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Financial Literacy and Risk Behaviour: A Systematic Literature Review

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ABSTRACT

Purpose: Financial literacy- risk nexus across studies reported varying outcomes due to difference in contexts and methodological approaches. The study aims to perform systematic literature review (SLR) that comprehends the relationship between financial literacy, risk behaviour and demographic features based on existing body of knowledge.

Methodology: Following PRISMA protocol, systematic review identified 37 relevant studies, extracted from SCOPUS database within a time span of 26 years (2000-2025). The study tabled objectives, findings, theories, contexts and methodologies of identified articles for foundational background and adopt hybrid approach. The relationships between the core constructs with respective additional variables and their varying role in model configurations across studies have been tabled. The study further performs bibliometric analysis on a small set of 37 articles for capturing trend and progress in the domain.

Findings: The result reveals significant influence of financial literacy on risk behaviour, where risk averse attitude reflects negative and risk preference highlights mixed effect. Dynamic role of constructs FL and RB along with additional variables were reported. Demographic features directly and indirectly (moderated and mediated) influenced the relationship.

Practical Implications: The study helps stakeholders frame effective financial education policies and strategies that are context-driven and are in line with demographic features for improving risk- related financial decisions.

Originality/Value: The study is among the first to examine the dynamic roles of variables classified in relation to core constructs across different empirical studies and contexts. It provides comprehensive synthesis of relationship based on consensus across prior studies. In addition, the study categorizes risk behaviour construct into three components that enhances literature and offers nuanced conceptual understanding.

Keywords: Financial Literacy, Risk Behaviour, PRISMA, Bibliometric Analysis, Risk Attitude, Risk Preference

INTRODUCTION

With the advancements in financial ecosystem and digitization, the scope of financial coverage has been increased in manifold. The various offerings to individuals have created complexity in making financial decision and heightened exposure to financial risk. The evolving financial activities (like retirement planning) necessitates to equip an individual with financial literacy and inform risk behaviour implications. "Financial literacy (FL) is a combination of financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions and ultimately achieve individual financial well-being" (OECD, 2025). Risk behaviour (RB) in financial context is a multi-faceted concept that incorporate one's attitude and decisions towards uncertainty, where willingness to expose resources to uncertain outcome is reflected (Grable, 2000; Weber, Blais and Betz, 2002). (Grable, 2000) "Financial risk tolerance (RT), defined as the maximum amount of uncertainty that someone is willing to accept when making a financial decision, reaches into almost every part of economic and social life". (Weber, Blais and Betz, 2002) Risk attitude is psychological orientation towards risk that suggest an individual to be risk seeker or risk neutral or risk averse. Risk preference (RP), refer to an inclination to participate in activities or behaviour involving a higher variance in return which could be in the form of gains or losses (Mata et al., 2018).There were many studies done earlier which directly or indirectly investigate relationship between demographic variables (Thanki et al., 2022), financial literacy (Patrisia et al., 2023) and risk behaviour (Patrisia et al., 2023) in varying context though as a major or supplementary construct. The earlier studies assess the construct financial literacy, risk tolerance, risk preference and risk attitude using various factors and dimensions repeatedly with different variables (Hemrajani et al., 2023).The findings, however are required to be comprehended comprehensively as some were contradictory and fragmented. The pressing need to synthesize the existing literature to arrive at consensus systematically regarding financial literacy-risk behaviour nexus has emerged. The present study has followed PRISMA protocol and conducted extensive review of literature systematically relating to influence of financial literacy on risk behaviour. With the objectives specified, the review study attempts to answer the research question and aims to exhibit relationship between financial literacy and risk behaviour across varying context. It also intends to provide direction for future research by laying research gap and providing conceptual and empirical foundations (Hashem E et al., 2023; Hemrajani et al., 2023).

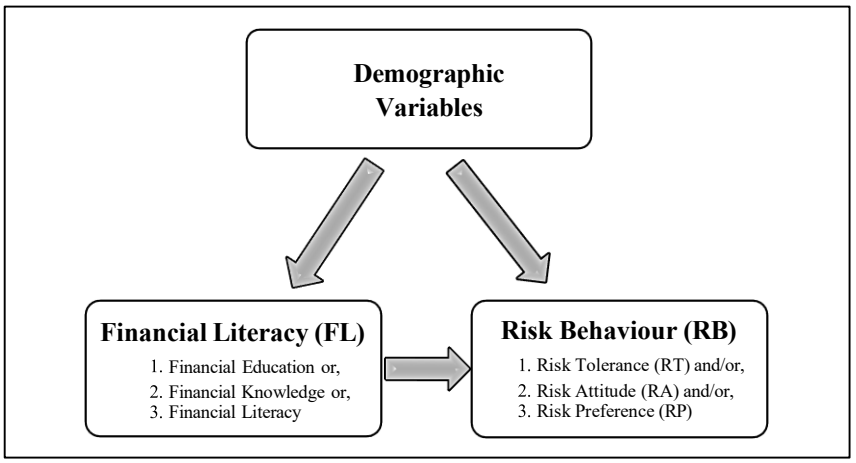

Fig. 1: Conceptual Framework

Objectives

1. To investigate the influence of financial literacy on any of the three constructs associated with risk behavior i.e., FL→RB (RT/RA/RP).
2. To classify variables studied with constructs financial literacy and risk behaviour (RT/ RP/ RA) based on their functional roles, analyse their role variability across various model configurations and uncover underexplored relationships.
3. To study the impact of demographic variables on financial literacy and risk behavior (Risk tolerance, risk preference and risk attitude).
4. To identify the influential authors, countries-wise publications, year-wise citations, influential journals, keyword co-occurrence and year-wise variables occurrence.

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Research Questions

1. How financial literacy influence risk behaviour of an individual in financial decision-making?
2. Do the demographic features affect financial literacy and risk behaviour?
3. What are the major research trends in relationship between financial literacy and risk behaviour?

The structure of the study outlined material and method in section 2, followed by result with discussions in section 3 and research gap in section 4. Lastly, the study has been concluded in section 5 with limitations provided in section 6 respectively.

MATERIALS AND METHODS

In order to maintain the methodological rigor in conducting a comprehensive review of literature in the domain of financial literature influencing risk behaviour, the study adopt PRISMA protocol (van Riel and Snyder, 2024). The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) protocol lays framework and guideline along with flow chart for relevant studies extraction from databases in a systematic manner (Moher et al., 2009). VOSviewer 1.6.20 and Biblioshiny interface of Bibliometrix package in R 4.5.2 were employed for performing bibliometric analysis (Guleria and Kaur, 2021; Hemrajani et al., 2023). The study follows three major stages for conducting systematic review adopted from (Tranfield, Denyer and Smart, 2003) namely 1) Review Planning, 2) Review Conducting and 3) Result Reporting.

Review Planning

The review conducted following PRISMA protocol for data extraction choose SCOPUS database as it comprises reliable journal classification system and found suitable from quality point of view (Wang and Waltman, 2016). The search string has been selected by filtering several keywords based on coverage to relevant studies, taken from review of past systematic literature review studies in the domain of Financial Literacy and Risk Behaviour (Hemrajani et al., 2023; Rana and Nandan, 2025). The search preformed using final keywords were based on Title, Abstract and Keywords.

Table 1: Keyword used for extracting articles

Database	Keywords
SCOPUS	TITLE-ABS-KEY ("financial literacy" OR "financial education" OR "financial knowledge" AND "risk attitude" OR "risk preference" OR "risk behaviour" OR "risk behavior" OR "risk tolerance")

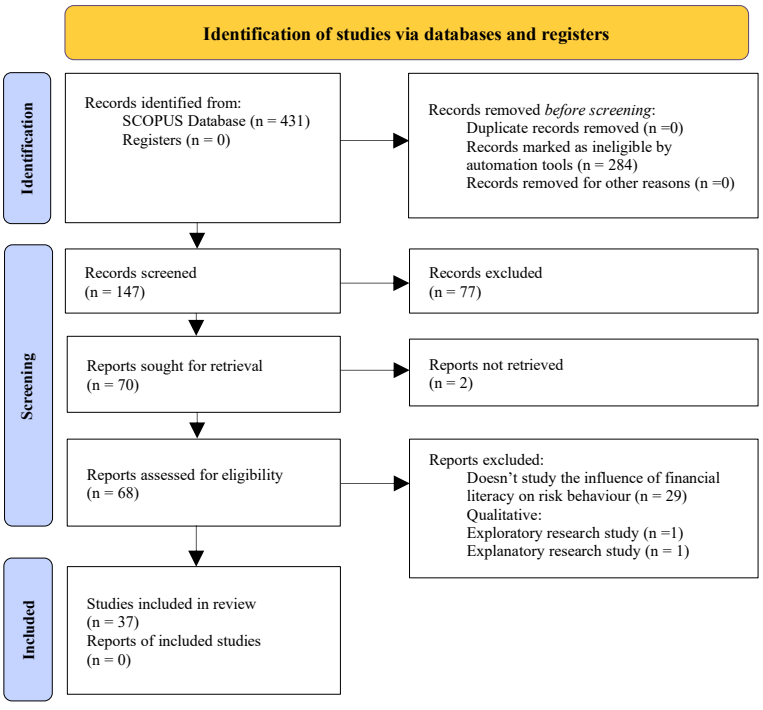
Table 2: Inclusion and Exclusion criteria

Number of documents appeared at initial search using above keywords				431
Steps	**Criteria**	**Inclusion**	**Exclusion**	**No. of Documents**
1	Period	From year 2000 to year 2025	Published in 1999 and before	412
2	Area	1) Economics, Econometrics and Finance, 2) Business, Management and Accounting, 3) Social Sciences 4) Psychology	Others	364
3	Document type	Article	Review and Short Survey	331
4	Language	English	Language other than English	326
5	Source type	Journal	NA	326
6	Access	Open Access	Closed Access	147

The criteria to eligibility for inclusion and exclusion of articles extracted from SCOPUS database covering a period of past 26 years used automation tool has been listed in table 2.

Review Conducting

Fig. 2: PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only



Source: (Page et al., 2021)

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The article extraction was carried out on 18th February 2026 with keywords (table 1) in SCOPUS database search engine resulting 431 articles presented in figure 2. After applying inclusion and exclusion criteria in table 2 following the sequence, 284 studies were removed as found ineligible by automation tool. Total of 147 articles were screened based on title, abstract and keyword, where 77 studies which were not aligned with research objective and found unable to answer research question were excluded. Subsequent to the initial screening, 68 articles were considered for full-text reading which comprises 29 studies that doesn't establishes relationship between financial literacy and risk behaviour and 2 studies were qualitative in nature. These studies were excluded and 37 studies remained were finally included in the review.

Result Reporting

The study presented report to ensure transparency and reproducibility of review process (Tranfield, Denyer and Smart, 2003). It further identifies emerging trends, significant patterns and relationship through analysis and synthesis of literature in alignment with review objectives (Snyder, 2019). Lastly, the thematic and descriptive analyses revealed findings that provide evidence-based insights with scope for future research.

