

IMPACT OF FINANCIAL LITERACY ON FINANCIAL SATISFACTION: MEDIATING ROLES OF INVESTMENT DECISIONS & MODERATING ROLE OF RISK ATTITUDE

Muhammad Arslan Iqbal¹, Ahmad Saeed² & Shafiq ur Rehman³

¹School of Accounting, Zhongnan University of Economics and Law, Wuhan, CHINA ²Assistant professor Noon business school, University of Sargodha, Sargodha, Pakistan ³Research Scholar, Hailey College of Commerce University of Punjab, Lahore, Pakistan

KEYWORDS	ABSTRACT
Financial Literacy, Behavior on Financial Satisfaction, Roles of Investment Decisions and Risk Attitude	The present research attempts to investigate relationship between financial literacy and financial satisfaction, with the specific emphasis on intervening and moderating roles of investment decisions and risk attitude. The research employs a structural equation modelling (SEM) methodology to examine the proposed associations, using survey data from subset of individuals who have previously made decisions regarding investments. The results indicate that financial behavior and literacy have a positive and significant effect upon financial satisfaction and individual investment decisions. Also, individual investment decisions were found to have a positive and significant effect on financial satisfaction. The relationship between financial literacy, financial behavior, and financial satisfaction was found to be mediated by individual investment decisions. Moderating role of risk attitude was observed between financial literacy, financial behavior, and individual investment decisions. The study highlights standing of attaining high-level financial literacy and making smart investment decisions to rise financial satisfaction for individual, corporate, and real investors.
Correspondence	Muhammad Arslan Iqbal
Email:	imalikarslan9999@gmail.com
DOI	https://doi.org/10.53664/JSRD/04-02-2023-04-274-283

INTRODUCTION

The contemporary society is characterized by a high degree of financial intricacy. The complexity and sophistication of financial markets have been amplified by the rapid pace of globalization and technological progress (Sachdeva & Lehal, 2023). In contemporary times, significance of possessing financial literacy has escalated significantly owing to growing complexity of managing personal finances and investments. Financial literacy refers to the aptitude and expertise necessary to make well-informed judgements about individual's personal financial matters and investments (Chen, Du

& Wang, 2023). Making prudent financial choices is imperative for individuals, as it enables them to fulfil present financial requirements while aligning with prospective financial aims. Financial satisfaction holds significant importance as outcome for individuals within this particular context. Financial satisfaction refers to affective state that arises from appraisal of an individual's financial circumstances and achievements of financial objectives (Tahir, Richards & Ahmed, 2023). Several scholarly investigations have focused significance of financial literacy and behavior in achieving personal financial contentment.

Existing literature indicates that interplay amid financial literacy, financial behavior, and financial satisfaction is significantly influenced by the investment decisions and risk attitudes of individuals. Individuals with greater financial literacy tend to make better investment decisions, leading to increased financial satisfaction (Sobaih & Elshaer, 2023). Also, financial behavior of individuals also exerts an influence on their investment choices, which in turn have an impact on their level of financial satisfaction (Dogra, Kaushal & Kalia, 2023). Investment choices have been shown to have a mediating role in the relationship between financial literacy, financial behavior, and financial satisfaction, as demonstrated by the research in relevant academic fields. According to the research that has been done before, the decision-making process that people go through in respect to their investments seems to have a mediating role in the relationship that exists between financial literacy, financial behavior, and financial satisfaction (Adil, Singh & Ansari, 2022). Individual's investing preferences, as well as the make-up of their investment portfolios, are reflected in choices that they make about their investments. In addition, researchers have investigated influence that a person's risk attitude has on the link between financial literacy, financial behavior, and investment choices (Tahir, Richards & Ahmed, 2023).

