ISTVÁN ÁBEL, ORSOLYA-ÉVA TÓTH

The financial literacy of SMEs - Do sustainability and sustainable development matter?

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Abstract

The concepts of sustainability and sustainable development and their relationship with financial literacy are important topic. Our research aims to examine the trends in articles focusing on financial literacy of SMEs and to determine if sustainability or sustainable development was in a focus of the authors.
To address our research questions, we selected articles from Scopus and Web of Science databases published from 2015 until present focusing on the abstract, title and keywords. By using research terms regarding financial literacy and small businesses, we systematically searched the database for relevant results
Our research revealed that the terms related to sustainability and sustainable development are rarely mentioned by researchers in the abstract, title and keywords. The analysis conducted highlights the importance of appropriate usage of keywords and reveals a research gap, that could be narrowed if the concept of sustainability and sustainable development gain prominence in research, and if authors' keywords are used properly.
This research holds value for others conducting research in the field of financial literacy issues of SMEs, as it emphasizes that there is strong relationship between financial literacy and business sustainability and indirectly, to sustainable development. By including sustainability and sustainable development as authors' keyword, or by referring to the given SDG goals, it may help to draw more attention from other researchers.

Keywords: Sustainability, Sustainable Development, Finance Literacy, SME, Authors' keyword

Introduction

The key to sustainability lies in everyday actions, but the consequences of these actions are more significant over the long run. This understanding is reflected in the fact that the United Nations developed the 2030 Agenda for Sustainable Development, which was signed by member states in 2015 and contains 17 Sustainable Development Goals (SDG) (*United Nations*, 2015). The UN and other international organizations emphasize that the responsibility of countries and organizations to achieve these goals is paramount. Since small and medium-sized enterprises (SME) make up the majority of the companies, their responsibility is also important.
The heightened attention to financial literacy was boosted by the aftermath of the economic crisis in 2008. The importance of financial awareness and knowledge attracted attention. A vast number of research and publications were initiated. Some of them were focused on understanding the reason behind the crisis, some of them were focused on possible lessons to be learned and some were about to measure the financial awareness, knowledge, skills, attitude, and behaviour.
Studies revealed that the lack of financial knowledge of the population may have contributed to the depth of the crisis. As the financial products and services became more complex and the lack of financial knowledge resulted in greater vulnerability during the crisis (Klapper et al., 2012). The consequences of the shock for the world economy were enormous and had long-term impact. And it is not over yet as the pandemic and the war in Ukraine brought new trouble in geopolitical risks.
Financial literacy is usually defined in terms of personal finance decisions. The concept of financial literacy at the firm-level is less well understood than it should be. Hussain et al. (2018) proved that financial literacy influences SMEs' performances and clarified that there are several linkages how it helped to sustain their performance. SMEs' performance are essential to achieve SDG goals (Sobir, 2019).
We conducted a literature review using academic databases, such as Scopus and Web of Science to identify the articles published after the year of 2015, as this year marks a turning point in terms of sustainable development. This literature review enables us to gain insight into the recent research in the field of financial literacy in terms of SMEs sustainability and sustainable development goals.
The paper is organised as follows. First, we summarize the current knowledge base focusing on sustainability concept, sustainable development, and financial literacy. In the following section we

introduce the research methodology of our literature review. The result section of this paper presents the selected articles focusing on financial literacy related to SMEs. In the Discussion part we provide the context and meaning of our research findings comparing our findings to previous papers. This section also provides suggestions for future research areas. Finally, we present the limitation of our results, and also the conclusion of our findings.

Literature background

Sustainability

Sustainability as a concept has been around for a long time. Sustainability refers to being able to continue doing something for a long period of time. As far as the small and medium-sized enterprises are concerned running the business for long is also important for the owners. However, most of the interpretations of sustainability mainly focuses on large companies (Jansson et al., 2017) and SME's particular concerns are not necessarily addressed.

From business perspective, the traditional shareholder theory means that long-term sustainability is equivalent to financial success, assuming that a businesses' main objective is to maximize shareholder value, and wealth (O'Connell and Ward, 2020). Maximising the shareholder value, in other words maximising of the profit, does not mean that the businesses can break the laws, and can do anything without any control (Friedman, 1970). Shareholder theory has been challenged, and businesses have been urged to consider other stakeholders besides shareholders (Freeman, 1984). The Triple Bottom line concept (Elkington, 1998) reflects this approach, which highlights the importance of optimising the economic, social and environmental performance in a boarder sense, as it is including non-direct stakeholders as well.

