Impact of financial literacy on savings behavior: The moderation role of risk aversion and financial confidence

Abstract

This research examines the impact of financial literacy on the savings behavior of investors residing in the Gulf Cooperation Council (GCC) region. It also investigates the moderating impact of financial confidence and risk aversion in the relationship between financial literacy and savings behavior. The primary data was collected from 357 respondents through a structured questionnaire using the snowball sampling method. The findings of this study suggest that financial literacy has a positive impact on investors' savings behavior. Further, the study also found that risk aversion significantly moderates the relationship between financial literacy and savings behavior. The three-way interaction between financial literacy, risk aversion, and financial confidence significantly affects the investors' savings behavior. The study suggests that policymakers should emphasize training programs for investors on financial literacy, financial confidence, and risk aversion.

Keywords: Financial literacy, financial confidence, risk aversion, savings behavior, GCC.

Introduction

Financial literacy affects the lives of every individual as the number of financial products keeps increasing. Financial literacy provides the power to choose and use financial products wisely, such as bank accounts, credit cards, loans, real estate, and insurance products. While these are older and simpler product offerings, they are being complemented with more financial

innovations such as mobile payments, peer-to-peer lending, cryptocurrencies, or crowdfunding. Innovative financial products allow individuals to diversify their portfolios (Calvet et al. 2004).

For example, Stout (2011) argued that individuals must invest in derivative products correctly to benefit social welfare. Thus, Taiwan's financial literacy has effectively reduced the hindrances to acquiring intricate derivative commodities (Hsiao and Tsai 2018). Most economies emphasize building financial resilience in individuals (Lusardi and Mitchell 2011). Thus, with sufficient financial knowledge, individuals can protect their financial future by prioritizing wealth accumulation (Kumar et al, 2023).

According to Lusardi and Mitchell (2014, 6), financial literacy refers to "people's ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt and pensions." Several problems can arise from a lack of financial education, including the creation of impossible debt loads due to ill-advised purchases or a failure to save for the future. As a result, you can end up with a low credit score, go bankrupt, or lose your home to foreclosure.

The concept of financial literacy has been documented to encompass saving patterns through formal and informal channels (Adetunji and David-West 2019), associated with both financial inclusion and savings (Morgan and Trinh 2019: Chu et al., 2017), reported to affect the investment of monthly savings in stocks and bonds (Mirzaei and Buerl 2022) and explaining individuals objective risk-taking behavior and subjective risk attitude in decision making (Phung et al., 2021).

Investment decision-making is a process that combines investors' logical and psychological calculations. Traditional finance theories, on the other hand, hold that investment decisions are rational. Modern finance theories, on the other hand, argue that rational deliberations do not govern investment decisions. Investors' investment decisions are also frequently impulsive (Suresh 2021).

This study contributes to the research gap Ingale and Paluri (2022) identified in the bibliometric analysis of financial literacy and financial behavior. They recommend investigating the relationship between financial literacy and financial behavior using various moderating and mediating variables. Thus, this study examines the relationship between financial literacy and the savings behavior of residents working in the Gulf Cooperation Council (GCC) countries.

Despite the considerable advancement in research on financial literacy at the individual level, certain areas of inquiry remain unaddressed or necessitate further investigation, particularly concerning the manifestation of financial literacy in the psychological attributes of individuals. Consequently, recent literature reviews advocate a more thorough examination of financial literacy's impact on individuals' risk-taking propensity (Goyal and Kumar, 2021).

This research also examines the moderating impact of risk aversion on the relationship between financial literacy and savings behaviors. Tahir et al. (2023) reported that along with financial literacy, tools that support planning and investing in risky and appropriate instruments lead to better outcomes. Similarly, financial behavior alone cannot affect financial well-being (Bhatia and Singh, 2023). Thus, the study examines the three-way interaction of financial literacy, risk aversion, and financial confidence on savings behavior.