The significance of financial literacy and behavior in achieving the financial contentment is widely acknowledged. However, there exists an absence of research on this subject matter in developing nations such as Pakistan. Pakistan is a nation with the populace exceeding 220 million individuals, characterized by low levels of literacy and limited financial literacy. A significant proportion of people lacks access to banking services and exhibits limited awareness regarding desired financial offerings. Additionally, an absence of scholarly inquiry exists regarding the impact of investment choices and risk propensity on interplay among financial literacy, financial conduct, and financial contentment within context of Pakistan (Ghaffar, Khattak, Shah & Jehangir, 2022). In this regard, the research outcomes will offer valuable perspectives on the significance of financial literacy and conduct in achieving financial contentment, the intermediary function of investment choices, and the regulatory function of the risk inclination in the correlation between financial literacy, financial conduct, and financial conduct, and financial institutions, investors, and individuals residing in Pakistan and other developing nations, who are keen upon augmenting their financial literacy and behavior to amplify their financial contentment.

LITERATURE REVIEW

In recent years, the significance of financial literacy has grown considerably owing to its substantial influence on the individuals' financial decision-making and overall financial contentment. The term

financial literacy pertains to individual's capacity to comprehend and proficiently employ financial principles encompassing budgeting, saving, investing, and debt management (Jain, Sharma, Behl & Tiwari, 2022). The significance of financial literacy has been underscored by escalating intricacy of the financial instruments and the expanding financial accountabilities that individuals encounter. According to Majeed, Khan, Ghaffar and Asghar. (2022), As per the findings, there is a significant correlation between insufficient financial literacy and decreased levels of the financial well-being, increased debt, and reduced retirement savings. In this connection, financial literacy pertains to an individual's capacity to comprehend and proficiently handle their personal financial matters. Thus, financial literacy comprises the diverse set of competencies, knowledge, skills and expertise, which include budgeting, saving, investing, and debt management. In this drive, having financial literacy is crucial for individuals to make well-informed decisions regarding their finances and attain their financial objectives.

Financial satisfaction pertains to an individual's personal assessment of their level of contentment with their financial circumstances. The subject matter pertains to diverse facets of the individual financial management, comprising revenue, expenditures, savings, liabilities, and investments. The attainment of financial contentment is a pivotal element of holistic welfare and has the potential to influence an individual's physiological and psychological well-being, as well as their interpersonal connections and general standard of living. Financial satisfaction refers to an individual's subjective evaluation of their financial situation (Adiputra, 2021). Owusu (2021) have identified the several factors that can influence an individual's financial satisfaction, including their income, financial literacy, and financial behavior. The literature has consistently shown that individuals who express higher levels of financial satisfaction tend to display positive financial behaviors, such as carrying significant debt or making late payments. Furthermore, the existing literature has demonstrated a favorable link amid the financial satisfaction and both mental health and overall life contentment (Panjaitan, Renaldo & Suyono, 2022).

The process of choosing investments is a critical component of responsible financial behavior and can have substantial effect on an individual's level of satisfaction with their financial situation. The individuals who demonstrate the capacity to make well-informed decisions with regards to their investments are more likely to achieve their financial objectives and demonstrate elevated levels of the satisfaction with their financial status (Khan, Çera & Pinto, 2022). According to the findings of Normawati, Rahayu and Worokinasih (2021) study, individuals who invested their funds in stocks and mutual funds reported greater levels of financial satisfaction in comparison to those who did not engage in either of these financial instruments. According to findings of Xiao and Iram (2021) research, individuals who engaged in investment activities in retirement accounts demonstrated greater levels of financial satisfaction as opposed to those who refrained from participating in such accounts. The results suggest that an individual's investment choices may have a significant impact on their level of financial satisfaction. Several research studies have been conducted to examine the role of investment decisions as a mediator variable in the relationship between financial literacy and financial satisfaction.

