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Influence of Financial Risk Tolerance on Investment Decision-making: A Conceptual Analysis and Future Research Agenda

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Abstract:

Although extensive research has been conducted on financial risk tolerance and investment decision-making, there is a lack of consensus in the literature regarding the conceptualization of the role of financial risk tolerance in investment decision-making. This inconsistency underscores the need for a conceptual study that elucidates these concepts to make future research consistent and applicable. Therefore, this study sought to fill this gap by conceptually analyzing the influence of financial risk tolerance on investment decision-making. Specifically, the paper explored the determinants of financial risk tolerance, such as personality type, sensation seeking, and self-efficacy. Through a conceptual model, we proposed that sub-variables of financial risk tolerance —personality type, sensation seeking, and self-efficacy—positively influence investment decision-making. The study recommended that financial risk tolerance assessment should precede investment decisions to reduce an individual's vulnerability to making suboptimal investment decisions that may lead to financial loss.

Keywords:

Financial Risk Tolerance, Investment Decision-Making, Personality Type, Sensation Seeking, Self-Efficacy.

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Introduction

The significant developments witnessed by the financial sector have impacted the global retail investor population. However, many of these investors struggle to make sound investment decisions (Baser, 2024; Mohta & Shunmugasundaram, 2024). This issue is not limited to a particular region but has global implications. The consequences of these unsound decisions extend to the financial resources of retail investors, affecting their financial well-being (Oteng, 2019). Generally, retail investment decision-making is conceptualized as any investment activity in which individuals trade securities in relatively small transactions.

Mounting evidence demonstrates that many retail investors incur financial losses due to unsound investment decisions (Basu & Dulleck, 2020; Shahani & Ahmed, 2022). For instance, the reckless investment decisions of retail investors in big financial advisory organizations in Australia resulted in 3000-4000 investors losing $3 billion in investments (Healy, 2019; Paterson, 2021; West, 2023). Most of these investors most likely failed to assess their risk tolerance and were willing to accept levels of risk beyond their capacity to bear, so they faced significant personal financial loss. A similar scenario unfolded in Kenya where 78,000 investors in the "Ekeza Sacco" investment scheme lost Sh2.4 billion ($13.5 million) (Wanjala & Riitho, 2020).

Conversely, a lot of retail investors in Ghana have also suffered financial losses from suboptimal investment decisions involving fraudulent investment schemes (Mohammed, 2021). Most likely, these investors did not comprehend the risk of various investment options, leading to a loss of funds (Nkukpornu et al., 2020). According to Asravor and Acheampong (2021), as well as Owusu and Laryea (2023), Ghanaian retail investors face suboptimal investment decisions stemming from high-risk tolerance for risky investments. The task of assessing individual risk tolerance is crucial during the advisory process to provide valuable guidance to clients (Mueller et al., 2021; Rahman, 2019; Singh & Saxena, 2022). However, the failure to properly assess risk tolerance has resulted in costly consequences, with myriad retail investors suffering financial losses due to advisors prioritizing their interests over those of their clients (Aharon, 2023).

Additionally, individuals who do not seek professional financial advice often rely on heuristics rather than assessing their risk tolerance level, resulting in unsound investment decisions (Ahmed et al., 2021; Weixiang et al., 2022). By emphasizing the importance of risk tolerance assessments, investors are empowered to make more informed decisions.

This study addresses a need for a conceptual study by advancing beyond previous studies that have only focused on demographic factors as measures for financial risk tolerance (Bayar et al., 2020). While demographic factors provide some insights, they do not capture the psychosocial factors influencing investment decisions. The absence of a conceptual framework linking psychosocial factors as measures for financial risk tolerance to investment decision-making creates a gap in the literature that this study seeks to fill.

Underlying Theories of Investment Decision-making

Prospect Theory

Kahneman and Tversky (1979) pioneered the prospect theory as an alternative to traditional economic models, providing a more accurate description of how people make decisions. Prospect theory argues that people avoid risk when dealing with gains but seek risk when faced with losses, a concept known as loss aversion. This theory predicts that individuals are more likely to choose options that offer potential gains over those that involve potential losses, even if the outcomes are objectively the same. Prospect theory introduces principles such as loss aversion, which suggests that individuals feel more distress from losses than the pleasure derived from equivalent gains.

Additionally, it examines framing effects, illustrating how different presentations of the same situation can lead to varied decisions and other biases that impact investor behavior. Prospect theory also includes concepts such as mental accounting, and self-control, which explain decision-making behaviors in various contexts. An understanding of prospect theory can guide portfolio construction by considering investors' risk preferences and attitudes toward gains and losses.

Portfolios can be structured to mitigate the negative impact of loss aversion by incorporating assets with asymmetric risk-return profiles or using strategies that systematically rebalance based on predetermined rules rather than emotional responses to market fluctuations. Prospect theory emphasizes the importance of understanding investor psychology and cognitive biases in investment decision-making. By recognizing and accounting for these biases, investors can make more informed decisions and create portfolios that match with their goals and risk tolerance.

Behavioral Finance Theory

The pioneering work in behavioral finance is attributed to Tversky and Kahneman (1973) who developed prospect theory and the heuristic approach. Traditional finance investors are logical and base their choices on all available data to maximize utility. Nevertheless, behavioral finance recognizes that human behavior is frequently influenced by emotions, heuristics, and cognitive errors, causing deviations from rational decision-making. The theory of behavioral finance challenges the notion of individuals always acting rationally. Its primary objective is to shed light on the way individuals make financial choices and act during the process (Nofsinger, 2017).