This paper makes several contributions to the literature. First, the research adds to the empirical literature on the financial literacy-savings behavior relationship (Adetunji and David-West 2019: Mirzaei and Buer 2022). Despite the efforts undertaken by various countries to enhance financial literacy, the act of saving has continued to pose a significant challenge for individuals (Morgan and Trinh 2019).

Low financial literacy among young people is very concerning, especially when we consider young people essential in the growth of national economies. A high degree of financial literacy among young people could significantly contribute to the state economy. Furthermore, financial literacy is linked to well-being, which leads to life pleasure, psychological well-being,

and academic achievement (Folke et al. 2021; Caplinska et al. 2019; Taft et al. 2013; Shim et al. 2015). Abdullah et al., (2019) found a link between financial literacy, debt management, and attitudes about money.

The study helps spell out the effects of financial education training that improves financial behavior, such as savings. Second, prior studies (Sseguya et al. 2018; Fang et al. 2017) posit that financial literacy alone is insufficient in justifying appropriate financial behaviors, specifically saving.

An individual's ability to withstand economic constraints and financial emergencies by demonstrating resilient behaviors is a subject of interest for further investigation, particularly regarding risk tolerance (Hermansson and Jonsson 2021). Other factors, such as risk aversion, are significant as potential moderating variables. Risk aversion constitutes one of those supplementary factors that can affect financial behaviors, encompassing saving substantially.

Risk aversion mirrors an individual's disposition to undertake financial risks, and it can impact determinations such as whether to allocate funds to secure low-risk assets or invest in alternatives that offer the potential for higher yields but carry more significant risks.

Financial literacy, risk aversion, and financial confidence play a role in savings behavior. Lastly, the prior literature has either emphasized developed or developing countries. This is the first study conducted for investors in emerging markets such as the GCC region.

The paper is organized into the following sub-sections. Section 2 discusses the literature review related to the areas covered in this research. Section 3 presents the methodology, and Section 4 elaborates on the results and discussion. The research concludes with Section 5

Literature Review and Hypothesis Development

Financial Literacy and Savings Behavior

Hogarth (2002) suggests financial literacy is the art of dealing with financial management that includes decisions such as investing, insuring, saving, and budgeting. An individual's financial literacy is determined by expertise, experience, and needs (Jonubi and Abad, 2013). A vital construct related to investment behavior is investor risk behavior (Wood and Zaichkowsky 2004).

Thus, everyone’s trading behavior varies, whereby financial literacy contributes to investor participation in the stock market but dissuades informal borrowing (Klapper et al. 2013). Financial literacy is not restricted to knowledge but also to skills, attitudes, and actual behavior (Morgan and Long 2020). Bapat (2019) discovered that financial knowledge, help-seeking behavior, and electronic banking serve as antecedents to the manifestation of financial management behavior.

Kadoya and Khan (2020) reported that financial literacy is positively correlated with education, the balance of financial assets, and the utilization of financial information but adversely correlated with experiencing financial difficulties in Japan. The study also revealed that while women are more favorable than men regarding financial conduct and attitude, men are more financially literate than women. Age and financial knowledge correlate favorably, but age and financial attitude are adversely associated.

The study by Swiecka et al. (2020) discovered that young people in Poland have a high degree of financial literacy, with 45.3% scoring at the ordinary level and 43.8% at the high level. However, the survey also revealed that, with men having greater financial literacy than women, gender affects financial behavior and financial instruments used. It emphasizes the

significance of financial literacy in maintaining the financial viability of individuals, families, businesses, and entire nations.

Several studies investigated the reasons for underinvestment in stock markets. The empirical findings suggested that individuals with low financial literacy tended to avoid stock market investments (Van Rooij et al. 2011). Financial literacy has been reported to have a myriad of positive outcomes on higher emergency savings level (Babiarz and Robb 2014), reduced financial fragility (Chhatwani and Mishra 2021), retirement readiness (Lusardi and Mitchell 2017), lower cost of debt (Lusardi and Tufano 2015), financial self-efficacy and financial well-being (Lone and Bhatt, 2022; Bapista and Dewi 2021).