In a study conducted by Mushafiq, Khalid, Sohail & Sehar (2021), conducted a study that revealed partial moderating effect of investment decisions on association between an individual's financial literacy level and their level of financial contentment. According to the research conducted by Ali, Ali and Bagram (2021), have reported that investment decisions partially moderate relationship between financial literacy and financial well-being. Findings suggest that the association between financial literacy and financial contentment could be impacted by mediating role of investment decisions. The tendency of a person for taking risks is critical component that plays a role in person's ability to make sound financial decisions and total financial well-being. People who have a greater tendency toward risk aversion tend to be more cautious in investment choices, while people who have a greater tendency toward risk tolerance tend to have a greater propensity toward taking on bigger financial risks in pursuit of better investment returns (Cera, Khan, Belas & Ribeiro, 2020). According to Khan (2017) there exists a positive correlation between financial satisfaction and risk-taking behavior. The individuals with higher levels of financial satisfaction demonstrated a greater inclination towards engaging in risky behaviors. Perveen, Ahmad, Usman & Liagat (2020) found that an individual's risk attitude plays a moderating role in relationship between financial literacy and financial satisfaction.

Hypothesis of Study

- 1. There is a significant effect on Financial Literacy on Financial Satisfaction
- 2. There is a significant mediating effect of Investment Decisions behavior between Financial Literacy on Financial Satisfaction
- 3. There is a moderating effect of Risk Attitude between Financial Literacy on Financial Satisfaction

RESEARCH METHODOLOGY

The present study employs a quantitative research design. The study utilized cross-sectional survey design to gather primary data from individual investors based in Pakistan. The survey methodology was deemed suitable as it facilitates acquisition of data from a substantial number of participants within a comparatively brief timeframe. Furthermore, it offers a proficient approach to gauge the constructs being examined. The study used a non-probability sampling technique. The research used the purposive sampling method to choose a sample of 239 individual investors who engage in various investment activities such as stock market investment, currency trading, bank investment, savings, and fixed time deposits. The application of sampling methodology was deemed appropriate as it enabled the identification of individuals who met the predetermined criteria for inclusion in the study. The study used a structured questionnaire as the methodology for data collection. The formulation of questionnaire was based on a comprehensive examination of the current literature and consisted of two discrete segments. The study's first phase involved collecting data on the participants' demographic characteristics, such as gender, age, income, education level, occupation, and investment experience.

The following section obtained data regarding participants' financial literacy, financial behavior, investment preferences, risk tolerance, and financial satisfaction. A preliminary assessment was carried out on a cohort of 20 individuals to appraise the lucidity, pertinence, and intelligibility of

the survey instrument. The data gathered during the initial evaluation was utilised to improve the survey tool before the start of the actual data collection phase. The study employed two software applications, specifically SmartPLS 3.2.9 and SPSS 20, for the purpose of conducting data analysis. The research employed the technique of structural equation modelling (SEM) to assess the research hypotheses. The utilisation of Structural Equation Modelling (SEM) allows for estimation of complex relationships between variables and provides a means of assessing both direct and indirect effects of variables under investigation. In this linking, the SmartPLS 3.2.9 software was utilized to scrutinize the desired measurement model, which involved assessing the dependability and authenticity of the constructs and indicators.

The software enabled the assessment of the structural model through the administration of tests on the research hypotheses and examination of direct and indirect effects of the variables. The present study employed statistical software package SPSS version 20 to perform a descriptive statistical analysis of the dataset. This analysis included the computation of measures such as means, standard deviations, and correlations. Software was employed to perform regression analyses with purpose of investigating moderating effect of risk attitude on correlation between financial literacy, financial behaviour, and investment choices. Investigation was carried out in adherence to ethical standards. The study participants were provided with comprehensive information about research, and their informed consent was obtained before their participation in study. Confidentiality and anonymity of participants' responses were ensured. The study protocol was granted approval by institutional ethics review board.

RESULTS OF STUDY

Measurement Model

The analysis of Table # 01 reveals that Average Variance Extracted (AVE) values for all constructs exceed 0.5, while Composite Reliability (CR) values exceed 0.7, indicating satisfactory convergent validity of measurement model. The loadings demonstrated satisfactory results, as no loadings were observed to be less than 0.70.