Sustainable development

Focusing on the macro level, according to the definition of the World Commission on Environment and Development sustainable development is a development that is future- oriented considering the needs of future generations while determining current decisions on how to meet their short-term aspirations about present economic circumstances (WCED, 1987, p.43)

In the business sector, sustainable development is translated into something that puts stakeholders' targets in focus without compromising important considerations related to potential future consequences (Hockerts, 1999). In other words, sustainability entails balancing stakeholder needs and short-term profits with environmental protection.

To implement sustainable development, businesses need to have a business strategy focusing on these sustainable development targets, considering the economic and social sustainability aspects in general (Werbach, 2009). Werbach (2009) emphasized that sustainability requires more than focusing on natural environment.

The role of SMEs to achieve the sustainable development goals are presented in report of the Department of Economics and Social Affairs (Sobir, 2019). The report focuses on each of the SDG (17) and provides the possible direct and indirect contributions of Micro, Small and Medium Enterprises (MSMEs). The list bellow contains the most important goals and we mention some specific considerations related to MSMEs contribution to meeting those goals:

Goal 1. End poverty in all its forms everywhere and Goal 5. Achieve gender equality and empower all woman and girls

MSMEs could significantly contribute to increase employment and reduce unemployment. Job creation could help to overcome poverty and could help to achieve gender equality by employing women.

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

MSMEs have multiple chances to contribute towards achieving these objectives. One of which is providing employees with ongoing learning opportunities to improve the essential skills for their present and future employability.

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

MSMEs have direct contribution to achieve these goals. In addition of MSMEs job creations they play crucial role to contribute the economic growth.

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

This goal contains the target 9.3, which directly linked MSMEs to this goal. This target aims to increase the access of MSMEs to financial services.

After carefully reviewing these goals and targets, it is clear that the performance of the MSMEs is crucial in meeting these targets. An MSME performing better could contribute better to the sustainable development goals and targets. In other worlds, the MSMEs sustainability's are one of the factors that may contribute to achieve the sustainable development goals and targets.

Financial literacy

Our literature survey focuses on the specific aspects of enterprise sustainability and financial literacy. The issue of financial literacy is hardly mentioned in the context of enterprise sustainability. Specific considerations of entrepreneurial decisions are seldom targeted in research dealing with the issues of financial literacy. This surprising gap in both research fields needs to be filled by covering the interconnected aspects of financial literacy in firm decisions and incorporating the concept of sustainability into the vast literature on financial literacy.

The concept of financial literacy is well known and used often without relying on a widely accepted and unified definition. Financial literacy represents a broad and changing concept as it is continuously changing reflecting the developments in the environment and financial markets. Financial literacy of individuals, however, it may have an impact on the macro-economic process and as a consequence may influence monetary and budgeting policy, and in general the sustainability of the financial system as a whole (Béres & Huzdik, 2012)

Remund (2010) conducted a survey to aggregate the existing definitions available from the year 2000. Based on his findings the definitions could be categorized in five groups such as: (a) understanding of financial concepts; (b) ability to communicate about finances, (c) aptitude in managing personal finances, (d) skill in making appropriate financial decisions and (e) confidence in planning for future needs (Remund, 2010, p. 279). These categorization covers general aspects of financial knowledge but still reflects a focus on personal finances as opposed to aspects of corporate decision making.

Huston (2010) emphasized that financial literacy is not the same as financial knowledge. Financial literacy cover both a concept and the measurement methodology which focuses not just on the personal knowledge but also on its application dimension (Huston (2010).

Amagir et al., (2018) defines three main components of financial literacy such as: knowledge and understanding; skills and behaviour; and attitudes and confidence.

Remund (2010) formulated the following definition: "Financial literacy is measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate, short-term decision-making and sound, long-range financial planning by mindful of life events and changing economic conditions" (Remund, 2010, p. 284).

Remund's definition is a comprehensive definition that covers all aspects of the definition that the OECD used for financial literacy in its approaches. The OECD defines financial literacy as "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing" (quoted by Atkinson & Messy, 2012, p. 14).

