Migration Letters

Volume: 21, No: S11 (2024), pp. 319-337 ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

Financial Literacy And Risk Aversion: The Influence Of Social Agents, Mindfulness, And Education In Emerging Economy

Afeera Ashraf¹, Wahab Ahmed², Khurram Shahzad³

Abstract

The research examines the relationship between risk aversion and financial literacy from financial, social influencers, financial education, and mindfulness perspectives. Quantitative data was gathered from university students through an electronic self-administered survey, and the research utilized partial least squares structural equation modeling. The findings indicate a favorable relation between risk aversion, financial knowledge, and mindfulness. Financial literacy, financial social agents, and financial education are inversely related. The most significant mediating factor appears to be mindfulness, indicating that individuals with a positive mind tend to have lower levels of risk aversion along with higher financial literacy. These findings have implications for stakeholders, including users of financial institutions and regulatory bodies. As financial decisions be¹ come more complex daily, individuals require adequate financial knowledge to make informed choices. The research suggests that financial education alone may have limited effectiveness in enhancing financial behaviors, echoing prior studies highlighting the importance of considering psychological traits alongside financial literacy.

Keywords: Financial Literacy, Risk Aversion, Financial Education, PLS-SEM, Mindfulness, Quetta.

Introduction:

The modern financial landscape is complex, and individuals without a strong understanding of financial concepts may struggle to make informed and wise monetary decisions (Lusardi, 2019; Lusardi & Mitchell, 2014). While making informed financial decisions, individuals need to be financially literate and capable of evaluating financial information related to annuities, commitments, and budgeting (Moaaz & Mansour, 2023; Riaz et al., 2022). The most important to manage the markets and to fuel the growth of economic products is financial literacy. While this is an area of concern, as many countries have put on their agendas that their initiatives should include this education to all age groups, the research on this lacks the depth of understanding to map the issue much better, in the same sense that programs on entrepreneurship have been traced through diffusion studies (Hohenthal, 2014). The availability of work on money management skills and financial literacy is scarce in industrialized and developing countries (Choung et al., 2023).

Scholars contend that research should further explore why university students are financially illiterate, including factors like financial self-efficacy, socialization agents, and attitudes

¹Scholar NUML, Quetta.

²Lecturer. BUITMS, Quetta.

³Assistant Professor, IMS, University of Balochistan, Quetta.

toward money (Utama & Syarif, 2023; Moaaz & Mansour, 2023). Therefore, they are the critical components of daily life and resources for resilience building (Atmaningrum et al., 2021), which is why it is crucial to understand how these elements affect financial decisionmaking. A positive money mindset drives action-oriented behaviour, encourages learning to manage money effectively, and develops good financial management skills (Shah, 2023; Karim et al., 2023). These include substantial financial decisions for individuals, such as managing debt, investing, savings, insurance, and retirement planning. These issues are faced by many, driving low levels of financial literacy that predominantly affect the female gender, which results in insufficient financial habits (Khusaini et al., 2021). Finance Experts need to know financial concepts, and they should like low-risk investments. Recent research shows that individuals who know more about finance are much more likely to trade in stock markets, whereas individuals with a higher degree of stock market literacy are less likely to lose money investing in risky stocks (Adil et al., 2023; Lusardi & Mitchell, 2023). The commonality to these claims is that aspirations for risky investments grow with financial literacy, and the financially literate are more likely to consider the relative merits of different financial instruments before investing (Li 2023).

With the growing intricacy of the financial industry, it is crucial to elevate understanding of monetary affairs. Addressing the gender gap in financial literacy may reduce financial disparities among individuals and families and further enhance financial well-being efforts (Riaz et al., 2022; Moussié et al., 2021; Dinç et al., 2021). Research shows that women are usually more risk-averse than men. Considering some of the ideas highlighted in the policy document, taller people are also found to take more risks, as does risk aversion in children, which is strongly related to parental education, and poorer parents tend to be shorter. It is important to weigh risk aversion when making financial decisions. Children of educated parents have generally been shown to be less risk averse because they learn some financial knowledge and skills from their parents (Bakar & Bakar, 2020; Hobfoll et al., 2018; Cooper & Zhu, 2016). The gender difference results in females exhibiting more risk aversion in risky asset investment than men. Understanding investments and how finance can help squash the gender gap of those willing to take a risk. Risk aversion is also strongly linked with confidence in financial abilities and an accurate understanding of finances (Sriyono & Rif'ah, 2022).

Risk aversion and financial literacy are crucial for investing. Studies have found that financial education can predict differences in risk appetite and investment decisions, measured through knowledge, literacy, and self-confidence (Hermansson & Jönsson, 2021). A study explores the relationship between financially literate young individuals in Romania who are risk-averse and interested in investing. College students undergo significant personal growth, including gaining financial independence and forming long-term financial habits that influence their decisionmaking later in life (Liu & Lin, 2021). Research studies provide limited data on investment literacy and decision-making related to finance. Specific demographics, such as women, older individuals, and those with limited educational achievements, are likelier to have lower financial knowledge levels than other groups (Atmaningrum et al., 2021). Research has found a connection between uncertainty and economic activity, with financial crises starting when market risk premiums and volatility reach their highest points. Risk-averse consumers are often older individuals with pessimistic attitudes who expect unfavorable outcomes more frequently (Bashir et al., 2022). Societal conditions, moral principles, and religious convictions can impact investors' tolerance for risk (Butler, 2022). Few studies assume that an investor's risk appetite remains constant, unaffected by changes in knowledge or unforeseen events. Most ambiguous models indicate no change in risk aversion when individuals experience an overall gain in wellbeing (Xu, 2021; Ye, 2022).

Many studies assess the general population's level of risk aversion and its relationship to option premiums and time series data on underlying assets (Aras, 2023; Häusler et al., 2018; Chattopadhyay & Dasgupta, 2015; Conine et al., 2016). A decline has influenced changes in assessment methodologies and the quality of financial literacy assessments. Financial literacy is crucial for managing savings, reducing transaction costs, and predicting financial behavior. Risk refers to the unpredictable outcomes, which can be advantageous or detrimental. Investor risk aversion affects financial markets by increasing volatility and decreasing returns. Gender does not appear to impact investing behavior significantly, but younger investors may choose riskier assets due to their greater willingness to take on risks than older investors (Meziani & Noma, 2018). Financial literacy involves evaluating risks, making educated decisions, and implementing innovative financial practices. The significance of financial literacy in individuals' lives is highlighted, and it has garnered increased interest due to the growing intricacy of financial instruments and the transition to making personal financial choices (Guo et al., 2022).

