Rehman and Mia *Future Business Journal* (2024) 10:75
https://doi.org/10.1186/s43093-024-00365-x

Future Business Journal

REVIEW **Open Access**

Determinants of financial literacy: a systematic review and future research directions

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Abstract

Financial literacy is considered an essential attribute for individuals and businesses to make optimal decisions. Considering the importance of financial literacy and the dearth of rigorous summaries in the existing literature on this topic, this study aims to investigate the factors affecting financial literacy. In doing so, we conducted a systematic review by selecting 53 papers from the Scopus database published between 1981 and 2024. Our investigation revealed that financial literacy is a multidimensional concept, and its determinants can be summarized into seven dimensions, namely demographic, socio-economic, psychological, financial, societal, Islamic, and technological factors. While demographic and socio-economic factors are widely used, psychological, financial, societal, and Islamic factors have received less attention from researchers. Nevertheless, the integration of technology into financial markets has recently drawn interest in the technological facet of financial literacy. Additionally, we analyzed the most influential papers and co-authorship networks in financial literacy research, providing a network analysis of existing studies. We further suggest that religious and technological factors, specifically Islamic financial literacy and digital financial literacy, may also influence financial literacy and deserve further investigation.

Keywords Financial literacy, Demographic factors, Socio-economic factors, Financial factors, Psychological aspect, Islamic aspect

Introduction

Financial markets worldwide have become more digital, user-friendly, comprehensive, and readily available in recent years. Unfortunately, individuals' lack of knowledge about fundamental financial concepts can lead to suboptimal financial decisions [1]. This highlights the need for individuals to be equipped with financial literacy. Lusardi [2] defined financial literacy as the ability to utilize financial data analysis skills to make informed decisions about financial management and planning, annuities and liabilities, and wealth accumulations. Abrantes-Braga and Veludo-de-Oliveira [3] conceptualized financial literacy as learning about personal finance and applying that knowledge. Drawing on these definitions, we can summarize financial literacy as having the understanding, abilities, and confidence to make a sound financial decision for individuals and businesses. This includes understanding financial terminology and using that knowledge to make informed choices.

Financial literacy has received significant attention in recent years. The aftermath of major financial crises, such as the Asian crisis of 1998, the global crisis of 2007–2009, and the European sovereign debt crisis of 2012, substantially increased its appeal [4]. The evolving landscape of retirement savings plans, coupled with increasing lifespans, further emphasizes the need for financial literacy as a critical tool for individuals and society to manage

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finances and safeguard against fraud. Therefore, governments, banks, employees, community groups, financial markets, and other institutions, in addition to individuals, are increasingly concerned about financial literacy, particularly in developing nations [5, 6]. Financial literacy also includes the ability to analyze financial information and accept responsibility for the choices made based on that analysis [7]. Financially literate individuals can effectively manage everyday expenses, build a financial safety net, plan for their children's education, and secure their post-retirement years. The topic of financial literacy has risen to the top of policy discussions due to its significance throughout a person's life cycle and the documented shortcomings in meeting even basic financial literacy requirements [8].

However, research on the factors affecting financial literacy, while increasing, remains limited. This is despite the growing global interest in the field. Our review identified numerous studies related to factors of financial literacy, but many examine these factors in isolation or fail to consider all the aspects of the concept [9–19]. Given the evolving nature of financial literacy, a systematic review presents a valuable opportunity to gain a deeper understanding of the factors influencing it. This knowledge can then be used to develop effective strategies for enhancing financial literacy.

Based on the Scopus search, there are only 10 systematic reviews on various topics of financial literacy (Table 2). This scarcity of reviews to consolidate existing findings and chart future research directions motivated us to investigate the determinants of financial literacy. While some existing reviews address financial behavior Ingale and Paluri [20] and financial education [21], the systematic review of 107 papers by Goyal and Kumar [22] sheds light on the determinants of financial literacy, including financial planning, and the impact of financial education on financial literacy. Furthermore, Damayanti et al. [11] conducted a literature review of 41 papers to identify influential factors that affect financial literacy in small and medium enterprises. They categorize these factors into three dimensions: financial knowledge, financial attitude, and financial awareness.

While most of the aforementioned review papers primarily used the WOS database [20, 21, 23], the review by Damayanti et al. [11] utilized both WOS and Scopus databases, focusing only on small and medium enterprises. While existing research offers inconclusive findings, a gap remains in comprehensively categorizing all factors affecting financial literacy.Therefore, a systematic review is necessary to understand the dynamics of financial literacy and aid future researchers in developing new study perspectives. This review paper aims to synthesize the various factors influencing financial literacy into a meaningful categorization to guide research in behavioral finance.

Garg and Singh [23] argued that financial literacy empowers individuals to make sound financial decisions, a crucial skill for navigating life events, household budgeting, homeownership, and retirement planning. This is particularly important as financial markets become increasingly complex due to liberalization and advancements in financial products [24]. In recognition of this importance, many countries are developing strategies to improve financial literacy among both youth and the general population. We believe this review will be instrumental in aiding policymakers design effective interventions to promote financial literacy among individuals and businesses.

The rest of the paper is laid out as follows: section "Theoretical framework and literature review" reviews some of the existing theories related to financial literacy. Section "Methodology" details the technique for performing the systematic review, including data collection and extraction procedures. Section "Analysis and discussion" presents the findings of the systematic analysis of the 53 included studies. Section "Network analysis of selected papers" explores network and citation patterns. Lastly, section "Conclusion" provides the conclusion, limitations of the study, and future research directions.

Theoretical framework and literature review

A variety of demographic, economic, financial, and possibly psychological factors influence financial literacy. However, our understanding of the sequence and interrelationships between these factors is still evolving. Recognizing that a single theory may not fully capture the complexities, researchers have proposed numerous hypotheses to identify the most influential factors affecting financial literacy at the individual and firm levels. To shed light on the interplay between these factors, we present a framework built upon several relevant theories (Fig. 1).

Dual process theory

Dual-process theory posits that both intuitive and cognitive processes influence decisions Evans [25], Glaser and Walther [26]. This theory takes different shapes, identifying two primary processing systems: "a fast, non-conscious, intuitive system" and "a slow, controlled, and conscious analytical system" [27]. The ability to switch between these systems is crucial for financial literacy. Financial literacy goes beyond simply knowing financial terms. It is a necessary skill for navigating today's complex financial landscape [28]. In general, the term "cognitive" refers to all types of knowledge and

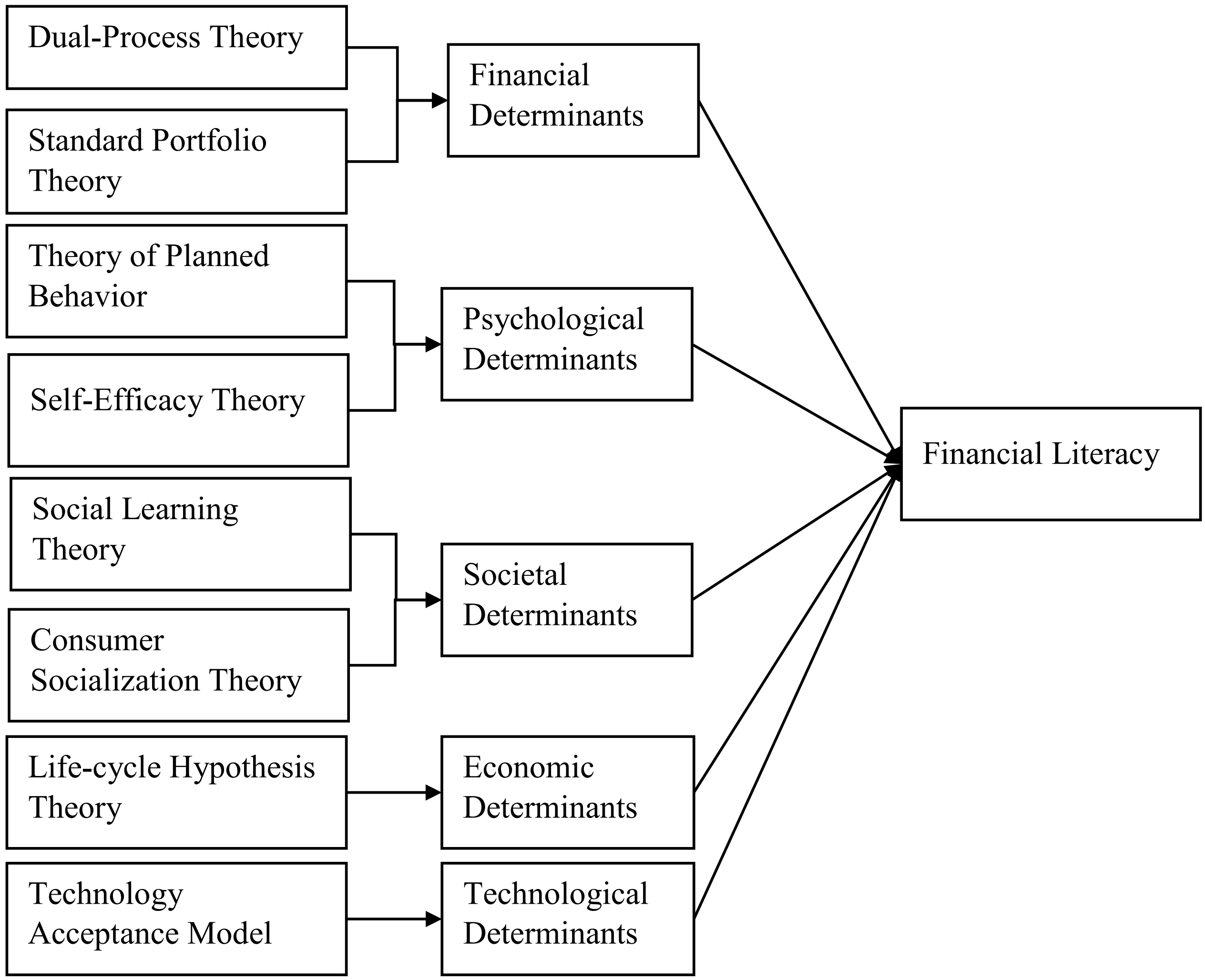

Fig. 1 Theoretical framework on determinants of financial literacy. Source: Authors. Note: We did not find any specific theory that clearly demonstrate the relationship with Islamic Financial Literacy

mental actions connected to comprehension, empathy, generosity, speculation, and contemplation as well as information management, problem-solving, prediction, and belief. Research in behavioral finance suggests that strong cognitive abilities are a key component of sound financial decision-making [29]. Individuals with higher cognitive capacity are not only more likely to seek out financial information but also more adept at applying it effectively [30]. Lusardi and Mitchell [31] further stated that the ability to recognize and avoid logical errors in decision-making, perform intellectual computations including cognitive appraisal, as well as comprehend and apply numbers are all necessary skills to become financially literate.