Alternatively, financial literacy is also reported to impact subjective financial well-being negatively (Mahdzan et al., 2023). Financial literacy plays a crucial role in enhancing the financial well-being of individuals, as evidenced by the advantages mentioned above. Studies in the past have demonstrated that adult consumers in industrialized nations lack the necessary financial understanding of ideas like interest compounding, features of stocks and bonds, or risk diversification (Lusardi and Mitchell, 2014; Lusardi and Tufano, 2015).

Financially literate consumers have a higher chance of savings, a better likelihood of participating in financial markets, and observe continuity in retirement savings plans (Ponchio et al. 2019; Xiao and Porto 2017). The prior studies have documented a positive impact of financial literacy; thus, the following relationship is hypothesized.

Hypothesis 1: Financial literacy has a positive impact on savings behavior.

Moderation Role of Risk Aversion

Mahdzan et al. (2017) examined the impact of financial literacy, risk aversion, and expectations on Malaysian retirement portfolio distribution and planning. The study results demonstrate that those who are financially literate and less risk-averse are more likely to hold risky assets in their retirement portfolios. In other words, these individuals prefer investing in assets that offer the possibility of greater returns while concurrently carrying a heightened level of risk.

People's propensity to make retirement plans is significantly influenced by their expectations for the future. For example, prior studies suggest that increased risk tolerance, financial literacy, income, and savings all positively affect retirement planning (Park and Martin, 2022). Bapat (2020) reported that financial attitude serves as a complete mediator and financial risk tolerance as a moderator in the connection between financial knowledge and the behavior of responsible financial management.

Regarding the relationship between capital accumulation and volatility, there is a conflict between theoretical literature and empirical contributions (Femminis 2019). While academic research points to a favorable link between productivity shocks and investment, empirical data points to the adverse impacts of rising volatility on capital accumulation.

The flexibility effect enables a risk-neutral firm to take advantage of the inequity between installation cost and labor adjustment to boost output when the marginal cost is low and decrease it when the cost is high. People believe the required assured return would decide between a risky and safe investment (Saltari and Ticchi 2007). If future returns rise, people may need less guaranteed returns, which could reduce present consumption to maintain a constant level of utility over time.

Le Fur and Outreville (2022) suggested that students who did not follow specialized finance courses had low financial knowledge. The study also reported that students with low financial literacy were risk-averse. Prior study findings said that single women exhibit greater

behavioral risk aversion compared to single men, whereas there is no difference between married women and men for behavioral risk aversion (Rai and Kimmel 2015; Twumasi Baffour et al. 2019).

Amari et al. (2020) reported that financial literacy, less risk tolerance, and high income in French households positively correlate with savings behavior. Studies by Trautmann and van de Kuilen (2018) and Arora and Marwaha (2014) reported that individuals with high income or wealth can tolerate risks as they can handle more significant losses. Almås et al. (2020) argued that savings volume is high in Chinese young and elderly as they tend to save as opposed to middle-aged individuals.

Hypothesis 2. Risk aversion moderates the relationship between financial literacy and savings behavior. The positive relationship between financial literacy and savings behavior is weaker for people with high (vs. low) levels of risk aversion.

Moderating Role of Financial Confidence

Individual confidence is also critical in savings behavior. Prior studies have indicated that overconfident investors have self-belief that they can make decisions without assistance but are more prone to fraud (Drew and Cross 2013). Underconfident individuals are comparatively less inclined to engage in stock trading, resulting in reduced investment returns (Xia et al. 2014).

Pikulina et al. (2017) reported that overconfident and underconfident investors negatively affect investment-related behavior. Ramalho and Forte (2019) argue that the more the investor's knowledge and self-confidence, the better their behavior will be. Jappelli and Padula (2015) suggest that solid financial knowledge supports reducing the costs of entering

stock markets. Pearson and Korankye (2022) reported that financial literacy overconfidence is positively related to increased levels of financial satisfaction and vice-versa.