RESULTS AND DISCUSSIONS

This section synthesizes findings of reviewed literature into tables and figures aligned with our objective and are discussed below. It begins with supplementary tables 3 and 4 to establish conceptual and empirical foundation that provide comprehensive background of the studies reviewed. Further, table 5 is aligned with objective 1 that reflect the influence of financial literacy on risk behaviour, whereas table 6, 7, 8, 9, 10, 11 and 12 list out additional variables (obj 2) with varying roles across studies. Table 13 indicates the demographic significance on both constructs (obj 3). Lastly, fig. 4 -11 and table 14 -17 provide emerging trends and overall pattern (obj 4) in the domain.

Conceptual and Empirical Overview

Table 3: Objectives and Findings

Author(s) and Year	Objective	Findings
(Liao et al., 2022)	To determine the impact of objective financial literacy, self-assessed financial literacy and composite financial literacy on stock investment return both empirically and theoretically.	Stock investment return was significantly and positively influenced by objective and self-assessed financial literacy. Further, the relationship has significantly been mediated by risk tolerance.
(Hamurcu, Hazar and Babuşcu, 2025)	The study aims to explore the influence of financial literacy's components on mutual fund investor's risk tolerance where components include financial knowledge, financial behaviour and financial attitude.	Financial behaviour significantly mediates the relationship financial attitude, financial knowledge and financial risk tolerance which implies significant impact of financial literary on financial decisions involving risk through financial behaviour.
(Sa'diyah, Widagdo and Fitriasari, 2024)	To determine the impact on risk tolerance, experience regret and investment decision of financial literacy. It aims to further examine the financial literacy influence on investment decision mediated by risk tolerance and experience regret.	The study found positive influence of financial literacy on risk tolerance, investment decisions and experience regret. Further, risk tolerance positively mediate and experience regret negatively regret relationship between financial literacy and investment decisions.
(Ajaz Khan et al., 2025)	To examine the impact of economic hardship and risk tolerance on financial capability moderated by three components of financial literacy i.e., financial attitude, financial behaviour and financial knowledge.	The economic hardship has significant and negative influence whereas, risk tolerance doesn't on financial capability. Further, financial literacy doesn't moderate the relationship.
(Suherman, Kurniawati and Mohidin, 2023)	To determine the level as well as influence of family occupation, financial literacy, gender and geographical location on financial risk tolerance of millennials.	Geographical location, financial literacy and gender have significant influence, whereas family occupation background has insignificant influence on financial risk tolerance. Despite moderate risk tolerance level, the Indonesian millennials showed different financial risk tolerance level among them.
(Dewi et al., 2025)	To study the influence of financial knowledge and e-payment awareness on saving behaviour and spending behaviour mediated by financial risk tolerance.	The study shows that financial risk tolerance significantly and positive mediate the influence of financial education and e-payment awareness on saving and spending behaviour. Further, the varying level of financial risk tolerance between male and female was observed.
(Shusha, 2017)	To investigate the influence of demographic characteristics on risk tolerance, financial literacy on risk tolerance and moderating effect of financial literacy on relationship between demographic variables and risk tolerance.	The findings reported significant impact of annual income, age, educational qualification and gender on financial risk tolerance. Further, the financial literacy moderate significantly and positively the relationship between demographic characteristics and risk tolerance.
(Naveed and Ali, 2024)	To determine the financial literacy's role on financial well-being with further investigation of mediation role of risk attitude.	Financial well-being is significantly influenced by both basic and advanced financial literacy. Further, the relationship is also positively mediated by risk tolerance.
(Sulistianingsih and Santi, 2023)	To examine the influence of financial literacy, home bias and risk preference on financial decisions of Small and Medium Enterprises (SMEs).	The financial decisions of SMEs owners showed direct-negative influence of risk preference and home bias, while the risk preference was found to be positively influenced by home bias. Further, financial literacy could reduce home bias resulting negative financing decisions towards positivity. Lastly, study revealed no direct effect of financial literacy on both financial decisions and risk preference.
(Larisa, Njo and Wijaya, 2021)	The study aims to examine the impact of financial literacy, demographic characteristics (age, education and income), financial risk tolerance, future time perspective (psychological features) on Indonesian female worker's retirement planning.	Financial literacy has a direct impact on retirement planning and also mediates the influence of future time perspective on female worker's planning for retirement.
(Ramudzuli and Muzindutsi, 2015)	To assess the impact of demographic characteristics and financial knowledge on university student's financial risk tolerance.	Financial risk tolerance was found to be higher for students having financial knowledge compare to other with its absence. In addition, monthly expenditure and religion showed significant influence whereas gender report no significant influence on financial risk tolerance.
(Bayar et al., 2020)	To investigate the influence of financial literacy and demographic features on financial risk tolerance of investors.	The findings revealed significant and positive impact of age, gender, income, financial literacy and education level on financial risk tolerance of individual investors.
(Noviarini et al., 2023)	To investigate the relationship between financial literacy, risk tolerance, debt anxiety and resource allocation decisions of different group of retirees.	The result reflects significant impact of debt anxiety and financial literacy on resource allocation preferences. With financial literacy, the outcome revealed decrease in debt anxiety of men and increase women's risk tolerance. For KiwiSaver, financial literacy is correlated with greater risk preference.

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(Masdupi et al., 2024)	To investigate the influence of financial literacy mediated by organisational risk-taking tolerance, financial risk attitude and access to finance on sustainability of Small and Medium Enterprises (SMEs)	Unlike access to finance, sustainability of SME is significantly influenced by organisational risk-taking tolerance, financial knowledge and financial risk attitude. Further, the relationship between financial literacy and SME sustainability is positively mediated by risk attitude and organisational risk-taking tolerance.
(Patrisia et al., 2023)	To analyse the effect of family communication pattern on risk tolerance and Islamic financial literacy with further investigation of relationships between Islamic financial literacy, financial behaviour and risk tolerance.	Family communication pattern has significantly positive impact on risk tolerance and Islamic financial literacy. In addition, Islamic financial literacy reflects significantly positive effect and moderate the relationship between risk tolerance and financial behaviour.
(Ye and Kulathunga, 2019)	To examine the influence of financial literacy, financial accessibility, financial risk attitude on sustainability of Small and Medium Enterprises (SMEs).	The results reported significant and positive impact of financial literacy, financial risk attitude and financial accessibility on SME's sustainability. Again, financial literacy predicts risk attitude and access to finance. Lastly, the study showed partial mediation effect of financial accessibility and financial risk tolerance on relationship between financial literacy and sustainability of SMEs.
(Mudzingiri et al., 2019)	To study the impact of financial literacy on university student's decisiveness regarding time preference and risk preference choices.	The study revealed that indecisiveness or multiple switching increases with decrease in level of financial literacy and vice versa.
(Meldona et al., 2023)	To investigate the influence of knowledge management and financial literacy on performance of Micro, Small and Medium Enterprise with further examination of mediating role of innovation capability and risk attitude.	Financial literacy and knowledge management significantly influenced the performance of MSMEs. In addition, innovation capability and risk attitude partially mediate the influence on MSME performance.
(Karki and Kafle, 2020)	The study aims to determine the impact of trading years, education level, financial literacy, gender, prior history of margin lending and loss on investor's capacity of risk tolerance.	The findings showed significant effect of financial literacy, prior experience to profit and loss, availability of margin lending on risk tolerance of individual investor. No significant influence of gender, trading years and education level on investor's capacity of risk tolerance were witnessed.
(Chen, Giannikos and Lou, 2023)	To examine the influence of financial literacy on financial risk preference.	Actual financial literacy showed direct valley shaped relationship where with increase in AFL initially decreases financial risk preferences and then increases. Further, the relationship has found to be significantly mediated by self-assessed financial literacy.
(Xu and Jiang, 2024)	To study the effect of financial literacy on entrepreneurial behaviour of Chinese households.	The study reported positive, immediate and persistent impact of financial literacy encouraging households to engage in entrepreneurial behaviour and pursue entrepreneurship.
(Dalina Amonhaemanon and Pornpen Vora-sittha, 2023)	To investigate the variation in structural relationship between risky investment intention, perceived and actual financial knowledge and risk tolerance. Further, it aims to determine the gender's influence on investment decision-making.	Financial knowledge significantly affects risk tolerance where, Perceived Financial Knowledge (PFK) was found to have more intensive influence than Actual Financial Knowledge (AFK). Moreover, male evidenced positive correlation of AFK and PFK with risky investment intention whereas for female only AFK did.
(Magendans, Gutteling and Zebel, 2017)	To examine the psychological factors that influence financial saving for a safety net.	The result reported significant impact of subjective financial knowledge and regulatory focus on individual's risk-taking attitude. Further, the risk attitude and perceived financial self-efficacy predict intention to save for financial buffer. Lastly, the perceived financial self-efficacy and saving intention influence saving behaviour where, saving intention and saving behaviour are mediated by saving barrier.
(Michels, Rieling and Musshoff, 2023)	To examine the risk attitude, innovativeness and financial literacy in comparison of German farmers with foresters.	For both farmers and foresters, the innovativeness and financial literacy level remain the same. However, the farmers possessed a risk-seeking attitude while the foresters remained risk-averse. Further, risk-seeking behaviour was found to have a positive relationship with innovativeness, whereas no significant correlation between risk attitude and financial literacy was evidenced.
(Thanki et al., 2022)	To investigate the influence of factors including gender on financial risk tolerance of both male and female	For male investors, the financial risk tolerance has been determined by marital status, personality type, occupation, income, number of dependents and financial literacy, whereas for female, marital status, personality type, income and financial literacy respectively.
(Hermansson and Jonsson, 2021)	To investigate the influence of financial literacy and financial interest on risk tolerance.	Financial literacy and financial interest are significantly associated with risk tolerance where financial literacy showed greater impact than financial interest.
(Harahap et al., 2022)	To examine the impact of financial literacy on retirement planning through the moderating role of herding behaviour and mediating role of financial risk tolerance and saving behaviour.	The relationship between financial literacy and retirement planning found to be significantly and positively moderated by herding behaviour and mediated by financial risk tolerance. The study find no mediating effect of saving behaviour.
(Mudzingiri, 2021)	To explore the influence of financial literacy on time and risk preferences of university students.	Financial literacy significantly influences the preference of university students relating to time and risk.
(Murhadi, Kencanasar and Sutedjo, 2023)	To investigate the influence of financial interest and financial literacy on risk tolerance. Further, it aims to examine the role of age and income on risk tolerance.	The result showed no significant impact of financial literacy, age and income on risk tolerance except for financial interest.
(Dharma et al., 2024)	To examine the influence of Islamic business ethics and financial literacy on investment in Islamic financial instruments mediated by risk attitude and moderated by religious knowledge.	The study revealed positive influence of financial literacy and Islamic business ethics on risk attitude and investment decisions. Again, it presents positive influence of religious knowledge and risk attitude on investment decisions. Lastly, risk attitude significantly mediate but religious knowledge doesn't moderate the relationship between them.
(Song et al., 2023)	To investigate the influence on financial behaviour by financial literacy that is mediated by financial risk tolerance and moderated by emotional intelligence.	The result reported significant impact of financial literacy on financial behaviour partially mediated by financial risk tolerance. Further, it revealed significant moderating effect of emotional intelligence between financial literacy-risk attitude-behaviour nexus.

