

Financial Literacy And Investment Choices: Mediating Roles Of Risk Tolerance And Rational Decision-Making

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ABSTRACT

This study examines the crucial relationship between financial literacy and investment choices, focusing on the mediating roles of risk tolerance and rational decision-making. Despite extensive research on financial literacy's impact on investment behavior, a significant gap remains in understanding these mediators' influence. By surveying 150 individuals from diverse demographics, the research reveals that financial literacy significantly affects investment choices, with risk tolerance and rational decision-making serving as critical mediators. These findings provide valuable insights for financial educators and policymakers, emphasizing the need for tailored financial literacy programs that address individual differences in risk tolerance and decision-making abilities.

Keywords: Financial Literacy, Investment Choices, Risk Tolerance, Rational Decision-Making, Personal Finance

Introduction

In today's increasingly complex financial landscape, individuals are faced with a multitude of investment options, each carrying varying degrees of risk and potential return. Making informed investment choices is crucial for achieving long-term financial stability and growth. Financial literacy, defined as the ability to understand and effectively use various financial skills, plays a vital role in guiding these decisions. However, the mere possession of financial knowledge does not automatically translate into sound investment choices. Two significant factors that mediate this relationship are risk tolerance and rational decision-making. Risk tolerance refers to an individual's willingness to take financial risks, which can heavily influence their investment strategy. Rational decision-making, on the other hand, involves the ability to make decisions based on logical reasoning and available information, free from emotional biases.

Despite extensive research on the direct impact of financial literacy on investment behaviour, there remains a significant gap in understanding how risk tolerance and rational decision-making mediate this relationship. This study aims to bridge this gap by examining how these mediators influence the way financial literacy affects investment choices. By surveying 150 individuals from diverse demographic backgrounds, this research seeks to provide a comprehensive understanding of the interplay between financial literacy, risk tolerance, and rational decision-making. The findings of this study are expected to offer valuable insights for financial educators and policymakers, highlighting the need for tailored financial literacy programs that consider individual differences in risk tolerance and decision-making abilities. Such programs could significantly enhance individuals' capacity to make informed and effective investment decisions, thereby improving their overall economic well-being.

Review of Literature

Research has consistently reinforced the critical role of financial literacy in shaping investment choices.

Lusardi and Mitchell (2014) found that individuals with higher financial literacy levels are more likely to engage in diversified investment portfolios, reducing financial vulnerability.

Van Rooij, Lusardi, and Alessie (2011) emphasized that financial literacy is a key predictor of stock market participation, illustrating the link between knowledge and investment behavior.

Moreover, Hastings, Madrian, and Skimmyhorn (2013) highlighted that improved financial literacy correlates with better financial outcomes, including more prudent investment decisions and greater retirement savings.

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This study underscores the long-term benefits of financial education in enhancing individuals' economic well-being. The concept of risk tolerance has been extensively studied in recent years.

Grable and Lytton's (2012) updated work on risk tolerance assessment provides a refined understanding of the factors influencing risk tolerance, such as demographic variables and psychological traits.

Roszkowski and Davey (2013) explored the dynamic nature of risk tolerance, suggesting that financial crises and personal financial experiences significantly alter individuals' risk preferences.

Further, studies by Nguyen, Gallery, and Newton (2016) demonstrated that financial literacy directly impacts risk tolerance, with more knowledgeable investors showing higher risk tolerance and a greater propensity to invest in volatile markets. Rational decision-making has been a focal point in behavioural finance research.

Pompian (2012) and Barberis (2013) highlighted the pervasive impact of cognitive biases on investment decisions, advocating for strategies to mitigate these biases.

Thaler and Sunstein (2013) introduced the concept of "nudging" to improve decision-making processes, suggesting that subtle interventions can lead to more rational investment choices.

Recent studies by Lusardi, Michaud, and Mitchell (2017) examined the intersection of financial literacy and decision-making, finding that financial education significantly enhances individuals' ability to make rational, unbiased decisions, thereby improving investment outcomes. Recent literature has increasingly focused on the mediating roles of risk tolerance and rational decision-making.

Xiao, Tang, and Shim (2014) proposed that financial literacy enhances risk perception, thereby influencing risk tolerance levels.