Bourova et al. (2018) investigated the financial literacy levels and the intensity of financial hardship among Australians with debt problems. It also looks at how confidence and financial knowledge affect the methods used to manage finances in debt. The study discovered no direct link between financial illiteracy and the intensity of financial distress. However, if coupled with overconfidence in their capacity to control spending, lesser levels of financial literacy may limit consumers' ability to avoid some of the more severe repercussions of failure. The study also discovered a link between confidence levels and financial literacy levels.

De Zwaan et al. (2017) discussed the importance of financial advisors having a thorough grasp of their clients, including their attitudes and level of financial literacy. Their study focuses mainly on the cognitive bias of overconfidence in customers of financial planning. The research emphasizes how financial advisers, to uphold their commitment to act in clients' best interests, must be aware of this tendency.

Gentile et al. (2016) look into the connection between financial expertise, overconfidence, and the use of professional financial assistance among Italian financial decision-makers. According to the study, overconfidence is adversely correlated with the demand for financial guidance, whereas financial expertise is positively correlated.

These results demonstrate that financial advice serves as a supplement to financial capacity rather than a replacement for it, validating the worries that inadequate regulation of financial advice will leave less experienced investors who need it most unprotected. Additionally, behavioral characteristics like self-confidence influence financial decisions and are linked to financial literacy. As there is little evidence of the collective role of financial literacy, savings behavior, and financial confidence, this study hypothesizes the following relationship:

Hypothesis 3. Financial literacy has a stronger positive relationship with saving behavior for individuals with high (vs. low) financial confidence and low (vs. high) risk aversion.

Research Methodology

Sample and Data Collection

This study adopts quantitative research. To collect the primary data, we have sent the questionnaire to respondents through Google Forms. We targeted 425 respondents, and 357 responded to the questionnaire statements (84 percent of the respondents). Data was collected from the respondents based on ethnicity, nationality, and country of residence.

This study was based on cross-sectional data obtained from various investors in the GCC. A snowball sampling method from non-probability sampling is employed to collect the data from the respondents. Data collection was conducted using online from Oct 2022 to January 2023.

Design and Measurement

Financial literacy is measured by using the three constructs. Financial attitude has fourteen items (e.g., 'It is important for me to have a regular saving habit') adopted from OECD 2013. Financial Behavior has five items (e.g., ‘I have to plan comprehensively for my monthly needs and settlement of debts’) adopted from OECD 2013. Financial Knowledge has three items (e.g., 'Is the following statement true or false? "Buying a single company stock usually provides a safer return than a Unit Trust"') adopted by Koh et al. (2020).

A seven-point Likert scale is employed for financial attitude, financial knowledge, and financial behavior. 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=either agree or disagree, 5=somewhat agree, 6= agree, 7= strongly agree.

Financial confidence has four items (e.g., ‘How confident do you feel managing your finances?’) adopted from the UK Financial Capability Survey 2018. 1= Highly confident, 2= Confident, 3 = Somewhat confident, 4= Neutral, 5= Not confident, 6= Somewhat not confident, 7 = Not at all confident.

Risk aversion is measured with three items (e.g., 'According to me, it is safer to have safe investments and guaranteed returns than to take a risk to chance to have the highest possible return) adopted by Lee et al. (2015).

A seven-point Likert scale is employed for risk aversion: 1=Total agree, 2=agree, 3=somewhat agree, 4=either agree or disagree, 5=somewhat disagree, 6= disagree, 7=total disagree.

Savings behavior (self-administered) is measured with ten items (e.g., ‘Which of the following do you prefer to invest to realize your personal goals and aspirations?’).

Descriptive and inferential statistics were used to analyze the results. The author used bootstrapping (SmartPls4) for the analysis to obtain an accurate value. Hair et al. (2021) claim that PLS-SEM bootstrapping produces all relevant data more accurately and precisely than PROCESS (Sarstedt et al., 2020).