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(Indrawati et al., 2025)	To determine the relationship between financial literacy and financing decisions with further investigation of mediation effect of risk tolerance and risk perception.	The outcome reveals significant impact of financial literacy on financing decisions with significant positive mediation effect of both risk tolerance and risk perception on the relationship.
(Grable and Rabbani, 2023)	To explore the relationship between demographic features and financial risk tolerance moderated by subjective and objective financial knowledge.	Respondents with higher education, income and male gender reported higher investment related risk tolerance (IRT). Subjective financial knowledge (SFK) significantly and positively affects investment risk tolerance as well as positively moderate the relationship between gender and IRT. Objective financial knowledge (OFK) moderates the relationship between age and IRT on one hand and between education and IRT on the other. Lastly, the correlation between SFK and OFK has been indicated by the study.
(NAIWEN et al., 2021)	To study the influence of financial literacy and risk tolerance on investment decisions of textile workers where, risk tolerance plays a mediating role with further examination of moderating role of gender difference.	The findings reported significantly positive influence of financial literacy on Investment decisions and risk tolerance with no significant mediation effect.
(Tahir, Richards and Ahmed, 2023)	To investigate the relationship between financial satisfaction, life satisfaction, propensity to plan, financial literacy and financial risk-taking attitude.	Risk-taking attitude significantly mediates though partially between financial literacy and financial satisfaction. Further, the study revealed improved life satisfaction with high risk-taking attitude and high propensity to plan.
(Alfando, Njo and Yuliana, 2025)	To study the impact of goal clarity, risk tolerance and financial literacy on retirement savings behaviour.	The study reported significant impact of subjective financial literacy both directly and through partial mediation of retirement saving on financial risk tolerance. On contrary, no significant influence of objective financial literacy and financial risk tolerance on saving behaviour was witnessed.
(Shah et al., 2024)	To investigate the relationship dynamics between financial literacy and objective oriented investment behaviour. It studies also aims to explore the relationship through mediation effect of financial self-efficacy and moderation effect of risk attitude.	The result reported significant and positive impact of Financial Literacy (FL) on Financial Self-Efficacy (FSE), FSE on Objectives-Oriented Investment Behaviour (OOIB), FL on OOIB and significant positive mediation effect of FSE between FL and OOIB.

Source: Authors' compilation

Table 4: Theory, Context and Methodology of reviewed literature

Authors and Year	Theory	Context	Methodology		
		Sample size and Country	Analytical tools	Sampling Type	Data Type
(Liao et al., 2022)	Not explicitly stated	13911 Investors of Chinese Stock Market, China	Probit Regression Model	Survey	Primary data
(Hamurcu, Hazar and Babuşcu, 2025)	Behavioural finance, Financial Capability Theory and Theory of Planned Behaviour	703 Turkish mutual fund investors, Turkey	Structural Equation Modeling (SEM) and Pearson correlation in SPSS and AMOS	Convenient and snow-ball sampling	Primary data
(Sa'diyah, Widagdo and Fitriasari, 2024)	Not explicitly stated	295 millennials who carry cryptocurrency investment, Indonesia	Partial least square Structural Equation Modeling (PLS-SEM)	Purposive sampling	Primary data
(Ajaz Khan et al., 2025)	Conservation of Resource Theory and Theory of Planned Behaviour	311 Microentrepreneurs of Uttar Pradesh, India	PLS-SEM using Smart PLS 4	Stratified Sampling	Primary data
(Suherman, Kurniawati and Mohidin, 2023)	Prospect Theory	410 university students of Indonesia	One-way ANOVA and Multiple Regression	Not specified	Primary data
(Dewi et al., 2025a)	Not explicitly stated	396 young adults of Indonesia.	PLS-SEM	Convenient sampling	Primary data
(Shusha, 2017a)	Not explicitly stated	386 Egyptian adults, Egypt	Pearson Correlation and Hierarchical Regression Analysis	Convenient sampling	Primary data
(Naveed and Ali, 2024)	Transformative Service Research as an Overarching Theory	367 investors of Pakistan Stock Exchange, Pakistan	PLS-SEM	Convenient sampling	Primary data
(Sulistianingsih and Santi, 2023)	Pecking Order Theory and Theory of Planned Behaviour	642 entrepreneurs of SME belonging to Minangkabau ethnic group, West Sumatra province of Indonesia	PLS-SEM	Simple random sampling	Primary data
(Larisa, Njo and Wijaya, 2021)	Theory of Planned Behaviour	304 female workforces aged 15 and above of Indonesia	PLS-SEM	purposive sampling	Primary data
(Ramudzuli and Muzindutsi, 2015)	Utility Theory	350 students of South African University, South Africa	Binary Logistic Regression	Purposive sampling and Random sampling	Primary data
(Bayar et al., 2020)	Not explicitly stated	325 Usak University Staff of Usak, Turkey	Multinomial logistic regression	random sampling	Primary data
(Noviarini et al., 2023)	Not explicitly stated	1185 observations from retirees aged 55 and above of New Zealand	Multi-Criteria Decision-Making (MCDM) Analysis	Not specified	Primary data
(Masdupi et al., 2024)	Resource Based View, Pecking Order Theory and Dual Process Theory	632 CFOs or owners of SMEs, West Sumatra, Indonesia	PLS-SEM	Not specified	Primary data
(Patrisia et al., 2023)	Not explicitly stated	668 Gen Z Muslims of West Sumatra, Indonesia	PLS-SEM	Purposive sampling	Primary data
(Ye and Kulathunga, 2019)	Resource Based View, Peaking Order Theory and Dual Based Theory	291 CFOs of SMEs in Sri Lanka	SEM in software AMOS.23 and SPSS 23	convenient sampling	Primary data
(Mudzingiri et al., 2019)	Expected Utility Theory	192 students of University of Free State, South Africa	Ordinal least Regression	Not specified	Primary data
(Meldona et al., 2023)	Knowledge Based Theory	195 owners of halal MSMEs in Malang Raya, Indonesia.	SEM	Not specified	Primary data
(Karki and Kafle, 2020)	Prospect Theory	99 investors of Nepal	Ordinal logistic Regression	Convenient sampling	Primary data
(Chen, Giannikos and Lou, 2023)	Not explicitly stated	25000 respondents, US households, USA	Logistic Regression	Survey	Secondary data

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(Xu and Jiang, 2024)	Human Capital Theory and Modern Entrepreneurship Theory	China Household Finance Survey (CHFS) in 2015 and 2017 of Chinese residents	Ordered Probit Model	Survey	Secondary data
(Dalina Amonhaemanon and Pornpen Vora-sittha, 2023)	Behavioural Finance Theory	995 informal labourers of Southern Thailand	PLS-SEM	Not specified	Primary data
(Magendans, Gutteling and Zebel, 2017)	Theory of Planned Behaviour	272 university students and employee of Netherland	Regression	Convenient and snow-ball sampling	Primary data
(Michels, Rieling and Musshoff, 2023)	Not explicitly stated	371 farmers and 215 foresters of Germany	Spearman rank correlation test	Not specified	Primary data
(Thanki et al., 2022)	Prospect Theory	671 investors of Gujarat, India	Multiple regression analysis using SPSS 23 and ANOVA was conducted.	Convenient sampling	Primary data
(Hermansson and Jonsson, 2021)	Not explicitly stated	12156 customers of Swedish Bank, Sweden.	Multiple Regression Analysis	Survey	Secondary data
(Harahap et al., 2022)	Prospect Theory and Theory of Planned Behaviour	388 medium-sized entrepreneurs, Bekasi Regency, West Java Province, Indonesia	PLS-SEM	Not specified	Primary data
(Mudzingiri, 2021)	Expected Utility Theory	192 students of University of Free State, South Africa	Maximum likelihood regression analysis	Not specified	Primary data
(Murhadi, Kencanasar and Sutedjo, 2023)	Not explicitly stated	184 Investor of Indonesia	SEM	Not specified	Primary data
(Dharma et al., 2024)	Not explicitly stated	300 university students and bank customers in Aceh province, Indonesia	PLS-SEM	Simple random sampling	Primary data
(Song et al., 2023)	Theory of Planned Behaviour	389 investors from leading educational institute of Pakistan	PLS-SEM through Smart PLS (v 3.3.3).	purposive sampling	Primary data
(Indrawati et al., 2025)	Prospect Theory and Pecking Order Theory	229 MSME entrepreneurs (Primary data), Gresik Regency and (Secondary data) Gresik Regency Industry and Trade Department (GRIT), Indonesia	SEM using Smart PLS 3.0	Purposive sampling	Both primary and secondary data
(Grable and Rabbani, 2023)	Not explicitly stated	8038 respondents of US households, USA	t-test, ANOVA and Least squares regression	Random sampling	Secondary data
(NAIWEN et al., 2021)	Rational Economic Theory	300 respondents of textile section of Faisalabad, Punjab, Pakistan	PLS-SEM	Convenient sampling	Primary data
(Tahir, Richards and Ahmed, 2023)	Utility Theory	12952 respondents from Australian population, Australia	PLS-SEM	Survey	Secondary data
(Alfando, Njo and Yuliana, 2025)	Theory of Planned Behaviour	212 employed millennials of Indonesia	PLS-SEM using Smart PLS 4.0 software	Purposive sampling	Primary data
(Shah et al., 2024)	Social Cognitive Theory	686 investors of Pakistan	SEM	Not specified	Primary data

Source: Authors' compilation

Objective 1

Table 5: Nature of influence of Financial Literacy on 3 different constructs of Risk Behavior