Financial education is often provided through various means, such as online sources, community groups, companies, and educational institutions to assist individuals in improving their financial decision-making (Moaaz & Mansour, 2023; González, 2022; Hàng & Quyen, 2022). There is a growing global recognition of the increasing importance of financial literacy and education, particularly for young individuals and immigrants, those from low-income backgrounds, and marginalized communities. Efforts to enhance financial literacy involve collaborative initiatives by governments, non-profit organizations, and financial entities that provide educational materials, raise awareness, conduct workshops, training sessions, and seminars, offer online courses, and utilize interactive technology (Choung et al., 2023). Financial inclusion and literacy are critical and significantly impact macroeconomic policies and indicators from an individual purpose. Increasing financial inclusion leads to accelerated economic growth, reduced poverty, and improved living standards. Involvement in the financial system also helps decrease income inequality and enhances the central bank's capability to manage economic activities through policies.

Therefore, the relevant population must understand risk management and financial literacy based on appropriate considerations (Sriyono & Rif'ah, 2022). The existing literature reveals a scarcity of studies focused on Pakistan, with only a handful conducted in Balochistan and Quetta. For instance, the differences related to financial literacy, exploring the relationship between financial literacy, financial attitude, financial behavior, and knowledge (Karim et al., 2023). Similarly, Umer et al. (2023) investigated the impact of financial literacy, cognitive ability, and demographic characteristics on the financial inclusion of investors in Gwadar. This study aims to evaluate the effect of risk aversion on financial literacy, mediating financial mindfulness, financial education and training, and socialized financial influencers.

Literature Review

Many studies have extensively examined the influence of financial literacy on investment decisions and risk tolerance. They find that financially literate persons are less likely to invest in speculative or high-risk assets and are generally more risk-averse (Li, 2020; Ouachani et al., 2020; Khan et al., 2020). This relationship is often assumed to result from improved financial literacy and, thus, a better grasp of financial concepts that allow for proper risk assessment and management. Research has proven the importance of financial knowledge and literacy for determining the utilization of financial services as they provide individuals with the skills with which they can make investment decisions and saving and risk management (Khan et al., 2022; Thaha, 2022; Lyons and Kass-Hanna, 2021). Risk aversion (RA) is manifested in the behavior of an individual who - instead of choosing a specific outcome over another of equal expected

value endorses one with higher variability, regardless of identical expectations (Bommier & Grand 2019).

Moreover, the relationships between peer groups in the formation of emotional and cognitive development and financial planning of the child are addressed (Lux & Walper, 2019; Hobfoll et al., 2018). The gap has been identified in the literature, where the children learn money values to peer groups and social motivation (e.g., Anderson & Hjortskov, 2019; Choi & her colleagues, 2018; Fadilah & Mariohan, 2021). Individuals can control their financial plans by smartly operating their own money and setting up their financial destiny; as a result, they can eventually contribute to the development of the economy. The extent of financial knowledge, the quality of coaching, and attitudes to money affect financial behavior (Sabri et al., 2022; Halim & Setyawan, 2021; Hakim et al., 2018). A positive financial attitude about thoughts, feelings, physical sensations, and surroundings fosters mindfulness (Opelt & Schwinger, 2020). It helps with mindfulness; it is all about observing thoughts and emotions non-reactively and objectively, and acceptance is a significant component of the practice. For example, it is essential to discard the belief of the existence of a "right" or "wrong" feeling or thinking from your mind. Experts say three types of mindfulness keywords are never taking anything for granted, being conscious and present, and remaining open-minded, accepting, and curious (Limpo et al., 2023; Krishnan, 2021).

The most basic finances are the crucial skills and mindsets included in financial education and understanding of money and finance (Choung et al., 2023). Learning how to manage money is what financial education is; such education empowers people with the value of responsible money management and allows them to choose better. At its core, early financial education is intended to give individuals a better understanding of money as adults, helping them better at handling their money overall and arming them with the knowledge and confidence required when making critical financial decisions. According to some research, the teaching of financial concepts to individuals at an early age will result in better financial outcomes in the future (Rohmah et al., 2022; Gusti, 2019; Lührmann et al., 2019; Fabris & Luburić, 2016) if individuals continue to grow up with an inadequate foundation of financial literacy. It teaches youngers to spend responsibly, save often, and understand the various financial options available to them as they come of age. Financial education positively affects young individuals' spending behavior, saving attitude, and financial literacy (Moaaz & Mansour, 2023; Kasman et al., 2018).

Increasingly, public and private institutions are concentrating on raising people's financial literacy in the contemporary world. Money satisfaction is ultimately a result of money management strategies, mindsets, and challenges (Kaur et al., 2021; Mahendru, 2020; Chen et al., 2020). First-year bachelor's degree students do not fare better than older university students regarding financial challenges while having improved attitudes about personal finances (Kozubíková & Kozubík, 2021). Financial social actors connect risk aversion and financial literacy. Participation or observation can be used to get formal or informal financial education. According to research, young people pick up attitudes and behaviors from the role models they interact with regularly (Mtemeri, 2019), and Instructors influence students' consumption habits just as much as parents do (Fitri et al., 2022; Ardyanti & Kardoyo, 2018).

Mindfulness serves as the connection between risk aversion and financial skill. We conducted multiple exploratory studies to investigate the concept and measurement of global risk aversion in empirical research (Lin, 2022; Perveen et al., 2020; Dohmen et al., 2018). The primary goal was to examine financial risk aversion. Subsequently, we assessed the effectiveness of the scale in predicting various behavioral outcomes by integrating it with a wide range of other measures. Some of these methods involved avoiding risk in using products, facing different decision challenges and bets, and associated factors like creativity. The inclination to minimize or

eradicate financial risks significantly impacts financial actors, highlighting the substantial benefits for individuals and organizations involved in financial activities and transactions (Kasiisii et al., 2023; Chen et al., 2023). This suggests that those who take fewer risks are more likely to achieve financial success or benefits. Nevertheless, its impact on financial outcomes can significantly differ among cases and be so for the specificities of the case and the nature of the financial activity itself.

In addition, individuals or organizations could be more careful in financial decisions to avoid risk in spending money, which could ultimately enhance financial performance (Andriani & Sukaris, 2022; Aren & Zengin, 2016). Risk aversion vastly improves the level of financial education and knowledge. People who avoid risks should invest in financial education and training (Sadiq & Khan, 2019; Aren & Zengin, 2016). This could be in better training or teaching effectiveness, more careful and risk-aware curriculum design, or increased student involvement and participation due to highlighting risk management. It is imperative to acknowledge that the nature and magnitude of the influence may differ based on the environment, the quality of educational and training initiatives, and the individuals involved. After going through the literature the following hypotheses are developed by the researchers;

H1: There is a relationship between financial literacy and risk aversion.

H2: There is a relationship between financial literacy and Financial social agents.

H3: There is a relationship between financial literacy and Mindfulness

H4: There is a relationship between financial literacy and Financial Education and training.

H5: There is a relationship between risk aversion and Financial social agents.

H6: There is a relationship between risk aversion and mindfulness

H7: There is a relationship between risk aversion and Financial Education and training.

H8: Investigating the role of financial social agents in mediating the relationship between financial literacy and risk aversion.