The pandemic has accelerated the development of digital finance services. Digital competence is getting to be more and more important in the future. Different types of new financial products are available. Due to the pandemic the households usage of digital payments have been accelerated. (MNB, 2021)

The development of this area raised the necessity to broaden the current approach to financial literacy. Although no generally accepted final definition exists on financial literacy, it is important to acknowledge that the current definition is changing because of these new developments.

The Alliance for Financial Inclusion highlighted that digital services could support inclusion. However, the low level of awareness and the lack of confidence can hinder this positive tendency. To cope with new challenges financial education should be more focused, and better tailored to digital financial literacy. According to their definition digital financial literacy requires "the knowledge, skills, confidence and competencies to safely use digitally delivered financial products and services, to make informed financial decisions and act in one's best financial interest per individual's economic and social circumstance" (Digital Finance Literacy, 2021, p.4.). Although these definitions explicitly tried to cover all relevant aspects of financial literacy, it is still noteworthy to mention that all of these definitions remained within the scope of personal finances.

There are still few attempts to widen this focus. Among those we find an important initiative to use a new definition which brings sustainable finance into the field of literacy. However, the concept of sustainability only appears as a characteristic feature of the considered financial products. They define sustainable finance literacy as the "knowledge of regulations, norms, and standards about financial products that have sustainable characteristics" Filippini et al. (2022, p.2.).

Measurement of financial literacy

Measurement issues can be discussed in relation to several financial literacy definitions. These issues discussed in this part originally were discussed within the framework of a narrow definition of financial literacy which focused on personal finances. However, these issues are equally relevant in the more general context covering corporate financial decisions.
An assessment of financial literacy level is necessary for several purposes. First, a measurement of financial literacy level is needed to define and work out the methodology of financial education. Such measurement helps in evaluating educational performance and effectiveness. Measuring financial literacy also helps to understand the impact of certain economic events (for example COVID 19), and may explain variation in savings, investments, and debt behaviour.
There are plenty of possibilities for different approaches to measurement among students enrolled in primary/elementary school or high/secondary school; or measurement among university students; or measurement of adults may raise different challenges.
Huston (2010) performed a study on data collection method of financial literacy measurement (N=52) mainly performed between 1996 and 2008 in U.S. discovered that the measurement methodologies were not consistent. However, a consistent and widely accepted methodology would be needed to be used as a reliable input in a variety of fields, including financial education.

How to improve financial literacy – the importance of education

According to Huston, (2010) financial literacy education must and should be colourful in order to meet the demands of a wide spectrum of needs and backgrounds (different learning style, different life stages etc.).
The development of financial literacy and knowledge is beneficial to individuals as well as the economy. Among other researchers, (Klapper et al., 2012) also found that proper financial literacy may help individuals to deal with macro-economic shock and financial crisis.
Financial education can be defined as "the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being." (Recommendation on Principles and Good Practices for Financial Education and Awareness, 2005 p.3.)
The financial education programs cover variable topics: budgeting; consumer protection; money management; saving and investing etc. These programs are targeted students, adults, low-income persons, women etc. The programs may be designed to improve general financial knowledge (interest rates, inflation, investments, etc.) and/or to influence financial behaviour and attitude.
Kaiser & Menkhoff (2017) performed meta-analysis of 126 studies and found financial education significantly impacted the financial behaviour in general, but according to the result of the research some behaviour like handling of debt is hard to influence.
However, in their comprehensive research analysis, Amagir et al. (2018) concluded that financial educations can increase children's and adolescents' financial knowledge and attitudes but have only a minor effect on actual behaviour.
In 2016 a study investigated the Hungarian financial literacy education performance. The sample consists of 40 training programs was carefully examined. by usage of questionnaires. The following were the main points of discussion: the characteristics and number of participants in the programs; the source of the programs' funding; the status of the program coordinators; the length of each program; the availability of the curriculum; and is there any evaluation of the effectiveness after each course or program. According to the findings of the research the majority of the financial education programs are quite short (only couple of hours) and ending without any effectiveness test. The authors also emphasized, that the majority of the program were financed by public fund, so it is important to increase the sound public spending and to monitor the effectiveness of these programs and also call for the necessity of proper quality assurance system. (Németh et al., 2016)
Németh E. et al., (2020) continued the investigation to see whether progress has been made in financial education and whether financial literacy education effectiveness has improved between 2016 and 2020 in Hungary. The sample consists of 122 training programs and the research was completed during the summer 2020. Based on the questionnaires fulfilled by the participants on training programs the researchers found that the focus was on school student still.

