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Financial Literacy and Financial Sustainability for Future Research Agendas: A Bibliometric Analysis

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Abstract

This study investigates the intersection of financial literacy and financial sustainability, two critical areas in addressing modern economic and environmental challenges. Previous studies have highlighted financial literacy's role in reducing poverty, improving decision-making, and promoting sustainable financial practices. However, integrating sustainability into financial literacy is underexplored, particularly in developing countries. This study employs a bibliometric analysis using the Scopus database. A total of 23 relevant documents were analyzed, focusing on publication trends, citation patterns, and thematic developments. VOSviewer and Biblioshiny were used for network visualization, co-occurrence mapping, and overlay visualization to identify key topics and their temporal progression. Findings indicate a growing academic interest in financial literacy and sustainability, especially from 2023 to 2024. Core themes include decision-making, sustainable finance, and technologies like AI and blockchain. Q1 journals dominate the literature, reflecting high-quality research contributions. The linkage between financial literacy and poverty reduction emerged as a critical area of focus. The study underscores the increasing importance of aligning financial literacy with sustainability goals. It highlights gaps in global financial education and emphasizes the need for inclusive, technology-driven solutions. Future research should integrate financial sustainability with emerging technologies and address regional disparities, especially in developing nations.

Keywords: Financial Literacy, Financial Sustainability, Bibliometric Analysis, Scopus

1 Introduction

Rapid economic development and global challenges, such as climate change, social inequality, and financial crises, demand a more sustainable approach to managing finances in this modern era (Naushad Alam et al., 2024). The concept of Financial Sustainability is increasingly becoming a significant concern, not only for large companies and institutions but also for individuals (Munisamy et al., 2022). Financial sustainability aims to ensure that financial decisions made today do not sacrifice future well-being in social, environmental, and economic aspects (Lagoarde-Ségot, 2024). On the other hand, financial literacy is an important foundation for achieving financial sustainability. Financial literacy refers to an individual's understanding and skills in managing personal finances effectively, from managing a budget, saving, and investing to understanding financial risks (Kadoya et al., 2018). With sound financial literacy, individuals can make more thoughtful and sustainable financial decisions (Caplinska & Ohotina, 2019). Integrating Financial Sustainability with financial literacy allows people to pursue short-term profits and build long-term, ethical, and environmentally sustainable economic stability (Tóth et al., 2021). This article will further discuss how these two concepts are intertwined and contribute to shaping a more balanced and sustainable financial future.

Financial literacy and sustainable finance are increasingly interconnected in the modern financial landscape (Yucel et al., 2023). Financial literacy now encompasses knowledge of sustainable investment options and the ability to evaluate sustainability claims (Tóth et al., 2021). The concept of sustainable finance literacy has emerged, focusing on retail investors' understanding of regulations and standards for sustainable financial products (Filippini et al., 2024). Studies show that sustainable finance literacy remains low even in countries with high financial literacy, highlighting the need for improved education and transparent regulatory standards (Karakurum-Ozdemir et al., 2019). Financial literacy is crucial for sustainable development, influencing individuals' financial behavior, payment discipline, and future planning (Zhang & Chatterjee, 2023). As the financial market introduces new sustainable and green instruments, the complexity of financial literacy increases, emphasizing the importance of both financial and sustainability literacy in promoting sustainable development and informed decision-making (Lagoarde-Ségot, 2024).

Many people understand financial literacy as basic money management (budgeting, saving, investing) but do not see how these practices can align with sustainable finance principles (Aren & Dinç Aydemir, 2014). The link between making informed personal financial decisions and supporting sustainable financial practices-such as investing in green funds or socially responsible companies-remains unclear to many (Swiecka et al., 2020). The lack of understanding of how individual financial decisions contribute to broader economic and environmental sustainability is significant. For instance, choosing financial products that support environmental, social, and governance (ESG) criteria can have long-term societal benefits, but this connection is often overlooked.

Financial literacy initiatives often fail to educate people on the specifics of sustainable financial products, such as green bonds, ESG funds, or ethical banking options. These concepts are more complex than traditional financial products, and without proper guidance, consumers may struggle to incorporate sustainability into their financial choices. Sustainable finance is often clouded by issues like greenwashing, where products marketed as "sustainable" may not meet stringent standards. A lack of deep understanding among consumers makes it difficult to differentiate between genuinely sustainable investments and those that only appear so on the surface.

Many financial literacy programs focus on traditional skills, such as budgeting and debt management, without incorporating lessons on how these practices can be aligned with sustainability goals. Developing educational content that integrates the importance of sustainability, climate risk, and responsible investing remains a challenge. Understanding how individuals perceive sustainable finance and what motivates or dissuades them from incorporating it into their financial habits is not fully established. Factors such as cognitive biases, perceived complexity, and short-term financial goals can hinder the adoption of sustainable practices.