H₉: Investigating the impact of mindfulness on the relationship between risk aversion and financial literacy.

H₁₀: Examining the mediating effect of financial education and training on the relationship between financial literacy and risk aversion.

Figure 1: Conceptual Framework



Methodology:

A deductive, quantitative methodology is used for the study to examine the association between gender groups, financial literacy, risk aversion, and financial education. Data was gathered through a cross-sectional (Almenberg & Dreber, 2021). The data was collected from the 315 Business Administration students of Universities in Quetta City using non-probability purposive sampling (Atiq & Usmani, 2023). The sample size was selected by using the g power method and software. G* power calculates the sample size using a technique that provides a flexible and robust approach based on the parameter and study design (Kang, 2021; Nanjundeswaraswamy & Divakar, 2021).

A partial least squares model is used instead of ordinary least squares to estimate the parameters. PLS is marketed as a straightforward regression method employing scale scores, which is particularly useful for structural equation modeling (Zhang et al., 2023; Zeng et al., 2021). It is utilized in academic and corporate settings to ensure accurate capture of variation in the variable under study (Suhartanto et al., 2020; Hair et al., 2019). However, the covariance-based SEM approach appears more successful in analyzing and validating theory. This study places less emphasis on theory-oriented research and more focus on prediction. The hypotheses were tested using the variance-based SEM technique, intelligent PLS (partial least square) (Perdana et al., 2023; Afthanorhan et al., 2020; Akter et al., 2017).

Table 1: Measures	
Constructs	Items
Financial Literacy	10 items by (Potrich et al., 2018)
Financial Risk Aversion	7 items by (Riaz et al., 2022)
Mindfulness	8 items by (Feldman et al., 2022)
Financial Social Agents	7 items by (Pinto et al., 2005)
Financial Education and Training	6 items by (Riaz et al., 2022)

Results and Discussion:

A frequency table provides a detailed breakdown of various demographic factors, including gender, age, marital status, and income, presenting these factors in percentages and actual frequencies. According to Table 2, the gender distribution indicates that 53.01% of the respondents were male, while 46.98% were female. This nearly equal representation highlights a balanced sample in terms of gender. When examining the age distribution, it is noted that a significant majority, 68.57%, of the respondents were within the 18-35 age range. This suggests a predominantly younger demographic. Meanwhile, 20% of the respondents fell into the 36-54 age bracket, indicating a fair representation of middle-aged individuals. Only 11.43% of the respondents were 55 or older, showing a smaller proportion of older participants.

The data reveals that 3.17% of the respondents reported a monthly income of less than Rs.20,000, reflecting the lower-income segment of the population. Additionally, 9.84% of respondents earned between Rs.20,000 and Rs.30,000, while 19.05% had incomes ranging from Rs.31,000 to Rs.40,000. The majority, 67.94%, reported earning Rs.41,000 and above, indicating a higher-income group within the sample. Regarding marital status, the data shows that 63.49% of the respondents were single, which could imply that a younger demographic had yet to marry. Moreover, 21.59% of the participants were in a marital union, indicating that a substantial group segment comprised individuals with existing households. Additionally, 14.92% of the respondents had undergone divorce.

Variables	Value	Frequencies	Percentage
Gender	Male	167	53.01
	Female	148	46.98
	18 to 35	216	68.57
Age	36 to 54	63	20
	55 and above	36	11.43
Marital	Single	200	63.49
Status	Married	68	21.59
	Divorced	47	14.92
Income	less than 20000	10	3.17
	20000 - 30000	31	9.84
	31000 - 40000	60	19.05
	41000 and above	214	67.94

rable 2. Demographies	Fable 2:	Demographics
-----------------------	-----------------	--------------

The study reports two essential findings related to the reliability and validity of the used constructs. An initial examination was performed on item factor loadings, and we revealed that item RA4 had the highest loading at 0.910 and item FE&T5 had the lowest loading at 0.683 (Hair et al., 2019). The above loadings reflect high correlations between the items and their corresponding constructs, thus the measurement quality. We also assessed the internal consistency of the constructs from both Cronbach's alpha and Composite Reliability perspectives (Hair et al., 2017; Reichenheim et al., 2014; Rios & Wells, 2014). Internal consistency was strong, with Cronbach's alpha values between 0.885 and 0.934, within the acceptable range of 0.70 to 0.95. This is supported by the CR values indicating that the constructs consistently measure the targeted variables. According to (Fornell and Larcker, 1981), the evaluation of AVE values was used to test the supremacy of the measurement model, and in this study, all constructs surpassed the recommended value greater than 0.50 (Sarstedt et al., 2023). Overall, 50% of the variation in the indicators is attributable to the factor, and hence, the convergent validity of the latent constructs is established. Discriminant Validity was determined using the Heterotrait-Monotrait Ratio (HTMT). The constructs were discriminant,

measuring the different concepts to the same extent; the HTMT values were less than 0.90 (Hamid et al., 2017). In summary, these findings demonstrate the credibility and robustness of the constructs employed in the study and, therefore, validate their application for subsequent investigation and explanation (Sarstedt et al., 2021).

While the data did support the initial hypothesis that Financial Social Agents on Risk Aversion (β = -0.138, t= -2.254, p<0.012), The results indicate that using financial social agents has led to a significant decrease in risk aversion, probably due to their advice and helping to abolish uncertainties. From another perspective, it can be concluded that more intelligent citizens know more about handling their expenses, which in turn points towards a positive relationship with mindfulness, meaning people who pay more attention to their financial behavior demonstrate better financial literacy. This association might be due to their increased awareness and understanding of financial concepts. No relationship was found concerning Financial Literacy (FL) and Financial Education and training (FE&T) (β = 0.056, t= 0.769, p>0.221). This outcome indicates that financial literacy may not immediately translate to improved financial education and training levels.

Moreover, the relationship between Financial Literacy (FL) and Financial Social Agents (FSA), the results represent that there is not a significant relationship between them (β =0.126, t= 1.233, p> 0.109), thus not supporting the hypothesis. This indicates that financial literacy alone does not significantly impact engagement with social financial agents, which could be influenced by other variables such as access to these agents or individual preferences. Financial literacy does not positively affect financial, social agents" implies that having a certain amount of financial knowledge and comprehension has no positive impact on people or organizations that work in the financial or economic sphere people or organizations referred to as "financial, social agents." Put another way, this claim implies that these agents do not experience any appreciable benefits from having a higher level of financial literacy. This interpretation is based on the text as supplied, which recognizes that there can be a complex link and that it may vary depending on several circumstances between financial outcomes and financial literacy. These elements consist of the specific setting, the definition of "positive impact," and the characteristics of the financial agents under consideration.