Psychologists have convincingly argued that the belief in people's inherent rationality is a myth, as they often exhibit irrational behavior and make consistent errors in prediction. This understanding is a significant step towards enlightening the financial world about the true nature of decision-making. Behavioral finance assists investors and financial professionals in comprehending how emotions and cognitive errors can result in irrational decision-making. By understanding these biases, investors can better control their emotions and make more objective decisions. Recognizing that investors are not always rational decision-makers, this has gained traction in recent years in investment decision-making.

Moreover, investors can improve their decision-making processes and achieve superior long-term financial results by recognizing and accounting for behavioral inconsistencies. By incorporating behavioral finance principles, investors can make better investment decisions. This includes strategies to avoid impulsive trading, mitigate the impact of emotional biases, and maintain a disciplined approach to portfolio management. Financial advisors can use insights from behavioral finance to understand their clients' behavioral biases and tailor their advice accordingly. Effective communication strategies can help clients make more informed and rational financial decisions, improving overall financial results.

The Concept of Investment Decision-making

Schwenk (1984) asserts that decision-making is a human cognitive process that leads to a course of action among alternatives. Building upon this foundation, various scholars have widely defined the concept from different perspectives, broadening the understanding of investment decision-making. For example, according to Júnior et al. (2023), investment decision-making involves investors committing funds to several options to earn the highest possible returns. Moreover, it is the process of analyzing investment alternatives with the solid intent to bring measurable social and financial benefits (Agrawal & Hockerts, 2021). Meanwhile, current studies on investment decision making converge on the same definition (e.g., Agrawal & Jespersen, 2023; Cohen, 2022; Dorfleitner et al., 2023), emphasizing the allocation of financial resources to maximize returns while considering factors such as risk and behavioral biases. Schoenmaker and Schramade (2019) argue that investment decisions primarily focus on maximizing returns, emphasizing performance as a key objective.

In contrast, Fender et al. (2019) introduce a broader perspective and emphasize the importance of considering long-term risks in addition to returns. This view highlights the importance of risk management in investment strategies and underscores the need to adopt a balanced approach. Raut (2020), on the other hand, proposes a rationalist perspective, emphasizing that investment decision-making follows a rational process. It consistently applies decision rules to various investment situations, taking advantage of the empirically determined quantitative relationship between market forces and security performance (Grim & Berkowitz, 2020; In et al., 2019). Meanwhile, Quaicoe and Eleke-Aboagye (2021) introduce a behavioral concept, maintaining that behavioral factors drive investment decisions in

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a Ghanaian context. Consequently, as Raut (2020) suggests, investors do not always make logical judgments.

Given the above perspectives, investment decision-making, from the viewpoint of Agrawal and Hockerts (2021), was related to impact investment. Meanwhile, not all investors are concerned about investing funds into projects to benefit from social goals. Others are strictly concerned about the financial goals. In addition, the perspectives apply to estimating risk and return of various asset classes and a systematic process focused on fundamental analysis.

The Concept of Financial Risk Tolerance

The idea that uncertainty is connected to outcome probabilities has existed for more than 700 years. However, the first real breakthrough in risk theory came in 1739, when Daniel Bernoulli applied his statistical expertise to discover a crucial link between risk-taking and income. He concluded that when people are involved in dangerous activities, they would instead take less of a chance and demand higher potential rewards. Financial risk tolerance arises due to risk and uncertainty (Ainia & Lutfi, 2019; Wang et al., 2019).

Financial risk tolerance and its definitions are widely discussed in the literature. For example, Singh et al. (2022) maintain that the concept describes a person's attitude towards risk and the willingness to accept more risk for a higher return. However, Gemici et al. (2023) contend that the concept denotes a higher magnitude of uncertainty, including the possibility of a loss a person is ready to endure. Ferreira-Schenk and Dickason-Koekemoer (2023) argue that age, income, personality, and financial goals influence risk tolerance levels. Moreover, as a phenomenon, Noviarini et al. (2021) view it as the level of anxiety individuals feel when the value of their investments fluctuates, influenced by factors like expertise and risk aversion. Rahman et al. (2021) consider it a subjective measure of willingness to take financial risks, influenced by income, financial obligations, and overall financial situation. Scholars also debate the effect of financial risk tolerance on investors. Cordasco and Cowen (2023) suggest that higher risk tolerance can lead to positive outcomes such as higher returns and wealth accumulation. Heo et al. (2021) argue that risk tolerance may not pay off during low consumption periods. Hemrajani and Sharma (2020) note that assessing risk tolerance is crucial, and various techniques have been developed by economists, psychologists, and decision scientists. Weber (2022) observes that these assessment methods vary depending on the assessor's background.

Studies have measured financial risk tolerance using different approaches. Bayar et al. (2020) focused on financial literacy and demographic factors, while Rahman et al. (2021) considered core behavioral traits like regret and happiness propensity. Muktadir-Al-Mukit (2022) examined sociodemographic factors like marital status and family size. Gemici et al. (2023) emphasise bio-psychosocial indicators such as personality type, sensation seeking, and self-efficacy as determinants of financial risk tolerance (e.g., Bunyamin & Wahab, 2022; Grable et al., 2022; Naqvi et al., 2020a; Oztop & Ezgi, 2020).

Personality Type

Personality traits are distinctive characteristics that describe how individuals think, feel, and act (Bergner, 2020; Sachitra, 2024). As Fajkowska (2023) indicated, these characteristics are enduring patterns of thought, emotion, and behavior that are particular to each person and influence how they react in different contexts. Meanwhile, Magaldi and Berler (2020) contend that Wood's ideas on thoughts and feelings characterizing personality traits are complete once they are valid in time and various contexts. Rashid and Boussabiane (2021) have connected personality traits with cognitive, emotional, and behavioral tendencies that are impacted by a mix of genetic and environmental factors and positively impact personality.