Business sustainability and the financial literacy

In addition to ensuring the accumulation of wealth, financial literacy also enhances the performance of a company (Lusardi and Mitchell, 2014). Organizational decision-making relies heavily on financial literacy, which is not surprising (Allgood and Walstad, 2016) and also financial planning (Lusardi and Mitchell, 2014).

There is no universally shared definition of financial literary but the concept, but few would object to the understanding that it is a component of knowledge required to manage finances. Noctor et al. (1992, p.4.) defined financial literacy as “the ability of an individual to make an informed judgement and take effective decisions regarding the use and management of money”. Thus, financial literacy is an important factor especially for the sustainability of newly started SMEs where the survival rate is relatively low.

Studies about financial literacy of the management in SMEs identified some common problems (Eniola & Entebang, 2017). Kotzé & Smit (2008) highlighted that lack of financial literacy in failing SMEs was often the main cause of failure.

Widdowson and Hailwood (2007) draw attention to the importance of financial literacy in risk management which opened the way to take advantage of financial market competition. Financial literacy also helped entrepreneurs in negotiating with the banks which was important to achieve sustainability (Lusardi and Mitchell, 2011, Reich and Berman, 2015).

It is well known that financial literacy helps value creation for individuals but Lusardi, Mitchell and Curto (2010) proved that its role in the process of value creation in SMEs contributed to their sustainability.

Financial literacy is important for the survival of SMEs in both developed and developing countries, according to Wise (2013). Poor financial literacy led to poor financial management practices and frequent financial mistakes (Lusardi and Mitchell 2014). To cope with economic changes, Huston (2010) emphasized the importance of financial literacy. Similarly, Widdowson & Hailwood (2007) discovered that people who have strong financial knowledge are more likely to make successful investments in complex assets.

Hussain et al. (2018) proved that financial literacy influences SMEs’ performances and also clarified that there are several linkages how it helped to sustain their performance. The concept of financial literacy as a component of the enterprise knowledge resources is especially important because there are few other knowledge resources so widely researched than financial literacy. Although the approaches until know focused on the educational aspects, this gap is narrowing as more and more studies addresses the issues how financial literacy influences the sustainability of SMEs.

Methodology

The main objective of this systematic literature review is to gain better understanding of how researchers articulate the concepts of sustainability and/or sustainable development goals in their articles that are focusing on financial literacy, particularly in the context of small and medium-sized businesses.

To achieve the research objective the following research questions were formulated:

RQ1: How do researchers define the sustainability and/or sustainable development goals in their articles on the financial literacy of small and medium-sized businesses?

RQ2: What sustainable development goals are addressed in the articles on the MSMEs’ financial literacy?

The systematic search we conducted is based on the notion that the title, keyword, and abstract (at least one of them) express the article's content significantly, so - despite not being suitable for drawing broad, comprehensive conclusions - can be used to collect relevant, eligible articles. Our assumption is that authors clearly mention the terms “sustainable development” or “sustainability” in the title and/or in the abstract and/or among the keywords. Our intention is to focus only on the titles, abstracts, and keywords.

First, we identified the relevant search terms based on the review of the literature (Table 1.) and (Table 2.). Each search term has at least one variant and some search terms have more variants. As an example, variants of “Financial awareness” are “Financial aware” and “Financially aware”. Finally, 14 search terms were used in the field of financial literacy.

Table 1. Search terms for financial literacy

Search terms		Variants searched
Financial literacy	1.1	Financial literacy
	1.2	Financially literate
Financial awareness	2.1	Financial awareness
	2.2	Financial aware
	2.3	Financially aware
Financial knowledge	3.1	Financial knowledge
Financial education	4.1	Financial education
Financial culture	5.1	Financial culture
Financial decision	6.1	Financial decision
	6.2	Financial decisions
Financial behaviour	7.1	Financial behaviour
	7.2	Financial behavior
	7.3	Financial behaviours
	7.4	Financial behaviors
TOTAL number of search terms		**14**

Also, search terms were identified to define the micro, small and medium-sized businesses. Due to the inaccurate outcomes, it became necessary to eliminate the terms micro and medium from the research terms. The final search terms listed in Table 2.