Hypothesized Relationships	В	S. D	t-	Р	Results
			stat	value	
				s	
H ₁ : There is a negative relationship	0.126**	0.063	1.98	0.023	Supported
between financial literacy and risk					•••
aversion.					
H ₂ : There is a positive relationship	0.126	0.102	1.23	0.109	Not
between financial literacy and					Supported
financial social agents.					
H ₃ : There is a positive relationship	0.119**	0.060	1.96	0.025	Supported
between financial literacy and					
mindfulness.					
H ₄ : There is a positive relationship	0.056	0.073	0.76	0.221	Not
between financial literacy and					Supported
financial education and training.					
H ₅ : There is a positive relationship	-0.138**	0.061	2.25	0.012	Supported
between risk aversion and financial					
social agents.					
H ₆ : There is a positive relationship	0.272**	0.047	5.80	0.000	Supported
between risk aversion and	*				
mindfulness.					~
H ₇ : There is a positive relationship	0.198**	0.055	3.61	0.000	Supported
between risk aversion and financial	*				
education and training.	0.015	0.01.6	1.00	0.100	
H ₈ : Investigating the role of financial	-0.017	0.016	1.08	0.139	Not
social agents in mediating the					Supported
relationship between financial					
literacy and risk aversion.	0.020**	0.010	1.01	0.025	0 (1
H ₉ : Investigating the impact of	0.032**	0.018	1.81	0.035	Supported
mindruiness on the relationship					
literacy					
Interacy.	0.011	0.016	0.60	0.242	Nat
Π_{10} . Examining the mediating effect	0.011	0.010	0.09	0.242	INUL Supported
on the relationship between financial					supported
literacy and risk aversion					
literacy. H_{10} : Examining the mediating effect of financial education and training on the relationship between financial literacy and risk aversion.	0.011	0.016	0.69	0.242	Not Supported

Table 3: Hypothesis Testing

Note: The table presents the results of hypothesis testing, including (Coefficients, β) indicates the strength and direction of the relationship, (standard deviations S.D) measures the amount of variation or dispersion in the sample data. Lower values indicate that the data points tend to be close to the mean of the sample, (T-statistics) is used to determine if there is a significant difference between the sample data and the null hypothesis. A higher absolute value of the Tstatistic indicates a more significant result. (P-values) indicates the probability that the observed results occurred by chance. In a one-tailed test, a P-value less than 0.05 typically indicates statistical significance, and the decision criteria are supported if the P-value is less than 0.05 in a one-tailed test, indicating that the relationship is statistically significant. The hypothesis is not supported if the P-value is greater than 0.05, indicating that the relationship is not statistically significant. All results were tested using a one-tailed test.

The hypothesis that Financial Literacy (FL) impacts Risk Aversion (RA), the (β = 0.126, t= 1.989, p< 0.023), supports the hypothesis. This result suggests that increased financial literacy reduces risk aversion because knowledgeable individuals are more confident in their financial decisions. When assessing if Financial Education and Training (FE&T) influences Risk Aversion (RA), the findings revealed a (β = 0.198, t= 3.616, p< 0.000), thus supporting the hypothesis. This indicates that financial education and training significantly decrease risk aversion, emphasizing the importance of structured financial learning in enhancing individuals' risk-taking capabilities. The hypothesis that Mindfulness (Mind) impacts Risk Aversion (RA) was supported, with a (β = 0.272, t= 5.804, p< 0.000). This result suggests that higher mindfulness is associated with reduced risk aversion because mindful individuals better manage their emotions and make balanced decisions. Furthermore, the mediation hypothesis that Financial Literacy (FL) affects Financial Education and training (FE&T), which in turn impacts Risk Aversion (RA), the results indicated (β = 0.011, t= 0.699, p>0.242), showing that this hypothesis was not supported.

Latent Constructs	\mathbf{R}^2	\mathbf{f}^2	Q ²
Risk Aversion	0.181		0.243
Financial Education and Teaching		0.047	
Financial Literacy		0.019	
Financial Social Agents		0.022	
Mind Fullness		0.086	

This finding implies that the indirect effect of financial literacy on risk aversion through financial education and training is not significant. The hypothesis that Financial Literacy (FL) influences Financial Social Agents (FSA), which then affect Risk Aversion (RA), had a (β = -0.017, t= 1.084, p> 0.139), indicating a lack of support for this hypothesis. This result suggests that the mediating role of financial, and social agents in the relationship between financial literacy (FL) influences the Mindfulness (Mind) variable with a Beta coefficient of (β = 0.032, t= 1.811, p< 0.035) was also confirmed. This suggests that mindfulness is the mediating factor between financial literacy and risk aversion and underlines the role of mindfulness as an agent translating financial literacy into risk-averse behavior.

Finally, the results also show that the role or behavior of these social agents is not significant, and mindfulness is a mediating variable between an individual financial literacy and risk aversion (Lone & Bhat, 2022; Khawar & Sarwar, 2021; Hermansson & Jönsson, 2021). As per the findings, the outcome also indicates that risk aversion and mindfulness are both key drivers of financial literacy (Mireku et al., 2023; Hermansson & Jönsson, 2021; Byegon, 2020). Financial education and training and financial agents with financial literacy did not have significant mediations as expected. In analyzing risk aversion, we noticed that the more risk averse a user is, the less she engages with financial social networks (Prasad et al., 2020; Bayar et al., 2020; Kanagasabai & Aggarwal, 2020). The R-square of the Model is 18%, which shows that the Model describes the financial risk as 18% overall. It suggests a positive relationship exists between how financially literate people are and the likelihood of them being risk-seekers or risk-averse. This notion is based on the belief that having sound financial knowledge and financial management skills enhances financial decision-making. Discussing how, for all of its widely acknowledged merits in theory, financial literacy does not seem to do that much for economic and social agents, it is contended that this line of criticism can be easily countered.

Financial literacy is, however, one of those reasonably uncontroversial skills that many people agree are necessary for making better financial decisions and money management at both the micro and macro levels (Lusardi, 2019; Mitchell & Abusheva, 2016; Lusardi & Mitchell, 2014).

Figure 2: Measurement Model



It is believed that improved levels of financial literacy would play a significant role in financial education, training, and social agents. A better understanding of finance is inevitably linked to better management of finances, making better financial choices, and leading to financial stability (Choung et al., 2023; Trivani & Soleha, 2023). The hypothesis that financial literacy leads to more mindfulness offers the idea of a positive relationship. This theory posits that those with an above-average tendency to exhibit mindfulness are more likely to be financially wise. Yet, the connection between practicing mindfulness and financial literacy may not be as neat after all, with other factors that may come into play. The authors use the idea that financial education and training do not make any difference because having financial literacy is not a substantially stronger argument (Skagerlund et al., 2018; Pereira & Coelho, 2018; Fernandes et al., 2014). Under this theory, simply because to know more about money does not mean it would be a more significant financial expert. While the effects might be minor, it does not

utterly eliminate that possibility. The link between financial education and financial literacy is multifaceted and is influenced by several different factors, including the quality of training and educational initiatives, the effectiveness of trainers and educators, the receptivity of trainees and students (Khan et al., 2022; Annamaria, 2019; Kasman et al., 2018; Arrondel, 2018).