Theory of planned behavior

The theory of planned behavior (TPB), a prominent psychological theory used in the context of financial literacy research [23, 30, 32, 33], links individual behaviors with beliefs. Developed by Ajzen [34], TPB posits that an individual's intention and behavior are influenced by subjective norms, perceived behavior control, and attitude toward behavior. This theory is widely applied across various domains to understand the relationships between behaviors, attitudes, beliefs, and behavioral intentions [23].

Financial human capital refers to the time and resources individuals invest in learning and developing financial expertise. Such investment requires the ability to analyze complex information [30]. Sharif and Naghavi [33] established a connection between family financial socialization and financial literacy using the TPB determinants (informational subjective norms, perceived behavioral control, and attitudes toward information seeking). This suggests that societal norms, the perceived value and utility of knowledge, and an individual's ability and confidence in obtaining it all contribute to information-seeking behavior [24].

Social learning theory

Social learning theory, as proposed by Bandura et al. [35], suggests that social factors shape financial behavior. Individuals' financial literacy is influenced by social networks, families, peers, and media [14]. The environment shapes people's perspective on money, impacting their financial attitude throughout life [23]. This was also underscored by Bandura and Walters [36], who found that social interactions greatly affect the behavior of individuals in various contexts. Social interactions play a vital role in financial decision-making. Individuals learn through observation and interaction with others, and financial knowledge can be transferred through these social contacts [33, 37]. Goyal and Kumar [22] further emphasize the strong link between social learning opportunities and financial literacy. Similarly, Karakurum-Ozdemir et al. [14] found that a combination of direct parental instruction and trial-and-error learning can improve students' financial literacy.

Theory of consumer socialization

According to the consumer socialization theory, children acquire financial knowledge and skills from a variety of sources, including peers, parents, schools, and media [38]. The theory emphasizes that within the context of family traditions and culture, family members play a crucial role as socialization facilitators. Youths exposed to financial education at home demonstrate higher financial literacy [33]. This theory underpins the importance of financial socialization processes in youth financial literacy initiatives [39]. Generally, "consumer socialization" refers to the processes by which young people learn the knowledge, skills, and attitudes necessary to function effectively as consumers in the marketplace. Empirical evidence supports a significant link between financial behavior and knowledge and social learning opportunities [22]. TCS stresses the role of the social environment in shaping financial literacy. Parental interaction, observation, and trial-and-error learning all contribute to a student's acquisition of financial knowledge. Haliassos et al. [37] further evidenced the social transmission of financial knowledge, demonstrating that a household's financial behavior is significantly influenced by the financial literacy of neighbors. Similarly, psychology and behavior-based economic and financial theories posit the existence of an association between behavioral patterns and financial decisions [22].

Self-efficacy theory

Self-efficacy theory is one of the psychological theories used to understand financial literacy. As stated by Bandura [40], self-efficacy is a complex construct that involves cognitive, social, and emotional aspects. People's actions and behaviors are influenced by their perceptions of their talents, as well as their expectations of how well they can handle the demands and challenges of their environment [41]. Furthermore, Bandura [40] highlighted that vicarious experience, verbal persuasion, and physiological and emotive state are all forms of mastery experience that influence self-efficacy. Gill and Prowse [42] noted that learning has a favorable impact on a person's cognitive abilities, agreeableness, and emotional steadiness. Several studies support the link between self-efficacy and financial literacy, demonstrating that psychological factors like self-assurance, trust, financial satisfaction, future orientation, and financial anxiety all influence financial knowledge acquisition [43, 44]. Within the context of financial literacy, self-efficacy theory focuses on an individual's understanding of financial products and services [45].

Life cycle hypothesis (LCH) theory

Friedman [46] and Modigliani [47] laid the groundwork for the Life Cycle Hypothesis (LCH) as well as the Permanent Income Hypothesis (PIH). Microeconomic theories like LCH posit that rational individuals save a portion of their income for future needs. In other words, individuals structure their finances and spending habits to maintain a consistent level of satisfaction (marginal utility) throughout their lifetime [2]. Financial literacy plays a crucial role in this process, as individuals leverage financial services to accumulate wealth and encourage smooth consumption patterns across different life stages, potentially sacrificing some current income to maintain their desired standard of living in the future [9]. The LCH provides a valuable framework for understanding financial decision-making over time, particularly considering the connection between financial literacy and the belief in the value of financial participation. In essence, the LCH assumes a certain level of financial literacy (knowledge of financial products and how to manage them) for individuals to make sound financial decisions that ensure consistent well-being throughout their lives [48].

Standard portfolio theory

In addition to the aforementioned theories, the standard portfolio theory provides insights into asset composition and the influence of financial knowledge [16]. At its core, a portfolio is characterized by its risk and anticipated return. Developed by Markowitz [49] using statistical analysis, the concept of portfolio theory demonstrates how investors can minimize risk for a given return by combining uncorrelated or negatively correlated assets within a portfolio. According to the standard model of portfolio choice, this entails an increase in the proportion of riskier assets within household portfolios and a necessity for greater diversification to optimize risk-return characteristics. Although portfolio theory has been instrumental in exploring the effect of financial knowledge on asset composition [50], a knowledge gap remains about how financial literacy impact investor behavior, particularly diversification strategies, amidst growing relevance and concern regarding the financial literacy of individual investors. For this study, financial literacy is defined as the ability to gather, evaluate, manage, and communicate about one's financial condition in relation to material well-being [18]. This description encapsulates the capacity to collect pertinent and significant data, distinguish between various financial possibilities, engage in discussion regarding finances, devise plans, and adeptly navigate daily financial decision-making. Skagerlund et al. [51] identified a lower level of financial literacy as one of the primary factors contributing to under-diversification. As a result, individuals with lower financial literacy may not fully understand the benefits of portfolio diversification.

Technological acceptance model

The Technology Adoption Model (TAM) is a prominent theory explaining how users adopt new technologies [52]. It focuses on how external factors influence user beliefs, attitudes, and intentions to adopt technology, ultimately leading to its use [53]. Two key factors influencing user adoption are perceived usefulness (PU) and perceived ease of use (PEOU). Perceived usefulness refers to the extent a user believes a technology will enhance their performance or efficiency [53]. People are more likely to adopt technologies they perceive as valuable and helpful in their daily lives [54]. Perceived ease of use, on the other hand, reflects how effortless users believe it will be to learn and use the technology [55]. Technologies that are user-friendly and straightforward are generally adopted more readily. Research showed that both perceived usefulness and ease of use significantly impact user attitudes toward technology [56, 57]. These positive attitudes foster trust, confidence, and a willingness to interact with the technology, ultimately resulting in its actual usage [58].

In today's world, a strong degree of financial literacy is crucial. It equips individuals with a fundamental understanding of financial concepts and the ability to apply that knowledge to make informed financial decisions, ultimately improving their well-being [59]. This financial literacy can be particularly advantageous when adopting new financial technologies. Individuals with stronger financial literacy may find it easier to learn and use these technologies [60]. Currently, there is no universally accepted benchmark for assessing financial literacy or financial knowledge, with both terms being used interchangeably [61]. It is further explained by Hasan et al. [61] that the time value of money, inflation, and risk diversification as the three primary criteria commonly employed to assess financial literacy. Digital literacy refers to an individual's capacity to securely and appropriately access, manage, understand, integrate, communicate, evaluate, and create information using digital devices and networked technologies. It enables participation in economic and social activities [62].

Methodology

To conduct the systematic review, we adhered to the procedure outlined by Tranfield et al. [63]. This includes developing the research objective, identifying the criteria for inclusion or exclusion of papers, conducting a database search, selecting relevant papers based on predetermined criteria, extracting pertinent data from these papers, and finally evaluating and discussing the results. In this study, we divided our method section into two parts to facilitate a thorough systematic review. The first part details our approach to data gathering, while the second describes the characteristics of the extracted data.

Method of data collection

Research objective

This study has two main goals: to examine and review the existing literature on the determinants of financial literacy and to classify all these factors into broader components of financial literacy.

Criteria for selecting papers

To identify relevant studies, we focused our search on Scopus, a comprehensive and reliable database of peer-reviewed literature with advanced functionalities for precise data retrieval [64]. Scopus offers a broader range of journals compared to other reputable databases such as the Web of Science [65, 66], ensuring a more extensive and diverse selection of studies crucial for a thorough and accurate review [67]. For a paper to be included in our review, the following inclusion criteria must be met:

- It must contain information on factors affecting financial literacy in any form.
- It must explore the relationship between these factors and financial literacy.

Table 1 Summary of the selected articles

S.no	Author/s	Year	Data source/type of study	Financial literacy	Determinants						
					Demographic	Socio-economic	Psychological	Societal	Financial	Islamic	Technological
1	Mouna and Anis [16]	2017	Questionnaire	✓		✓			✓		
2	Singla and Mallik [18]	2021	Questionnaire	✓	✓						
3	Fazal et al. [30]	2021	Questionnaire	✓			✓	✓	✓		
4	Polisetty, Lalitha, and Singu [17]	2021	Questionnaire	✓				✓	✓		
5	Bujan et al. [10]	2016	Questionnaire	✓	✓						
6	Bharucha [9]	2017	Questionnaire	✓	✓						
7	Singh et al. [69]	2020	Questionnaire	✓					✓		
8	Lee et al. [70]	2021	Questionnaire	✓	✓			✓			
9	Twumasi et al. [19]	2021	Mixed Methods	✓	✓	✓	✓				
10	Twumasi et al. [50]	2021	Mixed Method	✓	✓	✓	✓				
11	Muñoz-Murillo et al. [71]	2019	Experimental Design	✓			✓				
12	Garg and Singh [23]	2018	Descriptive and Explanatory	✓							
13	Sharif and Naghavi [33]	2019	Questionnaire	✓				✓			
14	Shimizutani and Yamada [72]	2020	Questionnaire	✓	✓	✓	✓				
15	Damayanti et al. [11]	Review Paper	Descriptive	✓	✓				✓		
16	Bawre and Kar [73]	2016	Questionnaire	✓	✓				✓		
17	Kadoya and Khan [13]	2020	Questionnaire	✓	✓	✓					
18	Kiliyanni and Sivaraman [74]	2018	Questionnaire	✓	✓	✓					
19	Ahmad et al. [75]	2019	Questionnaire	✓	✓					✓	
20	Karakurum-Ozdemir et al. [14]	2019	Questionnaire	✓	✓						
21	Tinghög et al. [29]	2020	Questionnaire	✓	✓		✓	✓	✓		
22	Jayanthi and Rau [12]	2018	Questionnaire	✓	✓						
23	Longobardi et al. [76]	2017	Questionnaire	✓		✓	✓				
24	Kenayathulla et al. [62, 63]	2019	Questionnaire / online Survey	✓		✓			✓		
25	Kevser and Doğan [77]	2020	Questionnaire	✓	✓					✓	
26	Rahim et al. [68]	2016	Questionnaire	✓			✓		✓	✓	
27	Thomas and Subhashree [78]	2019	Questionnaire	✓			✓	✓	✓		
28	Atul and Sangeeta [43]	2022	Questionnaire	✓					✓		
29	He and Ahunov [79]	2022	Questionnaire	✓	✓				✓		
30	Mireku et al. [80]	2023	Questionnaire	✓	✓				✓		
31	Castañeda et al. [81]	2023	Questionnaire	✓	✓				✓		
32	Mirzaei and Buer [82]	2022	Questionnaire	✓	✓				✓		
33	Böhm et al. [48]	2023	Questionnaire	✓	✓	✓					