There is limited research on how improved financial literacy directly impacts sustainability. While it is assumed that financially literate individuals make better decisions, it is still uncertain whether this leads to meaningful contributions to sustainable finance. The long-term impact of merging financial literacy with sustainable practices has not been thoroughly examined. For instance, do financially literate individuals who invest in sustainable products contribute significantly to environmental or social change, or are these effects marginal without systemic policy support?

Access to both financial literacy and sustainable financial products is uneven globally. In many developing countries, basic financial literacy is already limited, and introducing sustainability concepts adds a layer of complexity that many may not be prepared for. Applying sustainable finance principles and financial literacy varies widely across different cultures and economic contexts. Understanding these nuances and developing tailored programs that resonate with diverse populations remains challenging.

Financial technology (fintech) has the potential to enhance financial literacy and promote sustainable finance through tools like investment apps and educational platforms. However, understanding how these technologies influence behavior and decision-making in the context of sustainability is not fully developed. The integration of digital financial tools raises concerns about data privacy and security. How these risks impact trust and adoption of fintech solutions for sustainable finance is another area that needs more exploration.

While there have been significant strides in promoting both financial literacy and sustainable finance, deeper exploration is needed to understand their complex relationship, impact on individual behaviors, and broader societal outcomes. Comprehensive approaches that blend education, policy support, and technological innovation could be key to bridging the existing gaps. Hence, the purpose of this study is to review the research field of financial literacy and financial sustainability using performance analysis and science mapping methodology. The following research questions will be addressed:

RQ1: How many research publications on financial literacy and financial sustainability are published in terms of year, type, and subject area?

RQ2: What are the Most Global Cited Documents, Most Relevant Sources, and Most Local Cited Sources in what literature have an important impact?

RQ3: How are Three-Field Plots, WordCloud, and TreeMap in the literature on financial literacy and financial sustainability research?

RQ4: What topics have been studied most frequently in financial literacy and financial sustainability research?

The subsequent sections of this article have been organized in the following manner. In the second section, the methodology and analytical procedures are described. The findings about the descriptive structure of the research field are presented in the third section. Subsequently, the fourth section presents the conclusion and implications of the study. We proposed a research agenda for forthcoming studies on financial literacy and financial sustainability in the fifth section based on the aforementioned analyses and discoveries.

2 Literature Review

2.1 Financial Literacy

We list below definitions of financial literacy over three decades to see how the concept has evolved. Noctor et al. (1992) define financial literacy as the ability to make sound judgments and effective decisions regarding the use and management of money. This three-decade-old definition, which was still general, only discusses financial literacy as the management of money but did spur further research. Huston (2010), meanwhile, defines financial literacy as measuring how well individuals can understand and use information related to personal finance. This definition only focuses on individual and family financial literacy enhanced through financial education programs, but it distinguishes financial literacy from financial literacy education. The following year, Lusardi et al. (2011) termed financial literacy as the knowledge of basic financial concepts and the ability to perform simple calculations. According to the authors, women and youth in the US have low literacy levels, so the solution is to provide primary financial education. In a 2014 Organization for Economic Co-operation and Development (OECD) working paper, a measurement of financial literacy is derived from Atkinson and Messy (2012) for almost every country, such as Albania, Armenia, Germany, Ireland, Malaysia, Norway, Peru, Poland, South Africa, the United Kingdom, and the British Virgin Islands. From some of the literature above, it is clear that the definition of financial literacy and how it is measured are still being developed and discussed today.

Some of the literature reviewed by researchers is related to financial literacy. The literature review examines the current definition of financial literacy, why financial literacy matters, where the public has been accessing financial literacy education to date, the difficulties encountered by libraries and others in providing this education, and how these challenges might be addressed moving forward (Aren & Dinç Aydemir, 2014; Faulkner, 2015). A comprehensive review of the current literature on youth financial literacy education aims to identify characteristics of financial education programs that may influence positive changes (Abdullah & Chong, 2014; Totenhagen et al., 2015). Investigate theoretical models of financial literacy using bibliometric analysis and a literature review (Goyal & Kumar, 2021; Idris et al., 2023). Financial Literacy and financial inclusion are somewhat highlighted in the literature; however, the collective importance of how these two areas are researched together needs scholarly attention (Khan et al., 2022). Numerous studies have revealed levels of financial inclusion, but limited studies have been performed on the impact of financial inclusion initiatives on financial stability (Aduda & Kalunda, 2012). Review financial literacy in SMEs through a bibliometric analysis and a systematic literature review (Damayanti et al., 2018; Molina-García et al., 2022). Several financial literacy reviews have been conducted to fill the body of knowledge, but financial literacy and sustainable finance reviews have never been conducted. This reason is the basis for this research. Financial literacy significantly impacts the financial sustainability of individuals and organizations, and research mapping in this area can help direct more effective financial education policies and strategies.