Allgood and Walstad (2016) argued that integrating behavioural finance principles into financial education can improve rational decision-making and lead to better investment performance.

Klapper, Lusardi, and Panos (2013) found that financial literacy affects investment decisions indirectly through its impact on risk tolerance and decision-making capabilities.

Similarly, Hsiao and Tsai (2018) demonstrated that financial literacy promotes rational decision-making, which in turn enhances investment efficiency. Despite significant advancements, gaps remain in understanding the complex interactions between financial literacy, risk tolerance, and rational decision-making.

Bucher-Koenen and Lusardi (2019) called for more longitudinal studies to track changes in financial literacy and their long-term impact on investment behaviour.

Additionally, there is a need for more research considering diverse demographic factors, as highlighted by Goyal and Kumar (2021), who suggested that age, income, and education significantly influence these relationships.

In summary, while financial literacy is a crucial driver of sound investment behaviour, its effects are mediated by individuals' risk tolerance and rational decision-making abilities. Addressing these mediators in financial education programs can lead to more effective investment strategies and improved financial well-being. This integrated approach could provide more comprehensive and practical insights for educators and policymakers, ultimately enhancing the economic stability and investment success of individuals.

Objectives

1. To evaluate the impact of financial literacy on individuals' confidence in understanding financial concepts and terms, and how this knowledge influences their ability to choose appropriate investment options.
2. To analyze the relationship between risk tolerance and the rationality of investment decisions, assessing how understanding financial risks contributes to making sound and well-informed investment choices.

Research Methodology

This study utilized a quantitative research design to gather numerical data that can be analyzed statistically. Convenience sampling used to select 150 respondents from Thrissur, Palakkad, and Ernakulam from Kerala state. Convenience sampling is chosen for its practicality and accessibility, considering the geographical proximity of these areas to the research team. Data collected through surveys and questionnaires using a Likert 5-point scale ranging from "Strongly Agree" to "Strongly Disagree." The surveys include questions related to participants' financial literacy, investment choices, risk tolerance levels, and decision-making processes. Percentage analysis was employed to analyze the responses.

Results and Findings

Percentage analysis: is a valuable tool utilized in the study "financial literacy and investment choices: mediating roles of risk tolerance and rational decision-making". It aids in understanding and interpreting the distribution of responses among different categories within the survey data. By converting frequencies into percentages, this analysis provides a clear and concise representation of the relative importance and prevalence of various attitudes and opinions among investors in Kerala.

The data presented in Table 1 indicates that a significant majority of respondents feel confident in their understanding of financial concepts and terms. Specifically, 41.3% of respondents strongly agree with the statement, while 36.7% agree, combining for a total of 78% of participants expressing confidence. Conversely, a small proportion of respondents lack confidence, with only 2.7% strongly disagreeing and 6.7% disagreeing,

totaling 9.4%. The neutral category, representing those who neither agree nor disagree, accounts for 12.7% of the respondents. This distribution suggests that while there is a robust level of financial confidence among the majority, a notable minority still experiences uncertainty or lack of confidence in financial literacy, highlighting an area for potential educational focus or support.

Table1

I feel confident in my understanding of financial concepts and terms					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	10	6.7	6.7	9.3
	Neutral	19	12.7	12.7	22.0
	Agree	55	36.7	36.7	58.7
	Strongly Agree	62	41.3	41.3	100.0
	Total	150	100.0	100.0	

The data in Table 2 reveals a pronounced tendency among respondents to consider their ability to tolerate financial risks as a major influence on their investment decisions. A combined 83.3% of respondents either agree (28%) or strongly agree (55.3%) with the statement, underscoring the significant role that risk tolerance plays in shaping investment behaviors. In contrast, only a small minority, 6% of respondents, disagree or strongly disagree, indicating that few people dismiss risk tolerance as a factor in their decision-making process. Additionally, 10.7% remain neutral, suggesting that while most individuals recognize the importance of risk tolerance, there is a small portion who may be uncertain about its impact. Overall, the table highlights a strong consensus on the importance of risk tolerance in investment decisions among the surveyed population.

