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| RESEARCH ARTICLE

The Relationship between Financial Literacy and Financial Behavior: A Systematic Literature Review

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| ABSTRACT
Financial literacy (FL) has become an essential determinant of financial behavior, influencing how individuals manage money, make investments, and prepare for long-term financial security. As financial systems grow increasingly complex, the need for a comprehensive understanding of FL's impact on personal and small business financial behavior has become more pressing. This systematic review seeks to consolidate and synthesize the findings from 45 empirical studies published between 2014 and 2024, examining the relationship between financial literacy and financial behavior across various demographic groups and contexts. The review focuses on how financial literacy affects key financial behaviors, such as saving, investing, debt management, and budgeting, and explores the significant demographic factors such as age, gender, income, and education that influence these relationships. The review highlights disparities in financial literacy across populations, with particular emphasis on gender, socio-economic status, and geographical location. It also addresses the role of financial education programs in improving financial literacy and their subsequent impact on behavior. The findings underscore the moderating role of behavioral traits like financial self-efficacy and risk tolerance, which influence the strength of the relationship between literacy and behavior. This review identifies several research gaps.

| KEYWORDS

Financial Literacy, Financial behavior, financial decisions, Financial self-efficacy, financial education

| ARTICLE INFORMATION

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1. Introduction

Financial literacy (FL) has emerged as a critical factor in shaping individual financial behavior, influencing decisions that range from daily spending to long-term financial planning. Defined as the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing, financial literacy is essential for financial well-being (Zulaihati, Susanti, & Widyastuti, 2020). A lack of financial literacy is often associated with poor financial decisions, such as excessive borrowing, inadequate saving, and insufficient planning for retirement, which can lead to significant economic challenges for individuals and households (Xiao & Yao, 2022). With the increasing complexity of financial products and the global economy's interconnectedness, individuals need a solid foundation in financial knowledge and skills to navigate their finances effectively. Financially literate individuals are better equipped to avoid common financial pitfalls, such as high-interest debt or inadequate savings for emergencies or retirement, and to engage in behaviors that promote financial security, including consistent budgeting, prudent investing, and effective debt management (Kaiser & Menkhoff, 2020). This growing importance has led researchers to investigate the link between financial literacy and financial behavior across different populations and regions.

Recent research has highlighted the disparities in financial literacy across various demographic groups, such as age, gender, income levels, education, and geographic locations, which often lead to significant differences in financial behavior (Lusardi & Oggero, 2021). For instance, studies show that women, individuals from lower-income households, and those with lower levels of education often exhibit lower levels of financial literacy, resulting in less favorable financial outcomes, such as lower savings rates and higher debt levels (Bucher-Koenen et al., 2021). These disparities are concerning, as they can exacerbate financial inequality and make certain groups more vulnerable to economic shocks (Xiao & Porto, 2020). While there is consensus that financial literacy positively influences financial behavior, the findings in the literature are diverse due to differences in measurement methods, study contexts, and populations. For example, some studies find that financial literacy directly improves financial outcomes, while others suggest that the relationship is mediated by factors such as financial self-efficacy, access to financial resources, and socio-economic conditions (Kaiser, Lusardi, Menkhoff, & Urban, 2022). Therefore, a systematic review is needed to synthesize these findings, clarify the nature of the relationship between financial literacy and financial behavior, and identify the key gaps in the literature that require further investigation.

The relationship between financial literacy and financial behavior has been the subject of numerous studies, yet these studies present diverse findings due to differences in measurement, context, and sample populations (Hastings, Madrian, & Skimmyhorn, 2013). A systematic review of the literature on financial literacy and financial behavior is timely and necessary to synthesize the existing evidence, identify gaps, and offer a clear understanding of the link between these two concepts. This review is particularly motivated by the need to inform policymakers, educators, and financial institutions on how to structure interventions that improve financial outcomes for individuals through targeted financial literacy programs (OECD, 2020)

The primary aim of this literature review is to critically analyze and synthesize academic literature on how financial literacy impacts individuals' decision-making processes, identify key research gaps, as well as identify key gaps in the research that warrant further investigation. To achieve this aim, this paper seeks to answer the following research questions:

1. What is the current state of knowledge on the relationship between financial literacy and financial behavior?
2. How does financial literacy affect different aspects of financial behavior (e.g., saving, investing, debt management)?
3. What are the key demographic factors (e.g., age, education, income, gender) that influence the relationship between financial literacy and financial behavior?
4. What are the major research gaps in the current literature on financial literacy and financial behavior?
5. What are the recommendations for future research on financial literacy and financial behavior based on the identified gaps in the literature?

The rest of the paper is as follows: section two describes the methodology with emphasis on the selection process for the analyzed literature. Section three discusses the findings of the selected papers. Section four presents gaps and future research on financial literacy and behavior with section five highlighting on the main conclusions.

2. Theoretical Background

2.1 Definitions of Financial Literacy

Bhushan & Medury (2014) and Kalekye & Memba (2015) posited that financial behaviour is human behaviour that is pertinent to financial decision-making and money management such as constructing appropriate budget programme and controlling it, quick payment of bills and regular saving nature. According to OECD (2013), financial behaviour is very important and a fundamental component of financial literacy. For Atkinson and Messy (2012), a positive financial behaviour of individual such as appropriate planning for expenditures and caring financial stability enhances their financial literacy level, whereas negative financial behaviour like largely depending upon credits and loans weaken their financial well-being.

Banerjee, Kumar, and Philip (2017) concluded that financial inclusion behaviour increases with the positive effect of financial literacy on financial awareness. Sages and Grable (2010) produced evidence in their study that individuals with lower level of financial risk tolerance face difficulty in financial decision, and they are unsatisfied with their financial management competency. It means financial attitude and financial behaviour are correlated. There is gender difference in financial behaviours of men and women. However, women are more particular for making budget and keeping track of their finances, but they are lacking in financial knowledge which affect some aspect of their financial behaviour (OECD, 2013).

According to Lusardi (2006), women with lower level of financial literacy are less likely to take retirement plans and they are more dependent on their family and friends for their saving and investment planning. Mathivathani and Velumani (2014) undertook a study on financial literacy among rural women in Tamil Nadu. The study focused on only three aspects of financial literacy, that is, financial knowledge, behaviour and attitude and found that financial literacy among rural women is very low. Bonga and Mlambo (2016) highlighted concern on financial literacy improvement among women, particularly in developing nations. The study found that the initiative of improving financial literacy can make a long-term behavioural change of women. Bhushan and Medury (2014) concluded that in order to enhance the financial literacy level of individual, government should focus on building positive financial behaviour and attitude along with financial education.