Table 1 (continued)

S.no	Author/s	Year	Data source/type of study	Financial literacy	Determinants						
					Demographic	Socio-economic	Psychological	Societal	Financial	Islamic	Technological
34	Singh and Singh [83]	2023	Questionnaire	✓	✓	✓			✓		
35	Tang et al. [84]	2022	Questionnaire	✓					✓		
36	Espinoza-Delgado [85]	2023	Questionnaire	✓					✓		
37	Loke et al. [86]	2023	Mixed Methods	✓	✓				✓		
38	Galizzi et al. [44]	2023	Questionnaire	✓	✓		✓		✓		
39	Riaz et al. [87]	2022	Questionnaire	✓			✓	✓	✓		
40	Ferilli et al. [88]	2024	Questionnaire	✓							✓
41	Rahayu et al. [89]	2023	Questionnaire	✓					✓		✓
42	Khan et al. [60]	2023	Questionnaire	✓							✓
43	Hasan et al. [61]	2023	Questionnaire	✓					✓		✓
44	Wijaya et al. [90]	2022	Questionnaire	✓							✓
45	Alsmadi, [70]	2024	Questionnaire	✓						✓	✓
46	Taufiq et al. [91]	2023	Questionnaire	✓							✓
47	Mutamimah and Indriastuti, [92]	2023	Questionnaire	✓					✓		✓
48	Hasan et al. [93]	2024	Questionnaire	✓					✓		✓
49	Prabhakaran and Mynavathi, [94]	2023	Questionnaire	✓							✓
50	Morgan, [95]	2022	Questionnaire	✓					✓		✓
51	Yau and Wong [96]	2022	Questionnaire	✓					✓		✓
52	Hikouatcha et al. [97]	2024	Questionnaire	✓							✓
53	Majid and Nugraha [98]	2022	Questionnaire	✓					✓		✓
	TOTAL			**53**	**23**	**11**	**11**	**7**	**27**	**4**	**14**

Source: Authors

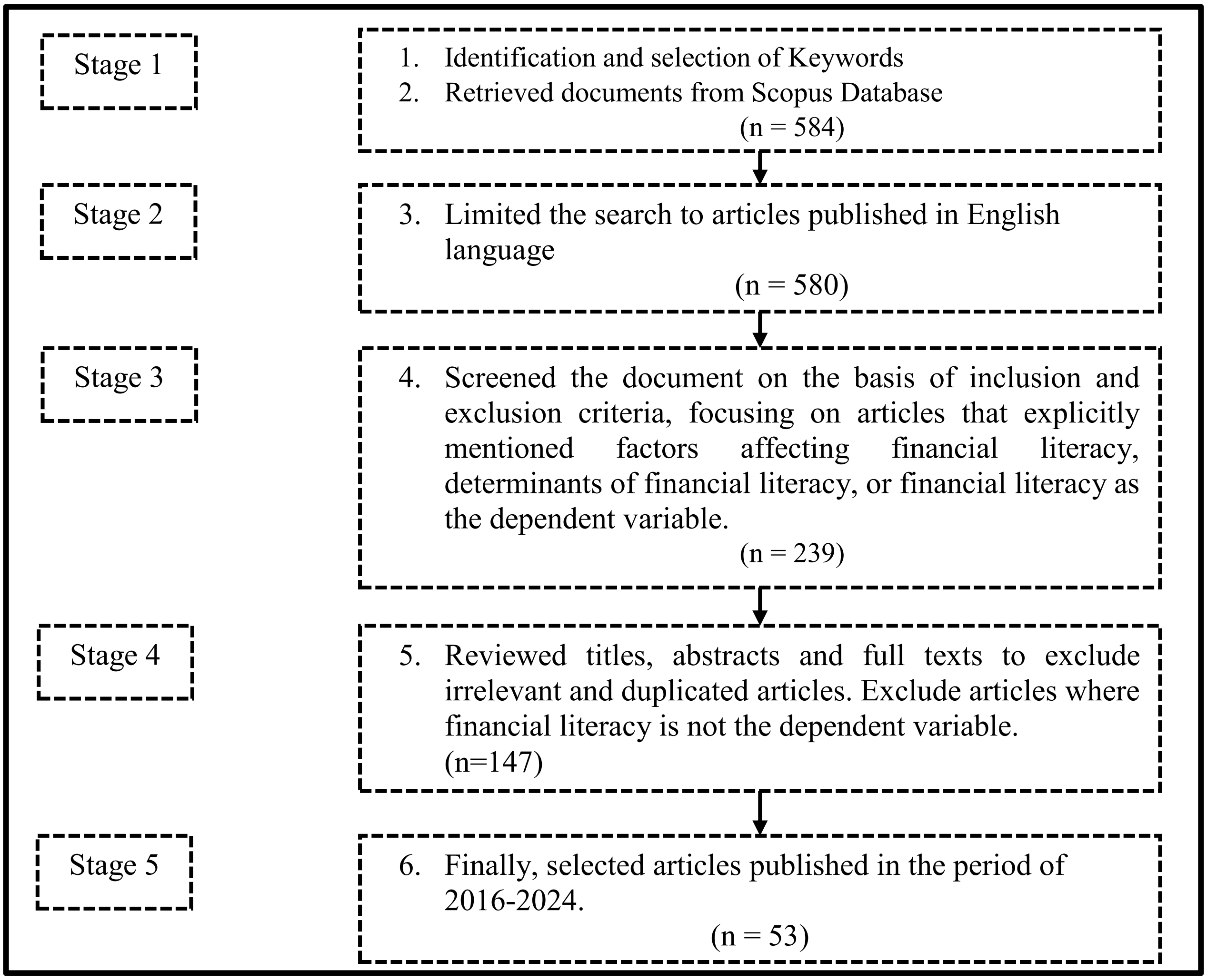

Fig. 2 Flowchart of the data collection procedure. Source: Authors

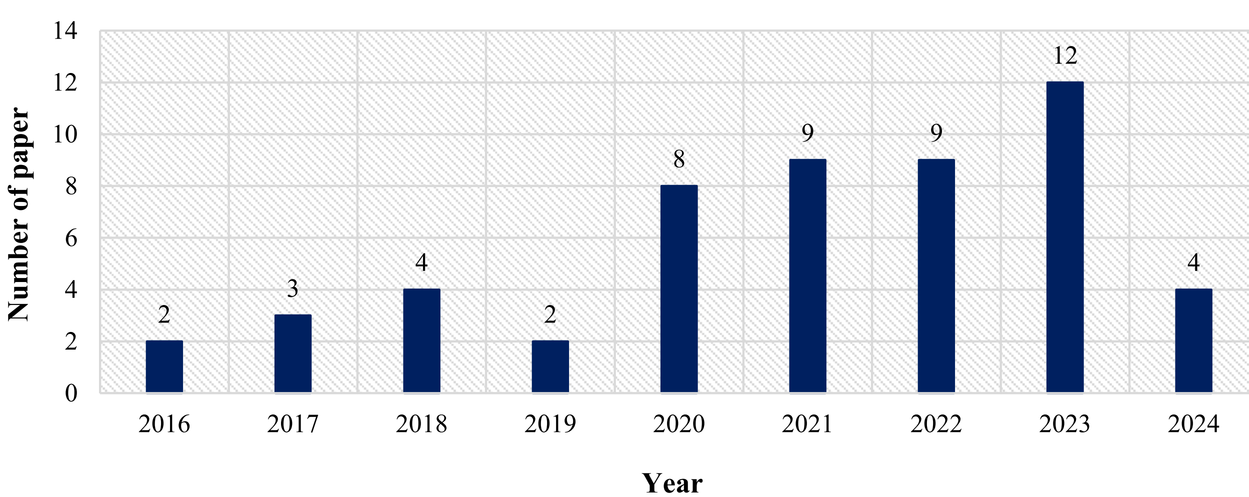

Fig. 3 Year-wise number of papers published. Source: Authors

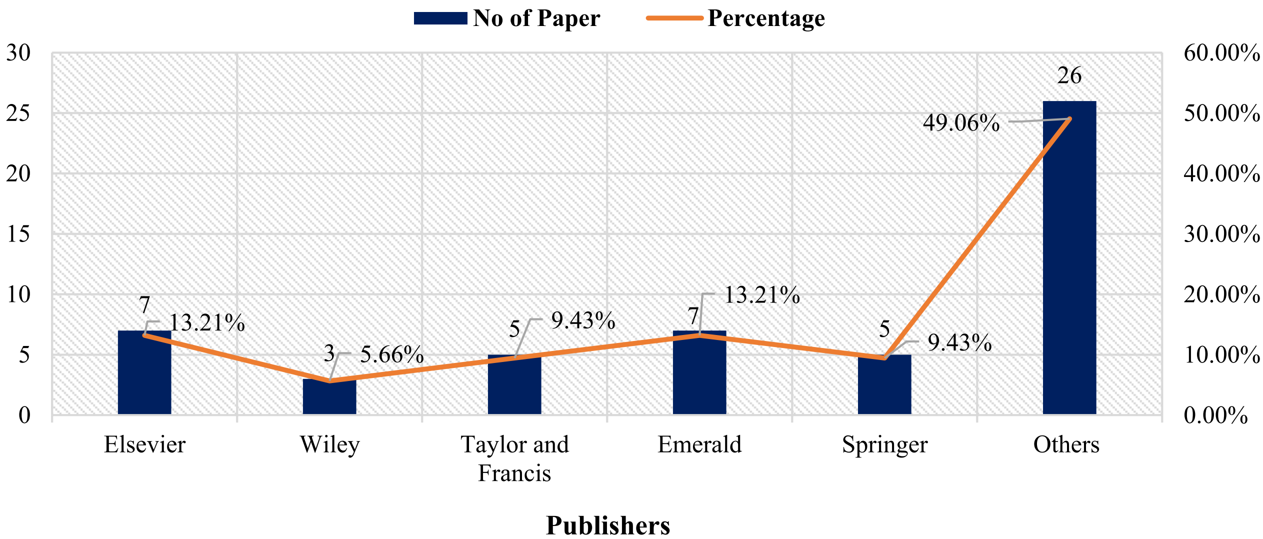

Fig. 4 No of papers published by publishers (Mixed methods are a research strategy in which both quantitative and qualitative data are collected and analyzed within the same study) Source: Authors