Figure 3: Structure Model



Conclusion & Implications:

The research method employed is the correlation study, which investigates the relationship between financial education & training, financial social agents, risk aversion, mindfulness, and financial literacy (Pencenoli, 2016). This study shows that financial literacy is an essential element of human capital investment with broad life consequences and has themes relevant to public financial policy. The analysis showed that both men and women understand the concept of financial literacy and that risk aversion significantly impacts this understanding. Methods for mindfulness can be used to calm the mind of anyone entering the high-stakes game of negotiating with money. Continuing to practice non-reactive mindfulness allows investors to make less emotional decisions and take measures more suitable to their financial objectives over the long term. When we optimize our decision-making, and when we understand that decisions are made by using both our limbic system (emotions) and neocortex (thoughts), then as an investor, you are on your path to be able to improve your financial decisions (Cognitive errors and biases - Wikipedia). Mindfulness encourages the consideration of long-term goals AND the present, leading to more careful decision-making and bias towards lower-risk options. By embracing a 3600 view, investors can gain more clarity of thought, allowing them to make better decisions, create less emotion, and, ultimately, better financial results.

The significance of mindfulness, financial and social agents, risk aversion, financial education, and financial literacy training, particularly in Quetta, is emphasized in this study. Understanding these elements is essential for developing effective strategies that improve financial decision-making and well-being. It adds to the body of knowledge already in existence and will pique interest in research on financial literacy. Decision-making, mindfulness, risk aversion, financial literacy, numeracy, adaptability, and parental qualities are all influenced by financial literacy. According to the study, additional regional and national workshops and seminars had to be arranged to raise awareness of financial literacy and foster the development of essential investing and decision-making abilities.

Limitations & Recommendations:

The study on financial literacy among business students in Quetta has limitations, including a small sample size and a focus on risk aversion, mindfulness, and financial education. It also did not consider psychological factors and socio-economic perspectives. Future research should consider these limitations and expand the scope to include other constructs like environmental and religious factors. The results indicate that forthcoming financial education should focus on assisting men and women in professional settings and decision-making contexts. Policy creators need to consider the elements that enhance financial literacy and psychological factors and work towards overcoming obstacles encountered by entrepreneurs and financial intermediaries. The study suggests that financial literacy, as researched to date, has significant limitations regarding its influence on subsequent financial actions. The partial effects of financial literacy decrease drastically when psychological attributes that have been overlooked in prior research are accounted for or when an instrument for financial literacy is used to control for omitted variables.

Latent Constructs	Factor Loadings	Cronbach's Alpha	CR	AVE	
Financial Education and Training		0.885	0.911	0.632	
FE&T1	0.792				
FE&T2	0.756				
FE&T3	0.810				
FE&T4	0.849				
FE&T5	0.683				
FE&T6	0.867				
Financial Literacy		0.930	0.943	0.701	
FL1	0.810				
FL3	0.839				
FL4	0.830				

Appendix A.

	011 12	0.110	0.100		
Mind	0.009	0.140	0.138		
FSA	0.072	0 146			
FL.	0.072				
	F LA I	Ľ	TOA	TATHIR	NA
Discriminant Validity	$\frac{(\text{HIMI Ratio})}{\text{FF}\&T}$	FI	FSA	Mind	R A
KA Disoriminent Validit	$\frac{0.247}{(\text{UTMT Patia)}}$	0.152	-0.165	0.330	0.848
	0.131	0.119	-0.125	0.852	0.040
F5A Mind	-0.044	0.126	0.801	0.675	
	0.056	0.837	0.05		
FE&T	0.795				
	FE&T	FL	FSA	Mind	KA
Discriminant Validity	(Fornell and Larcker	·)			
RA7	0.839				
RA6	0.862				
RA5	0.897				
RA4	0.910				
RA3	0.880				
RA2	0.739				
RA1	0.793				
Risk Aversion		0.934		0.947	0.718
MIND7	0.801				
MIND6	0.841				
MIND5	0.886				
MIND4	0.857				
MIND2	0.858				
MIND1	0.866				
Mindfulness		0.924		0.941	0.726
FSA6	0.825				
FSA5	0.802				
FSA4	0.844				
FSA3	0.790				
FSA2	0.773				
FSA1	0.767				
Financial Social Ag	gents	0.889		0.915	0.641
FL9	0.881				
FL8	0.819				
FL7	0.863				
FL5	0.818				

332 Financial Literacy And Risk Aversion: The Influence Of Social Agents, Mindfulness, And Education In Emerging Economy

References

- Almenberg, J., & Dreber, A. (2021, December 1). Gender differences in financial literacy: The role of stereotype threat Direct Scinces.
- Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017, September). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. In Journal of physics: Conference series (Vol. 890, No. 1, p. 012163). IOP Publishing.
- Adil, M., Singh, Y., Subhan, M., Al-Faryan, M A S., & Ansari, M S. (2023, February 7). Do trust in financial institution and financial literacy enhances intention to participate in stock market among Indian investors during COVID-19 pandemic? https://doi.org/10.1080/23322039.2023.2169998
- Afthanorhan, A., Awang, Z., & Aimran, N. (2020, January 1). An extensive comparison of CB-SEM and PLS-SEM for reliability and validity. https://doi.org/10.5267/j.ijdns.2020.9.003
- Akter, S., Wamba, S F., & Dewan, S M. (2017, July 11). Why PLS-SEM is suitable for complex modelling? An empirical illustration in big data analytics quality. https://doi.org/10.1080/09537287.2016.1267411
- Andersen, S C., & Hjortskov, M. (2019, June 7). The unnoticed influence of peers on educational preferences. https://doi.org/10.1017/bpp.2019.14
- Andriani, C., & Sukaris, S. (2022, September 27). The Effect of Financial Knowledge, Financial Attitude, and Personality on Financial Management Behavior in ASN Diskoperindag Gresik Regency. https://doi.org/10.30587/innovation.v3i2.4424
- Annamaria, L. (2019, January 24). Financial literacy and the need for financial education: evidence and implications - Swiss Journal of Economics and Statistics. https://sjes.springeropen.com/articles/10.1186/s41937-019-0027-5
- Aras, A. (2023, January 1). Empirical Evidence for the New Definitions in Financial Markets. https://doi.org/10.48550/arXiv.2305.
- Ardyanti, N., & Kardoyo, K. (2018, June 23). Determinants of Consumption Behavior Among Students. https://doi.org/10.15294/dp.v13i1.15112
- Aren, S., & Zengin, A N. (2016, November 1). Influence of Financial Literacy and Risk Perception on Choice of Investment. https://doi.org/10.1016/j.sbspro.2016.11.047
- Arrondel, L. (2018, February 13). Financial Literacy and Asset Behaviour: Poor Education and Zero for Conduct?. https://doi.org/10.1057/s41294-018-0053-9
- Atiq, N., & Usmani, S. (2023, May 30). Impact of Job Security on Turnover Intention Mediated by Job Satisfaction in the Context of Covid-19 in Pakistan. Pakistan business review. https://doi.org/10.22555/PBR.V24I4.696
- Atmaningrum, S., Kanto, D S., & Kisman, Z. (2021, March 30). Investment Decisions: The Results of Knowledge, Income, and Self-Control. https://doi.org/10.31014/aior.1992.04.01.324
- Bakar, M Z A., & Bakar, S A. (2020, June 2). Parental Financial Socialisation: Pathways to Positive Financial Behaviour. https://doi.org/10.6007/ijarbss/v10-i6/7260
- Bashir, S., Nawaz, A., & Ayesha, S N. (2022, September 27). Financial Inclusion Profile: Socio-Economic Determinants, Barriers, and the Reasons for Saving and Borrowing in Pakistan. https://archive.aessweb.com/index.php/5007/article/download/4622/7307
- Bayar, Y., Sart, G., Öztürk, Ö F., & Şaşmaz, M Ü. (2020, July 1). Financial Literacy and Financial Risk Tolerance of Individual Investors: Multinomial Logistic Regression Approach. https://doi.org/10.1177/2158244020945717
- Butler, C. (2022, July 8). Understanding Risk Tolerance.