Previous studies find that financial literacy has positive impact on an individual's financial behavior and financial status. Literate individual will be able to do well in such things as: budgeting, saving, controling spending (Moore, 2003; Perry and Morris, 2005);

managing debts (Campbell, 2006; Brown & Graf, 2013), Lusardi and Tufano, 2015); managing household finance (Bellet, 2018); participating in capital market (Van Rooij, Lusardi et al., 2011; Christelis, Jappelli et al., 2010; Yoong, 2010; Baker, et., 2019); purchasing high-risk investment assets (Bannier & Neubert, 2016; Bianchi, 2017); planning retirement (Kumar, Tomar, & Verma, 2019; Lusardi & Mitchell, 2007, 2008); and most importantly successfully accumulating wealth (Stango and Zinman, 2009; Bellet, 2018). From the perspective of business, the more literate an individual the more likely for them to access external funding and develop their businesses (Hussain, Salia, & Karim, 2018).

In other words, the greater an individual's financial knowledge the wiser their financial behavior would be. It is important for SME owners to have a good financial behavior since in addition to having to be careful in managing their personal finance, they have to manage their business finance as well. Many SME owners think their sales increases, yet the profit they receive remains the same. Also, many SME owners mix their personal and business finances whilst some of them even have no adequate financial recording. Widayanti et al., (2017) suggest that this is due to the low interests of SME owners to record and book each of the transactions they make and this will eventually make it difficult for them to monitor how their businesses are doing. In addition, the financial institution will also find it cumbersome to minimize the default risk for the loan given to SMEs. In Dahmen & Rodriguez'(2014) research, out of 14 SMEs which are poorly-managed financially,

In contemporary literature, financial literacy is frequently broken down into key dimensions: knowledge, skills, and attitudes. Each dimension contributes to an individual's overall financial capability. Knowledge refers to an individual's understanding of key financial concepts, such as interest rates, inflation, and financial products. It forms the foundation upon which sound financial decisions are made. Without this knowledge, individuals are likely to struggle with basic financial tasks, such as budgeting, saving, and investing.

Skills refer to the practical abilities required to manage personal finances effectively. This dimension goes beyond theoretical understanding and emphasizes the application of financial knowledge in daily life. Financial skills include tasks such as creating and sticking to a budget, managing debt, understanding credit scores, and making informed decisions about investments and savings. In this context, skills are an extension of knowledge, as individuals must not only understand financial concepts but also possess the ability to apply them.

The third dimension, attitudes, refers to the psychological factors that influence financial behavior. These include an individual's mindset toward saving, spending, and investing, as well as their confidence in their financial decision-making abilities. Positive financial attitudes are crucial because they motivate individuals to apply their financial knowledge and skills in a way that promotes long-term financial well-being. Research shows that individuals with positive financial attitudes, such as a belief in their ability to manage money, are more likely to engage in beneficial financial behaviors.

Attitudes toward risk also play a critical role in financial literacy. An individual's willingness to take calculated financial risks, such as investing in stocks or starting a business, is often shaped by their financial literacy. People who lack financial literacy tend to avoid risk altogether, which may limit their financial growth opportunities. On the other hand, those with greater literacy are more likely to understand the risks and rewards of various financial decisions, leading to more balanced and informed risk-taking behavior.

2.2 Financial Behavior and Its Components

Financial behavior refers to the actions individuals take in managing their money, such as saving, spending, investing, and borrowing. These behaviors are crucial in determining an individual's financial health and future security. While financial literacy provides the knowledge and tools necessary to make informed decisions, it is financial behavior that ultimately determines financial outcomes. Financial behavior encompasses both short-term actions, like day-to-day spending, and long-term decisions, such as retirement planning and investing.

One of the key components of financial behavior is saving. Saving refers to setting aside a portion of income for future use, rather than spending it immediately. It plays a crucial role in achieving financial security and preparing for unforeseen expenses or opportunities. Research indicates that individuals with higher financial literacy are more likely to engage in regular saving behaviors, as they understand the importance of building an emergency fund and planning for long-term financial goals.

Another important component is spending, which involves the allocation of income for immediate consumption. Financially literate individuals are typically more conscious of their spending habits and are able to budget effectively, ensuring that their expenses do not exceed their income. In contrast, those with lower financial literacy may struggle with impulse spending or fail to account for all their expenses, leading to financial stress and difficulty managing debt.

Investing is another critical financial behavior that involves committing money to assets or financial products with the expectation of generating a return. Common forms of investment include stocks, bonds, real estate, and retirement funds. Investing requires a more sophisticated understanding of financial markets and risk management, which is often linked to higher levels of financial literacy. Those who possess greater financial literacy are more likely to invest, as they understand the potential for long-term wealth creation and are better equipped to evaluate investment opportunities.

Borrowing, or taking on debt, is another significant aspect of financial behavior. This includes taking out loans, using credit cards, or entering into financial agreements that require repayment over time. Financially literate individuals are more likely to understand the terms and conditions of borrowing, such as interest rates and repayment schedules, and they are more adept at managing debt responsibly. In contrast, those with lower financial literacy may accumulate high-interest debt, such as credit card balances, which can lead to financial instability.

Financial behavior also includes risk management, which involves the strategic decision-making processes that protect against financial loss. This may include purchasing insurance policies, diversifying investments, and avoiding overly risky financial ventures. Financially literate individuals are more likely to engage in risk management behaviors, as they are aware of the potential downsides of risky decisions and the importance of protecting their assets.

The connection between financial literacy and financial behavior is well-established in the literature. Numerous studies show that individuals with higher financial literacy are more likely to engage in positive financial behaviors, such as saving, budgeting, and investing. This relationship suggests that financial literacy is a key driver of financial behavior, as it provides individuals with the knowledge, skills, and confidence needed to make informed decisions about their money.

The theory of planned behavior (TPB) helps explain the link between financial literacy and behavior. According to this theory, an individual's behavior is influenced by their attitudes, subjective norms, and perceived control over the behavior. Financial literacy enhances an individual's perceived control by providing them with the knowledge and skills needed to manage their finances effectively. This increased control leads to more intentional and positive financial behaviors, such as saving regularly or investing wisely.