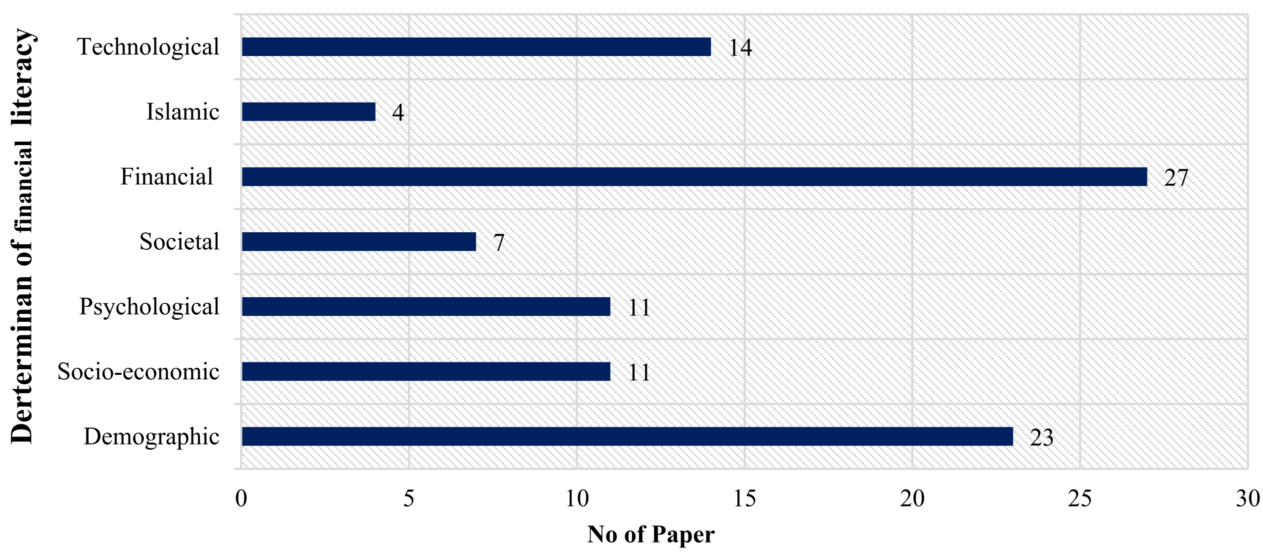

Fig. 5 No of determinants used in papers. Source: Authors

- It should not be a working paper or a conference paper.
- It must be published in the English language.

Scopus search and data collection

We conducted an unrestricted search for relevant literature within Scopus and ended up with publications from 1981 to 2024. To ensure comprehensive coverage, the following combination of keywords was utilized for the search: "determinants of financial literacy," "factors affecting financial literacy," "types of financial literacy," "components of financial literacy," and "influential variables that affect financial literacy."

Our search using the aforementioned keywords and string equations in Scopus yielded 584 articles as of March 10th, 2024. We then applied inclusion criteria, focusing on articles that explicitly mentioned factors affecting financial literacy, determinants of financial literacy, or financial literacy as the dependent variable. This initial screening based on titles resulted in the exclusion of 348 articles, leaving 239 potentially relevant studies. Further scrutiny of abstracts led to the exclusion of 92 additional articles where financial literacy was not the dependent variable. Finally, a full-text examination of the

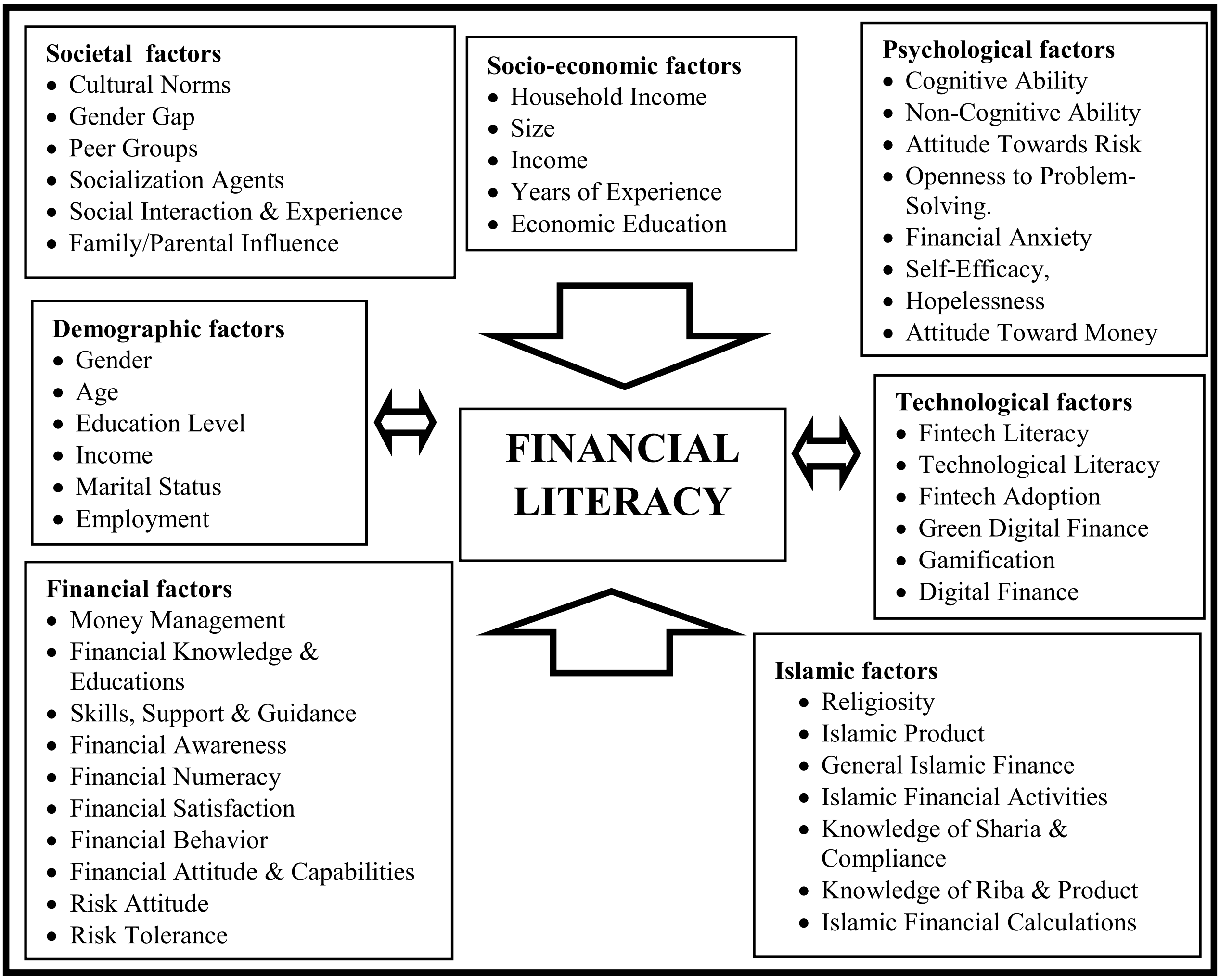

Fig. 6 Conceptual Framework. Source: Authors

remaining 147 articles yielded a final selection of 53 articles published between 2016 and 2024 directly relevant to our systematic review.

Characteristics of sampled papers

Table 1 summarizes the key features and characteristics of the 53 articles selected for this review (Fig. 2). Although our search identified a paper published in 2008, the focus on factors affecting financial literacy appears to be a more recent development, with the pioneering paper on the determinants of financial literacy being published in 2016 [10, 68]. This is further emphasized by Fig. 3, which illustrates that almost 62.7% of the included papers were published between 2021 and 2024. This recent surge in research highlights the timely nature of our systematic review of financial literacy.

All the papers included in this study are quantitative. Hence, questionnaires were the primary data collection tool for 88.89% (48) of the researchers (Table 1). Questionnaires give a relatively inexpensive, quick, and effective technique to acquire significant amounts of data from a large sample. A mixed-method approach (questionnaire/interview) was used in 5.56% of the studies, while only one paper employed an experimental design. Since our selection focused on papers published in Scopus-indexed journals, we observed a distribution across publishers: Elsevier and Emerald published 13.21% of the papers each, followed by Springer (9.43%), Taylor & Francis (9.43%), and Wiley (5.66%). The remaining 49.06% (26 papers) were published by other publishers (Fig. 4). Moreover, the top three most-cited papers of the 53 selected papers were published in Emerald, Springer, and Elsevier. The articles, by Garg and Singh [23], Karakurum-Ozdemir et al. [14], and Muñoz-Murillo et al. [24], have been citied 99, 59, and 50 times, respectively (Table 3).

Analysis and discussion

This section examines the publications from various perspectives, with each subpoint being analyzed aligning with the overarching study theme of synthesizing the determinants of financial literacy. Drawing on the 53 papers included in our systematic literature review, we categorized all factors influencing financial literacy into seven different categories based on the nature of the variables.

Our evaluation of the selected papers identified approximately 61 different factors of financial literacy. To facilitate understanding and align with the study's objective, we categorized these factors into broader categories based on their nature, namely demographic, socio-economic, psychological, societal, financial, technological, and Islamic. This categorization differs from the three-dimensional framework (financial knowledge, financial attitude, and financial awareness) proposed by Damayanti et al. [11] in a review-based publication.