Variables	Nature of Association/ Influence	Examples (Paper citations)
FL→RT	Positive and significant influence	(Ramudzuli and Muzindutsi, 2015; Magendans, Gutteling and Zebel, 2017; Shusha, 2017b; Bayar et al., 2020; Karki and Kafle, 2020; Larisa, Njo and Wijaya, 2021; NAIWEN et al., 2021; Thanki et al., 2022; Noviarini et al., 2023; Song et al., 2023; Tahir, Richards and Ahmed, 2023; Naveed and Ali, 2024; Sa'diyah, Widagdo and Fitriasari, 2024; Hamurcu, Hazar and Babuşcu, 2025; Indrawati et al., 2025)
	Actual financial knowledge (AFK) positively related to risk tolerance (RT), where AFK affect RT more in men and PFK affect RT more in women	(Dalina Amonhaemanon and Pornpen Vora-sittha, 2023)
	Subjective financial literacy (SFL) significantly predicts financial risk tolerance (FRT) but has no significant effect of objective financial literacy (OFL) on FRT.	(Alfando, Njo and Yuliana, 2025)
	Financial Knowledge (FK) positively influence FRT (High FK tends to have high FRT)	(Dewi et al., 2025b)
	Significant and positive (IFL is an antecedent of RT) influence	(Patrisia et al., 2023)
	Positive association between FL and organisation risk taking tolerance	(Noviarini et al., 2023)
	Positive and significant mediation of FRT	(Hermansson and Jonsson, 2021)
	Subjective financial knowledge and objective financial knowledge are positively related to FRT.	(Shusha, 2017a)
	Financial literacy doesn't have significant influence on Risk Tolerance	(Murhadi, Kencanasar and Sutedjo, 2023)
FL→RA	Positive association with Risk Appetite and Risk Neutral but negative association with Risk Averse.	(Xu and Jiang, 2024)
	FL not statistically significantly associated RA. Again, the FL has a significant negative correlation with risk-aversion attitude	(Michels, Rieling and Musshoff, 2023)
	Positive and significant	(Ye and Kulathunga, 2019; Noviarini et al., 2023; Dharma et al., 2024)
FL→RP	No significant influence	(Sulistianingsih and Santi, 2023)
	1. Actual financial literacy positively influences risk preference with the mediator self-perceived financial literacy. 2. Actual financial literacy has a positive influence on risk preference among the underconfident but a negative influence among the overconfident. 3. Positive effect of self-perceived financial literacy on risk preference.	(Chen, Giannikos and Lou, 2023)
	Significantly positive relationship	(Mudzingiri, 2021)
	Risk preference decreases more with high financial literacy than with low FL	(Mudzingiri et al., 2019)

Source: Authors' compilation

a. Financial literacy and financial risk tolerance

The review of eligible studies in the domain highlights majority studies that report statistically significant and positive influence of financial literacy/ financial knowledge (subjective/ objective/ perceived/ actual) on financial risk tolerance. However, the study (Murhadi, Kencanasar and Sutedjo, 2023; Alfando, Njo and Yuliana, 2025) shows insignificant influence which suggest that relationship may vary in few cases due to difference in context, demography or methodological approach.

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b. Financial literacy and risk attitude
There exists mixed relationship between two variables as majority study advocates positive relationship, few studies showing negative relationship between financial literacy and risk averse attitude and (Michels, Rieling and Musshoff, 2023) highlight no significant association.

c. Financial literacy and risk preference
The studies present positive and statistically significant association though direct and indirect between variables.

Objective 2

Table 6: Additional variables with predictor Financial Literacy and outcome Risk Behavior

Independent Variable (IV)	Dependent Variable (DV)	Additional Variable	Examples (Paper citations)
Financial literacy	Risk Tolerance	**Mediator Variables:** Experience Regret, Access to Finance Organisational Risk-Taking Tolerance Risk Attitude **Moderator Variable:** Gender **Dependent Variables:** Investment Decision Sustainability of SMEs Financial Interest **Controlled Variables:** Age Income **Other Independent Variables:** Gender (2times) Family Occupational Background Geographical Difference Financial Interest Education (2times) Religion Expenditure Personality Type A/B Income Variability Marital Status Age Number of Dependents Occupation Trading Experience Availability of Marginal Lending (Loan) Prior Loss Experience	(Ramudzuli and Muzindutsi, 2015; Karki and Kafle, 2020; Hermansson and Jonsson, 2021; NAIWEN et al., 2021; Thanki et al., 2022; Murhadi, Kencanasar and Sutedjo, 2023; Suherman, Kurniawati and Mohidin, 2023; Masdupi et al., 2024; Sa'diyah, Widagdo and Fitriasari, 2024)
	Risk Preference	**Other Independent Variable:** Time preference Multiple switching or indecisiveness in time preference	(Mudzingiri et al., 2019; Mudzingiri, 2021)

Source: Authors' compilation

The studies in table 6 presents different variables studied along with the main construct of financial literacy (IV) and risk tolerance (DV). The above mediator variables explain the effect of financial literacy on risk tolerance whereas the moderator variable like gender strengthen the relationship. Table 6 also reveals that researchers further extend the relationship by incorporating additional independent variables (like Family Occupational Background), dependent variables (like Investment Decisions) and controlled variables (Age and Income). On contrary, financial literacy (IV) and risk preference (DV) relationship was underexplored indicating scope to researchers for future research.

Table 7: Additional variables with predictor Financial Literacy and mediator Risk Behaviour

Independent Variable (IV)	Mediator Variable (MV)	Additional Variable	Examples (Paper citations)
Financial literacy	Risk Tolerance	**Mediator Variables:** Retirement Goal Clarity Risk Perception Saving Behaviour **Moderator Variable:** Herding Behaviour Emotional Intelligence **Dependent Variables:** Spending Behaviour Financing Decision Retirement Planning Financial Behaviour **Other Independent Variables:** Subjective Financial Knowledge Objective Financial Knowledge E-Payment Awareness **Endogenous Variable:** Retirement Saving Behavior **Exogenous Variable:** Subjective Financial Literacy (SFK) Objective Financial Literacy	(Harahap et al., 2022; Song et al., 2023; Alfando, Njo and Yuliana, 2025; Dewi et al., 2025a; Indrawati et al., 2025)
	Risk Attitude	**Mediator Variables:** Innovation capability Access to Finance **Moderator Variable:** Religious Knowledge **Dependent Variables:** Investment in Islamic Financial Instruments MSME performance Perceived Financial well-being Sustainability of SME **Other Independent Variables:** Islamic Business Ethics Knowledge management	(Ye and Kulathunga, 2019; Meldona et al., 2023; Dharma et al., 2024; Naveed and Ali, 2024)
	Risk Preference	**Dependent Variables:** Stock Investment Return	(Liao et al., 2022)

Source: Authors' compilation

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The table 7 identifies risk tolerance as mediating variable and financial literacy as independent variable with other variables across studies. The additional variables studied with the main construct serve the various roles which includes, outcome variables (like Retirement Planning), moderator variables (like Herding Behaviour) strengthening the relationship, other independent variables (like E-Payment Awareness) acting as a predictor, parallel mediator variables (like Risk Perception) explaining the relationship, endogenous variable (Retirement Saving Behavior) and exogenous variable (SFK) signifying influence on outcome variables. For construct risk attitude (MV) and financial literacy (IV), other variables studied having multiple roles include outcome variable (like MSME performance), moderating variable (Religious Knowledge), mediator (like Innovation Capability) and predictor (like Knowledge management). Lastly, a single study investigating risk preference as a mediator, financial literacy as a predictor and outcome (like Stock Investment Return) highlight potential avenue for researchers to carry further investigation in the domain.

Table 8: Additional variables with predictor Financial Literacy and moderator Risk Behaviour

Independent Variable	Moderator Variable (MoV)	Additional Variable	Examples (Paper citations)
Financial literacy	Risk Tolerance	**Dependent Variables:** Investment Intention **Other Independent Variables:** Actual Financial Knowledge (AFK) Perceived Financial Knowledge (PFK)	(Dalina Amonhaemanon and Pornpen Vora-sittha, 2023)
	Risk Attitude	**Mediator Variables:** Financial self-efficacy (FSE) **Dependent Variables:** Objective-Oriented Investment Behavior (OOIB)	(Shah et al., 2024)

Source: Authors' compilation

The role of risk tolerance and risk attitude in shaping direction of financial literacy influence caught less attention of researcher with very limited studies as shown in table 8. The attempt to extend the investigation by introducing additional variables having roles include parallel predictors AFK and PFK with outcome investment intention for risk tolerance (MoV). Again, outcome OOIB with mediator FSE for risk attitude (MoV).

Table 9: Additional variables with mediator Financial Literacy and Risk Behaviour

Mediator Variable	Additional Variable	Examples (Paper citations)
Financial Literacy (FT) and Risk Tolerance (RT)	**Mediator Variables:** Future Time Perspective (FTP) **Dependent Variables:** Retirement Planning **Other Independent Variables:** Age Education Income	(Larisa, Njo and Wijaya, 2021)

Source: Authors' compilation

The table 9 further extends the domain by positioning both financial literacy and risk tolerance as a mediator which explains the effect of predictor (age, education and income) with additional mediator (FTP) on Retirement planning (outcome). Unlike other studies, it is the only study available which considers FL and RT as a mediator and thus highlights required attention of researchers in the domain.

Table 10: Additional variables with moderator Financial Literacy and outcome Risk Behaviour

Dependent Variable	Moderator Variable	Additional Variable	Examples (Paper citations)
Risk Tolerance	Financial Literacy	**Independent Variables:** Gender, Age, Income and Education Status	(Grable and Rabbani, 2023)

Source: Authors' compilation

The study in table 10 highlight financial literacy shaping the direction of predictor (Age and others) on outcome variable (Risk Tolerance). The scarce studies with such role of FL and RT signifies much exploration of the construct. It further provides scope for future investigation to researchers with such mixed nature of the construct.

Table 11: Additional variable with predictor Risk Tolerance and moderator Financial Literacy

Independent Variable	Moderator Variable	Additional Variable	Examples (Paper citations)
Risk Tolerance	Financial Literacy	**Dependent Variables:** Financial Capability **Other Independent Variables:** Economic Hardship	(Ajaz Khan et al., 2025)

Source: Authors' compilation

The most recent studies in the domain with predictor economic hardship on financial capability with constructs risk tolerance as independent variable and financial literacy as moderator strengthening the relationship presented in table 11 provide direction for potential avenues with these new constructs.

Table 12: Additional variables with mediator Risk Tolerance and moderator Financial Literacy

Mediator Variable	Moderator Variable	Additional Variable	Examples (Paper citations)
Risk Tolerance	Financial Literacy	**Dependent Variables:** Family Communication Pattern Resource Allocation Choice **Other Independent Variables:** Financial Behaviour Demographic variables	(Noviarini et al., 2023; Patrisia et al., 2023)

Source: Authors' compilation

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The reviewed studies in table 12 present dominant constructs of financial literacy as a moderator and risk tolerance as mediator that were studied to explore the influence of variable family communication pattern and resource allocation choice on financial behaviour and demographic variables. The researcher could further investigate various construct through risk tolerance and financial literacy.

