making areas.

Khatabi and Ghoroghi (2025) identified and ranked factors affecting the performance of investors in the Tehran Stock Exchange. This qualitative research utilized a questionnaire for data collection and employed multi-criteria decision-making techniques, focusing on practical applications. The statistical population consisted of active investors in the Tehran Stock Exchange, with a sample of 20 market experts selected through purposive sampling in 2021. The research data were analyzed using the DEMATEL and TOPSIS techniques. The findings revealed that, according to the DEMATEL technique, the risk of regulatory changes in the capital market, economic indicators, and financial literacy are influential criteria affecting investor performance. The ranking of sub-criteria based on influential factors indicated that a lack of concern and the investors' stress levels during trading, the returns of parallel markets, a lack of greed for profit, and trading based on fundamental analysis were ranked first to fourth in terms of their significance on investor performance.

Jahani et al. (2023) investigated the biases affecting investment decisions and prioritized identified issues from the perspective of experts using the DEMATEL and Analytic Hierarchy Process

(AHP). The objective of the current research was to analyze behavioural biases influencing investment decisions and to prioritize identified issues based on expert opinions using the DEMATEL and AHP methods. An exploratory approach was taken to achieve this goal, employing interviews and a grounded theory-based approach to select interviewees through snowball sampling. After conducting 19 interviews with stock market participants between 2018 and 2019, theoretical saturation was reached. Subsequently, the most influential causal factors, their impact levels, and the most prominent behavioural biases of individual investors in the Iranian stock market were determined. They ranked based on expert opinions using the DEMATEL and AHP methods. The content validity, construct validity, and Cronbach's alpha indicated a high level of reliability for the questionnaires. The results were analyzed using descriptive and inferential statistical methods, showing that all behavioural biases directly and significantly impact investors' decisions.

Rostami Jaz and Bahreman (2022) examined the relationship between investor behaviour and management investment decisions, considering management tenure and financial literacy. This research analyzed the impact of managerial characteristics on the relationship between investor behaviour and investment decisions of companies listed on the Tehran Stock Exchange. A total of 130 companies were studied over the period from 2011 to 2020. The required financial data were collected from financial statements and financial software, then summarized, categorized, and analyzed using multiple regression through Eviews software. The findings indicated a significant relationship between investor behaviour and management investment decisions. However, management tenure and financial literacy did not significantly affect the relationship between investor behaviour and management investment decisions.

Recent studies have also explored the role of automated tools in improving learning and decision-making. Karizaki et al. (2024) investigated the use of automated formative assessments to provide feedback on students' articulation of ideas, demonstrating its potential to enhance understanding and performance in complex domains such as finance.

Aflatoni and Amir Beigi Langarudi (2021) investigated the relationship between investment decisions and company performance, with cash flows acting as a moderating variable. A sample of 103 companies listed on the Tehran Stock Exchange was selected for this research. The study examined the relationship between investment decisions and company performance, considering the moderating role of cash flows in companies listed on the Tehran Stock Exchange from 2014 to 2019, with 618 observations available for analysis. The statistical method employed for this research was multivariate regression using panel data. The results indicated that investment decisions positively affect return on assets and Tobin's Q as indicators of company performance, while cash flows moderated and reduced the relationship between investment decisions and return on assets as well as Tobin's Q.

Gheisari et al. (2021) examined the role of investors' financial knowledge on financial behaviour in the Iranian capital market. Through snowball sampling, this research involved in-depth interviews with 20 professors from accounting, business management, and finance at universities across the country and senior managers and experts from the Tehran Stock Exchange. The findings indicated that investors' financial behaviour, as framed in this model, made their decision-making process in the capital market predictable. Applying behavioural characteristics and financial knowledge models among individual investors is crucial for understanding financial behaviour in the Iranian capital market.

4. Research Methodology

The methodology selected for this study is based on multiple criteria, focusing on the impact of financial behaviours on individual investment decisions, emphasizing risk perception. This research is classified as applied research according to the objective criterion, as survey research based on the timing of data collection, and as quantitative research based on the nature of the data and research basis.

The statistical population of this study includes investors of companies listed on the Tehran Stock Exchange. The sample size was determined using Morgan's table, resulting in 217 participants, with the sampling method being convenience sampling. The data collection tool in this study consisted of five standardized questionnaires: individual financial behaviour, individual overconfidence, individual risk perception, individual financial literacy, and individual investment decisions. The reliability of these instruments was confirmed using Cronbach's alpha, yielding values of 0.73 for individual financial behaviour, 0.75 for individual overconfidence, 0.74 for risk perception, 0.71 for individual financial literacy, and 0.77 for investment decisions. The software used for data analysis in this research is SPSS and AMOS. A path analysis model was employed to evaluate the study's conceptual model, assess the existence or absence of relationships between variables, and generalize the results from the sample to the statistical population.