As illustrated in Fig. 5, demographic factors were the most frequently examined category, with 23 out of 53 papers investigating their influence on financial literacy. Socio-economic and psychological factors were also well-represented, with 11 papers dedicated to each category. Technology's growing influence is reflected in the 14 papers that specifically explored this relationship. Financial literacy was examined through the lens of societal factors in 7 papers, while financial factors and Islamic finance were examined in 27 and 4 papers, respectively (Fig. 5; Table 1). The incorporation of Islamic factors alongside other dimensions reflects the understanding that financial literacy encompasses diverse cultural and religious perspectives (Fig. 6). In many regions, particularly those with significant Muslim populations, Islamic finance principles play a crucial role in shaping individuals' financial behaviors and attitudes [70, 77]. Furthermore, while Islamic factors may have been explored in fewer research papers compared to other dimensions, their significance in influencing financial literacy cannot be overlooked. Given the global importance of Islamic finance and its growing presence in financial markets, understanding its impact on individuals' financial literacy becomes increasingly pertinent.

Impact of demographic factors on financial literacy

All the theoretical framework discussed in the literature review part of this paper suggests a significant relationship between demographic factors and financial literacy. Singla and Mallik [18] found that the level of financial literacy varies among individuals based on age, gender, education, and experience. They also highlighted gender as the most influential factor, with men typically exhibiting higher levels of financial literacy compared to women. Similarly, various studies affirmed the significant and positive impact of demographic factors (sex, age, occupation, and marital status) on financial literacy [10, 15, 23]. Moreover, Bharucha [9] identified marital status and residential location as additional factors positively impacting financial literacy. This indicates that financial literacy varies not only among married and unmarried individuals but also among residents based on their geographical location.

Prior studies have documented the positive impact of demographic factors on financial literacy, including age [11, 13, 72, 73], gender [14, 74, 75], income [12, 77, 79], marital status [48, 80, 82], and level of education [44, 83, 86]. Their study suggests older participants tend to outperform younger ones, and men generally exhibit higher levels of financial literacy than women. Moreover, households with higher incomes tend to have more experience with investing compared to those with lower incomes, while individuals with higher levels of education typically demonstrate superior financial literacy skills. Lusardi's [2] research supports this notion, demonstrating that young adults enrolled in business or accounting programs tend to have a stronger understanding of financial concepts compared to those in non-business fields.

A comprehensive study of financial literacy among Australian youth conducted by Lusardi [2] revealed that students with higher financial literacy levels were more likely to be male, possess greater job experience, earn more money, and have lower overall risk preferences. Furthermore, sociodemographic factors and family financial knowledge were found to have a significant relationship with financial literacy [11]. Bawre and Kar [73] showed that individuals with high financial literacy tend to excel both personally and professionally. Financial literacy tends to increase with higher levels of education, risk tolerance, age, job experience, family income, parental occupation, and training class attendance. Notably, women typically perform lower than males on financial knowledge examinations and express less confidence in their financial abilities [75]. Addressing this gender disparity in financial literacy is crucial in efforts to enhance women's financial literacy. Moreover, research suggests that financial literacy improves with age, peaking at around age 26–29 years [74]. As individuals are exposed to personal finance at an earlier stage in their careers, there is a growing need for measures to enhance financial literacy among young people.

In addition, factors such as household characteristics [19, 50], educational attainment [72], parenthood [9], and the discipline of education [74] have also been shown to influence financial literacy. While many studies treat these variables independently, there is a need for more research examining their combined effects on financial literacy. To address this gap, we consolidated these variables into a single determinant termed the demographic determinant of financial literacy. This framework will aid future researchers in identifying which variables to include when investigating financial literacy.

Impact of socio-economic factors on financial literacy

The demographic and socio-economic components of financial literacy stand out as the most discussed factors in the literature [74]. Socio-economic factors, in particular, play a significant role in determining a person's financial and social status, directly influencing their financial and social freedom [22]. Studies by Galizzi et al. [44] and [19] corroborated the significant impact of the socio-economic variable on financial literacy. According to Böhm et al. [48], families led by females had lower levels of financial literacy, although gender did not significantly influence financial literacy in India. Income levels also exhibited a notable correlation with financial literacy [2], suggesting that the low-income group typically demonstrates lower levels of financial literacy. This lack of knowledge can make it difficult to manage daily expenses and financial resources effectively, further exacerbating financial hardship [86]. Financially illiterate families, often lacking cognitive capacities, tend to encounter challenges in managing daily expenditures and financial resources [83]. This issue is particularly alarming for the economically disadvantaged, who are more likely to experience ongoing financial hardship. Mirzaei and Buer [82] emphasized that financial literacy can assist the poor by educating them about financial choices and challenges, enabling them to develop effective coping mechanisms.

Furthermore, studies by Lusardi and Mitchell [31] revealed gender disparities in financial literacy, with young women, even those with college degrees, exhibiting lower levels of financial literacy compared to their male counterparts. Similarly, He and Ahunov [79] and Kevser and Doğan [77] suggested that individuals with basic knowledge of economics tend to have a higher level of financial literacy and vice versa. Jayanthi and Rau [12] and Karakurum-Ozdemir et al. [14] further noted that individuals from disciplines such as finance, economics, and management demonstrate higher levels of financial literacy compared to those from other disciplines. Additionally, Lusardi and Mitchell [31] revealed that the number of years of workforce experience significantly influences financial literacy. Individuals with more years of experience tend to possess higher financial literacy levels and a better understanding of managing financial resources effectively.

A voluminous number of empirical literature has investigated socio-economic factors affecting financial literacy. For example, economic education [14, 75, 99], household income [13, 72], family size [14, 74] and income [11, 15, 73] have all been extensively studied to understand their impact on financial literacy levels, both at the individual and corporate levels, over the last few decades. Considering the importance and pervasive impact of these factors on financial literacy, they are often collectively referred to as the socio-economic determinant of financial literacy.

Impact of psychological factors on financial literacy

Financial literacy hinges on an individual's ability to make effective financial decisions. Integral to this process are the psychological factors of financial literacy, which encompass an individual's ability to perceive, analyze, evaluate, and execute sound financial decision-making efficiently [19, 31]. Lusardi and Mitchell [31] argued that having a basic understanding of finances is an investment in human capital, but expanding one's knowledge of finances incurs costs in terms of time and resources required for learning. A crucial theoretical factor in determining financial literacy is cognitive ability, an efficiency parameter that governs the productivity of inputs in the production function of additional financial literacy Muñoz-Murillo et al. [24]. Consequently, a positive relationship between cognitive ability and financial literacy is anticipated, as cognitively capable individuals are less likely to make financial mistakes. However, this relationship may be influenced by other important factors besides cognitive ability [72]. These include non-cognitive skills such as risk aversion [100], patience [101], numeracy [102], and parental characteristics [103].

Financial anxiety, a psychological condition characterized by a negative mindset toward financial matters, also plays a significant role in financial literacy [12]. The relationship between financial anxiety and financial literacy remains a subject of exploration [104], with some studies suggesting a positive relationship Pijoh et al. [71]. This indicates that individuals with higher financial anxiety may possess more financial information, leading to better financial literacy. Conversely, a higher level of financial literacy generally reduces financial anxiety levels. Furthermore, Tinghög et al. [29] found a significant indirect effect of gender on financial literacy through financial anxiety, with increased financial anxiety among women contributing to the gender gap in financial literacy. Openness to problem-solving is an individual ability to analyze and understand the situation and resolve problems efficiently. Openness to problem-solving, attitude towards risk, self-efficacy, and hopelessness have also been identified as important factors positively impacting financial literacy [19, 50, 68, 76].

Impact of financial factors on financial literacy

While researchers often use the terms "financial knowledge" and "financial literacy" interchangeably, they hold distinct meanings. Mouna and Anis [16] elucidate the difference, explaining that "financial knowledge" pertains to the theoretical understanding of financial concepts, whereas "financial literacy" encompasses both theoretical and practical application of financial concepts. Studies by Lusardi and Mitchell [31] found a significant and positive relationship between financial knowledge and financial literacy, indicating that individuals and businesses with a deeper comprehension of financial concepts are better positioned to make informed financial decisions, ultimately leading to higher levels of financial literacy. Financial education and financial knowledge are closely related concepts [11, 32, 105, 106]. Finance education involves teaching financial concepts with the goal of improving financial literacy Polisetty et al. [17]. Riaz et al. [87] advocated for educational institutions to recognize the importance of bolstering financial literacy through higher-quality educational programs. Similarly, Finke and Huston [107] posited that improving financial literacy can be achieved by educating youth about financial matters.

Another important component of financial literacy discussed in the literature is financial attitude and capabilities. Financial attitude refers to an individual's mental or psychological judgment of their financial situation [11]. People's attitudes towards money significantly influence their financial literacy, with those having ambitious financial goals and a positive attitude towards money more likely to strive for improved financial literacy [43, 85]. Financial awareness encompasses understanding financial institution products and services, as well as the ability to save for future financial goals [79]. Individuals and young entrepreneurs require financial awareness to make informed short-term decisions and consider long-term investments [82]. Money management skills are another significant aspect of financial literacy, involving decisions regarding savings, investing, and cash management [84]. Individuals with proficient money management skills are better equipped to regulate their finances, leading to more sensible and informed financial decisions [83, 85].

Impact of societal factors on financial literacy

Socialization theories posit that the socialization process involves the collaborative interaction of individuals within specific societal contexts [108]. In the context of finance, this process is referred to as financial socialization, wherein individuals acquire financial skills and knowledge through interactions with various agents like peer groups, family, media, and friends [30]. However, researchers have used different terms to describe these socialization agents. Thapa [109] categorized peer groups, family, media, and friends under a single category named "financial influence," which is considered a part of personality traits that influence individuals' financial literacy. Studies have shown that parents significantly influence their children's financial behavior [15, 17, 33], while peers also play a crucial role in shaping financial decisions [87]. Tinghög et al. [29] found that financial support from socialization agents, particularly family members, impacts pupils' financial decisions, emphasizing the importance of parental and peer guidance in fostering proper financial management skills. Furthermore, Polisetty et al. [17] investigated how financial literacy and expert guidance influence household portfolio diversification decisions. Their findings suggest that households seeking expert advice tend to achieve better investment outcomes than those relying solely on their own judgment.