Table 2. Search terms small and medium-sized businesses

Search terms		Variants searched
SME	1.	SME*
MSME	2.	MSME*
Small busines	3.	Small business
TOTAL number of research terms		**3**

The search terms sustainability and sustainable development were also identified.

Table 3. Search terms sustainability

Search terms		Variants searched
Sustainability	1.	Sustainability
Sustainable development	2.	Sustainable development
TOTAL number of research terms		**2**

To collect the relevant publications, we collected data from Scopus and Web of Science databases. The result was filtered for “Economics, Econometrics and Finance” and “Business, Management and Accounting” subject areas in Scopus Database. In case of Web of Science only publication in Management and Economics subject areas were selected.

The data were collected on 12th of April 2023, which means that the dataset includes articles published up until that date in the year 2023.
The dataset contains 21 journal articles starting from the year 2015 until April 2023, published in English. Although the research terms were provided in English, not all selected articles were in English, so we filtered the database for articles written in English.
Following the removal of duplicate and non-English articles, 19 articles remained for further analysis. Additional 7 were excluded from consideration as their title and/or their abstract did not appear to be relevant to our research purposes or we had no access to them. Finally, we selected 12 articles.

Result

Characteristics of the selected articles

Surprisingly the selection of the articles contains only 12 articles published over the period examined (2015-2023) (Table 4). Seven articles out of the total investigated Indonesian small businesses, and only one article focused on European SMEs, namely Hungarian ones.
Although our search period started in 2015, as the sustainable development goals was announced in that year, we only found the first relevant article in the year 2019. Three articles were published in 2019 and in 2020, two in 2021, while in 2022 four articles were published according to our search terms.