This study employed several validated instruments to assess various financial behaviour and decision-making dimensions. Specifically, we utilized the five-item questionnaire on individual financial behaviour developed by Chandrawati et al. (2023). To measure individual overconfidence, we referred to the scale established by Adil et al. (2022). Individual risk perception was assessed using frameworks Oyekale (2022) and Putri Pa et al. (2022) proposed. Furthermore, we evaluated individual financial literacy employing the metrics outlined by Adil et al. (2022), and individual investment decisions were analyzed using the criteria set forth by Khawaja and Alharbi (2021).

5. Research Findings

This study aims to investigate the influence of financial behaviours on individual investment decisions, with a particular emphasis on risk perception. Understanding the impact of behavioural biases on investment decisions is crucial for investors, financial institutions, and policymakers to make informed choices and enhance market stability.

Figure 1 illustrates the output of the conceptual model as generated by AMOS software. This study explores the interconnectedness of individual financial behaviour, overconfidence, risk perception, financial literacy, and investment decisions. Each component is crucial in shaping an individual's financial choices and well-being. Understanding these relationships is essential for developing effective interventions and educational programs to improve financial literacy and decision-making among individuals.

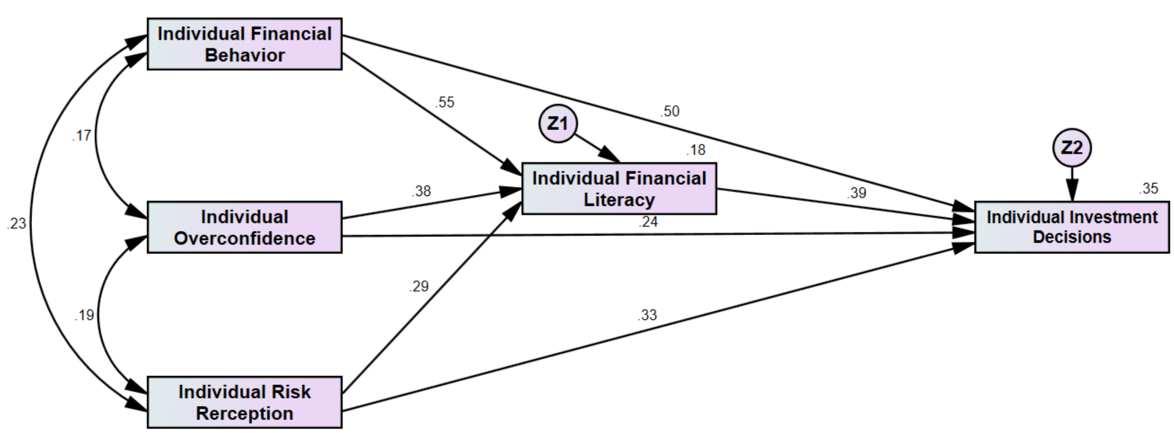

Figure 1. Research model

This study examines the influence of individual financial behaviour, overconfidence, and risk perception on investment decisions, focusing on the mediating role of financial literacy. As presented in Table 1, the results provide path coefficient and their corresponding significance levels, offering insights into the relationships between these variables.

Table 1. Standardized Regression Weights

Variables	Path Coefficient	P-Value
Impact of Individual Financial Behavior on Individual Investment Decisions	0.50	0.0001
Impact of Individual Overconfidence on Individual Investment Decisions	0.24	0.02
Impact of Individual Risk Perception on Individual Investment Decisions	0.33	0.01
Impact of Individual Financial Behavior on Individual Financial Literacy	0.55	0.0001
Impact of Individual Overconfidence on Individual Financial Literacy	0.38	0.003
Impact of Individual Risk Perception on Individual Financial Literacy	0.29	0.02
Impact of Individual Financial Literacy on Individual Investment Decisions	0.39	0.001

Table 2. Direct, Indirect, and Total Effects

Paths	Direct Effect	Indirect Effect	Total Effect
Impact of Individual Financial Behavior on Individual Investment Decisions	0.50	0.21	0.71
Impact of Individual Overconfidence on Individual Investment Decisions	0.24	0.15	0.39
Impact of Individual Risk Perception on Individual Investment Decisions	0.33	0.12	0.45

Table 3. Significance Levels of Direct, Indirect, and Total Effects

Paths	Direct Effect	Indirect Effect	Total Effect
Impact of Individual Financial Behavior on Individual Investment Decisions	0.0001	0.03	0.0001
Impact of Individual Overconfidence on Individual Investment Decisions	0.02	0.03	0.008
Impact of Individual Risk Perception on Individual Investment Decisions	0.01	0.04	0.0001

The following conclusions can be drawn based on the research model, path coefficients, and significance levels presented in Tables 1, 2, and 3.

Key Findings

- Individual Financial Behavior significantly directly and indirectly affects Individual Investment Decisions.
- Individual Overconfidence has a significant direct and indirect effect on Individual Investment Decisions.
- Individual Risk Perception significantly directly and indirectly affects Individual Investment Decisions.