Impact of islamic factors on financial literacy

Financial literacy can be defined and measured using diverse dimensions and instruments. Research by Ahmad et al. [75], Kevser and Doğan [77], and Rahim et al. [68] highlighted the importance of considering the components of Islamic Financial Literacy (IFL). Islamic financial literacy is defined as the ability of an individual to make informed financial decisions in accordance with Islamic principles [68]. Abdullah et al. [110] further elaborated that IFL involves the identification and management of finances in line with *Sharia* compliance. The core principles of Islamic banking, which prohibit practices like interest, are incompatible with some factors of traditional financial literacy constructs. This incompatibility highlights the critical need to develop specific frameworks for assessing IFL.

Religiosity is considered an influential determinant of IFL, reflecting an individual's religious beliefs, practices, and values in their daily life [68, 111]. Religion often shapes individuals' financial decisions, as evidenced by Al-Tamimi's [5] study in UAE, which found a significant positive impact of religiosity on financial literacy. Ahmad et al. [75] identified two dimensions of financial literacy through Exploratory Factor Analysis (EFA): subjective knowledge of *Sharia* compliance and subjective knowledge of *riba* and profit-sharing. *Sharia*[1] compliance knowledge guides individuals in managing economic

[1] *Sharia*: Muslims adhere to Islamic religious law, known as *Sharia*, which encompasses not only religious practices but also guides various aspects of their daily lives. *Sharia* provides adherents with a framework of rules and principles to guide decisions, including those related to finances and investments.

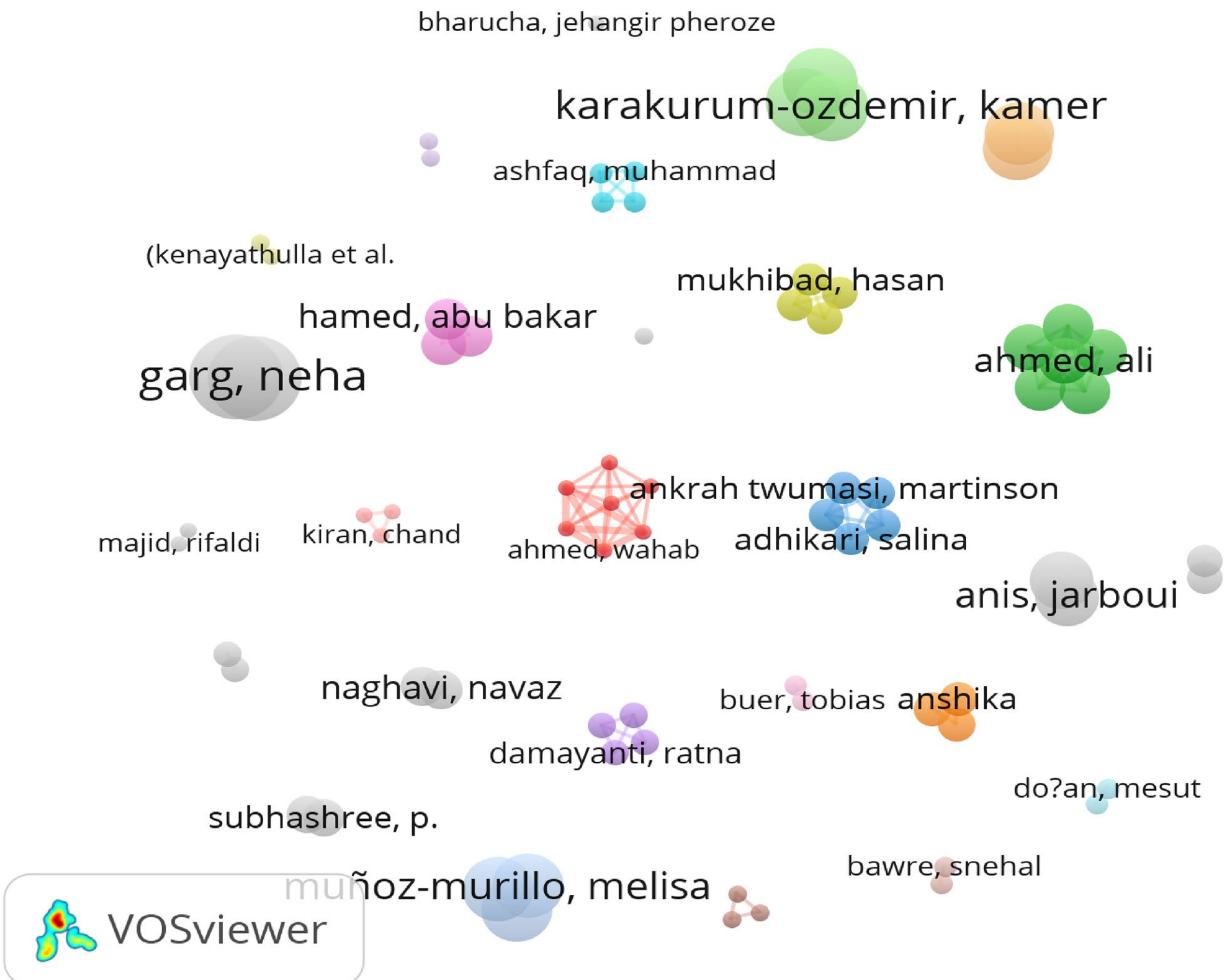

Fig. 7 Network visualization network of co-authorship based on citations.. Source: Authors

endeavors (*Muamala*h[2]) according to Islamic principles, while subjective knowledge of *riba*[3] and profit-sharing measures individuals' comprehension of concepts such as *riba* (interest) and profit-sharing contracts. Previous studies have highlighted components of IFL centered on interest-free systems (*riba*) [112, 113] and profit-sharing arrangements such as "*Musharakah*[4]" and "*Mudharabah*[5]" contracts [113]. As Islamic finance and banking gain popularity, IFL becomes increasingly crucial for understanding Islamic financial products and making informed decisions within the framework of Islamic principles [114–116].

Impact of technological factors on financial literacy

Over the past few decades, information technology has become a major driver of innovation in the global financial sector. Financial Technology (FinTech) has emerged as a key player, enabling the development of innovative and distinctive digital financial solutions worldwide [91]. FinTech offers numerous benefits to consumers, including increased transparency, elimination of unnecessary

[2] *Muamalah*: This is a branch of Islamic law that specifically deals with commercial transactions and financial activities. Sources agree that "rules governing commercial transactions" in Islam are part of *Muamalah*.

[3] *Riba*: In Islam, *Riba* refers to the prohibition of charging or paying interest on loans or deposits. The term "*riba*" denotes concepts related to growth, increase, or exceeding limits. This prohibition aims to ensure fairness and equity in financial transactions and prevent exploitation.

[4] *Musharakah*: In Islamic finance, a *musharakah* is a joint partnership where profits and losses are split according to a predetermined ratio. Because interest-related profits are prohibited in Islamic law, *musharakah* is a *Sharia*-compliant way for businesses to raise capital.

[5] *Mudharabah*: This term refers to a type of business agreement in Islamic finance where one party provides capital while the other contributes effort or expertise. The distribution of profits is determined by mutual agreement between the parties involved.

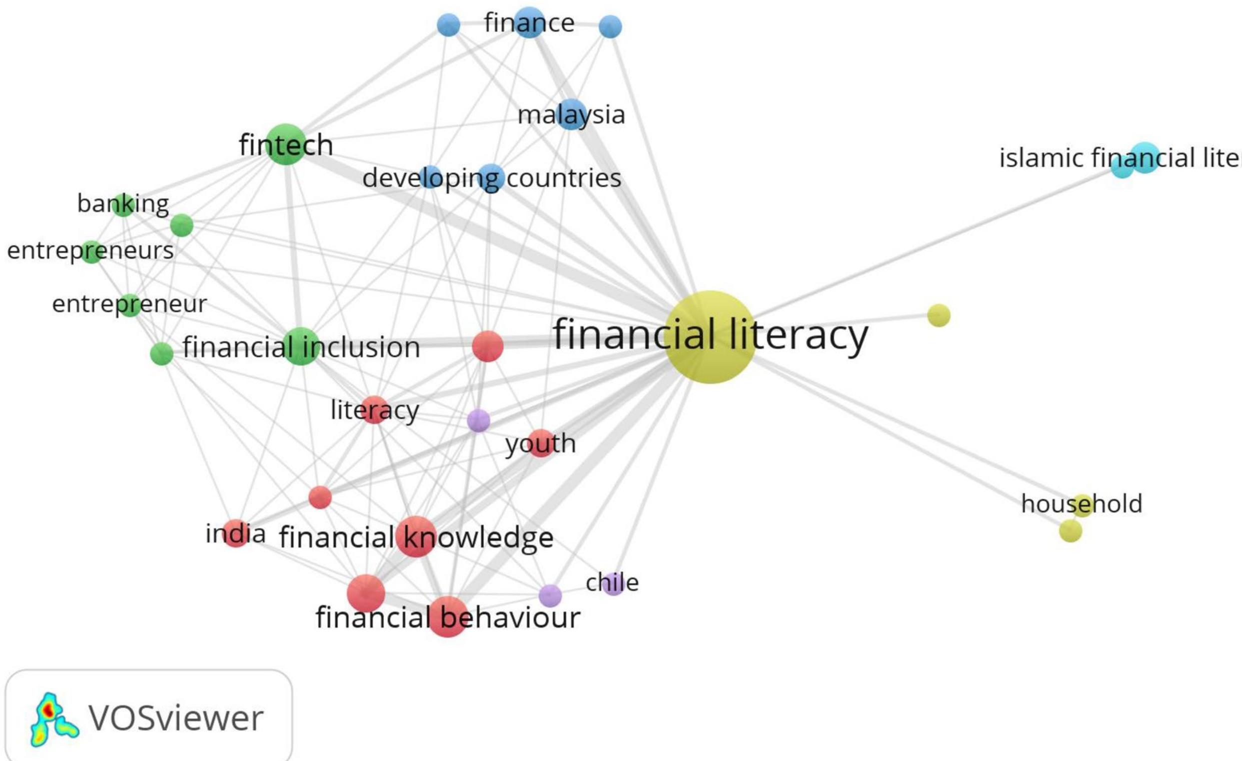

Fig. 8 Network visualization of co-occurrence of the keywords

intermediaries, reduced transaction fees, and easier access to financial tools [57]. Numerous studies, including those by Ahmad et al. [75], Ferilli et al. [88], Hikouatcha et al. [97], Kevser and Doğan [77], Khan et al. [60], Rahim et al. [68], emphasized the significance of including technological component in financial literacy. Digital financial literacy is defined as acquiring the knowledge, skills, confidence, and competencies to safely use digitally delivered financial products and services and make informed financial decisions [68]. Research by Lusardi and Mitchell [31], Mutamimah and Indriastuti [92], Taufiq et al. [91] found a significant and positive relationship between FinTech and financial literacy. Similar to financial literacy, FinTech education, and FinTech literacy are often used interchangeably [11, 32, 88, 93, 105, 106]. Individuals and businesses with a better comprehension of FinTech concepts are better equipped to make sound financial decisions, ultimately leading to higher financial literacy levels.