Reliability and Validity

Values of Cronbach's alpha are more significant than 0.7. Cronbach's alpha scores greater than 0.7 are a reliable predictor of reliability (Nunnally 1978). The values of average variance extracted (AVE> 0.50) and composite reliability (CR >0.60) were evaluated to determine convergent validity (Byrne et al., 2013; Islam et al., 2021d).

Model Fit

Model fit values are performed with SmartPls4. The measurement model was found to fit (Chi-square= 2.78, RMSEA= .07, SRMR= .02 NFI = .99). A value less than 0.10 or of 0.08 (in a more conservative version; see Hu and Bentler 1999) is considered a good fit. Henseler et al. (2014) introduce the SRMR as a goodness-of-fit measure for PLS-SEM that can be used to avoid model misspecification. The normed fit index by Bentler and Bonett (1980) is one of the earliest fit metrics suggested in the SEM literature. NFI values over 0.9 often indicate a good match.

Figure 1 demonstrates the research model derived from the literature review.

[Insert Figure 1 here]

Data Analysis and Results

Table 1 reveals the variable description.

[Insert Table 1 here]

Table 2 explains the demographic characteristics of the respondents.

[Insert Table 2 here]

Table 3 reveals that all variables have a good relationship. Cronbach Alpha for all the study variables is above .70. It shows the reliability of the data. All values are appropriate to ensure the model fit.

[Insert Table 3 here]

Hypothesis-1

There is a significant relationship between financial literacy and savings behavior. Financial literacy is significantly related to savings behavior (t= 2.91, >1.96, and P value is .0004). Therefore, Hypothesis 1 is accepted.

Hypothesis-2

Risk aversion moderates the relationship between financial literacy and savings behavior. The positive relationship between financial literacy and savings behavior is weaker for people with high (vs. low) levels of risk aversion. Risk aversion significantly moderates the relationship between financial literacy and savings behavior (t= 2.65, >1.96, and the P value is .008). Therefore, Hypothesis 2 is accepted.

Hypothesis-3

Financial literacy has a stronger positive relationship with saving behavior for individuals with high (vs. low) financial confidence and low (vs. high) risk aversion.

We examined the three-way interaction effect (Table 4). Financial Confidence x Risk Aversion x Financial Literacy -> Savings Behavior ($t = 2.25$, >1.96, and P value is .024). Therefore, Hypothesis 3 is accepted. Simple slope analysis suggests that individuals with financial confidence, low-risk aversion, and financial literacy will positively affect savings behavior.

[Insert Table 4 here]

Figure 2 explains the moderation effect is significant for financial literacy x risk aversion towards savings behavior ($b = .66$, $P < .05$) with a 95% confidence interval (CI) of [.17, 1.15].

[Insert Figure 2 here]

Figure 3 explains the relationship between financial literacy and savings behavior was significantly positive for the individuals with high financial confidence and low-risk aversion ($b = .33$, $P < .05$) with a 95% confidence interval (CI) of [.02, .64].

[Insert Figure 3 here]

The relationship between financial literacy and savings behavior was significantly positive for the individuals with low financial confidence and high-risk aversion (*b*= .27, P < .05) with a 95% confidence interval (CI) of [-.06, .61]. The authors have considered the bootstrap values.

The results indicate that financial confidence will be high when investors' risk aversion is low. Similarly, investors' financial confidence will be low when risk aversion is high. Risk aversion and financial confidence significantly influence and affect the relationship between financial literacy and savings behavior.

Discussion

The first objective of this research is to understand the relationship between financial literacy and savings behavior. Hypothesis 1 revealed a significant relationship between financial literacy and savings behavior. A growing body of research indicates that financial literacy relates to household well-being, including participation in savings and investments (Van Rooij et al. 2011; Behrman et al. 2012) and retirement planning (Lusardi and Mitchell 2007).

This implies that financial knowledge leads to responsible financial behavior among consumers. As a result, more countries are developing national financial education strategies and investing more in related programs (Grifoni and Messy 2012).