Mediation Analysis

In SEM, mediation analysis involves two key concepts: direct and indirect effects. The following principles apply:

- If the direct effect of a variable on another is statistically significant but the indirect effect is not, mediation is not present.
- Full mediation is established if the direct effect is not statistically significant, but the indirect effect is.
- Partial mediation is established if the direct and indirect effects are statistically significant.

Interpretation of Results

Using the bootstrap method (resampling technique) and the principles of mediation analysis in SEM, the following conclusions can be drawn:

- The direct and indirect effects of Individual Financial Behavior, Individual Overconfidence, and Individual Risk Perception on Individual Investment Decisions are statistically significant.
- This confirms that Individual Financial Literacy plays a partial mediating role in the relationship between:
- Individual Financial Behavior and Individual Investment Decisions,
- Individual Overconfidence and Individual Investment Decisions,
- Individual Risk Perception and Individual Investment Decisions.

The findings indicate that Individual Financial Literacy partially mediates the influence of Individual Financial Behavior, Individual Overconfidence, and Individual Risk Perception on Individual Investment Decisions. This highlights the importance of financial literacy as a bridging factor between psychological and behavioural factors and investment outcomes. Enhancing financial literacy could mitigate the adverse effects of overconfidence and risk misperception, leading to more informed and effective investment decisions.

6. Conclusions and Recommendations

The findings of this study demonstrate that behavioural financial factors significantly influence investors' perceptions of risk associated with their investment decisions, which in turn affect their actual investment choices. The results indicate that the direct and indirect effects of Individual Financial Behavior, Individual Overconfidence, and Individual Risk Perception on Individual Investment Decisions are statistically significant. Furthermore, the mediating role of Individual Financial Literacy in the relationship between these variables has been confirmed. Specifically, Individual Financial Literacy partially mediates the influence of Individual Financial Behavior, Individual Overconfidence, and Individual Risk Perception on Individual Investment Decisions.

This study underscores the importance of considering an individual's risk perception when making investment decisions, as it can significantly influence their risk tolerance and, ultimately, the performance of their investment portfolio. Additionally, investors must be aware of their behavioural biases and take steps to mitigate their impact on investment decision-making.

By exploring the psychological factors influencing risk perception and investment decisions, this research provides valuable insights into the complexities of financial behaviour. It offers implications for both theoretical understanding and managerial practices. The findings emphasize the multifaceted nature of financial decision-making. This study advances theoretical behavioural finance and decision-making models by elucidating the psychological mechanisms driving risk perception and investment decisions. From a managerial perspective, the findings offer valuable insights for financial advisors, wealth managers, and policymakers tasked with guiding individuals' financial decisions. Researchers and practitioners can develop more comprehensive approaches to understanding and managing financial decision-making processes, ultimately leading to better outcomes for individuals and society.

Based on the findings of this study, several recommendations are proposed for future research in the fields of behavioural finance and investment decision-making:

Explore Additional Behavioral Financial Factors: Future studies could investigate the impact of other behavioural financial factors on risk perception and investment decision-making. Many behavioural factors may influence these variables, and future research could examine their effects.

Cultural Differences: Future research could explore the influence of cultural differences on the relationship between behavioural financial factors, risk perception, and investment decision-making. Cross-cultural comparisons could provide deeper insights into these dynamics.

Types of Investments: Future studies could examine the impact of different types of investments (e.g., real estate, commodities) on the relationship between behavioural financial factors, risk perception, and investment decision-making. Different investment types may exhibit unique relationships with these factors.

Entrepreneurial Spirit and Risk: Future research could investigate the potential role of entrepreneurial spirit concerning risk factors. This aspect should be further explored within the context of traditional and modern financial theories to gain a deeper understanding of the relationship between entrepreneurship and risk in financial markets (Gudarzi Farahani et al., 2026).

Financial Education and Literacy: Future studies could examine the impact of financial education and literacy on the relationship between behavioural financial factors, risk perception, and investment decision-making. Individuals with higher financial education and literacy may be less susceptible to behavioural biases. Comparative analyses across individuals with varying financial education and literacy levels could clarify how much knowledge and financial literacy influence these relationships.

Designing Effective Interventions: Understanding how individuals with different levels of financial education navigate behavioural biases can provide valuable insights for developing effective educational programs and interventions to improve decision-making abilities and enhance overall financial well-being.

By addressing these research gaps, future studies can provide a more comprehensive understanding of the factors influencing risk perception and investment decision-making, ultimately contributing to developing more effective investment strategies and policies. Recent advancements in computational methods, such as the Subgraph2vec algorithm proposed by Bozorgi et al. (2024), highlight the potential of embedding techniques in knowledge graph representation, which could further enhance our understanding of complex financial behaviours and decision-making processes. Future studies could also explore interdisciplinary connections between financial decision-making and other domains, such as sustainable supply chain management. For instance, under uncertainty, Salamian et al. (2025) developed an integrated multi-product biodiesel and bioethanol supply chain model, highlighting the importance of considering environmental and operational risks in strategic planning. Such perspectives could enrich our understanding of how external uncertainties and systemic risks influence individual and organizational investment decisions.

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