Furthermore, digital financial literacy and green digital finance are essential concepts in contemporary finance. According to Morgan [95], Polisetty et al. [17], and Taufiq et al. [91], digital financial literacy involves teaching individuals about the use of digital financial tools and applications to enhance their understanding of financial matters. As Ferilli et al. [88] and Riaz et al. [87] suggest, digital finance represents the convergence of digitalization and finance. Green digital finance, however, takes a step further. It focuses on integrating digital technologies into financial systems to support and promote environmentally sustainable investments and practices. This involves leveraging digital tools and platforms such as blockchain, artificial intelligence, big data analytics, and mobile applications to facilitate the allocation of capital toward projects, businesses, and initiatives that have positive environmental impacts. Mutamimah and Indriastuti [92] further explained how green digital finance utilizes FinTech innovations to create new tools and solutions that promote sustainable practices within the financial sector, including mobile apps for tracking carbon footprints or digital platforms for impact investing. Digital financial literacy has become more important in this regard as a means of understanding digital financial products and making sound financial decisions.

Network analysis of selected papers

Most influential papers and authors in the context of financial literacy

In academia, the significance of an article is often gauged by the number of citations it receives (Merigó et al. [117]). In the case of financial literacy research, a search within the Scopus database revealed a limited number of highly cited papers. To identify the most pertinent contributions within the existing body of literature, we leveraged the VOS viewer software, which segmented the co-authorship network into 27 clusters, each comprising authors who contributed a minimum of 1 paper (Fig. 7). By setting a minimum co-authorship threshold of 3 papers, the network analysis included a total of 71 authors. Notably, the article titled "Financial Literacy Among Youth" by Garg and Singh [23] stands out as the most cited in both Scopus (99 citations) and Google Scholar (440 citations) databases (Table 3). Moreover, these authors also emerge as the most influential figures in the network visualization map (Fig. 7). Following closely is the second most cited paper, "Financial Literacy in Developing Countries" by Karakurum-Ozdemir et al. [14], boasting 59 and 146 citations in Scopus and Google Scholar, respectively (Table 3). As illustrated in Fig. 7, the visualization network of authorship based on citations revealed a strong co-authorship link between these influential authors, solidifying their prominence in the field. The third most influential paper is "What Determines Financial Literacy in Japan?" by Kadoya and Khan [13], cited 51 and 153 times in Scopus and Google Scholar, respectively (Table 3). The authors of this paper belong to cluster 16 in network analysis, showcasing co-authorship connections in only two papers (Fig. 7). Additionally, the paper titled "The Role of Cognitive Abilities on Financial Literacy: New Experimental Evidence" by Muñoz-Murillo et al. [24] clinches the fourth spot as the most influential paper based on citations in both databases. This paper falls within cluster 12, exhibiting two co-authorships (Fig. 7).

Co-occurrence analysis of the keywords

This study also investigated the relationship between keywords used by authors in the previous literature through co-occurrence network analysis. This analysis provides future researchers with a general understanding of the current research landscape, highlighting relationships and connections between keywords within the field of financial literacy [118, 119]. To conduct the analysis, we applied the VOS viewer application to the existing literature within the Scopus database. This process identified 111 keywords. By setting a minimum co-occurrence threshold of 2, we found 30 keyword clusters that met the criteria. The network visualization analysis revealed prominent keywords such as 'financial attitude,' 'financial behavior,' 'financial knowledge,''cognitive ability,' 'Islamic financial literacy,' 'demographic variable,' 'household income,' 'education,' 'youth & student,' and 'financial literacy' (Fig. 8). Of these keywords, 'financial literacy' was the most used keyword (occurring 44 times), followed by 'financial attitude' (8 occurrences).

'Financial behavior,' 'financial knowledge,' and 'financial technology (Fintech)' each appeared 7 times, while 'Islamic financial literacy' and 'digital financial literacy' were each used 4 times. However, 'cognitive ability,' 'demographic variables,' 'entrepreneurs,' as well as 'household income' were highlighted only a few times (2 occurrences) in the existing literature. This suggests potential avenues for future research by exploring the correlation between these less emphasized keywords. Additionally, Fig. 8 illustrates that keywords such as 'developing countries' and 'student and youth' are relatively less highlighted, indicating potential areas for further investigation and exploration within the domain of financial literacy research.

Conclusion

This systematic review explored the key factors influencing financial literacy in the existing literature. We analyzed 53 articles examining determinants of financial literacy, identifying 61 factors grouped into seven dimensions: demographic, socio-economic, psychological, social, cultural, financial, Islamic factors, and technological factors (Fig. 6). The analysis revealed a strong positive relationship between each dimension and financial literacy, regardless of the data source used in the studies. Demographic and socio-economic variables were the most frequently examined factors, likely because they represent foundational elements that influence individual financial decision-making. Studies exploring the relationship between financial factors and financial literacy were relatively scarce. Understanding financial concepts is crucial for making sound financial decisions, and familiarity with these concepts is likely to improve an individual's ability to make informed choices. While strong correlations exist between financial education & knowledge, financial attitude, and financial numeracy, limited research has been conducted using other financial variables, such as financial behaviors and awareness, financial fragility, and risk tolerance. Our findings highlight the need for further studies investigating the influence of these factors on financial literacy. Furthermore, our study underscores the significant role of psychological factors in influencing financial literacy, with cognitive capacity, self-efficacy, hopelessness, and financial anxiety emerging as frequently studied variables within this dimension. These factors are linked to an individual's ability to understand, analyze, and evaluate situations, ultimately impacting their financial decision-making. Nonetheless, further investigation into other psychological determinants of financial literacy, such as openness to problem-solving, attitude towards money, and financial resilience, is warranted to gain a comprehensive understanding.

Societal and cultural factors were also found to exert a noteworthy influence on financial literacy, underscoring the impact of social and cultural values on individual financial decisions. Religious values, though crucial in personal decision-making, have received relatively scant attention in financial literacy research. Studies by Kevser and Doğan [77] and Rahim et al. [68] are noteworthy examples that explore the significance of Islamic financial literacy. Religious beliefs can influence financial decisions, such as avoiding investments that conflict with religious principles (e.g., interest-based prohibitions in Islam). Technological advancements are another emerging area of interest. Authors including Ferilli et al. [88], Hikouatcha et al. [97], Morgan [95], and Taufiq et al. [91] have identified the significant influence of technological factors, such as FinTech and digital financial literacy, on overall financial literacy. This new field presents a promising avenue for future research.

The bibliometric network analysis employed in this study offers valuable insights for researchers. By analyzing author collaboration, citations, and keyword co-occurrence, researchers can identify the most influential works in the field, potential collaborators, and promising research directions for further investigation.

Limitations and future research directions

Our research is not without its limitations. First, to ensure the quality of the included papers, we limited our search to the Scopus database. Future research could benefit from incorporating additional databases like Web of Science for a comprehensive review. Second, due to language limitations, we excluded non-English papers, potentially overlooking valuable research written in other languages. Third, while our analysis identified several key factors influencing financial literacy, the overall volume of research on specific areas like the combined effects of cognitive ability, financial anxiety, financial literacy skills, financial numeracy, and the influence of socialization agents remains limited. Future research should investigate these areas in more detail to gain a comprehensive understanding. Fourth, our findings highlight the under-researched area of religious beliefs and financial literacy. While some studies explored the relationship between Islamic financial literacy and religious motivations, the scarcity of research in this area prevents definitive conclusions. Future studies could examine the broader influence of religious beliefs on financial decision-making. Finally, this study conducted a systematic review with a

Table 2 Existing systematic review papers on financial literacy Source: Authors

S.no	Title	Author name	Year publishing	Journal Name (Vol/Issue/Page/DOI)
1	Factors that influence financial literacy on small medium enterprises: A literature review	Damayanti et al. [11]	2018	Opción, 34(86),1540-1557
2	Financial literacy: A systematic review and bibliometric analysis	Goyal and Kumar [22]	2021	International Journal of Consumer Studies. 45, 80–105
3	Financial literacy and financial behavior: A bibliometric analysis	Ingale and Paluri [20]	2020	Review of Behavioral Finance, 14(1), 130–154, https://doi.org/10.1108/RBF-06-2020-0141
4	A systematic review of financial literacy as a termed concept: More Question than answers	Faulkner [21]	2015	Journal of Business and Finance Librarianship, 20,7–26, https://doi.org/10.1080/08963568.2015.982446
5	The role of social media in empowering digital financial literacy	Baranidharan et al. [120]	2023	IGI Global, pp. 80–96. https://doi.org/10.4018/978-1-6684-7450-1.ch006, Available at https://www.igi-global.com/chapter/the-role-of-social-media-in-empowering-digital-financial-literacy/329775
6	Financial literacy in SMEs: A bibliometric analysis and a systematic literature review of an emerging research field	Molina-García et al. [121]	2023	Review of Managerial Science, *17*(3), 787–826. https://doi.org/10.1007/s11846-022-00556-2
7	Mapping financial literacy: A systematic literature review of determinants and recent trends	Zaimovic et al. [122]	2023	Sustainability, 15 (12), 9358. https://doi.org/10.3390/su15129358
8	Financial literacy of entrepreneurs: A systematic review	Anshika and Singla [123]	2022	Managerial Finance, 48, 9/10, pp. 1352–1371. https://doi.org/10.1108/MF-06-2021-0260
9	Financial literacy in family and the economic behavior of university students: A systematic literature review	Narmaditya and Sahid [124]	2023	The Journal of Behavioral Science, 18(1), 114–128
10	Financial self-efficacy, financial literacy, and gender: A review	Narmaditya and Sahid [124]	2023	Journal of Consumer Affairs, 56(2), 743–765. https://doi.org/10.1111/joca.12436

Table 3 Summary table of authorship and citations of selected papers Source: Authors. Note: The citations are counted as per the time of conducting the research