Different scholars propose different dimensions to the measurement of personality traits. For example, Tsuji et al. (1997) proposed the 5-Factor Model (FFM) where personality is composed of five super-trait factors. This theory interprets five super-trait factors: introversion versus extraversion, separateness versus attachment, naturality versus controlling, un-emotionality versus emotionality, and practicality versus playfulness.

Many recognize the Myers-Briggs Type Indicator (MBTI) as a tool for evaluating unique personality traits. These indicators divide people into sixteen different personality types. The MBTI is founded on Carl Jung's discovery that an individual's personality type affects their perception of and interactions with the outside world. The MBTI questionnaire measures four preferences: (i) Extraversion versus introversion as the preferred direction of attention, (ii) Sensing versus intuition as the method of gathering information about the environment, (iii) Thinking versus feeling as the method of decision-making (iii) Judging versus perception as the method of orienting oneself in the environment.

The distinction between Type A and Type B personalities was first made in the work of Friedman and Rosenman (1977), who described Type A personalities as action-emotion complexes seen in individuals actively involved in a persistent and ongoing fight to do more tasks in less time. The personalities of types A and B contrast with one another. People with type A personalities are competitive, aggressive, and irritable with themselves and others; they set standards and are under constant time constraints. On the other hand, people with type B personalities have a laid-back attitude, are rarely under time pressure, and are reluctant to take aggressive action.

The Big Five, a collection of five personality variables, is the most used taxonomy for studying personality traits (Goldberg, 1990; McCrae & Costa, 2004). Extraversion is the first of these five personality traits. An enthusiastic attitude toward various circumstances and individuals is characterized

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as extraversion. Good disposition, cooperation, and trust are characteristics of the second dimension, agreeableness. Anxiety, uncertainty, and vulnerability are traits of neuroticism. Being conscientious entails being exact, organized, accountable, and persistent. People who tend to pay attention to their emotions and value other people's suggestions are said to be open to new experiences. Lastly, because they have a positive outlook on others and get along with them, agreeableness is a characteristic of people who cooperate with others. This conceptual study concentrated on Type A vs Type B personalities, as Friedman and Rosenman (1977) first put out considering the abovementioned personality assessments.

Sensation Seeking

Sensation-seeking represents a personality disposition critical to investment decision-making (Sekścińska et al., 2021). Over the years, the concept has widely been described as a bio-psychosocial indicator (Naqvi et al., 2020b) that affects retail investors' risk tolerance and, hence, their investment decisions. Acevedo et al. (2023) claim that the need for a variety of unique, complex, intense, and fresh sensations and experiences, as well as the readiness to incur risks physically to pursue these experiences, account for sensation seeking. According to Ngcamu et al. (2023), sensation seeking is a personality characteristic in which people's thresholds for various sensations differ. As a result, it is defined by how much novelty a person craves and how much sensory stimulation they receive. To Ahmad (2020), those who possess this quality also tend to make riskier financial choices. Furthermore, Park and Stangl (2020) maintain that scores of sensation-seeking reveal that it is higher among males than females. As a result, men have a higher tolerance for risky investment activities. Breivik et al. (2020) observe that sensation-seeking people devise new ways of experiencing adventure. In financial terms, they are willing to engage in risky investments, even when they are aware of the negative outcomes. However, these risky engagements sometimes result in a positive gain leading to financial satisfaction (Naqvi et al., 2020b). To this end, the study defined sensation-seeking as seeking varied, complex, novel, and intense experiences. The description by Acevedo et al. (2023) was more compatible with the studies as it highlighted the main elements of sensation-seeking, which are relevant to this study.

Self-Efficacy

Self-efficacy is an important personality trait recognized as multidimensional (Acosta-Gonzaga, 2023). Shimizu et al. (2023) describe the concept as a positive or negative attitude toward oneself. Therefore, having confidence in oneself is to have the required capabilities to achieve some goals. Moreover, the concept has been described as a primarily stable trait that develops over time and a fluid state that can be temporarily altered (De Ruiter, 2023). Recent research has emphasized the relevance of self-efficacy in making investment decisions. For example, a high level of self-efficacy drives investors' confidence in their investment decisions, which leads to the assumption of risks that may generate high returns

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(Orth & Robins, 2022; Phung et al., 2022; Sharma et al., 2022). Investors with a high sense of self-worth are less likely to give up readily, even when faced with adversity (Park et al., 2022). As a result of their performance being in line with their self-perceived image, they are probably greater achievers in all endeavors than individuals with lower self-efficacy. Ultimately, they maintain their course during volatile market conditions (Sharma & Kumar, 2019).

The position of Ahmad et al. (2021) is that, individuals with high self-efficacy have a distinct vision of their goals. This clarity may help them maintain their investment objectives. Moreover, they assume a positive outlook, which can translate to an optimistic outlook on investments (Kasoga & Tegambwage, 2022). In contrast, Sekścińska et al. (2021) argue that a high level of self-efficacy can result in overconfidence in one's investment decisions, which may lead to taking on too much risk or failing to assess potential hazards accurately. Furthermore, Nguyen et al. (2023) and Nam (2022) explain that people who exhibit more of this trait are unlikely to seek or accept the advice of financial experts or peers, which may result in poor investment decisions.

Self-efficacy can also result in confirmation bias (Peters, 2022) in which people only pursue news that supports their beliefs and ignore the news that challenges them. According to Ahmad (2022), retail investors with high self-efficacy are more prone to making investment decisions using emotions instead of rational analysis, often leading to poor outcomes.