https://www.investopedia.com/articles/pf/07/risk_tolerance.asp

- Byegon, G. (2020, July 30). Linkage Between Self-Control, Financial Innovations and Financial Inclusion. A Moderated Mediation Analysis Across Levels of Financial Literacy (The case of owners of Microenterprise in Kenya). https://doi.org/10.24018/ejbmr.2020.5.4.294
- Chattopadhyay, S., & Dasgupta, R. (2015, January 1). Demographic and Socio-economic Impact on Risk Attitudes of the Indian Investors An Empirical Study.

https://doi.org/10.18488/journal.aefr/2015.5.4/102.4.601.623

- Chen, D., Zhu, Y., Zhou, N., & Xing, M. (2023, May 5). Impacts of environmental uncertainty on degree of enterprise financialization and the moderating role of executive incentives. https://doi.org/10.3389/fenvs.2023.1170596
- Chen, F., Lu, J., Li, J., Wang, W., & Bissielou, H. (2020, February 5). Sustainable Financial Education and Consumer Life Satisfaction. https://doi.org/10.3390/su12031150

- Choi, J Y., Castle, S., Burchinal, M., Horm, D., Guss, S S., & Bingham, G E. (2018, December 1). Peer effects on low-income children's learning and development. https://doi.org/10.1016/j.jsp.2018.10.002
- Choung, Y., Chatterjee, S., & Pak, T. (2023, December 1). Digital financial literacy and financial wellbeing. https://doi.org/10.1016/j.frl.2023.104438
- Choung, Y., Chatterjee, S., & Pak, T. Y. (2023). Digital financial literacy and financial wellbeing. Finance Research Letters, 58, 104438.
- Choung, Y., Chatterjee, S., Kim, J., & Liu, Y. T. (2023). A Loan at Any Cost: Obtaining High-Interest Loans and the Roles of Financial Literacy, Financial Hardship; and the Dilemma of Minority Racial/Ethnic Groups. Consumer Interests Annual, 69.
- Conine, T E., McDonald, M., & Tamarkin, M. (2016, September 15). Estimation of relative risk aversion across time. https://doi.org/10.1080/00036846.2016.1231910
- Cooper, R., & Zhu, G. (2016, April 1). Household finance over the life-cycle: What does education contribute?. https://doi.org/10.1016/j.red.2015.12.001
- Dinç, Y., Çetin, M., Bulut, M., & Jahangir, R. (2021, June 21). Islamic financial literacy scale: an amendment in the sphere of contemporary financial literacy. https://doi.org/10.1108/ijif-07-2020-0156
- Dohmen, T., Falk, A., Huffman, D., & Sunde, U. (2018, May 1). On the Relationship between Cognitive Ability and Risk Preference. https://doi.org/10.1257/jep.32.2.115
- Fabris, N., & Luburić, R. (2016, May 1). Financial Education of Children and Youth. https://doi.org/10.1515/jcbtp-2016-0011
- Fadilah, A., & Marjohan, M. (2021, August 30). Parent support contribution and peer conformity on learning motivation. https://doi.org/10.29210/120212964
- Feldman, G., Westine, M., Edelman, A., Higgs, M., Renna, M., & Greeson, J. (2022). Cognitive and affective mindfulness scale-revised (CAMS-R). Handbook of assessment in mindfulness research, 1-24.
- Fernandes, D., Lynch, J., & Netemeyer, R G. (2014, August 1). Financial Literacy, Financial Education, and Downstream Financial Behaviors. https://doi.org/10.1287/mnsc.2013.1849
- Fitri, N., Herawan, E., & Febianti, Y N. (2022, April 30). The Effects of Consumer Behavior and Digital Literacy on Consumption Patterns in Students. https://doi.org/10.24036/011166480
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of marketing research, 18(1), 39-50.
- González, A L. (2022, January 18). Analysis of the concept of informal economy through 102 definitions: legality or necessity. https://doi.org/10.12688/openreseurope.13990.2
- Guo, L., Cheng, J., & Zhang, Z. (2022, October 19). Mapping the knowledge domain of financial decision making: A scientometric and bibliometric study. Frontiers in psychology. https://www.frontiersin.org/articles/10.3389/fpsyg.2022.1006412/full
- Gusti, G P. (2019, December 20). The Influence Of Application Of Lecture Method On Learning Outcomes Of Student Financial Literacy. https://doi.org/10.37061/jps.v7i4.11263
- Hair, J F., Hollingsworth, C L., Randolph, A B., & Chong, A Y. (2017, April 10). An updated and expanded assessment of PLS-SEM in information systems research. https://doi.org/10.1108/imds-04-2016-0130
- Hair, J F., Risher, J J., Sarstedt, M., & Ringle, C M. (2019, January 14). When to use and how to report the results of PLS-SEM. https://doi.org/10.1108/ebr-11-2018-0203
- Hair, J F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V G. (2014, March 4). Partial least squares structural equation modeling (PLS-SEM). https://doi.org/10.1108/ebr-10-2013-0128
- Hakim, M S., Oktavianti, V., & Gunarta, I K. (2018, April 1). Determining factors that contribute to financial literacy for small and medium enterprises. https://doi.org/10.1088/1757-899x/337/1/012064
- Halim, M A., & Setyawan, I R. (2021, January 1). Determinant Factors of Financial Management Behavior Among People in Jakarta During COVID-19 Pandemic. https://doi.org/10.2991/assehr.k.210805.021
- Hång, N T., & Quyen, N T. (2022, January 1). Financial Education In Connection To Real Life For Primary School Students In Vietnam. https://doi.org/10.37500/ijessr.2022.5213