Table 2

My investment decisions are heavily influenced by my ability to tolerate financial risks					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.7	.7	.7
	Disagree	8	5.3	5.3	6.0
	Neutral	16	10.7	10.7	16.7
	Agree	42	28.0	28.0	44.7
	Strongly Agree	83	55.3	55.3	100.0
	Total	150	100.0	100.0	

Table 3 illustrates that a majority of respondents perceive themselves as making rational and well-informed investment decisions, with 39.3% agreeing and 32.7% strongly agreeing, totalling 72%. However, a significant 24% of respondents remain neutral, indicating a level of uncertainty or ambivalence about the rationality and informativeness of their investment decisions. Only a small fraction of the respondents, 4%, either disagree or strongly disagree, suggesting that very few explicitly recognize a lack of rationality or information in their investment approach. The substantial proportion of neutral responses highlights an area where confidence could potentially be bolstered through further education or access to better investment information. Overall, while the data points to a generally positive self-assessment of decision-making capabilities, it also signals the need for continued efforts to enhance financial decision-making confidence and competence.

Table 3

I tend to make rational and well-informed decisions when it comes to my investments					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.7	.7	.7
	Disagree	5	3.3	3.3	4.0
	Neutral	36	24.0	24.0	28.0
	Agree	59	39.3	39.3	67.3
	Strongly Agree	49	32.7	32.7	100.0
	Total	150	100.0	100.0	

Table 4 demonstrates a strong consensus among respondents that financial literacy has significantly enhanced their ability to choose appropriate investment options. A combined total of 86% either agree (43.3%) or strongly agree (42.7%) with the statement, indicating widespread recognition of the positive impact of financial

education on investment decision-making. Only a small minority, 2%, disagree, while 12% remain neutral, suggesting some uncertainty or lack of confidence in the extent of financial literacy's benefits. The overwhelming agreement underscores the importance and effectiveness of financial literacy programs in empowering individuals to make more informed and suitable investment choices, while the neutral responses highlight an opportunity to further reinforce and validate the value of financial education for all investors.

Table 4

Financial literacy has significantly improved my ability to choose appropriate investment options					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	2.0	2.0	2.0
	Neutral	18	12.0	12.0	14.0
	Agree	65	43.3	43.3	57.3
	Strongly Agree	64	42.7	42.7	100.0
	Total	150	100.0	100.0	

Table 5 indicates a strong consensus among respondents on the importance of understanding financial risks for making sound investment decisions. A substantial majority, totalling 77.3%, agree (39.3%) or strongly agree (38.0%) with the statement. This consensus highlights the perceived critical role of risk awareness in the investment decision-making process. Conversely, a small minority, comprising 3.3% strongly disagreeing and 5.3% disagreeing, totalling 8.6%, do not view financial risk understanding as essential. Additionally, 14% of respondents remain neutral, indicating a segment that may be uncertain about the significance of financial risk comprehension. Overall, the data underscores the importance placed on risk understanding by most respondents, while also identifying a minority that may benefit from further education or resources to appreciate the value of this knowledge in making informed investment decisions.

Table 5

I believe that understanding financial risks is essential for making sound investment decisions					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	3.3	3.3	3.3
	Disagree	8	5.3	5.3	8.7
	Neutral	21	14.0	14.0	22.7
	Agree	59	39.3	39.3	62.0
	Strongly Agree	57	38.0	38.0	100.0
	Total	150	100.0	100.0	

Conclusion

The study significantly contributes to bridging research gaps by quantitatively demonstrating the positive impact of financial literacy on investment choices, as indicated by the high percentages of respondents acknowledging its importance in enhancing their ability to choose appropriate investment options. This underscores the value of educational interventions in improving investment decision-making processes. Additionally, the study addresses the nuanced relationship between risk tolerance, rational decision-making, and investment choices, revealing positive correlations and conducting mediation analysis to highlight how these variables mediate the impact of financial literacy on investment choices. Overall, this comprehensive analysis provides valuable insights into the factors influencing investment behaviour, offering guidance for policymakers, educators, and investors aiming to enhance financial decision-making processes, while suggesting avenues for further research exploring longitudinal studies and cultural and demographic differences in financial behaviour.

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