S.no	Author/s	Title of the paper	Year	Journal Name	Publisher	Citation	
						Scopus	Google
1	Mouna and Anis [16]	Financial literacy in Tunisia: Its determinants and its implications on investment behavior	2017	Research in International Business and Finance	Elsevier	41	133
2	Singla and Mallik [18]	Determinants of financial literacy: Empirical evidence from micro and small enterprises in India	2021	Asia Pacific Management Review	Elsevier	12	88
3	Fazal et al. [30]	Influence of cognitive ability, money management skills, and cultural norms on the financial literacy of women working in the cottage industry	2021	Asian Journal of Business and Accounting	University of Malaya	0	03
4	Polisetty et al. [17]	Factors affecting financial literacy among budding entrepreneurs	2021	Universal Journal of Accounting and Finance	Horizon Research Publishing (HRPUB)	0	2
5	Bujan et al. [10]	Socio demographic determinants of financial literacy of the citizen of the republic of Croatia	2016	Economic Review	Portal of Croatian scientific and professional journals—HRČAK	3	13
6	Bharucha [9]	Socio-economicSocio-economic and demographic determinants of Indian youth financial literacy: Determinants of financial literacy	2017	International Journal of Asian Business and Information Management	IGI Publisher	2	13
7	Singh et al. [69]	Relationship between various determinants and dimensions of financial literacy among working class	2020	International Journal of Financial Research,	Sciedu Press	02	02
8	Lee et al. [70]	The effects of financial literacy on fresh graduates' employability rate in Malaysia	2021	5th International Conference on E-Business and Internet (ICEBI 2021)	ACM	01	02
9	Twumasi et al. [19]	Financial literacy and its determinants: the case of rural farm households in Ghana	2021	Agricultural Finance Review	Emerald	11	14
10	Twumasi et al. [50]	Does financial literacy inevitably lead to access to finance services? Evidence from rural Ghana	2021	AGRIBUSINESS	Federal University of Santa Maria	08	13
11	Muñoz-Murillo et al. [71]	The role of cognitive abilities on financial literacy: New experimental evidence	2020	Journal of Behavioral and Experimental Economics	Elsevier	51	132
12	Garg and Singh [23]	Financial literacy among youth	2018	International Journal of Social Economics	Emerald	99	440
13	Sharif and Naghavi [33]	Family financial socialization, financial information seeking behavior and financial literacy among youth	2020	Asia–Pacific Journal of Business Administration	Emerald	18	55
14	Shimizutani and Yamada [72]	Financial literacy of middle-aged and older Individuals: Comparison of Japan and the United States	2020	The Journal of the Economics of Ageing	Elsevier	12	25

Table 3 (continued)

S.no	Author/s	Title of the paper	Year	Journal Name	Publisher	Citation	
						Scopus	Google
15	Damayanti et al. [11]	Factors that influence financial literacy on small medium enterprises: A literature Review	2018	Opción	Serbiluz Universidad Del Zulia	08	25
16	Bawre and Kar [73]	An investigation of the demographic factors affecting financial literacy and its components among urban Indians	2019	Int. J. Education Economics and Development	Inder science Enterprises Ltd	04	13
17	Kadoya and Khan [13]	What determines financial literacy in Japan?	2020	Journal of Pension Economics and Finance	Cambridge University Press	51	153
18	Kiliyanni and Sivaraman [74]	A predictive model for financial literacy among the educated youth in Kerala, India	2018	Journal of social service Research	Taylor and Francis Group	06	18
19	Ahmad et al. [75]	Determinants of the Islamic financial literacy	2020	Accounting	Growing Sciences	12	47
20	Karakurum-Ozdemir et al. [14]	Financial literacy in developing countries	2018	Social Indicators Research	Springer	59	146
21	Tinghög et al. [29]	Gender differences in financial literacy: The role of stereotype threat	2021	Journal of Economic Behavior and Organization	Elsevier	24	51
22	Jayanthi and Rau [12]	Determinants of rural household financial literacy: Evidence from south India	2019	Statistical Journal of the IAOS	IOS Press	01	15
23	Longobardi et al. [76]	Family background and financial literacy of Italian students: the mediating role of attitudes and motivations	2017	Economic Bulletin	Wiley	01	15
24	Kenayathulla et al. [62, 63]	Financial literacy of undergraduate students in selected Malaysian higher education institutional A way forward to policy recommendation	2020	Malaysian online journal of educational management (MOJEM)	University of Malaya	1	13
25	Kevser and Doğan [77]	Islamic financial literacy and its determinants: A field study on Turkey	2021	Journal Transition Studies Review	Academia	04	19
26	Rahim et al. [68]	Islamic financial literacy and its determinants among university students: An exploratory factor analysis	2016	International Journal of Economics and Financial issue	Eco journals	19	187
27	Thomas and Subhashree [78]	Factors that Influence the financial literacy among engineering students	2020	Procedia Computer Science	Elsevier	16	81
28	Atul and Sangeeta [43]	Determinants of financial literacy and its influence on financial wellbeing: A study of the young population in Haryana, India	2022	Finance: Theory And Practice	Financial University under The Government of Russian Federation	01	01
29	He and Ahunov [79]	Financial literacy: The case of China	2023	China and World Economy	Wiley	03	06
30	Mireku et al. [80]	Is there a link between financial literacy and financial behaviour?	2023	Cogent Economics and Finance	Taylor and Francis	03	09

Table 3 (continued)

S.no	Author/s	Title of the paper	Year	Journal Name	Publisher	Citation	
						Scopus	Google
31	Castañeda et al. [81]	Socio-demographic determinants of financial literacy levels	2022	Studies in Business and Economics	De Gruyter Open Ltd	0	02
32	Mirzaei and Buer [82]	First results on financial literacy in Oman	2022	Journal of Managerial Finance	Emerald	02	09
33	Böhm et al. [48]	Determinants of financial literacy: Analysis of the impact of family and socio-economic variables on undergraduate students in the Slovak Republic	2023	Journal of Risk and Financial Management	MDPI	01	08
34	Singh and Singh [83]	Financial literacy and its determinants among the schedule tribes: evidence from India	2023	International Journal of Social Economics	Emerald	0	02
35	Tang et al. [84]	Impact of financial literacy on individuals' financial decisions: A comparative analysis of Eastern, Central, and Western regions in China	2022	Contemporary Chinese Political Economy and Strategic Relations	Institue of China and Asia–Pacific Studies, National Sun Yat-sen University	0	0
36	Espinoza-Delgado and Silber [85]	Gender gaps in financial literacy: Evidence from Argentina, Chile, and Paraguay	2023	Feminist Economics	Taylor and Francis	0	0
37	Loke et al. [86]	Financial literacy in Malaysia, 2015–2018	2022	Malaysian Journal of Economic Studies	Malaysian Economic Association	0	02
38	Galizzi et al. [44]	Financial literacy among autistic adults	2023	Journal of Consumer Affairs	Wiley	0	0
39	Riaz et al. [87]	Influence of financial social agents and attitude toward money on financial literacy: The mediating role of financial self-efficacy and moderating role of mindfulness	2022	Sage open	Sage	02	04
40	Ferilli et al. [88]	The impact of FinTech innovation on digital financial literacy in Europe: Insights from the bankingindustry	2024	Research in international business and finance	Elsevier	0	3
41	Rahayu et al. [89]	Financial literacy, digital financial literacy and women's economic empowerment	2023	Journal of Telecommunications and the Digital Economy	Telecommunications Association	0	01
42	Khan et al. [60]	Fintech literacy among millennials: The roles of financial literacy and education	2023	Cogent Social Sciences	Taylor and Francis	0	01
43	Hasan et al. [61]	Financial inclusion – does digital financial literacy matter for women entrepreneurs?	2023	International Journal of Social Economics	Emerald	05	13
44	Wijaya et al. [90]	Does financial technology matter? Evidence from the Indonesia healthcare industry during the COVID-19 pandemic	2022	University of Pardubice Journal	University of Surabaya, Indonesia	0	0
45	Alsmadi [70]	Exploring the moderating role of religious orientation on Islamic Fintech adoption	2024	International Journal of Islamic and Middle Eastern Finance and Management	Emerald	0	02

Table 3 (continued)

S.no	Author/s	Title of the paper	Year	Journal Name	Publisher	Citation	
						Scopus	**Google**
46	Taufiq et al. [95]	Does financial literacy or digital literacy determine a consumer use of FinTech?	2023	International Conference on Business and Technology	Springer	02	03
47	Mutamimah and Indriastuti [92]	Fintech, financial literacy, and financial inclusion in Indonesian SMEs	2023	International journal of entrepreneurship and innovation management	Inderscience	01	05
48	Hasan et al. [93]	Evaluating the mediating effect of financial literacy between fintech adoption in microfinance services	2024	International Journal of System Assurance Engineering and Management	Springer	0	01
49	Prabhakaran and Mynavathi [94]	Perception vs. reality: Analyzing the nexus between financial literacy and fintech adoption	2023	Investment Management and Financial Innovations	Consulting Publishing Company	0	01
50	Morgan [95]	Assessing the risks associated with green digital finance and policies for coping with them	2022	Green Digital Finance and Sustainable Development Goals	Springer	03	07
51	Yau and Wong [96]	Powering financial literacy through blockchain and gamification: How digital transformation impacts Fintech education	2022	Proceedings of the Future Technologies Conference	Springer	0	01
52	Hikouatcha et al. [97]	Empirical investigation of the Fintech and financial literacy nexus: Small business managers' insights in Cameroon	2022	African Journal of Science, Technology, Innovation and Development	Taylor and Francis	01	02
53	Majid and Nugraha [98]	Crowdfunding and Islamic securities: The role of financial literacy	2022	Journal of Islamic Monetary Economics and Finance	Bank Indonesia	02	27

focus on theoretical discussions. Future research could employ meta-analysis techniques to numerically summarize the existing literature.

Appendix

See Tables 2 and 3.

Abbreviations

WOS	Web of science
TPB	Theory of planned behavior
TCS	Theory of customer socialization
LCH	Life cycle hypothesis
PIH	Permanent income hypothesis
FL	Financial literacy
SLR	Systematic literature review
IFL	Islamic financial literacy
EFA	Exploratory factor analysis

Acknowledgements

We would like to thank the editor, associate editor and two anonymous reviewers for their very helpful comments and suggestions in enhancing the quality and content of the manuscript.

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Funding

The study is not funded by any organization.

Availability of data and materials

The data can be requested from the corresponding author.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Competing interests

No competing interest reported by the authors.

Received: 21 January 2024 Accepted: 17 June 2024
Published online: 02 July 2024

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