Role of Financial Risk Tolerance in Investment Decision-making

The role of financial risk tolerance in investment decision-making can be explained through various psychological and behavioral factors, including personality type, sensation seeking and self-efficacy.

Personality Type and Investment Decision-making

Naqvi et al. (2020a) investigated the influence of biopsychosocial indicators of financial risk tolerance on investment decisions. The findings show that personality type significantly affects investment decisions. The findings prove that investors with personality Type A are likelier to have a high financial risk tolerance than those with personality Type B. Therefore, individuals with Type A personalities tend to take financial risks to attain better financial success and enjoy social recognition, which is the byproduct of such success. In addition, the high-risk-taking ability of Type A individuals is also attributed to the substantial income they possess compared to individuals with Type B. Hence, their risk tolerance is higher than Type B individuals.

Aren and Hamamci (2020) further examined this relationship discovering that individuals with high levels of agreeableness tend to make less risky investment decisions. In contrast, those with high levels of conscientiousness are more likely to take risks. Additionally, Sadiq and Khan (2019) highlighted the importance of personality traits in investment intentions. The study's findings disclosed that understanding ones' personality traits can lead to better investment choices. The findings suggest that designing financial education programs and investment strategies must hinge on personality traits of individuals. Moreover, investment managers could consider their clients' personality traits and financial risk behavior when providing investment advice and making investment decisions on their behalf, leading to more successful investment outcomes. Therefore, we posit the proposition below:

P1: Personality type has a significant positive relationship with investment decision-making.

Sensation Seeking and Investment Decision-making

The sensation seeking behavior of investors leads them to engage in risky investment and make poor investment decisions. As a result, their risk tolerance level is greater than those of investors who do not exhibit sensation seeking behavior. Thanki et al. (2020) extended the study beyond psychosocial indicators of financial risk tolerance by examining sensation-seeking behavior's impact on investment decision-making. The study's findings suggest that sensation seeking investors tend to invest more in risky investment options, leading to potentially higher returns and greater losses. They experience the fear of loss or happiness of gain depending upon whether or not the investments perform well. Therefore, individuals are advised to consider their risk tolerance level when making investment decisions.

Additionally, seeking advice from a financial expert is recommended to ensure a well-rounded and informed approach to investment decision-making. Ayaa and Peprah (2022) explored gender difference in investment decision-making noting that Ghanaian female employees, despite being aware of the potential negative outcomes, are less inclined towards risky adventures when deciding to invest. This lack of confidence in taking the initiative for investment decisions underscores the need for a more comprehensive understanding of the psychological factors influencing investment decisions. Meanwhile, men are more prone to risky adventures when deciding to invest. Further, findings from recent studies (e.g., Hillenbrand et al., 2020; Sekścińska et al., 2021; Rahies et al., 2022) confirm that sensation-seeking has a positive significant relationship with investment decision-making. On the basis of the above, we therefore posit the proposition below:

P2: Sensation seeking has a positive significant relationship with investment decision-making.

Self-Efficacy and Investment Decision-making

Nguyen et al.'s (2019) study on the influence of biopsychosocial indicators of financial risk tolerance on investment decisions disclosed that individuals with higher self-esteem tend to make investment decisions in two stages: evaluating potential outcomes and assessing whether their knowledge management regarding the decision was efficient and effective or not. Investors with higher self-esteem know when and where to invest and understand the market's volatility. As a result, the higher the self-

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esteem, the higher the confidence necessary for effective investment decisions and risk tolerance. Osakwe et al. (2022) found that high self-efficacy is related to the investor's willingness to invest in cryptocurrency and skepticism.

According to Ayaa and Peprah (2022), women express emotions when investing in a financial product. Therefore, they lack the confidence to take the initiative regarding investment decisions. The findings further prove that women are more risk-averse than men, leading them to choose more conservative instruments for investment decision-making. Muslichah et al. (2023) examined the relationship between financial self-efficacy and investment decisions. The findings reveal that financial self-efficacy was significantly and positively associated with investment decision-making. The findings further prove that those with higher financial self-efficacy have persistent high expectations for their investment outcomes. Selling the winning investments rather than the losing one's is more likely to meet their high investment outcome expectations, resulting in higher disposition levels in their investment decision-making. Therefore, we posit the proposition below:

P3: Self-efficacy has a positive and significant relationship with investment decision-making.

Conceptual Framework

Below is the conceptual framework of the Study:

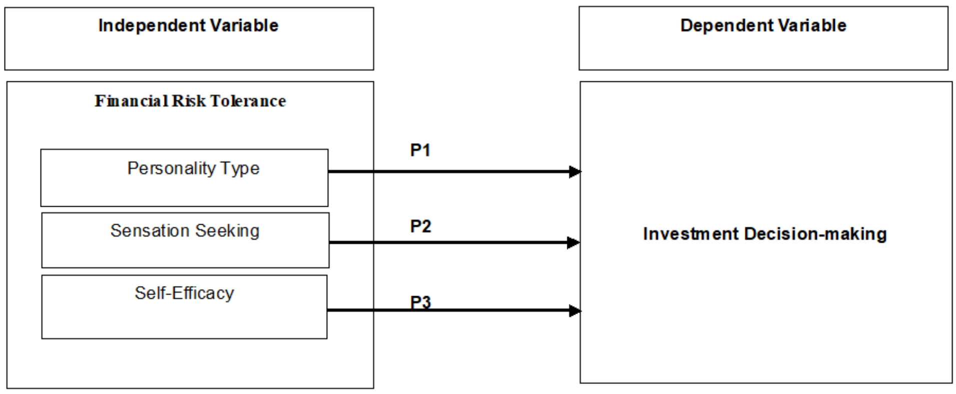

Figure 1: Influence of financial Risk Tolerance on Investment Decision-making
(Source: Authors' compilation)

The framework indicates that each of the sub-variables of financial risk tolerance has a significant and positive relationship on investment decision-making.