Table 4. Summary of the articles

CODE	Authors	Article Title	Source Title	Year	Country	Sample	Focus	Authors' keywords	Main Findings	Abstract mentioned
S1	Yanto H., Kiswanto, Baroroh N., Hajawiyah A., Rahim N.M.	The roles of enterpreneurial skills, Financial Literacy, and Digital Literacy in Mainainting MSMEs during the COVID-19 Pandemic	Asian Economic and Financial Review	2022	Indonesia	N=204	Financial literacy; Digital literacy; Entepreneur skills	**Business Sustainability**; Digital Literacy; Financial Literacy; Health and Safety; Busness during pandemic; Enterpreneurial Skills	Implementation of health and safety measures (pandemic) has insignificant impact on business sustainability, but significant positive impact was found in case of financial and digital literacy	MSME sustainablitity; business sustainability
S2	Nugraha D.P., Setiawan B., Nathan R.J., Fekete-Farkas M.	Fintech Adoption Drivers for Innovation for SMEs in Indonesia	Journal of Open Innovation: Technology, Market, and Complexity	2022	Indonesia	N=415	Perceived usefulness; perceived ease of use; user innovativeness; government support; trust and financial literacy	Digitalization in Finance; Indonesian SMEs; extended TAM; **Sustainable Development Goals**	Perceived usefulness, perceived ease of use, user innovativeness, government support, and trust, have a direct impact on behavioral intention of Indonesian SMEsto adopt Fintech solution. Financial literacy indirectly correlates with Fintech.	NO
S3	Raharja B.S., Bachtiar N.K., Azis M.R.A.	The behavioural dimension of SME's owner on affecting the financial decisions	Business: Theory and Practice	2022	Indonesia	N=482	behavioural and non-behavioural factors on financial decision	Capital Structure; Financial Behavior; Financial Education; Financing Development; Investment Decisions	Significant effect of behavioural aspects of SME's owners and non significan impact of non-behavioural factors on the financing decisions	Sustainablity of SMEs industry
S4	Hamdana, Murwani F.D., Sudarmiatin, Hermawan A.	The effects of financial and technology literacy on the **sustainability** of Indonesian SMEs: Mediating role of supply chain practice	Uncertain Supply Chain Management	2022	Indonesia	N=485	Financial literacy; Technology literacy; Supply chain practices; SMEs sustainability	SMEs; Developing Country; Financial Literacy; Technology Literacy; **Business Sustainability**; Supply Chain Practice	Financial literacy, technological literacy, and supply chain practice contributed positively and significantly to the sustainability of SMEs	Sustainablity of SMEs; sustainable manner
S5	Sahela, KZ; Susanti, R; Adjie, AR	The Influence of Government Dimension on Financial Education and Empowerment of Micro-, Small- and Medium-Sized Enterprises in Indonesia	Journal of Asian Finance Economics and Business	2021	Indonesia		Financial education; Consumer protection; Governement Dimension; MSMEs Empowerment	Financial Education; MSMEs Empowerment; Entrepreneurship Theory	Financial education plays an important role in the sustainability of financial inclusion	Sustainability of MSMEs
SW1	Toth, R; Zeman, Z; Turoczi, I; Kasa, R; Popp, J; Olah, J	The system of relationships between **sustainable** corporate governance and corporate financial literacy	Polish Journal of Managment Studied	2021	Hungary	N=511	Corporate Financial Literacy; Corporate Financial Results; Operation Efficiency; Corporate Financial Decesions	Corporate Financial Literacy; Financial Decisions; Financial Effectiveness; **Economic and Financial Sustainability**	Financial literation index play significant role SME' sustainability	Corporate sustainability
S6	Kostini N., Raharja S.J.	Analysis of Financial Behavior of SMEs in the Creative Industries in Bandung City, Indonesia	Review of Integrative Business and Economics Research	2020	Indonesia	N=432	financial behaviour 9 indicators (external and internal)	Financial Behaviour; SMEs; Creative Industries; Internal Factors; External Factors	Financial education importance to strenghten the financial behaviour.	Sustainability of business
S7	Guliman S.D.O.	The role of entrepreneur's financial sophistication on the nexus of business strategy and **sustainability** indicators of philippine microenterprises	Asia-Pacific Social Science Review	2020	The Republic of Phillipines	N=384	Financial Sophistication and Business Strategy impact on Sustainablility indicators (Economic, Environmental, Social and Governance)	Financial Sophistication; Financial Literacy; Business Strategy; **Sustainability**; MSMEs	Business strategy is positively linked to each of the sustainability indicators; the entrepreneur's financial sophistication increases the effect of business strategy on each of the sustainability indicators.	Sustainability indicator
S8	Maziriri E.T., Chivandi A.	Modelling key predictors that stimulate the entrepreneurial performance of small and medium-sized enterprises (SMEs) and poverty reduction: Perspectives from SME managers in an emerging economy	Acta Commercii	2020	South Africa	N=150	Enterpreneurship Education, Budgeting Financial Literacy and Access to Credit Facilities are the independent variables; Enterpreneurial Performance as mediating variable on SMEs Poverty Reduction	Enterpreneurship Education, Budgeting Financial Literacy, Access to Credit Facilities; Poverty Reduction; Enterpreneurial Performance	Entrepreneurial performance was found to have a robust influence on poverty reduction. A robust relationship was also found between budgeting financial literacy and entrepreneurial performance.	2015 United Nations Sustainable Development Goals
S9	Marlina L., Irawati N., Sadalia I., Muda I.,	The financial behavior traits impact on financial distress at small medium enterprise's (the relationships between the industry and **sustainable development** in indonesia)	International Journal of Scientific and Technology Research	2019	Indonesia	N=60	Factors resulting financial distress for SMEs	Financial Distress; Financial Behaviour; Self Control Planning; Patience affect; Small Medium Enterprises, Behaviour Traits	Financial behaviour (capacity of control, planning and patience) influence financial distress. The highest impact has the patience.	NO
W1	Rasheed, R; Siddiqui, SH	Attitude for inclusive finance: influence of owner-managers' and firms' characteristics on SMEs financial decision making	Journal of Economic and Administrative Sciences	2019	Pakistan	N=285	SME Owner-manager attitude towards financial decision	Pakistan; SME; Decision Making; Owner-manager; Inclusive Finance	The low awareness level of owner-managers regarding financial products and procedures significantly affects their attitude	Sustainability studies
W2	Ye, JM; Kulathunga, KMMCB	How Does Financial Literacy Promote **Sustainability** in SMEs? A Developing Country Perspective	Sustainability	2019	Sri Lanka	N=291	The impact of financial literacy, access to finance and financial risk attitude on SMEs' sustainability	Financial Literacy; Access to Finance; Financail Risk Attitude; **SMEs Sustainable Performance**	Direct positive effects of financial literacy, access to finance and financial risk attitude on sustainability.	susstainablility, SME's sustainability

As far the journals are concerned, each journal is included in the database only once, meaning that only one article is published during our research period matches our research criteria. We also checked the SCImago Journal Rank indicator to define the prestige of the journal where the selected articles were published. Table 5 provides the relevant list.