Behavioral economics also offers insights into the connection between financial literacy and behavior. Traditional economic theories assume that individuals act rationally when making financial decisions. However, behavioral economics suggests that cognitive biases, such as overconfidence or loss aversion, often lead individuals to make suboptimal financial choices. Financial literacy can help mitigate these biases by equipping individuals with the tools to make more informed and rational decisions.

For example, individuals with greater financial literacy are less likely to be swayed by short-term market fluctuations when investing. They understand the importance of long-term investment strategies and are better equipped to resist the temptation to make impulsive decisions based on fear or greed. Similarly, financially literate individuals are more likely to avoid common borrowing pitfalls, such as taking out high-interest loans without fully understanding the terms and conditions.

The table 1 below shows some empirical studies on financial literacy and financial behavior across diverse cultures.

Table 1: Some Empirical Studies on Financial Literacy and Financial Behavior across different continents

Author(s) & Year	Country	Context	Sample Size	Findings	The Role of FL and FB of individuals and firms
Lusardi & Mitchell (2014)	USA	Personal Finance	-	Financial literacy improves retirement planning	Financial literacy influences Financial behavior
Rahman et al. (2021)	Bangladesh	Households	360	Financial behavior improves well-being through education	Financial behavior influences Well-being
Esiebugie et al. (2018)	Nigeria	SMEs	75	Financial increases SME performance	Financial literacy influences Performance
Ndou (2023)	South Africa	Family Finance	200	Family income moderates Financial literacy and financial behavior nexus	Financial literacy and financial behavior influence each other
Jamal et al. (2015)	Malaysia	Students	500	Attitude mediates Financial literacy and financial behavior nexus	There is a strong relationship that exist among financial literacy, financial attitude

					and financial behavior
Cera et al. (2021)	Albania	SMEs	80	Financial literacy boosts financial capability	Financial literacy influences Capability
Sayinzoga et al. (2016)	Rwanda	Rural Households	150	Financial literacy training improved savings culture of individuals	Financial literacy strongly influences savings culture of individuals in the rural areas
Kaiser & Menkhoff (2017)	Global Meta	Meta	101 studies	Education increases financial literacy and financial behavior	Financial literacy influence financial behavior
Oluyemisi (2024)	Nigeria	SMEs	120	Financial literacy affects sales growth	Financial literacy influences sales growth
Winarsih et al. 2020	Indonesia	SMEs	-	Financial literacy influence sustainability	Financial literacy strongly impacts Business Sustainability
Rootman & Anthony (2015)	South Africa	Consumers	200	Inclusion mediates financial literacy and financial relationship	There is a strong relationship that exist among financial literacy, financial inclusion and financial behavior
Mulasi & Mathew (2022)	Kenya	Consumers	260	Self-efficacy mediates financial literacy	There is a strong relationship that exist among financial literacy, self-efficacy and financial behavior
Mabula & Ping (2018)	Tanzania	SMEs	90	Financial literacy improves SME financial control	Financial literacy plays a vital role in Financial Control of SMEs
Basha et al. (2022)	India	Students	450	Financial literacy improves investing behavior	Financial literacy influences Investing decisions of individuals
Yong et al. (2018)	Malaysia	SMEs	100	Financial behavior improves capability	Financial behavior influences Capability
Adil et al. (2020)	Pakistan	SMEs	130	FL influences investment decisions	Financial literacy strongly influences Investment decisions of individuals and firms
Khawar & Sarwar 2021	Pakistan	Family Finance	170	Financial literacy increases savings	Financial literacy influences Saving habits
Patrisia et al. 2023	Indonesia	Families	220	Financial impacts family finances	Financial behavior has a direct impact on family finances

Stolper & Walter (2017)	Germany	General Public	-	Literacy affects behavior positively	Financial literacy influence financial behavior
Allgood & Walstad (2015)	USA	Survey	1,000+	Low Financial literacy linked to poor financial behavior	Financial literacy influence financial behavior
Khan et al. (2020)	Pakistan	Consumers	390	An individual's cognitive ability moderates financial behavior	Individuals' Cognition ability influences financial behavior
Sabri & Juen (2014)	Malaysia	Students	550	Students' confidence in financial literacy leads to an increase in saving	Financial literacy influences Saving habits
Mugambe & Mulindwa (2024)	Uganda	SMEs	210	Education moderates financial literacy's impacts on financial behavior	The role of financial literacy in financial behavior of SMEs' owners is moderated
Rai et al. (2019)	India	Urban Households	350	Financial behavior improves financial literacy	Financial behavior influences financial literacy
Purwidianti & Tubastuvi (2019)	Indonesia	Families	400	Financial affects budgeting	Financial literacy influences budgeting
Ergun (2018)	Turkey	General	300	Financial literacy relates to debt management	Financial literacy influences debt
	Brazil	Meta	Review	Financial Literacy influences behavior	Financial literacy influences financial behavior
Ouachani et al. (2021)	Tunisia	SMEs	150	Financial literacy predicts access to credit	Financial literacy influences access to credit of SMEs
Akhtar & Liu (2018)	Pakistan	Entrepreneurs	90	Financial literacy escalates business knowledge	Financial literacy significantly impacts business knowledge
Mathivathani & Velumani (2014)	India	Rural Women	-	Poor financial literacy identified among rural women	Poor financial literacy leads to poor financial behavior

Source: Authors' own construct (2025)

From the table 1 above, the connection between financial literacy and behavior is also evident in studies on financial education. Research consistently shows that individuals who receive financial education, whether in school, the workplace, or through community programs, are more likely to engage in positive financial behaviors. Financial education programs that focus on practical skills, such as budgeting and saving, have been particularly effective in changing behavior.

2.3 Conceptual Framework

The framework below delineates the dual and dynamic interplay between Financial Literacy (FL) and Financial Behavior (FB), integrating mediators and outcomes identified in various studies.