Financial literacy is essential for making sound financial decisions. A high level of financial literacy leads to better financial decisions (Grohmann 2018). People who lack financial literacy are less likely to engage in financial planning and investing (Van Rooij et al., 2011). People may take out a mortgage due to a lack of financial knowledge and an inability to plan for the future. Budgeting, spending, and purchasing attitudes impact future financial decisions (Tang & Baker 2016). A saving attitude also helps to form financial behavior (Henager & Cude 2016).

Financial literacy has a direct and beneficial influence on saving behavior. Furthermore, the mediation effect of intention was revealed to be positively significant in the above relationship. This suggests that knowledge of the financial system leads to excellent saving behavior, particularly an inclination to save more. Thus, financial planning, future preparation, budgeting, investment, and saving are indicators of financial behavior (Peiris 2021).

This explanation is related to the financial literacy theory. Traditional microeconomic models assume that individuals make rational decisions about saving and spending to achieve optimal financial well-being over a lifetime. However, these models think that individuals have the financial knowledge and capability to do so despite evidence that only a few people have this level of financial knowledge. Recent research has concentrated on acquiring financial knowledge and the relationships between knowledge, investment, and saving behavior (Lusardi & Mitchell 2014).

The second objective is to analyze the moderating role of risk aversion between financial literacy and savings behavior. Hypothesis 2 explains there is a moderating effect of risk aversion between financial literacy and savings behavior. According to Santini et al. (2019), a person's capacity to make financial decisions can be effectively measured by their level of financial literacy. Amari et al. (2022) revealed that demographic characteristics significantly affected risk aversion. Furthermore, financial literacy moderates the associations between risk aversion and saving behavior.

Grable and Kwak (2021) found reducing expectations is one-way risk-averse financial decision-makers attempt to manage emotions of disappointment related to decisions with uncertain and potentially negative outcomes. It was discovered that when a financial decision-maker frequently sets high outcome expectations, and the results fall short of those expectations, the financial decision-maker experiences less disappointment. Specifically, people who habitually set high expectations are more tolerant of disappointment than others.

The degree of risk a financial decision-maker is unwilling to bear when making a financial decision is referred to as financial risk aversion (Dickason and Ferreira, 2018; Gerrans et al., 2015). Stock market engagement is assumed to be inversely associated with financial risk aversion (Mishra, 2018). Individuals with significant financial risk aversion possess less hazardous assets (Lei, 2018).

The third objective is the role of financial confidence and risk aversion between financial literacy and savings behavior. Hypothesis 3: We examined the three-way interaction between financial literacy, risk aversion, and financial confidence ($T= 2.25$, $P< 0.05$), which is significant for savings behavior. Amonhaemanon (2023) found informal laborers' actual financial literacy was low, but their financial literacy confidence was high. Females had more confidence in their financial literacy than males. Dupas and Robinson (2012) discover that, for example, providing female microenterprise owners with access to such low-cost savings accounts increased savings, productive investment, and food expenditures in Kenya.

Totenhagen et al. (2019) discovered that financial knowledge influences financial behavior and financial values, resulting in a social exchange perspective and higher relationship satisfaction. Individuals' attitudes toward money are affected, and finance determines individual behavior regarding savings, borrowing, and risk-taking (Agarwalla et al., 2013).

Savings history is essential for reaping the full benefits of the intervention, which is consistent with the literature on savings, which emphasizes the importance of habit formation (De Mel et al. 2013). Several other studies have found that financial literacy affects formal and stock market participation (Hogarth and O’Donnell 1999).

Furthermore, a lack of financial literacy would have numerous negative consequences. According to Campbell (2006), it may result in costly borrowing and a high debt load. Financial literacy has implications for savings, investments, and stock market participation and significantly impacts an economy's financial and economic development.

Many young adults report that they do not feel adequately prepared to make wise financial decisions when it comes to managing debt (28%), saving for the future (40%), or investing their money (43%) (Schwab Moneywise 2009). Regarding actual financial knowledge (Lusardi and Mitchell 2008; 2011) find that the ability to perform a simple interest rate calculation and knowledge of inflation and risk diversification is meager among the young (a finding confirmed by Lusardi et al. 2010).