Objective 3

Table 13: Relationship between Demographic Features, Financial Literacy and Risk Behaviour

Demographic Variable	Association or Influence on	Variable	Nature of relation (Paper citations)
Gender	Significant influence	Financial Literacy	(Objective and subjective financial knowledge are more in male than female) (Grable and Rabbani, 2023), (Gender influence both Actual and Perceived financial knowledge where PFK found to be greater than AFK) (Dalina Amonhaemanon and Pornpen Vora-sittha, 2023)
	Significant influence	Risk Tolerance	(Female revealed lower risk tolerance than male) (Hamurcu, Hazar and Babuşcu, 2025), (Risk Tolerance were found more in male than female) (Grable and Rabbani, 2023), (Gender significantly influence level of Risk Tolerance) (Dalina Amonhaemanon and Pornpen Vora-sittha, 2023), (Male shown comparatively more tolerance level of risk than female) (Hermansson and Jonsson, 2021), (Men were more financial risk tolerant than women) (Magendans, Gutteling and Zebel, 2017), (Men possesses higher risk tolerance than female) (Bayar et al., 2020), (Female were found more risk tolerant in Indonesia than male) (Suherman, Kurniawati and Mohidin, 2023)
	No significant influence	Risk Tolerance	(Karki and Kafle, 2020)
	Significant influence	Risk Attitude	(Tendency to take calculated risk felt more in male than female) (Shah et al., 2024)
	Significant moderation	Financial Literacy and Risk Tolerance	(Gender reflect more significant moderation effect between financial literacy and risk tolerance for female than male) (Naiwen et al., 2021)
	No significant interaction between	Financial Literacy and Risk Tolerance	(Hermansson and Jonsson, 2021)
Marital Status	Significant influence	Financial Literacy	(Married were reported to be more financially literate and likely to be influenced than unmarried one) (Hamurcu, Hazar and Babuşcu, 2025)
	Significant influence	Risk Tolerance	(Risk tolerance was found to be higher among single or unmarried individuals than married one) (Thanki et al., 2022)
Education Level	Significant influence	Financial Literacy	(Positive and significant influence were reported with Doctoral degree holder having higher financially literacy level than one confined to Primary education.) (Hamurcu, Hazar and Babuşcu, 2025), (positive) (Noviarini et al., 2023), (Subjective and objective financial knowledge were found to be positively associated) (Grable and Rabbani, 2023), (Positive) (Larisa, Njo and Wijaya, 2021), (Positive) (Shusha, 2017b)
	Significant influence	Risk Tolerance	(Positive) (Noviarini et al., 2023), (Positive with investment risk tolerance) (Grable and Rabbani, 2023), (Positive) (Hermansson and Jonsson, 2021) (Positive) (Bayar et al., 2020)
	No significant influence	Risk Tolerance	(Karki and Kafle, 2020)
	Significant influence	Risk Attitude	(Highly educated has shown more tendency to take calculated risk) (Shah et al., 2024)
	Significant interaction between	Financial Literacy and Risk Tolerance	(Positive)(Hermansson and Jonsson, 2021)
Wealth	No significant interaction between	Financial Literacy and Risk Tolerance	(Hermansson and Jonsson, 2021)
Trading Experience	No significant influence	Risk Tolerance	(Karki and Kafle, 2020)
Availability of Marginal lending (Loan)	Significant influence	Risk Tolerance	(Positive) (Karki and Kafle, 2020)
Prior Loss Experience	Significant influence	Risk Tolerance	(Negative) (Karki and Kafle, 2020)
Age	Significant influence	Financial Literacy	(Positive) (Larisa, Njo and Wijaya, 2021; Noviarini et al., 2023),
	Significant influence	Risk Tolerance	(Positive but inverted U-shaped) (Grable and Rabbani, 2023), (Younger generation of Indonesia are risk averse) (Alfando, Njo and Yuliana, 2025) (Negative) (Bayar et al., 2020)
	No significant influence	Risk Tolerance	(No significant relationship between age and RT) (Thanki et al., 2022; Murhadi, Kencanasar and Sutedjo, 2023; Alfando, Njo and Yuliana, 2025)
	No significant influence	Risk Attitude	(Michels, Rieling and Musshoff, 2023)
	No significant interaction between	Financial Literacy and Risk Tolerance	(Hermansson and Jonsson, 2021)
Investment Experience	Significant influence	Risk Attitude	(Tendency to take more calculated risk were felt among investors having greater Investment Experience) (Shah et al., 2024)
Income Level	Significant influence	Financial Literacy	(Positive) (Larisa, Njo and Wijaya, 2021; Noviarini et al., 2023), (Income has positive relation with objective financial knowledge but weak U-shaped relation with subjective financial knowledge) (Grable and Rabbani, 2023),
	Significant influence	Risk Tolerance	(Positive but weak U-shaped relationship between income and investment risk tolerance) (Grable and Rabbani, 2023), (Positive) (Shusha, 2017b; Bayar et al., 2020; Thanki et al., 2022; Noviarini et al., 2023), (High earner displayed greater level of risk tolerance) (Magendans, Gutteling and Zebel, 2017)
	No significant influence	Risk Tolerance	(Reported no relationship between RT and income) (Murhadi, Kencanasar and Sutedjo, 2023)
	Significant influence	Risk Attitude	(Greater confidence and risk-taking ability were felt with one earning higher income) (Shah et al., 2024)

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Occupation	Significant influence	Risk Tolerance	(Self-Employed reflected more tendency to take risk) (Shah et al., 2024) (Positive relationship between occupation and risk tolerance of male only.) (Thanki et al., 2022)
	Significant influence	Risk Attitude	(Farmers demonstrate higher risk seeking behavior than foresters) (Michels, Rieling and Musshoff, 2023)
	No significant influence	Risk Tolerance	(Insignificant relationship between risk tolerance and occupation of female) (Thanki et al., 2022)
Geographical Differences	Significant influence	Risk Tolerance	(Suherman, Kurniawati and Mohidin, 2023)
House type	Significant influence	Risk Tolerance	(Risk tolerance were more in homeowners than tenants) (Magendans, Gutteling and Zebel, 2017)
Number of dependents in a family	Significant influence	Financial Literacy	(Negative) (Shusha, 2017b)
	Significant influence	Risk Tolerance	(Negative) (Thanki et al., 2022)

Source: Authors' compilation

The reviewed literature in table 12 indicates that gender significantly predict financial literacy and risk tolerance where male has shown higher financial literacy and risk tolerance than female. Again, it significantly moderates the relationship. Non-existence of significant influence fails to gather backing of sufficient literature. The marital status reflects significant but bi-directional relationship where married possess higher financial literacy and lower risk tolerance and vice-versa. Education is positively and significantly related to financial literacy, risk attitude and risk tolerance which implies increase in academic level of education attract more risk tolerance behaviour (inclined to take more calculated financial risk) and higher financial literacy level. Education also significantly moderates the relationship between financial literacy and risk tolerance. Risk tolerance is influenced positively by prior loss experience and negatively by availability of marginal lending (loan). Wealth doesn't moderate the relationship between risk tolerance and financial literacy. Age shows significantly positive influence on financial literacy and negatively on risk tolerance as older generation prefer lesser risk than younger generation. Financial literacy and risk tolerance are negatively influenced by dependents in family and positively by income of an individual. Risk attitude is positively influenced by income, occupation and investment experience. Lastly, risk tolerance is positively and significantly influenced by occupation, house type and geographical differences.

Objective 4

Fig. 4: Treemap of journals with publication

Source: Authors' compilation

Table 16: Journal-article summarization

Sr. no.	Particulars	No. of Articles/ Sources
1.	Total number on journals or sources	32
2.	Total number of articles	37
3.	Number of sources with twice publications in the domain	5
	SAGE Open	
	Sustainability (Switzerland)	
	Journal of Risk and Financial Management	
	Journal of Behavioral and Experimental Finance	
	Cogent Business and Management	

Source: Authors' compilation

The analysis of sources identifies several journals presented in the fig. 4 that have contributed in the domain. Table 16 present 32 journals that have published 37 articles in total highlighting widely dispersed literature across journals where few sources with multiple publications serve as a key platform for advancing research relating to financial literacy and risk factor.

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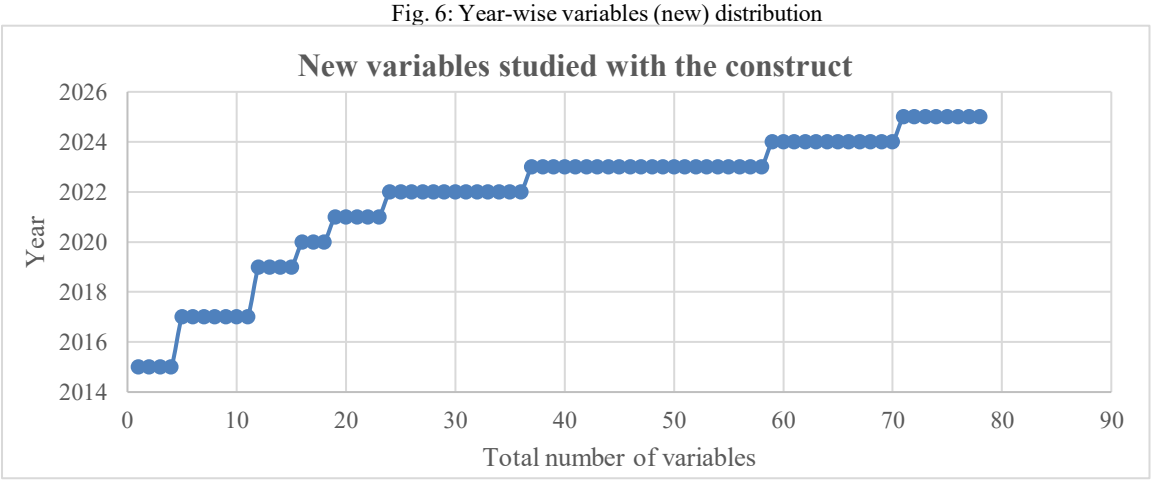
Fig. 5: Variables studied along with the FL and RA/ RP/ RT constructs over the period

***The variable has been studied in two different research paper during the year*

Source: Authors' compilation

The fig. 5 present variables that have been studied in the respective year from 2015 to 2025 in the domain. The variables that are most recent like spending behaviour, retirement goal clarity, age, financial capability, retirement saving behaviour, e-payment awareness, economic hardship, income could further be studied with different construct, presenting additional variables like gender, education, income, age, religion, number of dependents and marital status though signify demographic characteristics, however have been studied as a main construct (confounding variable) rather than controlled variable in the respective article (Thanki et al., 2022).

Fig. 6: Year-wise variables (new) distribution



Source: Authors' compilation

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The fig. 6 presents both the number of additional variables (variables other than financial literacy/ risk attitude/ risk preference/ risk tolerance) studied in a particular year as well as total number of additional variables studied over the period respectively. In year 2023, 22 variables and in year 2020 only 3 variables were studied in the domain which comprise it to be highest and lowest over the period. The year 2020 is marked by Covid pandemic lockdown restraining movement for physical data collection in empirical studies could possibly resulted lowest studies (Meijering et al., 2024).