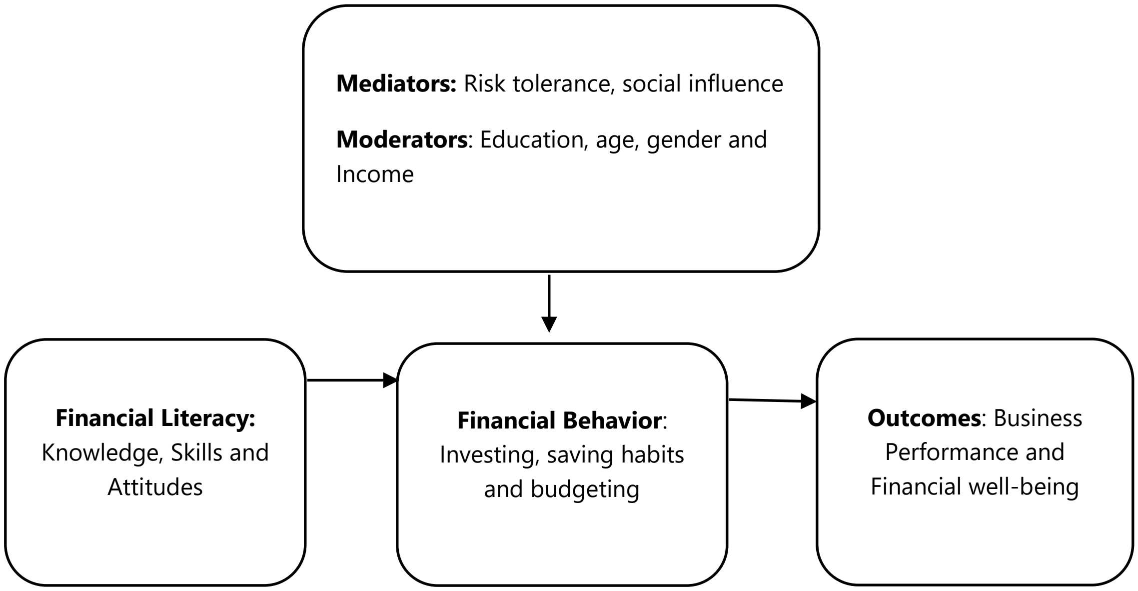

Figure 1: Conceptual Framework

The systematic literature review on financial literacy and financial behaviour employed the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) statement which guided the present literature review (Page et al, 2020). The PRISMA approach suggests that authors explain the process of their research transparently and adequately (Page et al, 2020). Based on PRISMA, this study selected the most relevant research articles related to FL and financial behaviour from 2014 to 2024. The systematic review comprised 110 articles that met the criterion for inclusion by the end of the search where majority of the research papers empirically analyzed FL in the context of financial behaviour. Employing the procedures of other systematic literature reviews (López-Duarte et al., 2016), the researcher focused on Scopus and the Google Scholar websites, to increase the likelihood of finding relevant studies and maximizing the adequacy and transparency of this study (Franco-Santos et al., 2012).

2.4 Rules for inclusion

The group of keywords used in the search strategy was related to the concept of FL. The study limited the search to empirical articles published in English on business, management, finance and accounting (Scopus) and limited the search in google scholar to articles. Also, there was a limitation to the year of publication from 2014 to 2024 in both websites. Following Franco-Santos et al.'s (2012) methodology, the study screened the references of the 110 articles found to avoid missing relevant studies. The study also recognized financial literacy and financial behaviour being either independent or dependent variables and indicated such variables in the study results. The researcher acknowledges that there are other conceptualizations of FL. Some of them include the metrics of financial attitude and financial knowledge in the concept, and the researcher does not disregard or reject them. However, the researcher pinpoints significant arguments that support the mentioned bidimensional conceptualization of financial behaviour.

First, this conceptualization is the most frequently used approach in the scientific literature in both the personal finance (Lusardi & Mitchell, 2014; Ouachani et al., 2021; Santini et al., 2019) and SME contexts. Second, several significant nonscientific investigations (BDC, 2017; Lentz et al., 2016) and working papers (Alperovych et al., 2020; Trombetta, 2016) have opted for this conceptualization to capture FL. Third, a less developed line of research has suggested a broader conceptualization of FL, also adding metrics of financial attitudes and financial knowledge (Atkinson & Messy, 2011; OECD, 2018, 2020).

Although these investigations showed that financial knowledge and its application have a strong, but not perfect correlation with financial attitudes and financial behaviors (Atkinson & Messy, 2011), both the attitudes and behaviors are influenced by the level of FL; thus, it means that FL is a prerequisite for certain attitudes and subsequent behaviors. Furthermore, FL is acquired over time, whereas knowledge, attitudes and behaviors in a certain moment are the consequences of the FL acquired earlier. However, there can be a virtuous cycle of experiential learning from past behaviors to acquire higher levels of FL in a particular situation based on the past.

To detect this cycle, the researcher has to separate financial behaviours from FL. Therefore, considering all of these insights, the researcher decided to employ Huston's (2010) conceptualization of FL to integrate the experiences and consequences of personal FL and in SMEs and maintain behaviours as a separate construct within the consequences of FL.

As shown in the diagram 1, firstly, the keywords "financial literacy and financial behaviour" was introduced to the Scopus and web of science websites with the help of google scholar as a search engine and the researcher selected 100 papers from Scopus and 110 papers from Google Scholar out of a lot of papers. Secondly, the study scoped the review to the last 10 years (2014–2024). These publications were further classified by article type and while focusing on the dimensions to measure FL, systematic reviews with critical evaluations of related studies were done. This systematic review offers a transparent and comparable scheme of analysis of 110 articles finally after a series of screening and selection of articles to accomplish the objectives of this study. Also depicted in Figure 1below, the variables are limited to FL definition, FL dimensions, FL scales and FL indicators.