The literature on financial literacy has linked financial knowledge to several indicators of financial behavior. Less financially literate people are less likely to plan for retirement (Lusardi and Mitchell 2007; 2008; 2009; 2011), less likely to accumulate wealth (Stango and Zinman, 2009; Van Rooij et al. 2012), and less likely to invest in stocks (Van Rooij et al. 2011; Yoong 2011). Furthermore, less financially literate people are more likely to pay high interest and fees on their debt (Lusardi and Tufano 2015) and to use high-cost borrowing methods (Lusardi and de Bassa Scheresberg 2013).

Mpaata et al. (2021) explained that financial literacy and self-control significantly predict saving behavior. Furthermore, self-control moderates the relationship between financial literacy and saving behavior. Moreover, the findings suggest that individuals with low self-control require a high level of financial literacy to positively affect their savings behavior compared to those with high self-control. Even if they undergo financial literacy training, the effect on savings behavior is negligible. This means that before individuals are taken for financial literacy training, their self-control levels must be assessed.

Conclusion, Implications, Limitations, and Future Research

According to the study's objectives, we find a significant relationship between financial literacy and savings behavior. Risk aversion significantly influences the relationship between financial

literacy and savings behavior. Financial confidence positively overcomes the impact of risk aversion between financial literacy and savings behavior.

Financial products and services have become more widely available in society in recent decades. To provide tools for better financial decision-making, one must first assess what people know and what they need to know, then evaluate the gap between those two things. The majority of financial decisions are based on a few fundamental concepts.

These ideas are universal and apply to any situation or economic environment. Three such concepts are (1) numeracy as it relates to the ability to calculate interest rates and understand interest compounding, (2) inflation understanding, and (3) risk diversification understanding (Lusardi. 2019).

The results have important implications for regulators, academics, and individuals. The importance of financial literacy in savings indicates a need to promote financial educational programs in schools and higher education. This would support better decision-making and improved savings behavior.

There is a need to provide training for people on financial literacy and savings behavior. Any banking sector in India should initiate it. It is also crucial for investors to have proper guidelines for investing and saving for the future. They need to overcome the fear of risk and invest their earned money in their children's education, medical facilities, and other family benefits. By providing the necessary training for the individual investors, there will be much chance to enhance confidence.

The finding that risk aversion does not detract from the positive influence of financial proficiency indicates that financial education can bestow advantages upon a diverse set of people, not solely those comfortable with risk.

This study is unique and has a complicated relationship between the independent and dependent variables by adding two more moderating variables. Hence, the study variables financial behavior, risk aversion, and financial confidence will help to understand the impact

on savings behavior. The three-way interaction result suggests that financial decisions are multifaceted. While formulating policies promoting savings, it would be crucial to consider knowledge, individual psychological factors, and confidence levels.

Despite its significance, this study has several limitations. First, the study focuses on the GCC region. Conducting research in the GCC is exciting because of its large population and the country's rules and regulations. It was challenging to provide the questionnaire for the targeted respondents, which was distributed via Google Forms. The authors collected primary data using snowball sampling. Second, many employees in the GCC are from various countries, making it difficult to understand and obtain data from individual investors. Third, we could only get 357 out of 425 respondents (84%). Fourth, we made use of smartpls4. Only SRMR, NFI, and Chi-square were used to assess model fit. The study's findings cannot be generalized and applied to other countries worldwide.

The survey was conducted in the GCC. It will be exciting to test the proposed hypothesis model in various emerging markets worldwide, including India, Bangladesh, Russia, and African countries.

In this study, we used three-way interactions. By considering the multiple variables, the moderated mediation or moderated moderation model can be used to understand the investors from various countries better. The effects of financial literacy can vary from one country to another country. Accordingly, the savings behavior also changes with risk aversion and financial confidence. This study contributes to the existing literature on financial literacy and savings behavior.

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