Table 5. Journal rank

Source Title	Q rank
Journal of Open Innovation: Technology, Market, and Complexity	Q1
Sustainability	Q2
Uncertain Supply Chain Management	Q2
Asian Economic and Financial Review	Q3
Business: Theory and Practice	Q3
Journal of Asian Finance Economics and Business	Q3
Polish Journal of Managment Studied	Q3
Asia-Pacific Social Science Review	Q4
International Journal of Scientific and Technology Research	Q4
Acta Commercii	Not ranked
Journal of Economic and Administrative Sciences	Not ranked
Review of Integrative Business and Economics Research	Not ranked

The citations index was also analyzed. According to the information provided by the databases, four articles are not yet cited. The highest citations index is achieved by the article of Ye & Kulathunga (2019) with 33 citations, journal ranked as Q2.

Summary of the findings of the selected articles

The studies of Ye and Kulathunga (2019) (W2) and Rasheed & Siddiqui, (2018) (W1) research emphasized that financial literacy is an important component of the knowledge base influencing the decisions in SMEs and it has an impact on their sustainability.

Rasheed & Siddiqui, (2018) in their research based not only behavioural theory aspects (attitude) but also focus on personal and firm characteristics that are influencing the owner/managers financial decision makings. Such personal characteristics could be the gender, age, education, and experience. The size, the age, the industry type, and the turnover are the firm characteristics that may play also role to moderate the decision-making attitudes.

Ye and Kulathunga (2019) emphasized that "Financial literacy should also help businesses to deal with challenges in cutting edge credit markets. Financial literacy enables entrepreneurs to manage risks through strategies, such as maintaining financial reserves, diversifying their investment portfolio and buying insurance. Inadequate financial literacy has been identified as one of the main barriers to the sustainable development of SMEs." (Ye and Kulathunga, 2019, p.3.). They noted that even if the importance of financial literacy was empirically detected, the transmission of the impact on SMEs' sustainability was not addressed. Therefore, their research is targeting to reveal relationship between financial literacy and sustainability directly, while assuming that financial risk attitude mediates the relationship between financial literacy and SMEs sustainability. Financial literacy and sustainability are found to have a positive relationship, based on the research. The important finding of the research is that it is advisable to employ a financially highly literate CFO to promote sustainability.

Maziriri & Chivandi, (2020) (S8) focused on budget literacy, which could be defined as a smaller part of financial literacy. Entrepreneurship education, budgeting financial literacy, and credit facilities are examined for their impact on entrepreneurship and poverty reduction. Quantitative approach is employed. The dataset contains answers collected through a structured questionnaire from 150 managers of rural small and medium sized enterprises from Vhembe District of Limpopo province, South Africa. Researchers found positive effects of entrepreneurship education, budgeting, and financial literacy on entrepreneur performance and poverty reduction. Therefore, in their research positive relationship was identified between the level of budgeting literacy and Sustainable Development Goal 1.

The paper published by Kostini & Raharja, (2020) (S6) explored the factors influencing financial behaviour of creative SMEs in Indonesia. They emphasized that SMEs encounter the difficulty the sustainability through financial management. The research involved 432 participants and focusing the following factors like: financial management, recording of data, planning, handling personal and business expenses, non-planned purchase, creditors payment. Better financial management, proper recording of the transaction, planning are the main factors influencing the financial behaviours.

Raharja et al., (2022) (S3) involved 592 SMEs owner to explore the relationship between the behavioural, non- behavioural factors of the owner of the SMEs combining the business characteristics on their financial decisions. According to the findings Owners' financial decisions are most likely to be affected by non-behavioural factors

The comprehensive research was performed on the impact of financial sophistication on sustainability indicators in Philippine microenterprises by Guliman (2020) (S7). The model created uses structural equation modelling to identify the relationship between financial sophistication and sustainably indicators and business strategy. Financial sophistication refers to financial knowledge financial behaviour financial attitude and financial decision-making style. The following sustainability indicators are taken into account: Economic, Environmental, Social and Governance. The research found positive and significant relationship between business strategy and sustainability indicators, and indirect impact was determined stronger correlation with the existence of financial sophistication.