Constructs	Items	Loadings	AVE	CR
Financial Literacy	FL1	0.878	0.620	0.907
	FL2	0.744		
	FL3	0.751		
	FL4	0.878		
	FL5	0.717		
	FL6	0.741		
Individuals Investment Decisions	IID1	0.701	0.610	0.916
	IID2	0.847		
	IID3	0.729		
	IID4	0.907		
	IID5	0.785		
	IID6	0.755		
	IID7	0.724		

Table 1 Reliability Analysis

Constructs	Items	Loadings	AVE	CR
Financial Satisfaction	FS1	0.746	0.612	0.863
	FS2	0.814		
	FS3	0.827		
	FS4	0.739		
Risk Attitude	RA1	0.736	0.513	0.932
	RA2	0.726		
	RA3	0.769		
	RA4	0.723		
	RA5	0.746		
	RA6	0.801		
	RA7	0.781		
	RA8	0.794		
	RA9	0.721		

Table 1a Reliability Analysis

Subsequently, in the second step, researchers evaluated the discriminant validity of the variables by employing the HTMT criterion proposed by Henseler et al. (2015) and revised by Franke and Sarstedt et al. (2019). The stricter criterion stipulates that the HTMT values must not exceed 0.85, while the more lenient criterion requires that they do not surpass 0.90. As indicated in Table # 02, the HTMT values were observed to be below the more stringent threshold of \leq 0.85. Therefore, it can be inferred that the participants understood the differentiation among the five constructs. The combination of these two validity assessments has demonstrated that measurement items possess both validity and reliability.

	initiatiti varianty (11							
Constructs		FL		FS		IID	F	RA
Financial Lit	eracy							
Financial Satisfaction		0.760						
Individuals Investment Decisions		0.841		0.604				
Risk Attitude		0.818		0.616		0.789		
able 3 Hypotl Hypothesis	hesis Testing Relationship	SB	SE	TV	PV	BCILL	BCIUL	f2
H1	$FL \rightarrow FS$	0.336	0.080	4.195	0.000	0.215	0.476	0.08
	FL → IID	0.430	0.069	6.221	0.000	0.321	0.548	0.207
	$IID \rightarrow FS$	0.102	0.061	1.672	0.001	0.002	0.202	0.09
H2	$FL \rightarrow IID \rightarrow FS$	0.044	0.018	2.424	0.016	0.008	0.079	
H3	RA on FL → IID	0.129	0.058	2.217	0.028	0.015	0.243	

The findings of the analysis utilizing structural equation modelling revealed that financial literacy exerted a significant and positive influence on financial satisfaction (β = 0.336, t= 4.195, p < 0.000). Further, the findings of study revealed that there is a significant mediating relationship between FL \rightarrow IID \rightarrow FS (β = 0.044, t= 2.424, p < 0.016). Lastly, the findings indicated that there is a significant

moderating effect of risk tolerance between observed variables i.e., RA on FL \rightarrow IID (β = 0.129, t= 2.217, p < 0.028).

DISCUSSION

The objective of the current study is to investigate the influence of Financial Literacy on Financial Satisfaction. Additionally, the study seeks to analyses mediating effect of Individuals Investment Decisions on the relationship between financial behavior, literacy, and financial satisfaction. The current study additionally investigates moderating influence of risk attitude on relationship among financial behavior, literacy, and individuals' investment decisions of investors. The current study validates a significant and positive association between financial literacy and financial satisfaction. The current results align with the previous studies that have demonstrated a favorable correlation between financial literacy and the financial satisfaction of individual investors (Chen et al., 2023; Dogra et al., 2023; Ghaffar et al., 2022). Impact of financial literacy on an individual's investment decisions has been found to be positive and significant, which is consistent with the prior research conducted by researchers in the different contexts and situations that has established the desired positive correlation between financial literacy and investment decisions (Iram et al., 2021; Jain et al., 2022; Khan et al., 2022).