Conclusion and Recommendation

This study contributes to the understanding of financial risk tolerance and investment decision-making in three main ways. First, the study examines psychological and behavioral factors influencing financial risk tolerance such as personality type, sensation seeking, and self-efficacy. By incorporating these factors into the conceptual analysis, the study improves understanding of how these individual traits shape investment decisions. For example, it explains how Type A personalities, who are competitive and aggressive, are more likely to engage in high-risk investments such as leveraged ETFs or cryptocurrency than Type B personalities, who are more relaxed and risk-averse and may prefer low-risk investments like bonds or index funds. This analysis enables a fine-grained understanding of the various dimensions of risk tolerance and their interplay in influencing investment behavior. It emphasizes the importance of considering individual psychological profiles when developing tailored investment strategies, thereby increasing the likelihood of achieving better financial results.

Second, this study broadens our understanding of financial risk tolerance by presenting empirical evidence from diverse geographical and socio-economic contexts. It examines cases such as suboptimal investment decisions of retail investors in Australia, Kenya and Ghana, underscoring the significance of financial risk tolerance assessment in making investment decision. This cross-contextual analysis demonstrates that financial risk tolerance is influenced by local factors such as cultural risk attitudes, economic conditions, and the prevalence of financial fraud. This evidence provides a framework for developing region-specific financial education and advisory programs that cater to the unique characteristics of local investors.

Third, this study integrates theoretical perspectives, including the prospect theory and behavioral finance theory, to explain the impact of financial risk tolerance on investment decision-making. With its concepts of loss aversion and framing effects, prospect theory explains why individuals may avoid risks associated with gains, but seek risks to avoid losses. Behavioral finance theory clarifies how cognitive biases and emotions can lead to irrational investment decisions. By combining these theories, the study offers a framework that explains both rational and irrational investor behavior. This theoretical integration has direct implications for financial advisors and individual investors. For instance, advisors can use these theories to identify cognitive biases in their clients and develop strategies to reduce their effect, such as using systematic balancing rules to avoid emotional trading decisions. Awareness of these theories can foster more rational decision-making for individual investors, leading to better investment results. This dual theoretical insight and practical application approach significantly enhance our understanding of how financial risk tolerance affects investment decisions.

Further, in recognition that investors are sometimes non-rational decision-makers, investors can improve their decision-making and obtain superior long-term financial results by identifying and accounting for behavioral inconsistencies. Investors can make improved decisions on investments by including ideas from behavioral finance. This involves avoiding impulsive trading strategies, moderating the effects of emotional biases, and sticking to set operating procedures in portfolio management. Financial advisors are encouraged to employ the knowledge of behavior biases obtained from behavioral finance to personalize their advice according to those biases. More so, effective communication techniques can enable clients to make more informed and rational economic decisions.

It is recommended that future research should:

- Investigate the interplay between psychological traits and financial risk tolerance, focusing on self-efficacy sensation-seeking behavior and various personality types.
- Examine how these psychological traits influence risk attitudes and decision-making processes among investors.
- Analyze the direct impact of self-efficacy, sensation-seeking, and specific personality types on risk preferences asset allocation choices and reactions to market fluctuations
- Explore behavioral drivers of investment behavior to enhance understanding of investor decision-making.
- Consider the practical applications of these findings in developing tailored investment strategies, as well as effective risk management approaches tailored to specific psychological profiles

References

Acevedo, B. P., Aron, E. N., Aron, A., Cooper, T., & Marhenke, R. (2023). Sensory processing sensitivity and its relation to sensation seeking. Current Research in Behavioral Sciences, 4, 100100. https://doi.org/10.1016/j.crbeha.2023.100100

Acosta-Gonzaga, E. (2023). The effects of self-esteem and academic engagement on university students' performance. Behavioral Sciences, 13(4), 348. https://doi.org/10.3390/bs13040348

Agrawal, A., & Hockerts, K. (2021). Impact investing: A review and research agenda. Journal of Small Business & Entrepreneurship, 33(2), 153-181.https://doi.org/10.1080/08276331.2018.1551457

Agrawal, A., & Jespersen, K. (2023). How do impact investors evaluate an investee social enterprise? A framework of impact investing process. Journal of Entrepreneurship in Emerging Economies. https://doi.org/10.1108/JEEE-04-2022-0129

Aharon, D. B. (2023). Transparency and information asymmetry in financial markets: A critical perspective. Brill Research Perspectives in International Banking and Securities Law, 4(4), 1-65.

Ahmad, F. (2020). Personality traits as predictor of cognitive biases: Moderating role of risk-attitude. Qualitative Research in Financial Markets, 12(4), 465-484. https://doi.org/10.1108/QRFM-10-2019-0123

Ahmad, F., Oriani, R., & De Angelis, M. (2021). Investor's intrinsic motives and the valence of word-of-mouth in sequential decision-making. Journal of Behavioral Finance, 22(2), 170-188. https://doi.org/10.1080/15427560.2020.1751630

Ahmad, M. (2022). The role of cognitive heuristic-driven biases in investment management activities and market efficiency: A research synthesis. International Journal of Emerging Markets, (ahead-of-print). https://doi.org/10.1108/IJOEM-07-2020-0749

Ahmed, Z., Noreen, U., Ramakrishnan, S. A., & Abdullah, D. F. B. (2021). What explains the investment decision-making behaviour? The role of financial literacy and financial risk tolerance. Afro-Asian Journal of Finance and Accounting, 11(1), 1-19. https://doi.org/10.1504/AAJFA.2021.111814