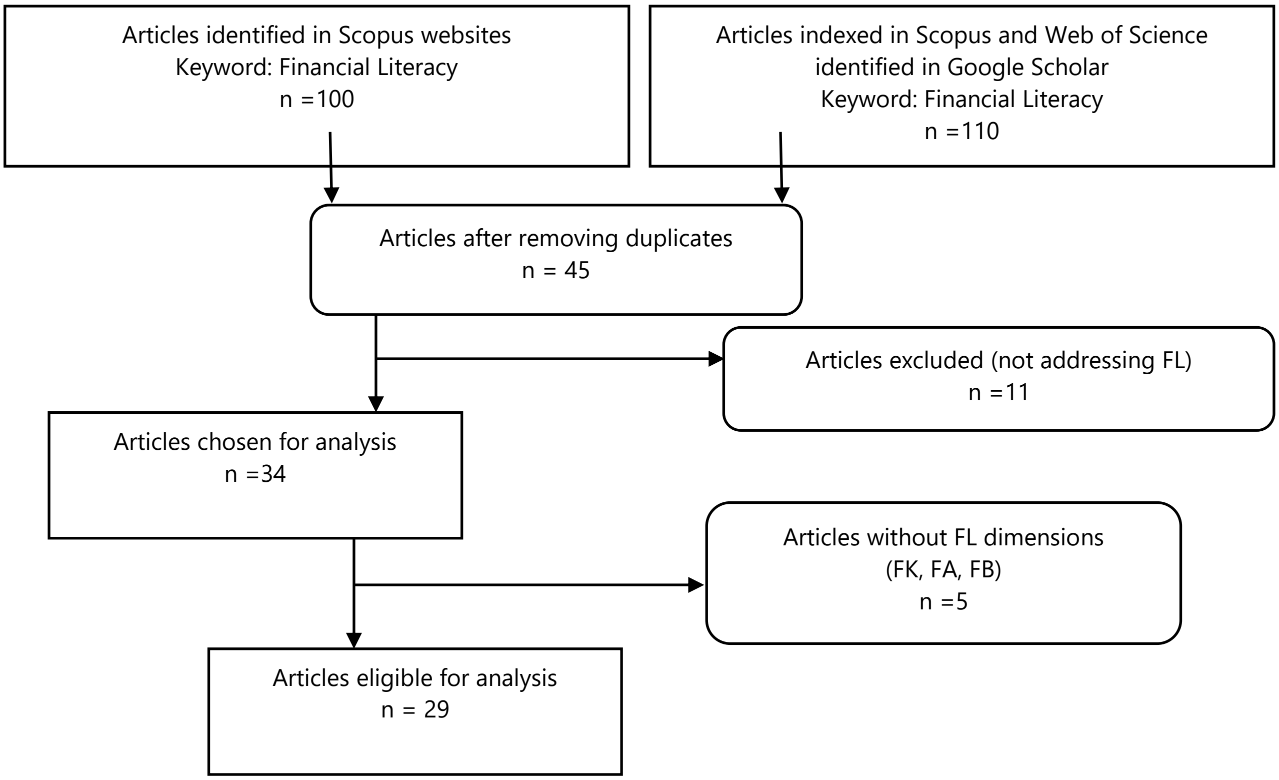

Figure 2: Literature Selection with the PRISMA methodology

A total of 210 items were initially recognized. Duplicates were eliminated, and irrelevant papers were deleted following a review of titles and abstracts. Only empirical works in the English language pertaining to business, management, finance, and accounting were incorporated. This meticulous method resulted in the identification of 45 empirical studies that examined financial literacy and financial behavior, with explicit relevance to aspects including financial knowledge, financial attitude, and financial behavior.

The implementation of PRISMA enhanced the review's quality by ensuring the minimization of selection bias and the inclusion of only methodologically rigorous and contextually pertinent articles in the final analysis.

3. Results

To identify and classify FL measures, the researcher used the concepts and labels associated with FL including financial education and financial behaviour. It should be noted that financial education is conceived as an experience of FL, whilst financial behaviour is concepted as consequences of FL. In some instances, FL and financial behavior were either seen as experiences or consequences. The conceptualization of FL in this study is the most frequently used approach in the scientific literature in both the personal finance (Lusardi & Mitchell, 2014; Ouachani et al., 2021; Santini et al., 2019) and SME (Akhtar & Liu, 2018a, 2018b) contexts.

Also, several significant non-scientific investigations (BDC, 2017; Lentz et al., 2016) and working papers (Alperovych et al., 2020; Trombetta, 2016) conceptualizations of FL were also considered. In addition, a less developed line of research has suggested a broader conceptualization of FL by adding metrics of financial attitudes and financial behaviors (OECD, 2018, 2020). FL is acquired over time, whereas attitudes and behaviors in a certain moment are the consequences of the FL acquired earlier.

However, there can be a virtuous cycle of experiential learning from past behaviors to acquire higher levels of FL in a particular situation based on the past. To detect this cycle, the study separates financial knowledge, financial behaviour and financial attitude from FL. Therefore, considering all of these insights, the researcher employed Wongso et al's (2020) conceptualization of FL to review the experiences and consequences of FL.

3.1 Publication and Citation Trends

The study begins the analysis of financial literacy and related financial behaviors by examining the trends in published articles and their citation records. This section examines the scholarly focus on financial literacy and behavior throughout history. Table 2 below shows a consistent increase in the number of publications over time, with notable peaks in 2020.

Table 2: Publication and Citation Trends (2010–2024)

Year	No. of Articles	Total Citations	% Cited Papers
2014	27	25	93%
2015	37	34	92%
2016	52	46	88%
2017	42	20	48%
2018	50	48	96%
2019	51	43	84%
2020	55	52	95%
2021	51	43	77%
2022	51	46	90%
2023	78	57	73%
2024	88	35	40%

Source: Author's own construct (2025)

From the table 2 above, the quantity of published articles and their corresponding citation counts were assessed from 2010 to 2024. The assessment identified consistent growth in publications, with a significant increase between 2020 and 2024. For example, the number of articles rose from 27 in 2014 to 88 in 2024.

The citation trend indicates that earlier publications possessed a greater citation rate, signifying their foundational significance in the area. In 2020, 95% of the 55 published articles were referenced, indicating their significance. Nevertheless, more contemporary papers for instance, those from 2024) exhibit reduced citation rates owing to their recent publication and limited exposure duration. The elevated citation rates from 2014 to 2022 indicate that research on financial literacy and behavior has become essential in academic discussions. This is probably attributable to heightened apprehensions regarding personal and corporate financial resiliency, especially considering global economic risks. This upward trend in citation rates suggests that more recent publications are becoming increasingly impactful.

3.2 Country Contributions

Table 3 presents the top 20 countries contributing to research on financial literacy. The United States leads with the highest number of publications and citations, indicating the country's prominent role in this field. The U.S. also boasts a strong total link strength (TLS), reflecting its extensive collaboration with other nations. India ranks second in publication count but lags in citations compared to other countries, while the United Kingdom demonstrates a high level of international collaboration, as evidenced by its highest TLS score. Most of the top contributors are developed or upper-middle-income countries, with South Africa being the sole representative from Africa.

Table 3: Top 20 Countries by Publication and Citation Output

Country	Publications	Citations	TLS
United States	106	2956	53
India	68	1005	23
United Kingdom	59	2089	65
Australia	45	1287	36
China	33	847	26
Malaysia	31	542	19
Canada	29	507	18
Spain	27	647	11
Iran	24	156	9
Indonesia	23	39	4
France	18	889	18
Italy	18	700	10
Pakistan	18	712	24

South Africa	17	115	3
Taiwan	16	262	15
UAE	16	1245	10
South Korea	14	203	8
Saudi Arabia	13	115	8
Germany	11	212	12
Portugal	11	117	3

Source: Author's own construct (2025)

This section delineates countries excelling in research production and influence concerning Financial literacy and Financial Behavior. The United States led with 106 publications and 2,956 citations, succeeded by the United Kingdom with 59 publications and 2,089 citations, and India with 68 publications and 1,005 citations. Total Link Strength (TLS) quantifies the extent of global collaboration and influence, with the UK achieving the maximum score of 65.