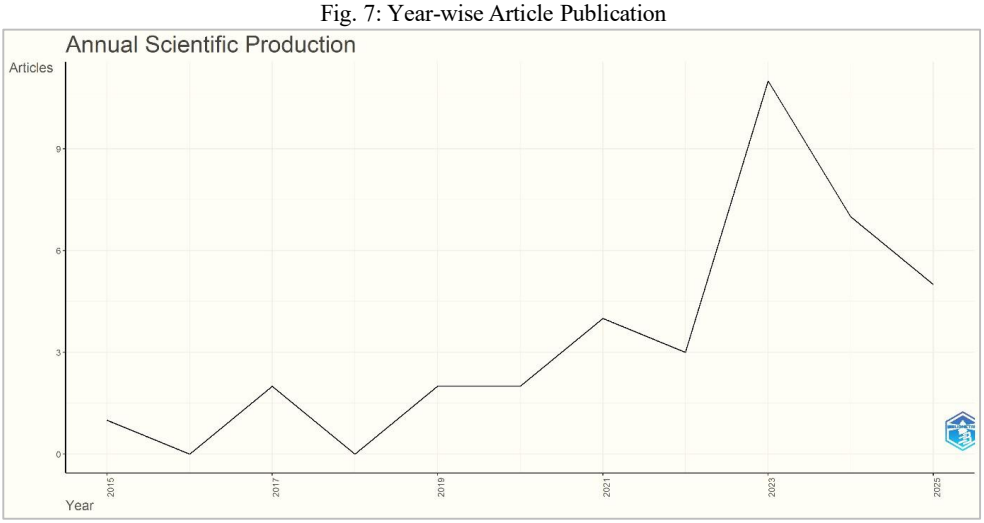
Table 14: Repetition of variables in different studies falling under same research area

Sr. no.	Variable	No. of Repetition	Year
1	Access to finance	2	2019 and 2024
2	Age	3	2022 (2 times) and 2023
3	Income	4	2022 (2 times) and 2023 (2 times)
4	Gender	4	2015, 2021 and 2023 (2times)
5	Education	3	2015, 2022 and 2023
6	Retirement planning	2	2021 and 2022
7	Financial interest	2	2021 and 2025
8	Financial behaviour	2	2023 (2 times)

Source: Authors' compilation

The table 14 highlight repeatedly studied key variables in different years. Among key variables in fig. 4, there are 8 variable that have been studied repeatedly whereas income and gender were mostly studied over the period. This repetition demonstrates the variable's significance and relevance in the domain which could be considered in future studies (Hashem E et al., 2023).

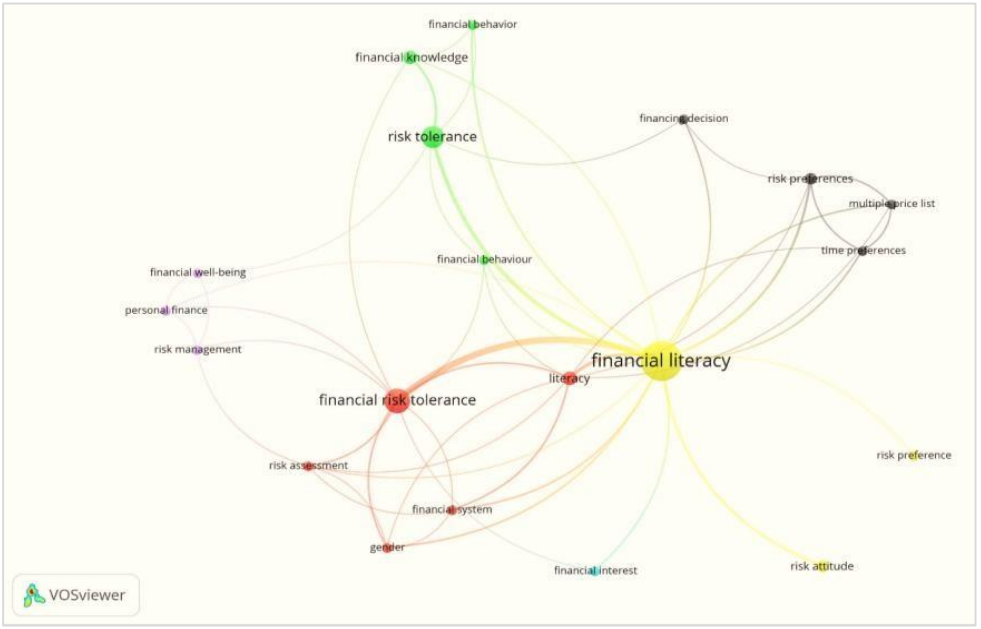
Fig. 7: Year-wise Article Publication



Source: Authors' compilation

The fig. 7 presents trend in research publication over the period (ranging from 2015 to 2025) where, year 2023 is marked by highest publication with 11 articles and year 2013 with lowest publication of 1 article published in the research domain. The pattern of annual scientific production shows gradual and then sharp rise thereafter, decline in recent years which further indicate growing scholarly interest in the domain of risk-related factors and financial literacy.

Fig. 8: Keyword co-occurrence analysis



Source: Authors' compilation

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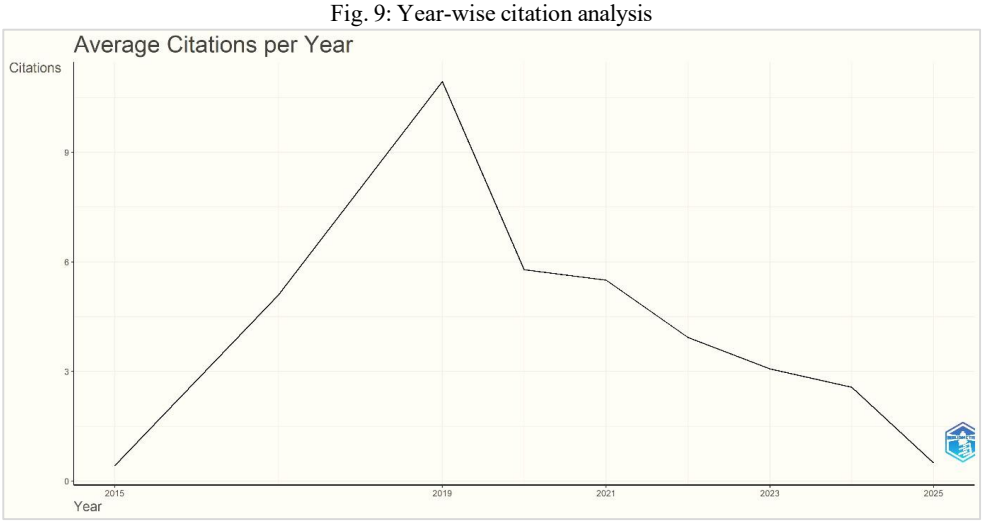
The fig. 8 present co-occurrence network of 20 keywords produced using VOS viewer after applying two minimum occurrences as a threshold limit. In network representation, the size of each node highlight frequency of keyword occurrence whereas the links and thickness between nodes indicate keyword co-occurrence relationships. The keywords that occurred most frequently were financial literacy with 26 occurrences followed by financial risk tolerance with 11 occurrences, risk tolerance with 9 occurrences, financial knowledge with 4 occurrences, literacy with 4 occurrences, risk preference and risk attitude with 3 occurrences respectively. The Total Link Strength (TLS) has also been reflected in the analysis where, financial literacy shows highest TLS value with 43 followed by financial risk tolerance 21, literacy 14, risk tolerance 12 and risk preference 9. Represented by six different hues in the figure present clusters which can further be grouped into three broader thematic areas namely 1) financial literacy and financial knowledge, 2) financial risk tolerance and risk preference and 3) financial decision-making and financial well-being. Collectively, it highlights the focuses of existing literature lies on how influence of risk behaviour and financial knowledge affect individual's financial outcome (Ramudzuli and Muzindutsi, 2015; Song et al., 2023; Dharma et al., 2024).

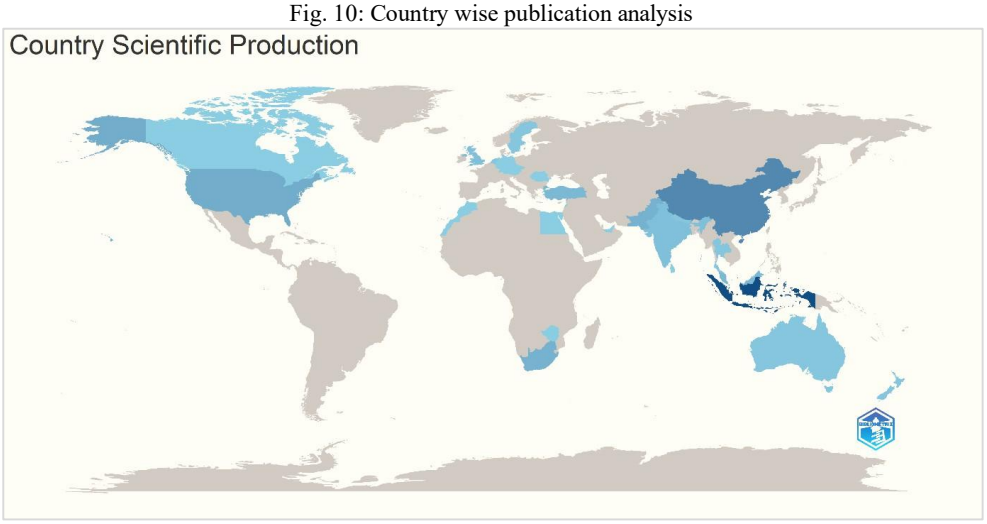
Fig. 9: Year-wise citation analysis



Source: Authors' compilation

The fig. 9 demonstrate annual scholarly impact of research publication indicated by average citation per year in the last decade 2015-2025 consisting of 37 articles in the domain. The pattern in annual citations varies significantly with receiving highest in 2019 and gradual decrease thereafter. Few studies have received notable academic attention highlighting growing recognition of the research domain.

Fig. 10: Country wise publication analysis



Source: Authors' compilation

Table 17: Country-wise number of publications

Indonesia	China	USA	Pakistan	South Africa	Malaysia	Turkey
22	12	6	5	5	4	4
India	UK	Australia	Nepal	Netherlands	New Zealand	Sweden
3	3	2	2	2	2	2
Thailand	Austria	Canada	Czech Republic	Egypt	Germany	Lebanon
2	1	1	1	1	1	1
Morocco	Romania	Sri Lanka	United Arab Emirates	Zimbabwe		
1	1	1	1	1		

Source: Authors' compilation

The country-wise scientific production in fig. 10 indicates maximum researches in the domain have been conducted in Asian region followed by Europe where Indonesia lies at the top followed by China. Table 17 highlights significant contribution of countries like Indonesia, China, USA,

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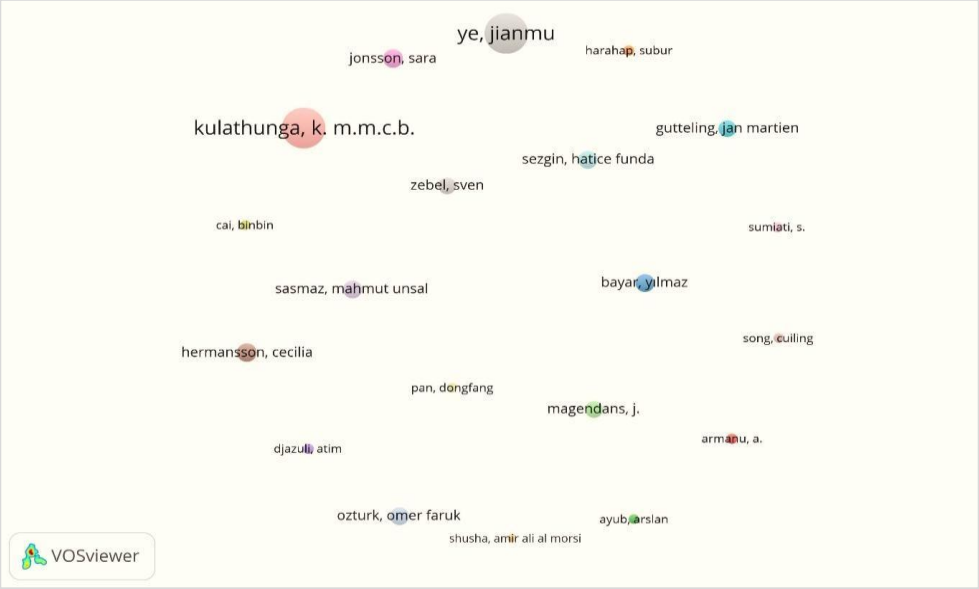
Pakistan and Saudi Arabia towards the enrichment of the literature. The increasing participation of Middle East countries (UAE, Egypt and others) further indicates growing interest and global relevance of the topic.