2.2 Financial Sustainability

Financial sustainability refers to the ability of individuals, organizations, or countries to manage their financial resources effectively and efficiently over the long term without sacrificing financial stability in the future (Yusuf et al., 2024). This includes wise management of income, expenses, and investments and ensuring that the financial resources available are sufficient to meet long-term needs (Bui et al., 2024). Financial sustainability begins with having a stable and diversified source of income (Nadash et al., 2024). This allows organizations or countries to reduce their dependence on a single source of income, which can be a risk in the event of changes in market or economic conditions (N Alam et al., 2024). Wise spending management is essential to ensure spending on activities that support long-term goals and avoid waste (Mediawati & Rasyid, 2024). Financial sustainability also includes wise investments for the future, whether in assets, capacity building, or infrastructure strengthening. This helps create new sources of income in the future and reduces dependence on existing revenues. Every financial decision must be accompanied by careful consideration of risk.

Organizations or countries that want to achieve financial sustainability must have a plan to identify, manage, and mitigate financial risks that may arise, such as market changes, exchange rate fluctuations, or natural disasters. Transparency in financial reporting and accountability to funds is essential to maintain public trust and other stakeholders. This helps ensure that resources are used effectively to achieve sustainability goals. Financial sustainability requires long-term planning, including projected income, expenses, and investments. This allows the organization or country to make more informed decisions and mitigate future financial errors or imbalances.

Financial sustainability is carried out in the government, business, and individual sectors. Government sector: for the government, financial sustainability includes effective state budget management, debt management, and stable tax revenues. The government must balance development expenditure and debt management to maintain economic stability. Financial sustainability requires companies to have a business model that can generate sustainable profits, maintain healthy cash flow, and make investments for long-term growth. Companies must also manage market risks and maintain good relationships with stakeholders, including investors and customers. Meanwhile, at the individual level, financial sustainability includes managing spending, saving, and investing wisely to maintain the desired lifestyle without burdening their finances.

Financial sustainability is an essential concept to ensure financial stability in the long term, both for individuals, organizations, and countries. Financial sustainability can be achieved with wise resource management, careful planning, and effective risk management. This requires a commitment to transparency, accountability, and investment for the future while managing challenges that may arise over time.

3 Research Method

3.1 Bibliometric

For examining the evolution of a published theme, bibliometric analysis is thought to be more beneficial. Billings (1881) reviewed the evolution of medical knowledge in one of the first works to employ the bibliometric method. One of the first researchers to review the medical science literature using the bibliometric method was Billing. In the beginning, the bibliometric approach examined library literature using statistics and mathematics (Nicholas & Ritchie, 1978; Pritchard, 1969). The number of publications, citations, and research categories were determined using the bibliometric method (Moed et al., 1985). According to Heersmink et al. (2011), bibliometric research is typically employed in quantitative analyses of books, journals, articles, and other written communication. The methodological approach employed in this study was comparable to that of Ingale & Paluri (2020), Goyal & Kumar (2021), Gallego-Losada et al. (2022), Idris et al. (2023), Nathie et al. (2023), and Harun et al. (2024). This study follows a bibliometric literature review because bibliometric is the most extensively practiced approach to trace the knowledge anatomy of a research field and is used to analyze research topics (Ingale & Paluri, 2020). Bibliometric analysis is performed to delve into the domain, followed by content analysis of the major themes (Gallego-Losada et al., 2022). Bibliometric analysis of financial literacy and financial sustainability was carried out to understand research developments, publication trends and the relationship between concepts in this field. With the bibliometric method, researchers can identify the most studied topics, influential journals and authors, and research gaps that are still open.

3.2 Sample Selection

Bibliometric analysis should identify the documents to be sampled. So, for our bridge, we established a search and filter strategy that includes three stages: database search, data filtering, and unrelated document filtering (see Figure 1). Stage 1 is database searching, First, we choose a database from which to look for documents. We only used the Scopus database. Second, we developed a suitable keyword search strategy that included financial literacy and financial sustainability.

The document may be abandoned or taken into consideration as a result of the inclusion or exclusion of keywords, which could render the conclusion invalid. The various definitions of financial literacy and sustainability, including the ideas covered in the preceding section, must not be disregarded. Therefore, the researchers decided to include the keywords "financial literacy" OR "financial knowledge" OR "financial education" OR "financial attitude" AND "financial sustainability" OR "sustainable finance". The first 33 documents from the database search are displayed. Then, match the inclusions specified by the query. TITLE-ABS-KEY (("financial literacy" OR "financial knowledge" OR "financial education" OR "financial attitude") AND ("financial sustainability" OR "sustainable finance")) AND (LIMIT-TO (PUBSTAGE , "final")) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "re") OR LIMIT-TO (DOCTYPE , "cp")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SRCTYPE , "j")) OR LIMIT-TO (SRCTYPE , "b") OR LIMIT-TO (SRCTYPE , "p")).