Ainia, N. S. N., & Lutfi, L. (2019). The influence of risk perception, risk tolerance, overconfidence, and loss aversion towards investment decision making. Journal of Economics, Business, & Accountancy Ventura, 21(3), 401-413. https://doi.org/10.14414/jebav.v21i3.1663

Aren, S., & Hamamci, H. N. (2020). Relationship between risk aversion, risky investment intention, investment choices: Impact of personality traits and emotion. Kybernetes, 49(11), 2651-2682. https://doi.org/10.1108/K-07-2019-0455

Asravor, R. K., & Acheampong, V. (2021). Factors influencing risk attitudes of entrepreneurs in Ghana: the role of gender. Journal of Small Business & Entrepreneurship, 1-24. https://doi.org/10.1080/08276331.2021.1980838

Ayaa, M. M., Peprah, W. K., Mensah, M. O., Owusu-Sekyere, A. B., & Daniel, B. (2022). Influence of heuristic techniques and biases in investment decision-making: A conceptual analysis and directions for future research. International Journal of Academic Research in Business and Social Sciences, 12(5), 1252 – 1267. http://dx.doi.org/10.6007/IJARBSS/v12-i5/13339

Baser, D. (2024). A study of behavioral finance in investment decisions. Available at SSRN 4686732. https://dx.doi.org/10.2139/ssrn.4686732

Basu, A. K., & Dulleck, U. (2020). Why do (some) consumers purchase complex financial products? An experimental study on investment in hybrid securities. Economic Analysis and Policy, 67, 203-220. https://doi.org/10.1016/j.eap.2020.07.005

Bayar, Y., Sezgin, H. F., Öztürk, Ö. F., & Şaşmaz, M. Ü. (2020). Financial literacy and financial risk tolerance of individual investors: Multinomial logistic regression approach. Sage Open, 10(3), 2158244020945717. https://doi.org/10.1177/2158244020945717

Bergner, R. M. (2020). What is personality? Two myths and a definition. New Ideas in Psychology, 57, 100759. https://doi.org/10.1016/j.newideapsych.2019.100759

Breivik, G., Sand, T. S., & Sookermany, A. M. (2020). Risk-taking attitudes and behaviors in the Norwegian population: The influence of personality and background factors. Journal of Risk Research, 23(11), 1504-1523. https://doi.org/10.1080/13669877.2020.1750455

Bunyamin, M., & Wahab, N. A. (2022). The Influence of financial behaviour on financial risk tolerance in investment decision: A conceptual paper. International Journal of Industrial Management, 14(1), 529-542. https://doi.org/10.15282/ijim.14.1.2022.7435

Cohen, G. (2022). Artificial intelligence in trading in the financial markets. International Journal of Economics & Business Administration (IJEBA), 10(1), 101-110.

Cordasco, C. L., & Cowen, N. (2023). Market participation, self-respect, and risk tolerance. Journal of Business Ethics, 1-12. https://doi.org/10.1007/s10551-023-05396-y

De Ruiter, N. M. (2023). Practices in state self-esteem research: An analysis of enacted ontologies. Identity, 23(1), 67-90. https://doi.org/10.1080/15283488.2022.2130323

Dorfleitner, G., Pons, D., & Renier, N. (2023). An investor's perspective on measuring and managing social performance and impact. In Handbook of Microfinance, Financial Inclusion and Development (pp. 248-270). Edward Elgar Publishing

Fajkowska, M. (2023). Personality coherence as a personality dynamics-related concept. Journal of Personality, 91(4), 1012-1034. https://doi.org/10.1111/jopy.12717

Fender, I., McMorrow, M., Sahakyan, V., & Zulaica, O. (2019). Green bonds: The reserve management perspective. BIS Quarterly Review, September.

Ferreira-Schenk, S., & Dickason-Koekemoer, Z. (2023). Analysing the factors affecting the long-term investment intention of investors. International Journal of Economics and Financial Issues, 13(1), 112. https://doi.org/10.32479/ijefi.13640

Friedman, M., & Rosenman, R. H. (1977). The key cause: Type A behavior pattern. Stress and coping, 203-212.

Gemici, E., Gök, R., & Bouri, E. (2023). Predictability of risk appetite in Turkey: Local versus global factors. Emerging Markets Review, 55, 101018. https://doi.org/10.1016/j.ememar.2023.101018

Goldberg, L. R. (1990). An alternative "description of personality": The big-five factor structure. J. Pers. Soc. Psychol. 59 (6), 1216–1229.

Grable, J., Kwak, E. J., Fulk, M., & Routh, A. (2022). A simplified measure of investor risk aversion. Journal of Interdisciplinary Economics, 34(1), 7-34. https://doi.org/10.1177/0260107920924518

Grim, D. M., & Berkowitz, D. B. (2020). ESG, SRI, and impact investing: A primer for decision-making. The Journal of Impact and ESG Investing, 1(1), 47-65.

Healy, J. (2019). Breaking the banks: What went wrong with Australian banking? Simon and Schuster.

Hemrajani, P., & Sharma, S. K. (2020). Measuring financial risk tolerance: The role of socio-demographic factors under the influence of attitude towards money. IUP Journal of Applied Finance, 26(1), 31-52.