The research has shown that the investment decisions made by individuals significantly impact the relationship between financial literacy and financial satisfaction. The study's findings suggest that individuals with a strong level of the financial literacy demonstrate effective investment decision-making abilities, resulting in the profitable investments and higher investment returns. This, in turn, contributes to an overall increase in financial contentment. Thus, the results suggest that personal investment decisions have a significant impact on the relationship between financial behavior and financial satisfaction. The findings suggest that individuals who demonstrate a heightened level of financial behavior have achieved higher levels of financial satisfaction by making the shrewd and successful investment decisions. The results mentioned above suggest that an individual with a high level of financial literacy and who demonstrates responsible financial behavior is likely to achieve financial satisfaction by making wise and prudent investment decisions (Khan, 2017; Majeed et al., 2022; Mushafig et al., 2021).

The noteworthy moderating influence of risk attitude on relationship between financial literacy and individual's investment choices underscores the significance of financial literacy. Individuals who possess financial literacy tend to make more informed investment decisions, particularly when faced with risk aversion. The demonstration of the influence of financial literacy on an individual's investment choices in the context of risk aversion is deemed advantageous for investors (Sobaih & Elshaer, 2023; Tahir et al., 2023). The significance of the moderating effect of risk attitude on the association between financial behavior and individual's investment decision has been established. This phenomenon underscores the significance of financial conduct, whereby individual or investor with a propensity for risk aversion is more likely to exhibit prudent and astute investment decisionmaking. The aforementioned evidence indicates that possessing financial literacy and exhibiting sound financial behavior can enable an individual to make optimal investment decisions even in the face of risk aversion.

CONCLUSION

The objective of study was to examine the influence of financial literacy and behavior on financial satisfaction, while considering mediating effect of investment decisions and the moderating effect of risk attitude. The findings of the research indicate that financial literacy and behavior exert a noteworthy favorable influence on both financial contentment and investment choices. Besides, the process of making investment choices serves as a mediator in association between an individual's level of financial literacy, their financial behavior, and their overall sense of financial contentment. The research additionally discovered that the inclination towards risk serves as a moderator in the correlation among financial literacy, conduct, and investment choices. The implications of study's findings hold significant importance for the stakeholders, including individual investors, corporate investors, and real investors. The proposition is made that financial literacy and behavior play a pivotal role in augmenting financial contentment and facilitating astute investment choices. Thus, enhancing financial literacy and behavior can enable investors to enhance financial contentment and make informed investment choices, thereby resulting in improved financial consequences. The research emphasizes the significance of investment choices and risk dispositions in influencing one's level of financial contentment.

Limitations & Future Direction

The research exhibits a number of limitations. Study's sample size was restricted to 239 individual investors, which could potentially limit its generalizability to the broader population. The study's scope was limited to individual investors and did not account for the influence of financial literacy and behavior on financial contentment among institutional investors. Study solely examined the effects of investment decisions and risk attitude as intervening and regulating variables. Additional variables, such as income, age, and educational attainment, were not taken into account. Finally, the research was dependent on data that was self-reported, thereby potentially susceptible to bias. In spite of aforementioned limitations, this investigation offers significant perspectives on correlation among financial literacy, conduct, investment choices, risk propensity, and financial contentment. Subsequent research endeavors may broaden scope of these discoveries by incorporating a more heterogeneous participant pool and integrating supplementary variables that may exert an impact on financial contentment.

REFERENCES

- Adil, M., Singh, Y., & Ansari, M. S. (2022). How financial literacy moderate the association between behaviour biases and investment decision? *Asian Journal of Accounting Research*, 7(1), 17–30.
- Adiputra, I. G. (2021). The influence of financial literacy, financial attitude and locus of control on financial satisfaction: Evidence from the community in Jakarta. *KnE Social Sciences*, 636–654–636–654.
- Ali, M. S., Ali, M. N., & Bagram, M. M. M. (2021). Financial Literacy and Financial Satisfaction: A Moderated Mediation Analysis of Self-Esteem and Financial Behavior. JISR management and social sciences & economics, 19(1), 67–84.