Developed economies such as the United States, United Kingdom, Australia, and Canada prevail in both quantity and academic influence. Nevertheless, growing economies like India, Malaysia, and Pakistan demonstrate significant contributions. Significantly, South Africa is the sole African nation included, highlighting a considerable deficiency in regional research presence.

This analysis indicates a global bias in research production, highlighting the necessity for more inclusive and diverse academic contributions from underrepresented locations.

3.3 Journal Productivity

The review evaluated the most active and influential academic journals in the publication of research on Financial Literacy and Financial Behavior. Table 4 below showcases the top eleven (11) journals publishing research on financial literacy.

Table 4: Top 11 Journals by Publication and Citation Output

Journal	Articles	Citations
Emerald Emerging Markets Case Studies	19	6
International Journal of Finance	16	627
Journal of Accounting and Finance	11	30
Health Care Management Review	10	270
SA Journal of Human Resource Management	9	33
Journal of Organizational Effectiveness	8	226
Personnel Review	8	159
Benchmarking	7	159
Employee Relations	7	209
International Journal of HR Management	7	530
Journal of Cleaner Production	7	1122

Source: Author's own construct (2025)

From table 4 above, the review evaluated the most active and influential academic journals in the publication of research on Financial Literacy and Financial Behavior. Journals such as the Journal of Cleaner Production (7 articles, 1,122 citations) and the International Journal of HR Management (7 articles, 530 citations) exhibit significant citation impact, indicating the publication of high-quality, extensively referenced research. In contrast, journals such as Emerald Emerging Markets Case Studies exhibit a high publication volume (19 articles) yet possess comparatively low citation counts (6), suggesting a restricted scholarly impact or specialized readership. The existence of journals across several fields (finance, human resources, organizational behavior) underscores the multidisciplinary character of financial literacy research. It underscores the necessity for writers to judiciously select journals that augment both visibility and citation influence.

Although this study purports to systematically investigate financial literacy and financial behaviour, it should be noted that where appropriate this study adapted the other metrics and dimensions of financial literacy including financial knowledge, financial attitude, financial skills among others. The adaptation of the above-mentioned dimensions were focused by many authors which may sometimes be regarded as an experience or consequence of financial behavior and literacy. Personal financial contexts a swell as financial contexts of SMEs were considered in this study as said earlier on in such a way that financial literacy and financial behaviour are not only regarded as basic financial concepts, but also relating to financially managing a small venture (comprehensive financial contexts).

This stems from financial knowledge, such as money, price, budget, and debt commitment literacy (Latvijas Banka, 2018; Latvijas Komercbanku Asociācija, 2018), financial attitude, particularly in effective risk management and diversification which is a critical internal control function for any business (Jonsson et al., 2017) and financial behaviors like prudent expenditure planning and insurance coverage (Fatoki 2014), preventing excessive credit usage which may diminish individual financial well-being and play a significant role in personal decision-making, influencing business growth and development and enhancing SMEs performance (Peng et al., 2015; Potrich et al., 2015) were all considered.

3.4 ESTOL Framework

The ESTOL framework provides a systematic approach to comprehend the components of financial literacy research. Table 5 below provides the summary of ESTOL framework.

Table 5: Summary of ESTOL Framework

Element	Description
Experiences	Financial literacy shaped by financial education, SME growth, and behavior traits.
Scales	Financial knowledge, Financial Attitude, Financial Behavior, and Financial skills.
Theories	Theory of Planned Behavior, Behavioral Economics, and Capability Approach frameworks.
Outcomes	Well-being, SME growth, investment, and inclusion.
Linkages	Bidirectional Financial literacy ↔ Financial Behavior; influenced by education, income, and attitude.

Source: Author's own construct (2025)

Financial literacy is influenced by life experiences, encompassing formal financial education, personal financial management, business operations particularly in SMEs, and exposure to financial hazards and opportunities.

Financial literacy is typically assessed with scales that measure financial knowledge, financial attitude, financial behavior, and financial skills. These ratings evaluate the extent and comprehensiveness of financial knowledge and application.

Theoretical foundations encompass the Theory of Planned conduct, which correlates attitudes and intentions with conduct; Behavioral Economics, which examines decision-making amongst risk and bias; and the Capability Approach, which assesses an individual's potential to attain financial objectives.

Principal benefits of financial literacy encompass enhanced financial well-being, augmented SME performance, elevated savings rates, improved investment decisions, and increased financial inclusion.

There exist bidirectional linkages between Financial literacy and Financial behavior. Financial literacy affects conduct, whereas behavior can simultaneously enhance and broaden financial literacy. These correlations are frequently influenced by demographic characteristics such as income, education and income.

3.5 Experiences of financial Literacy and Financial Behaviour

Specifically in this study, financial literacy and financial behaviour as experiences and consequences were the focus. Several authors found financial literacy and financial behaviour as experiences. Financial literacy was an experience of financial behaviour, retirement confidence, financial well-being, financial education, performance of SMEs etc (Arofah et al, 2018; Ergun, 2018; Andarsari & Ningtyas, 2019; Rahman et al, 2021; Ingale & Paluri, 2020; Oluyemisi, 2024; Khawar & Sarwar, 2021; Stolper and Walter, 2017; Esiebugie et al., 2018; Méndez Prado et al., 2022; Mabula and Ping, 2018; Winarsih et al, 2020; Purwidianti & Tubastuvi, 2019; Sayinzoga et al, 2016; Song et al, 2023; Jamal et al, 2015; Sabri and Juen, 2014; Lusardi, 2019; Cera et al, 2021; Ndou, 2023; Mulasi and Mathew, 2022; Cwynar, 2020; Adil et al, 2020; Alim et al, 2022; Rootman and Anthony, 2015; Patrisia et al, 2023; Mugambe &Mulindwa, 2024; Farida et al, 2021; Arofah, 2019; Allgood and Walstad (2015).