Heo, W., Grable, J. E., & Rabbani, A. G. (2021). A test of the association between the initial surge in COVID-19 cases and subsequent changes in financial risk tolerance. Review of Behavioral Finance, 13(1), 3-19. https://doi.org/10.1108/RBF-06-2020-0121

Hillenbrand, C., Saraeva, A., Money, K., & Brooks, C. (2020). To invest or not to invest? The roles of product information, attitudes towards finance and life variables in retail investor propensity to engage with financial products. British Journal of Management, 31(4), 688-708. https://doi.org/10.1111/1467-8551.12348

In, S. Y., Rook, D., & Monk, A. (2019). Integrating alternative data (also known as ESG data) in investment decision making. Global Economic Review, 48(3), 237-260. https://doi.org/10.1080/1226508X.2019.1643059

Júnior, A. C. P., da Silva, H. L., Bortoletto, W. W., & de Arruda Ignacio, P. S. (2023). Financial and environmental efficiency of CDM projects: Analysis and classification for investment decisions. Managerial and Decision Economics, 44(2), 926-941. https://doi.org/10.1002/mde.3722

Kahneman, D., & Tversky, D. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47(2), 263-292.

Kasoga, P. S., & Tegambwage, A. G. (2022). Psychological traits and investment decisions: The mediation mechanism of financial management behavior–evidence from the Tanzanian stock market. Journal of Money and Business, (ahead-of-print). https://doi.org/10.1108/JMB-05-2022-0028

Magaldi, D., & Berler, M. (2020). Semi-structured interviews. Encyclopedia of Personality and Individual Differences, 4825-4830. https://doi.org/10.1007/978-3-319-24612-3_857

McCrae, R. R., & Costa Jr, P. T. (2004). A contemplated revision of the NEO five-factor inventory. Personality and Individual Differences, 36(3), 587-596. https://doi.org/10.1016/S0191-8869(03)00118-1

Mohammed, U. (2021). Effect of Ponzi schemes on a country: The case of Ghana. Journal of Financial Crime, 28(3), 926-939

Mohta, A. & Shunmugasundaram, V. (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

Mueller, M., Resnik, P., & Saunders, C. (2021). Risk preferences of investors. Robo-Advisory: Investing in the Digital Age, 35-51.

Muktadir-Al-Mukit, D. (2022). Do sociodemographic factors have influence on risk tolerance level of stock market investors? An analysis from a developing country perspective. South Asian Journal of Business Studies, 11(2), 149-173. https://doi.org/10.1108/SAJBS-11-2019-0193

Muslichah, M., Putra, Y. H. S., Abdullah, R., & Usry, A. K. (2023). Islamic financial literacy and financial inclusion: Examining the intervening role of financial self-efficacy. International Journal of Islamic Economics and Finance (IJIEF), 6(2), 181-200. https://doi.org/10.18196/ijief.v6i2.16384

Naqvi, M. H. A., Jiang, Y., Miao, M., & Naqvi, M. H. (2020). Linking biopsychosocial indicators with financial risk tolerance and satisfaction through macroeconomic literacy: A structural equation modeling approach. Cogent Economics & Finance, 8(1), 1730079. https://doi.org/10.1080/23322039.2020.1730079

Ngcamu, L. J., Quaye, E. S., Horvey, S. S., & Jaravaza, D. C. (2023). Personality traits, money attitudes and consumer decision-making styles as predictors of investment products choice in South Africa. Journal of Consumer Behaviour. https://doi.org/10.1002/cb.2146

Nguyen, H. H., Ngo, V. M., Le, T. T. P., & Van Nguyen, P. (2023). Do investors' personalities predict market winners? Experimental setting and machine learning analysis. Heliyon. https://doi.org/10.1016/j.heliyon.2023.e15273

Nguyen, L., Gallery, G., & Newton, C. (2019). The joint influence of financial risk perception and risk tolerance on individual investment decision-making. Accounting & Finance, 59, 747-771. https://doi.org/10.1111/acfi.12295

Nkukpornu, E., Gyimah, P., & Sakyiwaa, L. (2020). Behavioural finance and investment decisions: Does behavioral bias matter? International Business Research, 13(11), 1-65. https://doi.org/10.5539/ibr.v13n11p65

Nofsinger, J. R. (2017). The psychology of investing. Routledge.

Noviarini, J., Coleman, A., Roberts, H., & Whiting, R. H. (2021). Financial literacy, debt, risk tolerance and retirement preparedness: Evidence from New Zealand. Pacific-Basin Finance Journal, 68, 101598. https://doi.org/10.1016/j.pacfin.2021.101598

Oteng, E. (2019). Financial literacy and investment decisions among traders in the Techiman Municipality. Research Journal of Finance and Accounting, 10(6), 50-60.

Osakwe, C. N., Dzandu, M. D., Amegbe, H., Warsame, M. H., & Ramayah, T. (2022). A two-country study on the psychological antecedents to cryptocurrency investment decision-making. Journal of Global Information Technology Management, 25(4), 302-323.

Orth, U., & Robins, R. W. (2022). Is high self-esteem beneficial? Revisiting a classic question. American Psychologist, 77(1), 5. https://doi.org/10.1037/amp0000922

Owusu, S. P., & Laryea, E. (2023). The impact of anchoring bias on investment decision-making: Evidence from Ghana. Review of Behavioral Finance, 15(5), 729-749. https://doi.org/10.1108/RBF-09-2020-0223

Oztop, A. O., & Ezgi, K. U. Y. U. (2020). Influence of socio-demographic characteristics, financial literacy and mood on financial risk tolerance. Journal of Business Economics and Finance, 9(3), 209-222. https://doi.org/10.17261/Pressacademia.2020.1297

Park, L., Ward, D. E., Naragon-Gainey, K., Fujita, K., & Koefler, N. (2022). I'm still spending: Financial contingency of self-worth predicts financial motivational conflict and compulsive buying. Personality and Social Psychology Bulletin, 01461672221119356. https://doi.org/10.1177/01461672221119356