According to Yanto et al (2022) (S1), MSME owners' digital literacy and financial literacy improved as they dealt with their financial problems online during the pandemic. Still focusing on the COVID era, the Nugraha et al., (2022) (S2) found that financial literacy has indirect relationship with Fintech adoption, meaning than Fintech could improve the financial inclusion of SMEs.

The article focusing on Hungarian SMEs (Tóth et al., 2021) (SW1) introduces a model to explore the relationship between corporate financial literacy and corporate financial result, the efficiency of operation, and the outcome of corporate financial decision. The research sample contains 511 SMEs representatives. In their model the corporate financial index was created with seven constituents' group and the respondents were grouped into clusters. Their findings indicate that the level of corporate financial literacy had a significantly positive impact on financial results.

Sustainability of SMEs is not only investigated from the financial literacy angle but also from technical literacy, and from supply chain aspects in recent publication of Hamdana et al., (2022) (S4). In their research direct and indirect effects have been tested. The findings of the research among 485 SMEs owners indicate that there is positive relationship in case of direct relationship, while in case of indirect ones the results indicate relationship, but not always a strengthening one. According to their standpoint "Sustainability being an operational practice concept, is a multidimensional concept that includes business strategy, financial management, customer satisfaction, stakeholder interests, the process of adapting to technology, starting from the initial chain to the final destination of a product/service." (Hamdana et al., 2022, p. 1454.).

Factors contributing to financial distress were presented in the paper of Marlina et al., (2019) (S9). The sample is relatively small as only 60 participants fulfilled the questionnaire. The research defined financial distress as an early warning of a possible bankruptcy. The results reveal that the financial behaviour (like capacity of self-control, planning and patience) has positive impact on managing distress.

Last but not least, the article of Sahela et al., (2021) (S5) indicates that financial education has a significant and positive impact on finance in MSMEs, and it contributes to sustainability of financial inclusion. The results revealed that financial education, customer protection and the government have key role in achieving financial inclusion and fostering economic growth.

Considering our first research question, we can conclude that researchers who focus on financial literacy did not give much attention to sustainability and sustainable development goals. In general, they did not emphasize that financial literacy is a key element for maintaining business sustainability and to achieve sustainable development goals. As a result of analyzing the articles above, we can conclude that these phrases were simultaneously mentioned in the title, the abstract, and in the keywords of four articles from the twelve (S4; S7; SW1; W2.

As far as the second research question is concerned, our research shows that authors refer to sustainable development goals in a general manner, not specifying any development goals in the title or in the abstract or not defining them among the keywords. In addition, only two of the twelve articles mentioned sustainable development goals. Nevertheless, in one instance, it can be inferred that the authors intention is to target SDG 1, which pertains to poverty reduction (S8).

Limitations

Our research was based on Scopus and Web of Science dataset, while including other dataset source could increase the contribution to the academic knowledge.

We assumed that the title of the articles, the abstract, and the keywords are the proper words and phrases that express the essence of the given research paper. However, these are not always the most suitable representation of the paper content. In case of authors' keywords other factors may influence the selection of these keywords, like the author's personal preferences and/or strategic considerations. The keywords together with the title and the abstract of research papers are good starting point, but the paper content and its contribution to the academic knowledge could be understood by analysing the paper content.

Conclusion

Our systematic literature review resulted 12 articles published during the search period from year 2015. We defined the search terms regarding financial literacy and small businesses and searched systematically in the database Scopus and Web of Science. We focused on the abstract, title and the keywords.

We can conclude that most of the selected articles focused on financial behaviour, and some focused on the relationship between financial literacy and the performance of SMEs, namely their sustainability. However, due to the limited number of articles no definitive trends or general consequences could be concluded. Furthermore, most of the published research focused on Indonesian SMEs, which makes generalization hard.

Although it appears that there is limited focus on sustainability and/or sustainable development goals, but perhaps researchers are not "sustainability-aware" enough, which may explain the limited number of articles found during our systematic review. This means that they are not using "sustainability" as keyword, even though their research is about the performance or/and growth of SMEs. Due to this lack of "awareness" some of them miss the opportunity to at least mention these phrases as an author keyword and they also miss the opportunity to use them in the title or in the abstract.

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