This study also revealed that financial behaviour is an experience of financial literacy, sales growth, family financial socialization, financial well-being, etc (Behaviour Rai et al, 2019;Rai et al, 2019; Ergun, 2018; Rahman et al, 2021; Ingale & Paluri, 2020; Oluyemisi, 2024; Khawar & Sarwar, 2021; Chavali et al, 2021; Sabri and Juen, 2014; Banthia and Dey, 2022; Cera et al, 2021; Ndou, 2023; Riitsalu,and Murakas, 2019; Cwynar, 2020; Adil et al, 2020; Patrisia et al, 2023; Farida et al, 2021; Yong et al, 2018).

However, some other experiences of financial literacy and financial behaviour besides the main focus of this study (financial literacy and financial behaviour) were also revealed by some authors. In other words experiences of financial literacy and financial behaviour include financial attitude, financial knowledge, financial education and financial experience (Ratna et al., 2019; Rai et al, 2019; Purwidianti & Tubastuvi, 2019; Lusardi, 2019; Banthia and Dey, 2022; Yong et al, 2018; Kaiser and Menkhoff, 2017), financial risk tolerance (Song et al, 2023), social influence and emotional intelligence (Jamal et al, 2015), self-efficacy (Mulasi and Mathew, 2022; Khan et al, 2020; Arofah, 2019), financial socialization, cognitive ability, financial advice and financial inclusion (Khan et al, 2020; Stolper and Walter, 2017).

Financial literacy and financial behaviour according to some articles have been experienced by demographic characteristics of individuals such as gender, nationality, working experience, number of credit cards, daily budget, debt/loan, credit card payment on time, financial situation, personal income source (Ergun, 2018; Lusardi, 2019) and business characteristics in terms of SMEs including age of business, size of business, geographical location, business experience, access to financial education and access to financial services(Thabet et al, 2019; Mugambe &Mulindwa, 2024; Ratna et al., 2019).

3.6 Consequences of Financial Literacy and Financial Behaviour

In this section, the consequences of financial literacy and financial behaviour were analysed in the 110 articles and some authors explained that the consequences of financial literacy is financial behaviour (Arofah et al, 2018; Andarsari & Ningtyas, 2019; Ingale & Paluri, 2020; Stolper and Walter, 2017; Purwidianti & Tubastuvi, 2019; Sayinzoga et al, 2016; Song et al, 2023; Yahaya et al, 2019; Jamal et al, 2015; Banthia and Dey, 2022; Lusardi, 2019; Mulasi and Mathew, 2022; Alim et al, 2022; Khan et al, 2020; Rootman and Anthony, 2015; Basha et al, 2022; Mugambe &Mulindwa, 2024; Arofah, 2019; Kaiser and Menkhoff, 2017; Allgood and Walstad (2015). Interestingly, some authors proposed that financial literacy is also a consequence of financial behaviour (Liter Rai et al, 2019; Ratna et al. (2019; Thabet et al, 2019; Yong et al, 2018; Kaiser and Menkhoff, 2017; Jamal et al, 2015).

In this systematic literature review of financial literacy and financial behaviour, it was shown that some papers postulated that financial literacy and financial behaviour have other consequences besides the focused consequences of financial literacy and financial behaviour which include personal or individuals financial wellbeing (Rahman et al, 2021; Chavali et al, 2021; Riitsalu,and Murakas, 2019; Cwynar, 2020), family communication patterns, financial outcomes for family and family financial socialization (Khawar & Sarwar, 2021; Patrisia et al, 2023; Ndou, 2023), financial satisfaction (Farida et al, 2021), retirement confidence (Sabri and Juen, 2014), financial education (Lusardi, 2019). In the case of SMEs, the other consequences of financial literacy and financial behaviour outlined by some articles are investment decisions (Adil et al, 2020), financial management behaviour (Prihartono and Asandimitra, 2018), sales growth (Oluyemisi, 2024), performance of SMEs (Esiebugie et al., 2018; Mabula and Ping, 2018), participation in formal financial systems (Méndez Prado et al., 2022), business sustainability (Winarsih et al, 2020) and financial capability (Cera et al, 2021).

4. Discussion

In this systematic literature review, the researcher aimed to analyse the extant research on the experiences and consequences of financial literacy and financial behaviour in the context of personal finances and SMEs to accumulate knowledge on this issue. In this section, the study will provide the analysis of the findings. The researcher will criticize some of those relations considering that some studies have found potential moderators and interactive effects. Finally, the researcher will include some suggestions to address some weaknesses in this systematic study.

The relationship between financial literacy and financial behaviour was seen to be rotational as financial literacy was seen to be an experience of financial behaviour whereas financial behaviour was also seen in some cases as an experience of financial literacy. Similarly, financial literacy served as a consequence to financial behaviour and financial behaviour also was seen as a consequence of financial literacy. In the case of personal finances, financial literacy and financial behaviour enhanced the financial well-being, financial satisfaction and family finances of individuals. In the case of SMEs, financial literacy and financial behaviour contributed to the performances, investment decisions and sales growth of SMEs. For instance, an increase in the level of financial literacy resulted in an improvement of SME performance (Mabula and Ping, 2018; Esiebugie et al., 2018).

Furthermore, according to Chavali et al (2021), an increase in the financial behaviour resulted in the financial wellbeing of individuals under the research.

Financial behaviour as an action is required to improve certain organizational capabilities but may sometimes be influenced by certain variables before researcher make recommendations to directly linking it to personal or SME performance. In the study of Rahman et al, 2021, financial behaviour led to financial well- being of individuals but was mediated through educational level, employment status, monthly household income and monthly personal income of individuals. Similarly, an increase in the level of family financial behaviour and financial literacy resulted in the increase in the family finances in the study of Ndou (2023). However, this was moderated by the level of the family parental income.

The consequences of financial literacy and financial behaviour were also seen to be resulted by each other as financial literacy was seen as a consequence of financial behaviour and in some papers, financial behaviour was also seen as a consequence of financial literacy. For example, in Yahaya et al (2019), financial behaviour was the consequence of the variables of financial literacy namely financial knowledge and financial attitude (Purwidianti & Tubastuvi, 2019). Also,

Regarding consequences, it seems that some studies have suggested that FL could have a direct relationship with all of the consequences that were mentioned, namely family commitment patterns (Patrisia et al, 2023), financial behaviours (Farida et al, 2021), financial capabilities (Cera et al, 2021), family financial socialization (Khawar & Sarwar, 2021), etc. this is empirically valid, but some authors posited that this may also be moderated by some factors or variables such as financial attitude (Jamal et al, 2015), financial inclusion (Rootman and Anthony, 2015), educational level (Mugambe &Mulindwa, 2024) among others.