- Häusler, A N., Kuhnen, C M., Rudorf, S., & Weber, B. (2018, July 25). Preferences and beliefs about financial risk taking mediate the association between anterior insula activation and self-reported real-life stock trading. https://doi.org/10.1038/s41598-018-29670-6
- Hermansson, C., & Jönsson, S. (2021, March 1). The impact of financial literacy and financial interest on risk tolerance. https://doi.org/10.1016/j.jbef.2020.100450
- Hobfoll, S E., Halbesleben, J R B., Neveu, J., & Westman, M. (2018, January 21). Conservation of Resources in the Organizational Context: The Reality of Resources and Their Consequences. https://doi.org/10.1146/annurev-orgpsych-032117-104640
- Hohenthal, J., Johanson, J., & Johanson, M. (2014). Network knowledge and business-relationship value in the foreign market. International business review, 23(1), 4-19.
- Kanagasabai, B., & Aggarwal, V. (2020, June 30). The Mediating Role of Risk Tolerance in the Relationship between Financial Literacy and Investment Performance. https://doi.org/10.4038/cbj.v11i1.58
- Kang, H. (2021, July 30). Sample size determination and power analysis using the G*Power software. https://doi.org/10.3352/jeehp.2021.18.17
- Karim, R A., Hussin, M., & Sahid, S. (2023, May 13). The Influence of Socioeconomics, Financial Literacy, and Psychological Factors on Teachers' Retirement Financial Preparation. https://doi.org/10.6007/ijarems/v12-i2/16744
- Kasiisii, A S., Siluvaimuthu, M., & Golden, S. (2023, May 11). The Effectiveness of Digital Financial Inclusion in Improving Financial Capability. https://doi.org/10.26668/businessreview/2023.v8i5.839
- Kasman, M., Heuberger, B D., & Hammond, R A. (2018, October 1). A Review of Large-Scale Youth Financial Literacy Education Policies and Programs. https://eric.ed.gov/?id=ED597185
- Kaur, G., Singh, M., & Singh, S. (2021, June 10). Mapping the literature on financial well-being: A systematic literature review and bibliometric analysis. https://doi.org/10.1111/issj.12278
- Khan, F., Siddiqui, M A., & Imtiaz, S. (2022, February 20). Role of financial literacy in achieving financial inclusion: A review, synthesis and research agenda. https://doi.org/10.1080/23311975.2022.2034236
- Khan, M S R., Rabbani, N., & Kadoya, Y. (2020, September 8). Is Financial Literacy Associated with Investment in Financial Markets in the United States?. https://doi.org/10.3390/su12187370
- Khawar, S., & Sarwar, A. (2021, July 18). Financial literacy and financial behavior with the mediating effect of family financial socialization in the financial institutions of Lahore, Pakistan. https://doi.org/10.1186/s43093-021-00064-x
- Khusaini., Mutiah., & Ramdani, H C. (2021, May 1). Vocational and senior high school differences in financial literacy. https://doi.org/10.1088/1755-1315/747/1/012018
- Kozubíková, Z., & Kozubík, A. (2021, January 1). Level of Knowledge in Personal Finance by University Freshmen Management Students. https://doi.org/10.31410/eraz.s.p.2021.137
- Krishnan, H A. (2021, September 1). Mindfulness as a strategy for sustainable competitive advantage. https://doi.org/10.1016/j.bushor.2021.02.023
- Li, J. (2023, March 21). Why Do So Many People Value the Stock Market. https://doi.org/10.54254/2754-1169/4/20221082
- Li, X. (2020, December 1). When financial literacy meets textual analysis: A conceptual review. https://doi.org/10.1016/j.jbef.2020.100402
- Limpo, T., Vieira, A I., Magalhães, S., Rocha, R S., Cordeiro, C., Rodrigues, R., Coelho, A., Nóbrega, R., Jacob, J., Cardoso, P., Pinheiro, M., & Castro, S L. (2023, August 1). Examining the Impact and Moderating Effects of an 8-Week Mindfulness-Based Program in Grade 4. https://doi.org/10.1007/s12671-023-02189-2
- Lin, M. (2022, April 28). Resilience and Financial Well-Being: Money Attitudes as Mediator. https://doi.org/10.17265/2161-623x/2022.02.001
- Liu, H., & Lin, J. (2021, September 28). Impact of Internet Integrated Financial Education on Students' Financial Awareness and Financial Behavior. https://doi.org/10.3389/fpsyg.2021.751709
- Lone, U M., & Bhat, S A. (2022, October 3). Impact of financial literacy on financial well-being: a mediational role of financial self-efficacy. https://doi.org/10.1057/s41264-022-00183-8

Lührmann, M., Serra-García, M., & Winter, J. (2019, January 30). Starting early: Educating teenagers to make savvy financial choices.

http://election2015.ifs.org.uk/publications/13838

- Lusardi, A. (2019, January 24). Financial literacy and the need for financial education: evidence and implications. https://doi.org/10.1186/s41937-019-0027-5
- Lusardi, A., & Mitchell, O S. (2014, March 1). The Economic Importance of Financial Literacy: Theory and Evidence. https://doi.org/10.1257/jel.52.1.5
- Lusardi, A., & Mitchell, O S. (2023, November 1). The Importance of Financial Literacy: Opening a New Field. https://doi.org/10.1257/jep.37.4.137
- Lux, U., & Walper, S. (2019, February 27). A systemic perspective on children's emotional insecurity in relation to father: links to parenting, interparental conflict and children's social well-being. https://doi.org/10.1080/14616734.2019.1582597
- Lyons, A C., & Kass-Hanna, J. (2021, June 1). A methodological overview to defining and measuring "digital" financial literacy. https://doi.org/10.1002/cfp2.1113
- Mahendru, M. (2020, July 2). Financial well-being for a sustainable society: a road less travelled. https://doi.org/10.1108/qrom-03-2020-1910
- Meziani, A S., & Noma, E. (2018, March 7). A New Method of Measuring Financial Risk Aversion Using Hypothetical Investment Preferences: What Does It Say in the Case of Gender Differences?. The journal of behavioral finance.