Fig. 11: Citation analysis - Top 20 influential authors



Source: Authors' compilation

The citations network presented in the fig. 11 reflect most influential authors that have been derived by employing threshold of one document and 30 minimum citations per author in VOS viewer software. The Scopus database comprising 37 articles which produced 20 influential authors with highest citations were included. The node represents individual author with its size indicating number of citations. The authors namely KMMCB Kulathanga and Jianmu Ye with 168 citations followed by Sara Jonsson and Cecilia Hermansson with 76 citations were the prominent contributors having significant citations in the literature. Further, the coloured node highlight different clusters that are linked through citation pattern though diverse but have fallen under the same domain.

CONCLUSIONS

Empirical studies exhibit influence of financial literacy on risk behaviour across different contexts and demographic settings. Such studies though directly and indirectly investigate the relationship, in some cases highlighted different outcome. To consolidate the findings and explore the relationship established by prior studies, the systematic review comprehensively highlights nature and significance of influence based on consensus. The study adopts PRISMA guidelines and conducts systematic review of literature for establishing comprehensive relationship. It further conducts bibliometric analysis for trend and pattern identifications and adopt hybrid approach. The study concludes that financial literacy positively and significantly influences financial risk tolerance, risk seeking and risk neutral attitudes of an individual. It reports mixed influence of financial literacy on risk preference whereas inverse relationship with risk averse attitude. The relationship has notably been explained by financial accessibility and further investigated with diverse financial behaviours involving decisions towards investment, saving, spending, resource allocation and planning for retirement. For demographic setting, gender significantly strengthen the relationship followed by herding behaviour and emotional intelligence. The role reconfiguration of additional variables across studies like saving behaviour (mediator and predictor), gender (predictor and moderator), along with core construct financial literacy (mediator and predictor), risk tolerance (predictor, mediator, moderator and outcome), risk attitude (moderator and mediator) and risk preference (mediator and outcome) indicates no fixed theoretical positioning in the model. Demographic features like gender, marital status, wealth, age, income, education and dependents in family also significantly predict financial literacy and shape the direction of relationship with risk tolerance as explained by Behavioural Finance Theory, Theory of Planned Behaviour and Rational Economic Theory (Hamurcu, Hazar and Babuşcu, 2025). However, few studies indicate no significant mediation effect of demographic variables on the relationship due to variability in sample composition (Hermansson and Jonsson, 2021). Explained by Social Cognitive Theory, the studies present significant impact of gender, education, investment, experience, income and occupation on risk attitude (Shah et al., 2024). On contrary, risk attitude also demonstrates no significant influence of age due to variation in cultural setting (Michels, Rieling and Musshoff, 2023). Lastly, the demographic features like education, marital status, gender, age, income, prior loss experience, marginal lending availability, occupation, geographical differences, house type and dependents significantly predict risk tolerance as is explained by Prospect Theory, Theory of Planned Behaviour and Financial Capability Theory (Suherman, Kurniawati and Mohidin, 2023; Alfando, Njo and Yuliana, 2025; Hamurcu, Hazar and Babuşcu, 2025). The contradictory finding resulted insignificant influence of gender, education, trading experience, age, income and occupation attributed to sample composition and measurement scale variations (Karki and Kafle, 2020; Thanki et al., 2022). The study identifies a) KMMCB Kulathanga, Jianmu Ye, Sara Jonsson and Cecilia Hermansson as influential authors b) Indonesia, China and USA as significant contributors among countries, c) SAGE Open, Sustainability (Switzerland) and Journal of Risk and Financial Management as influential journals in the domain. The study further present upward trend with highest publications in year 2023 followed by year 2025 and emerging theme like financial behaviour, risk management, time preference, financial interest and retirement planning as a scope for future research.

FUTURE RESEARCH DIRECTION

The review study provides direction for potential research in future, where researcher can broaden the scope of risk behaviour by incorporating risk appetite, risk propensity and risk perception in it. With limited evidences, a mixed influence of financial literacy on risk preference lays scope of future investigation. The researchers can pursue avenues that employs variables in different position in model configuration with theory-based justification. The evolving role of variables and core constructs can further be studied based on longitudinal studies. The components of financial literacy i.e., financial behaviour, financial attitude and financial knowledge can be further investigated in relation to risk behaviour (Atkinson and Messy, 2012).

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LIMITATIONS

The study presents valuable insights into relationship between financial literacy and risk behaviour, however, it suffers certain limitations. The systematic review used only a single database SCOPUS for article extraction. The majority of research papers before 2008 are mostly restricted to open access resulting limited accessibility to literature. The search string used could confine the coverage of literature to a very specific set of studies which may have excluded relevant articles.

REFERENCES

1. Ajaz Khan, K., Akhtar, M.A., Hassan, Y. and Přílučíková, J., 2025. Demystifying the role of risk tolerance, economic hardship and financial literacy on microentrepreneurs' financial capability. *Management & Sustainability: An Arab Review*, [online] pp.1–26. https://doi.org/10.1108/MSAR-02-2025-0075.
2. Alfando, K., Njo, A. and Yuliana, O.Y., 2025. Empowering Indonesian Millennials: The Role of Financial Literacy, Goal Clarity, and Risk Tolerance in Retirement Savings. *FINANCIAL PLANNING REVIEW*, [online] 8(3), pp.1–15. https://doi.org/10.1002/cfp2.70013.
3. Atkinson, A. and Messy, F.-A., 2012. *Measuring Financial Literacy*. OECD Working Papers on Finance, Insurance and Private Pensions. [online] https://doi.org/10.1787/5k9csfs90fr4-en.
4. Bayar, Y., Sezgin, H.F., Öztürk, Ö.F. and Şaşmaz, M.Ü., 2020. Financial Literacy and Financial Risk Tolerance of Individual Investors: Multinomial Logistic Regression Approach. *Sage Open*, [online] 10(3). https://doi.org/10.1177/2158244020945717.
5. Chen, B., Giannikos, C.I. and Lou, J., 2023. Is More Financial Literacy Always Beneficial? An Investigation through a Mediator. *Journal of Risk and Financial Management*, [online] 16(1), p.53. https://doi.org/10.3390/jrfm16010053.
6. Dalina Amonhaemanon and Pornpen Vora-sittha, 2023. PREDICTING INDIVIDUAL INVESTOR'S INTENTION TO INVEST: A COMPARISON BETWEEN ACTUAL AND PERCEIVED FINANCIAL KNOWLEDGE. *International Journal of Business and Society*, [online] 24(2), pp.559–575. https://doi.org/10.33736/ijbs.5944.2023.
7. Dewi, V.I., Effendi, N., Ervani, E. and Sapulette, M.S., 2025a. Do Financial Knowledge and e-Payment Awareness Affect Saving and Spending Behavior? The Mediating Role of Financial Risk Tolerance. *Gadjah Mada International Journal of Business*, [online] 27(2), pp.149–173. https://doi.org/10.22146/gamaijb.v27i2.21214.
8. Dewi, V.I., Effendi, N., Ervani, E. and Sapulette, M.S., 2025b. Do Financial Knowledge and e-Payment Awareness Affect Saving and Spending Behavior? The Mediating Role of Financial Risk Tolerance. *Gadjah Mada International Journal of Business*, 27(2), pp.149–173. https://doi.org/10.22146/gamaijb.v27i2.21214.
9. Dharma, Y., Puteh, A., Widodo, R., Alfaqih, L. and Yahya, A., 2024. The Influence of Financial Literacy and Islamic Business Ethics on Investment in Islamic Financial Instruments: The Mediating Role of Risk Attitude and the Moderating Role of Religious Knowledge. *Journal of Ecohumanism*, [online] 3(8), pp.264–282. https://doi.org/10.62754/joe.v3i8.4729.
10. Grable, J.E., 2000. *FINANCIAL RISK TOLERANCE AND ADDITIONAL FACTORS THAT AFFECT RISK TAKING IN EVERYDAY MONEY MATTERS*. [online] *JOURNAL OF BUSINESS AND PSYCHOLOGY*, Available at: <https://www.jstor.org/stable/25092698> [Accessed 26 February 2026].
11. Grable, J.E. and Rabbani, A., 2023. The Moderating Effect of Financial Knowledge on Financial Risk Tolerance. *Journal of Risk and Financial Management*, [online] 16(2), p.137. https://doi.org/10.3390/jrfm16020137.
12. Guleria, D. and Kaur, G., 2021. Bibliometric analysis of ecopreneurship using VOSviewer and RStudio Bibliometrix, 1989–2019. *Library Hi Tech*, [online] 39(4), pp.1001–1024. https://doi.org/10.1108/LHT-09-2020-0218.
13. Hamurcu, Ç., Hazar, A. and Babuşcu, Ş., 2025. A portfolio-focused behavioral model linking financial literacy and risk tolerance: Evidence from mutual fund investors in Türkiye. *Borsa Istanbul Review*, [online] 25, pp.119–127. https://doi.org/10.1016/j.bir.2025.09.001.
14. Harahap, S., Thoyib, A., Sumiati, S. and Djazuli, A., 2022. The Impact of Financial Literacy on Retirement Planning with Serial Mediation of Financial Risk Tolerance and Saving Behavior: Evidence of Medium Entrepreneurs in Indonesia. *International Journal of Financial Studies*, [online] 10(3), p.66. https://doi.org/10.3390/ijfs10030066.
15. Hashem E, A.R., Md Salleh, N.Z., Abdullah, M., Ali, A., Faisal, F. and Nor, R.M., 2023. Research trends, developments, and future perspectives in brand attitude: A bibliometric analysis utilizing the Scopus database (1944–2021). *Heliyon*, [online] 9(1), p.e12765. https://doi.org/10.1016/j.heliyon.2022.e12765.
16. Hemrajani, P., Rajni, Khan, M. and Dhiman, R., 2023. Financial risk tolerance: A review and research agenda. *European Management Journal*, [online] 41(6), pp.1119–1133. https://doi.org/10.1016/j.emj.2023.10.004.
17. Hermansson, C. and Jonsson, S., 2021. The impact of financial literacy and financial interest on risk tolerance. *Journal of Behavioral and Experimental Finance*, [online] 29, p.100450. https://doi.org/10.1016/j.jbef.2020.100450.
18. Indrawati, N.K., Muljaningsih, S., Juwita, H.A.J., Jazuli, A.M., Nurmasari, N.D. and Fahlevi, M., 2025. The mediator role of risk tolerance and risk perception in the relationship between financial literacy and financing decision. *Cogent Business & Management*, [online] 12(1). https://doi.org/10.1080/23311975.2025.2468877.
19. Karki, D. and Kafle, T., 2020. Investigation of Factors Influencing Risk Tolerance among Investors using Ordinal Logistic Regression: A case from Nepal. *Cogent Economics & Finance*, [online] 8(1), p.1849970. https://doi.org/10.1080/23322039.2020.1849970.
20. Larisa, L.E., Njo, A. and Wijaya, S., 2021. Female workers' readiness for retirement planning: an evidence from Indonesia. *Review of Behavioral Finance*, [online] 13(5), pp.566–583. https://doi.org/10.1108/RBF-04-2020-0079.
21. Liao, K., Zhang, Y., Lei, H., Peng, G. and Kong, W., 2022. A Comparative Analysis of the Effects of Objective and Self-Assessed Financial Literacy on Stock Investment Return. *Frontiers in Psychology*, [online] 13. https://doi.org/10.3389/fpsyg.2022.842277.
22. Magendans, J., Gutteling, J.M. and Zebel, S., 2017. Psychological determinants of financial buffer saving: the influence of financial risk tolerance and regulatory focus. *Journal of Risk Research*, [online] 20(8), pp.1076–1093. https://doi.org/10.1080/13669877.2016.1147491.
23. Masdupi, E., Firman, Rasyid, R. and Darni, M.O., 2024. Financial literacy and sustainability in SMEs: Do financial risk attitude, access to finance, and organizational risk-taking tolerance mediate? *Asian Economic and Financial Review*, [online] 14(1), pp.43–58. https://doi.org/10.55493/5002.v14i1.4959.
24. Mata, R., Frey, R., Richter, D., Schupp, J. and Hertwig, R., 2018. Risk Preference: A View from Psychology. *Journal of Economic Perspectives*, [online] 32(2), pp.155–172. https://doi.org/10.1257/jep.32.2.155.
25. Meijering, L., Osborne, T., Lowe, T.A., Sattari N, Z., de Haas, B., Schreuder, L., Weitkamp, G. and Maeckelberghe, E., 2024. Challenges and opportunities during the COVID-19 pandemic: A layered vulnerabilities perspective. *SSM - Qualitative Research in Health*, [online] 5, p.100419. https://doi.org/10.1016/j.ssmqr.2024.100419.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, 2026, Pages 4858-4873