4.1 Research Gaps and Future Research

The systematic review on financial literacy (FL) and financial behavior reveals several additional research gaps that warrant further exploration. One significant issue is the lack of standardized measures and definitions across studies. Researchers often use different scales and methods to measure financial literacy and behavior, leading to inconsistencies and making it difficult to compare findings or generalize results. There is a clear need for standardized and universally accepted definitions and measurement tools that encompass the various dimensions of financial literacy, including financial knowledge, attitudes, and behaviors. This would allow for more coherent and comparable research outcomes across different contexts and populations.

Another gap lies in the limited research on the long-term effectiveness of financial literacy interventions. While many studies highlight the importance of financial education, few evaluate how effective these programs are over extended periods. Specifically, there is a lack of understanding regarding the most effective delivery methods (e.g., digital platforms, formal education, community-based programs) and which demographic groups benefit the most. More research is needed to measure the sustained impact of financial education programs on individuals' financial behavior, exploring how these interventions translate into long-term improvements in financial decision-making and well-being.

The underrepresentation of vulnerable populations is another pressing gap. Most research focuses on middle-income individuals and populations in developed economies, neglecting marginalized groups such as low-income households, refugees, and people with disabilities. These groups often face unique financial challenges and barriers to accessing financial education. There is a need for more studies that focus on these vulnerable populations to understand their specific financial literacy needs and to develop tailored interventions that can improve their financial outcomes and inclusion in financial systems.

The increasing role of digital financial services introduces a new gap: the impact of fintech and digital financial tools on financial literacy and behavior. Although some research explores how fintech enhances financial inclusion, there is limited understanding of how digital platforms affect users' financial literacy, particularly in terms of digital literacy, trust in technology, and adoption of online financial services. This is especially relevant for older generations or those with lower technical proficiency, where further research could examine how fintech is changing financial behavior and knowledge acquisition.

Another area requiring attention is the integration of behavioral economics and cognitive biases into financial literacy research. While some studies have explored the relationship between financial literacy and behavioral biases (e.g., overconfidence, loss aversion), more research is needed to understand how these biases affect financial decisions in individuals with varying levels of financial literacy. Understanding how financial education can be tailored to address these biases could improve financial behavior and decision-making outcomes.

There is also a growing interest in the connection between financial literacy, financial stress, and mental health, but this relationship remains underexplored. Financial stress is often linked to poor mental health, and individuals with lower financial literacy may be more susceptible to experiencing financial-related stress. More research is needed to explore the role that financial literacy plays in reducing financial stress and improving mental health, particularly in vulnerable populations who face multiple layers of financial insecurity.

Finally, the role of social networks and peer influence on financial literacy and behavior is underexplored. While the role of family financial socialization is well-documented, less is known about how broader social networks—friends, colleagues, and peer groups—affect financial decisions and literacy. Understanding the social dynamics that influence financial behavior could help design more effective financial education interventions, particularly for young adults and marginalized communities who are heavily influenced by their social circles.

Addressing these research gaps will provide a more comprehensive understanding of financial literacy and behavior, leading to better-informed policies and educational programs that can enhance financial well-being across diverse populations and contexts.

5. Conclusion

This article aimed to systematically analyse the experiences and consequences identified in the existing studies on financial literacy and financial behaviour in the personal and SME contexts and to make suggestions for future studies. Some literature analyses have been done in the context of personal finance management (for example, Hung et al., 2009; Huston, 2010; Lusardi & Mitchell, 2014) and SMEs (Graña-Alvarez et al, 2024). However, a systematic analysis of the experiences and consequences of FL in both personal and SMEs financial literacy and financial behaviour has not yet been made. This study reviewed 110 articles on financial literacy and financial behaviour in the context of personal and SMEs context.

FL and FB are salient factors that influence the improvement of personal financial decisions and wellbeing and SMEs performance. The Organization for Economic Cooperation and Development (OECD, 2018), suggested to policymakers to continue encouraging FL training programs for entrepreneurs, managers and founding team members because FL is a critical factor in terms of managing SME organizations in difficult scenarios. Lusardi & Mitchell (2014) highlighted the need to also encourage the personal finances of individuals in their social settings. This study contributes to the small business research on management, accounting, and finance as well as exploring the experiences and consequences of personal financial benefits of individuals.

This study findings showed that educational, cultural and specific contextual factors such as the level of education, gender and age increase FL and FB. Moreover, the study revealed that FL and FB have several experiences and consequences in the context of personal and SMEs, such as financial literacy, financial behaviour, financial attitude, financial knowledge, financial education, financial capabilities, family financial socialization and organizational performance. It was also found that financial literacy and financial behaviour could be an experience and a consequence to each other. In other words, the researcher revealed that financial literacy and financial behaviour could predict each other and can serve as a dependent or independent variables to each other as shown in some studies. It was also found in some articles that there are moderating and mediating factors of the consequences of financial literacy and financial behaviour apart from some papers showing a direct relationship between FL and FB consequences. It is worthy to also mention that this study was able to identify other experiences and consequences of FL and FB in both personal and SME contexts which range from retirement confidence, family communication patterns as well as financial well-being in the case of personal finances to SME practices and sustainability in the case of SMEs which is somewhat different from the traditional SMEs profitability. This study also acknowledges that some studies failed to test moderating and mediating variables of FL and FB which should be considered in a future study.

This study also provided that there is a direct relationship between FL and performance, and the researcher argues that the relationship between FL, FB and personal and organizational financial capabilities (consequences) should be mediated, possibly moderated through financial attitude and financial knowledge to serve as control systems. This study also recognizes some limitations to this systematic review. Firstly, it is acknowledged of the limited number of sampled articles of 110 articles. Also, the study of the role of FL and FB at both personal and organizational level is a still growing research area which needs to be expanded beyond the limited 10 years literature of this study.

FL as well as FB has been particularly helpful in unfavorable contexts, such as emerging economies not leaving the indelible benefits in the developed world. In this systematic review, only the articles published in English language journals and indexed in the Google Scholar and Scopus databases and a few additional articles from other sites were drawn leaving out other prominent sites. Therefore, it is very assured that there are other important articles on FL and FB which are left out in this study. However, the employed databases in this study are among the most reputed in any field (López-Duarte et al., 2016) and this study is acceptable and prudent as FL main dimensions playing all the roles of predicting, predicted, moderating and mediating are considered in this study which are financial behaviour, financial education, financial knowledge and financial attitude.

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