Peters, U. (2022). What is the function of confirmation bias? Erkenntnis, 87(3), 1351-1376. https://doi.org/10.1007/s10670-020-00252-1

Quaicoe, A., & Eleke-Aboagye, P. Q. (2021). Behavioral factors affecting investment decision-making in bank stocks on the Ghana Stock Exchange. Qualitative Research in Financial Markets, 13(4), 425-439. https://doi.org/10.1108/QRFM-05-2020-0084

Rahies, M. K., Khan, M. A., Askari, M., Ali, Q., & Shoukat, R. (2022). Evaluation of the impact of risk tolerance and financial literacy on investment intentions of securities investors in Pakistan using the theory of planned behavior (TBP). Empirical Economic Review, 5(1), 104-137. https://doi.org/10.29145/eer.51.05

Rahman, M. (2019). Propensity toward financial risk tolerance: An analysis using behavioural factors. Review of Behavioral Finance, 12(3), 259-281. https://doi.org/10.1108/RBF-01-2019-0002

Rahman, M. L., Amin, A., & Al Mamun, M. A. (2021a). The COVID-19 outbreak and stock market reactions: Evidence from Australia. Finance Research Letters, 38, 101832. https://doi.org/10.1016/j.frl.2020.101832

Rashid, A., & Boussabiane, H. (2021b). Conceptualizing the influence of personality and cognitive traits on project managers' risk-taking behaviour. International Journal of Managing Projects in Business, 14(2), 472-496. https://doi.org/10.1108/IJMPB-11-2017-0138

Raut, R. K. (2020), Past behaviour, financial literacy and investment decision-making process of individual investors", International Journal of Emerging Markets, 15(6),1243-1263.

Sachitra, V. (2024). Exploring the roles of personality traits and self-efficacy on environmental engagement: A Sri Lankan youth survey. Social Responsibility Journal, 20(4), 740-760. https://doi.org/10.1108/SRJ-03-2021-0098

Sadiq, M. N., & Khan, R. A. A. (2019). Impact of personality traits on investment intention: The mediating role of risk behaviour and the moderating role of financial literacy. Journal of Finance and Economics Research, 4(1), 1-18. https://doi.org/10.20547/jfer1904101.

Schoenmaker, D., & Schramade, W. (2019). Investing for long-term value creation. Journal of Sustainable Finance & Investment, 9(4), 356-377. https://doi.org/10.1080/20430795.2019.1625012

Schwenk, C. R. (1984). Cognitive simplification processes in strategic decision-making. Strategic Management Journal, 5(2), 111-128. https://doi.org/10.1002/smj.4250050203

Sekścińska, K., Jaworska, D., & Rudzinska-Wojciechowska, J. (2021). Self-esteem and financial risk-taking. Personality and Individual Differences, 172, 110576. https://doi.org/10.1016/j.paid.2020.110576

Shahani, R., & Ahmed, K. A. (2022). Investigating the moderating roles of basic and advanced financial literacy between behavioural biases and stock buying decisions. Journal of Organisational Studies & Innovations, 9(1), pp. 1-19

Sharma, R., Arora, M., & Mehta, K. (2022). Psychological traits and investors' cryptocurrency behavior. In Handbook of Research on Stock Market Investment Practices and Portfolio Management (pp. 215-228). IGI Global.

Shimizu, H., Takahashi, C., Koike, M., Fukui, K. I., & Nakashima, K. I. (2023). How do changes in one's self-esteem affect the self-esteem of others? Japanese Psychological Research, 65(1), 66-74. https://doi.org/10.1111/jpr.12350

Singh, A., & Saxena, A. (2022). Impact of behavioural biases on investment decision making: A review study. Manthan: Journal of Commerce and Management, 9(1), 125-140. https://doi.org/ http://dx.doi.org/10.17492/jpi.manthan.v9i1.912207

Singh, Y., Adil, M., & Haque, S. I. (2022). Personality traits and behaviour biases: The moderating role of risk-tolerance. Quality & Quantity, 1-25. https://doi.org/10.1007/s11135-022-01516-4

Thanki, H., Karani, A., & Goyal, A. K. (2020). Psychological antecedents of financial risk tolerance. The Journal of Wealth Management. https://doi.org/10.3905/jwm.2020.1.111

Tsuji, H., Fujishima, Y., Tsuji, H., Natsuno, Y., Mukoyama, Y., Yamada, N., ... & Hata, K. (1997). Five-factor model of personality: Concept, structure, and measurement of personality traits. Japanese Psycholofic, 40(2), 239-259.

Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. Cognitive Psychology, 5(2), 207-232.

Wang, Y., Ashton, J. K., & Jaafar, A. (2019). Does mutual fund investment influence accounting fraud? Emerging Markets Review, 38, 142-158. https://doi.org/10.1016/j.ememar.2018.12.005

Wanjala, K., & Riitho, D. G. (2020). Internal control systems implementation and fraud mitigation nexus among deposit taking Saccos in Kenya. Finance & Economics Review, 2(1), 11-29.

Weber, R. M. (2022). A producer's credo. Journal of Financial Service Professionals, 76(4).

Weixiang, S., Qamruzzaman, M., Rui, W., & Kler, R. (2022). An empirical assessment of financial literacy and behavioral biases on investment decision: Fresh evidence from small investor perception. Frontiers in Psychology, 13, 977444. https://doi.org/10.3389/fpsyg.2022.977444

West, A. (2023). Meaningful work and unethical work: The crisis in Australian financial advice. Business ethics, the Environnment and Responsibility, 32(3), 882-895