https://www.tandfonline.com/doi/full/10.1080/15427560.2018.1431888

- Mireku, K., Appiah, F., & Agana, J A. (2023, April 1). Is there a link between financial literacy and financial behaviour?. https://doi.org/10.1080/23322039.2023.2188712
- Mitchell, J W., & Abusheva, M E. (2016, January 1). The actual challenges of financial literacy. https://doi.org/10.1051/shsconf/20162801134
- Moaaz, R., & Mansour, S. (2023, April 19). The formalization of the Egyptian informal sector: a behavioral and experimental approach. https://doi.org/10.1108/reps-05-2022-0028
- Moussié, R., Goulder, R G., Jha, S., Kip, C., Moloney, G., Pasqual, L., Raghavan, C., Rossmann, S., Wong, E., Addati, L., Behrendt, C., Cattaneo, U., Orton, I., & Pozzan, E. (2021, July 1). Family-Friendly Policies For Workers In The Informal Economy
- Mtemeri, J. (2019, April 30). Family Influence on Career Trajectories among High School Students in Midlands Province, Zimbabwe. https://doi.org/10.18844/gjgc.v9i1.4229
- Nanjundeswaraswamy, T S., & Divakar, S. (2021, March 12). Determination Of Sample Size And Sampling Methods In Applied Research. https://doi.org/10.24874/pes03.01.003
- Opelt, F., & Schwinger, M. (2020, July 1). Relationships Between Narrow Personality Traits and Self-Regulated Learning Strategies: Exploring the Role of Mindfulness, Contingent Self-Esteem, and Self-Control. https://doi.org/10.1177/2332858420949499
- Ouachani, S., Belhassine, O., & Kammoun, A. (2020, September 21). Measuring financial literacy: a literature review. https://doi.org/10.1108/mf-04-2019-0175
- Perdana, P N., Armeliza, D., Khairunnisa, H., & Nasution, H. (2023, June 28). Research Data Processing Through Structural Equation Model-Partial Least Square (SEM-PLS) Method. https://doi.org/10.21009/jpmm.007.1.05
- Pereira, M C., & Coelho, F. (2018, May 28). Mindfulness, Money Attitudes, and Credit. https://doi.org/10.1111/joca.12197
- Perveen, N., Ahmad, A., Usman, M., & Liaqat, F. (2020, November 23). Study of Investment Decisions and Personal Characteristics through Risk Tolerance: Moderating Role of Investment Experience. https://doi.org/10.34069/ai/2020.34.10.6
- Pinto, M. B., Parente, D. H., & Mansfield, P. M. (2005). Information learned from socialization agents: Its relationship to credit card use. Family and Consumer Sciences Research Journal, 33(4), 357-367.
- Potrich, A. C. G., & Vieira, K. M. (2018). Demystifying financial literacy: a behavioral perspective analysis. Management Research Review, 41(9), 1047-1068.
- Prasad, S., Kiran, R., & Sharma, R K. (2020, August 5). Influence of financial literacy on retail investors' decisions in relation to return, risk and market analysis. https://doi.org/10.1002/ijfe.1920
- Reichenheim, M E., Hökerberg, Y H M., & Moraes, C L. (2014, May 1). Assessing construct structural validity of epidemiological measurement tools: a seven-step roadmap. https://doi.org/10.1590/0102-311x00143613

- Riaz, S., Khan, H H., Sarwar, B., Ahmed, W., Muhammad, N., Reza, S., & Haq, S M N U. (2022, July 1). Influence of Financial Social Agents and Attitude Toward Money on Financial Literacy: The Mediating Role of Financial Self-Efficacy and Moderating Role of Mindfulness. https://doi.org/10.1177/21582440221117140
- Rios, J A., & Wells, C S. (2014, January 1). Validity evidence based on internal structure.. https://doi.org/10.7334/psicothema2013.260
- Rohmah, M., Rahmadani, R., & Ismail, K. (2022, August 27). Pendampingan Pendidikan Literasi Financial Bagi Orang Tua Dalam Membendung Konsumerisme Pada Anak Usia Dini Di Desa Sukaraja. https://doi.org/10.56248/zadama.v1i1.24
- Sabri, M F., Wijekoon, R., Rahim, H A., Burhan, N A S., Madon, Z., & Hamsan, H H. (2022, June 16). Financial Literacy, Financial Behavior, Self-Efficacy, and Financial Health among Malaysian Households: The Mediating Role of Money Attitudes. https://doi.org/10.6007/ijarbss/v12i13/14150
- Sadiq, M., & Khan, R A A. (2019, January 1). Impact of Personality Traits on Investment Intention: The Mediating Role of Risk Behaviour and the Moderating Role of Financial Literacy. https://doi.org/10.20547/jfer1904101
- Sarstedt, M., Hair Jr, J. F., & Ringle, C. M. (2023). "PLS-SEM: indeed a silver bullet"–retrospective observations and recent advances. Journal of Marketing Theory and Practice, 31(3), 261-275.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In Handbook of market research (pp. 587-632). Cham: Springer International Publishing.
- Skagerlund, K., Lind, T., Strömbäck, C., Tinghög, G., & Västfjäll, D. (2018, June 1). Financial literacy and the role of numeracy–How individuals' attitude and affinity with numbers influence financial literacy. https://doi.org/10.1016/j.socec.2018.03.004
- Sriyono, S., & Rif'ah, N L. (2022, September 27). Can Gender be a Moderating Variable in Micro Small Medium Enterprises Financial Behavior? A Perspective from Financial Financial Literacy, Financial Attitude, and Income. https://doi.org/10.18196/mb.v13i2.14199
- Suhartanto, D., Leo, G., Setiawati, L., & Purwaningsih, S S. (2020, April 1). Modelling customer loyalty using partial least square: An empirical evidence from online food industry. https://doi.org/10.1088/1757-899x/830/3/032089
- Thaha, S. (2022, February 2). Pentingnya Financial Literacy Dalam Tata Kelola Keuangan Pribadi (Suatu Studi Pustaka). https://doi.org/10.36277/edueco.v4i1.79
- Trivani, G., & Soleha, E. (2023, March 31). The Effect of Financial Literacy, Income and Self Control on Financial Behavior Generation Z (Study on Generation Z Financial Behavior in Bekasi Regency). https://doi.org/10.15294/eeaj.v12i1.67452
- Umer, N., Khan, H H., Zada, M., Ahmed, W., & Haq, S N U. (2023, June 30). Impact of Financial Literacy, Cognitive Abilities and Demographics Characteristics on Financial Inclusion. , 5(2), 97-120. https://doi.org/10.56976/rjsi.v5i2.95
- Utama, A N B., & Syarif, A. (2023, June 20). Student Perspectives On Financial Literacy To Support Entrepreneurial Character. https://doi.org/10.22437/jbsmr.v6i2.26186
- Xu, J. (2021, May 1). Lose oneself in comparison: An investment and consumption game between two agents. https://doi.org/10.1016/j.orl.2021.03.007
- Ye, L. (2022, October 24). Starbucks' Investment Strategy Based on P/E, EV/EBITDA and P/S Methods. https://bcpublication.org/index.php/BM/article/download/2507/2480
- Zeng, N., Liu, Y., Gong, P., Hertogh, M., & König, M. (2021, March 27). Do right PLS and do PLS right: A critical review of the application of PLS-SEM in construction management research. https://doi.org/10.1007/s42524-021-0153-5
- Zhang, L., Kim, D., & Ding, S. (2023, March 22). Cultivating organizational performance through the performance measurement systems: Role of psychological empowerment and creativity. https://doi.org/10.3389/fpsyg.2023.1116617