26. Meldona, Soetjipto, B.E., Wardoyo, C., Hermawan, A. and Utaberta, N., 2023. Innovation capability and risk attitude mediate the effects of knowledge management and financial literacy on MSME performance. *Journal of Social Economics Research*, [online] 10(4), pp.194–214. https://doi.org/10.18488/35.v10i4.3555.
27. Michels, M., Rieling, J.A. and Musshoff, O., 2023. Risk attitude, innovativeness, and financial literacy—A cross-occupational comparison of German farmers and foresters. *Q Open*, [online] 4(1). https://doi.org/10.1093/qopen/qoae007.
28. Moher, D., Liberati, A., Tetzlaff, J. and Altman, D.G., 2009. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *Journal of Clinical Epidemiology*, 62(10), pp.1006–1012. https://doi.org/10.1016/j.jclinepi.2009.06.005.
29. Mudzingiri, C., 2021. The impact of financial literacy on risk seeking and patient attitudes of university students. *Development Southern Africa*, [online] 38(5), pp.845–861. https://doi.org/10.1080/0376835X.2021.1945431.
30. Mudzingiri, C., Mwamba, J.W.M., Keyser, J.N. and Bara, A., 2019. Indecisiveness on risk preference and time preference choices. Does financial literacy matter? *Cogent Psychology*, [online] 6(1). https://doi.org/10.1080/23311908.2019.1647817.
31. Murhadi, W.R., Kencanasar, F.R. and Sutedjo, B.S., 2023. The Influence of Financial Literacy and Financial Interest on The Financial risk Tolerance of Investor in Indonesia. *Journal of Law and Sustainable Development*, [online] 11(2), p.e310. https://doi.org/10.55908/sdgs.v11i2.310.
32. NAIWEN, L., WENJU, Z., MOHSIN, M., ZIA UR REHMAN, M., NASEEM, S. and AFZAL, A., 2021. The role of financial literacy and risk tolerance: an analysis of genderdifferences in the textile sector of Pakistan. *Industria Textila*, [online] 72(03), pp.300–308. https://doi.org/10.35530/IT.072.03.202023.
33. Naveed, M. and Ali, S., 2024. Does Risk Tolerance Mediates the Relationship Between Financial Literacy and Financial Wellbeing During COVID-19: Empirical Evidence From an Emerging Economy. *Sage Open*, [online] 14(4), pp.1–5. https://doi.org/10.1177/21582440241297065.
34. Noviarini, J., Coleman, A., Roberts, H. and Whiting, R.H., 2023. Financial literacy and retirees' resource allocation decisions in New Zealand. *Pacific-Basin Finance Journal*, [online] 79, p.101985. https://doi.org/10.1016/j.pacfin.2023.101985.
35. Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., Shamseer, L., Tetzlaff, J.M., Akl, E.A., Brennan, S.E., Chou, R., Glanville, J., Grimshaw, J.M., Hróbjartsson, A., Lalu, M.M., Li, T., Loder, E.W., Mayo-Wilson, E., McDonald, S., McGuinness, L.A., Stewart, L.A., Thomas, J., Tricco, A.C., Welch, V.A., Whiting, P. and Moher, D., 2021. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, [online] 372, p.n71. https://doi.org/10.1136/bmj.n71.
36. Patrisia, D., Abror, A., Dastgir, S. and Rahayu, R., 2023. Generation Z's Financial Behaviour: The Role of Islamic Financial Literacy. *ISRA International Journal of Islamic Finance*, [online] 15(2), pp.20–37. https://doi.org/10.55188/ijif.v15i2.540.
37. Ramudzuli, P.M. and Muzindutsi, P.-F., 2015. Financial knowledge and subjective financial risk tolerance among students at a South African University. *Risk Governance and Control: Financial Markets and Institutions*, [online] 5(3), pp.180–185. https://doi.org/10.22495/rgcv5i3c2art3.
38. Rana, V.S. and Nandan, T., 2025. Retrospect and prospect review: Financial literacy and its influence on the process of making financial decisions using SPAR-4-SLR protocol. *Multidisciplinary Reviews*, 8(5). https://doi.org/10.31893/multirev.2025139.
39. van Riel, A. and Snyder, H., 2024. Enhancing the impact of literature reviews: guidelines for making meaningful contributions. *Spanish Journal of Marketing - ESIC*, 28(3), pp.250–265. https://doi.org/10.1108/SJME-05-2024-0125.
40. Sa'diyah, C., Widagdo, B. and Fitriasari, F., 2024. Cryptocurrency investment: Evidence of financial literacy, experience, and risk tolerance. *Investment Management and Financial Innovations*, [online] 21(3), pp.148–159. https://doi.org/10.21511/imfi.21(3).2024.13.
41. Shah, S.S., Qureshi, F., Memon, F.A. and Uddin, M.H., 2024. Financial literacy and investment behavior of individuals in Pakistan: Evidence from an Environment prone to religious sentiment. *Journal of Behavioral and Experimental Finance*, [online] 44, p.100974. https://doi.org/10.1016/j.jbef.2024.100974.
42. Shusha, A., 2017a. Does Financial Literacy Moderate the Relationship among Demographic Characteristics and Financial Risk Tolerance? Evidence from Egypt. *Australasian Accounting, Business and Finance Journal*, [online] 11(3), pp.67–86. https://doi.org/10.14453/aabfj.v11i3.6.
43. Shusha, A.A., 2017b. Does Financial Literacy Moderate the Relationship among Demographic Characteristics and Financial Risk Tolerance? Evidence from Egypt. *Australasian Accounting, Business and Finance Journal*, 11(3), pp.67–86. https://doi.org/10.14453/aabfj.v11i3.6.
44. Snyder, H., 2019. Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, [online] 104, pp.333–339. https://doi.org/10.1016/j.jbusres.2019.07.039.
45. Song, C.L., Pan, D., Ayub, A. and Cai, B., 2023. The Interplay Between Financial Literacy, Financial Risk Tolerance, and Financial Behaviour: The Moderator Effect of Emotional Intelligence. *Psychology Research and Behavior Management*, [online] Volume 16, pp.535–548. https://doi.org/10.2147/PRBM.S398450.
46. Suherman, S., Kurniawati, H. and Mohidin, R., 2023. Determinants of financial risk tolerance: Evidence from the Indonesian millennials. *Humanities and Social Sciences Letters*, [online] 11(1), pp.67–82. https://doi.org/10.18488/73.v11i1.3300.
47. Sulistianingsih, H. and Santi, F., 2023. Does SME's financing decisions follow pecking order pattern? The role of financial literacy, risk preference, and home bias in SME financing decisions. *Cogent Business & Management*, [online] 10(1), p.1. https://doi.org/10.1080/23311975.2023.2174477.
48. Tahir, M.S., Richards, D.W. and 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*, [online] 41(4), pp.787–809. https://doi.org/10.1108/IJBM-09-2022-0431.
49. Thanki, H., Shah, S., Sapovadia, V., Oza, A.D. and Burduhos-Nergis, D.D., 2022. Role of Gender in Predicting Determinant of Financial Risk Tolerance. *Sustainability*, [online] 14(17), p.10575. https://doi.org/10.3390/su141710575.
50. Tranfield, D., Denyer, D. and Smart, P., 2003. *Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review*. *British Journal of Management*, https://doi.org/10.1111/1467-8551.00375.
51. Wang, Q. and Waltman, L., 2016. Large-scale analysis of the accuracy of the journal classification systems of Web of Science and Scopus. *Journal of Informetrics*, 10(2), pp.347–364. https://doi.org/10.1016/j.joi.2016.02.003.
52. Weber, E.U., Blais, A. and Betz, N.E., 2002. A domain-specific risk-attitude scale: measuring risk perceptions and risk behaviors. *Journal of Behavioral Decision Making*, [online] 15(4), pp.263–290. https://doi.org/10.1002/bdm.414.
53. Xu, S. and Jiang, K., 2024. Knowledge creates value: the role of financial literacy in entrepreneurial behavior. *Humanities and Social Sciences Communications*, [online] 11(1), p.679. https://doi.org/10.1057/s41599-024-03201-3.
54. Ye, J. and Kulathunga, K., 2019. How Does Financial Literacy Promote Sustainability in SMEs? A Developing Country Perspective. *Sustainability*, [online] 11(10), p.2990. https://doi.org/10.3390/su11102990.