- Çera, G., Khan, K. A., Belas, J., & Ribeiro, H. N. R. (2020). The role of financial capability and culture in financial satisfaction. Economic Papers: A journal of applied economics and policy, 39(4), 389–406.
- Chen, F., Du, X., & Wang, W. (2023). Can FinTech Applied to Payments Improve Consumer Financial Satisfaction? Evidence from the USA. *Mathematics*, 11(2), 363.
- Dogra, P., Kaushal, A., & Kalia, P. (2023). What drives the investment intentions of emerging economy millennials? Examining the effect of financial advertisement with the PLS-SEM. *Journal of Financial Services Marketing*, 1-16.
- Ghaffar, J. A., Khattak, M. S., Shah, T. A., & Jehangir, M. (2022). Impact of personality traits on financial planning: Empirical evidence from Pakistan. *Journal of Economic & Administrative Sciences*, 11(2), 453–462.
- Iram, T., Bilal, A. R., & Latif, S. (2021). Is awareness that powerful? Women's financial literacy support to prospects behaviour in the prudent decision-making. *Global Business Review*, 0972150921996185.
- Jain, R., Sharma, D., Behl, A., & Tiwari, A. K. (2022). Investor personality as a predictor of investment intention-mediating role of overconfidence bias and financial literacy. *International Journal of Emerging Markets*. 23 (2), 167–184.
- Khan, K. A., Çera, G., & Pinto, S. R. (2022). Financial capability as a function of financial literacy, financial advice, and financial satisfaction. E& MEkonomie a Management. 12 (4), 57–74.
- Khan, M. Z. U. (2017). Impact of availability bias and loss aversion bias on investment decision making, moderating role of risk perception. *Management & Administration (IMPACT: JMDGMA*), 1(1), 17–28.
- Majeed, K. B., Khan, A., Ghaffar, I., & Asghar, H. (2022). The Linkage Between Financial Literacy and Financial Decision–Making with The Mediating Effect of Investment Behavior. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 19(3), 1582–1598.
- Mushafiq, M., Khalid, S., Sohail, M. K., & Sehar, T. (2021). Exploring the relationship between investment choices, cognitive abilities risk attitudes and financial literacy. *Journal of Economic and Administrative Sciences*, 28 (3), 267–284.
- Normawati, R. A., Rahayu, S. M., & Worokinasih, S. (2021). Financial knowledge, digital financial knowledge, financial attitude, financial behaviour and financial satisfaction on millennials. ICLSSEE 2021: Proceedings of the 1st International Conference on Law, Social Science, Economics, and Education, ICLSSEE 2021, March 6th 2021, Jakarta, Indonesia,
- Owusu, G. M. Y. (2021). Predictors of financial satisfaction and its impact on psychological wellbeing of individuals. *Journal of Humanities and Applied Social Sciences* (ahead-of-print).
- Panjaitan, H. P., Renaldo, N., & Suyono, S. (2022). The Influence of Financial Knowledge on Financial Behavior and Financial Satisfaction on Pelita Indonesia Students. *Jurnal Manajemen Indonesia*, 22(2), 145–153.
- Perveen, N., Ahmad, A., Usman, M., & Liagat, F. (2020). Study of Investment Decisions and Personal Characteristics through Risk Tolerance: Moderating Role of Investment Experience. *Amazonia Investiga*, 9(34), 57–68.

- Sachdeva, M., & Lehal, R. (2023). The influence of personality traits on investment decisionmaking: a moderated mediation approach. International Journal of Bank Marketing. 13 (6), 367–384.
- Sobaih, A. E. E., & Elshaer, I. A. (2023). Risk-Taking, Financial Knowledge, and Risky Investment Intention: Expanding Theory of Planned Behavior Using a Moderating-Mediating Model. *Mathematics*, 11(2), 453.
- Tahir, M. S., Richards, D. W., & Ahmed, A. D. (2023). The role of financial risk-taking attitude in personal finances and consumer satisfaction: evidence from Australia. *International Journal of Bank Marketing*. 11(3), 67–84.
- Tahir, S., Shahid, A. U., & Richards, D. W. (2022). The role of impulsivity and financial satisfaction in moderated mediation model of consumer financial resilience and life satisfaction. International Journal of Bank Marketing. 18 (3), 157–174.