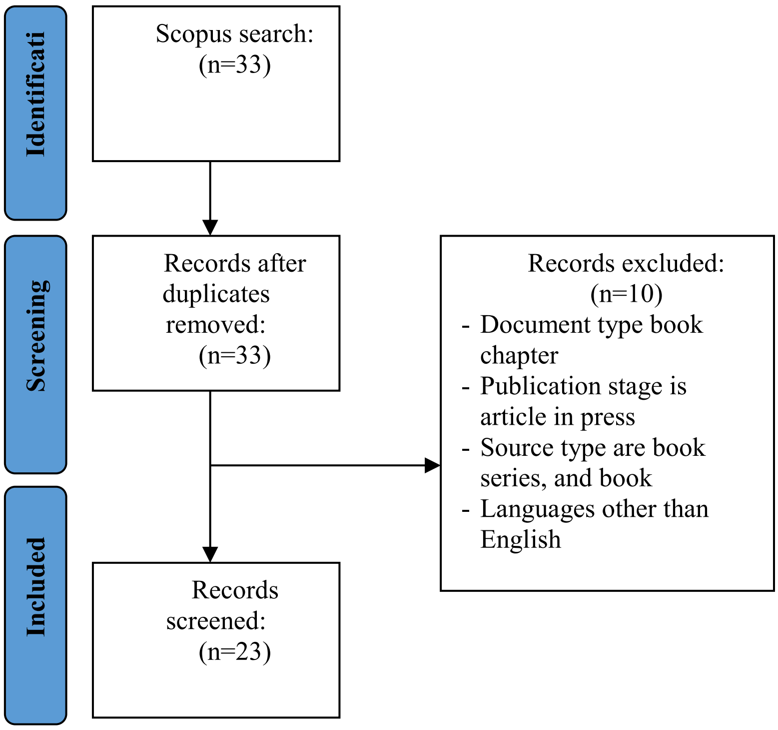

Figure 1. Sample selection

Stage two is database filtration. Besides the initial search, several inclusion and exclusion filters were used. First, since only "article," "conference paper," and "review" are included in the search, we decided to exclude all other terms. Those terms are subject to rigorous peer review and are judged on novelty. Second, we choose the final publication stage because it is past the stage of publication completed. Third, we decided to include a source-type journal, and the language is English. Excluding unrelated documents is stage three. We conducted independent and manual evaluations of the documents to exclude studies that did not match the criteria for inclusion in this bibliometric analysis. Thus, this stage excluded ten contributions that have nothing to do with financial literacy and financial sustainability. The remaining 23 documents were processed for bibliometric analysis.

4 Result and Discussion

4.1 *Number of Publications*

While analyzing financial literacy and financial sustainability, we found the annual number of published documents and citation patterns. Fig. 2 demonstrates that most papers were published during the past ten years (2015 until 2024) and that the number of studies has expanded significantly over the past two years (2023 and 2024). The year 2024 (6 documents), 2023 (6 documents), 2022 (3 documents), 2021 (2 documents), 2020 (documents), 2019 (documents), 2018 (1 documents), 2017 (0 documents). Fig. 3 shows documents by type 19 articles that explore financial literacy and financial sustainability, two reviews, and two conference papers. Fig. 4 shows documents with subject areas, namely Environmental Science 18.9%, Social Science 18.9%, Computer Science 15.1%, Business, Management and Accounting 13.2%, Energy 11.3%, Economics, Econometrics and Finance 9.4%.

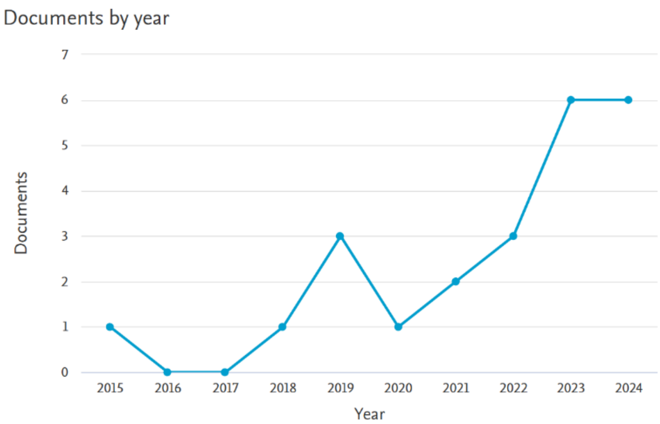

Figure 2. Documents by year

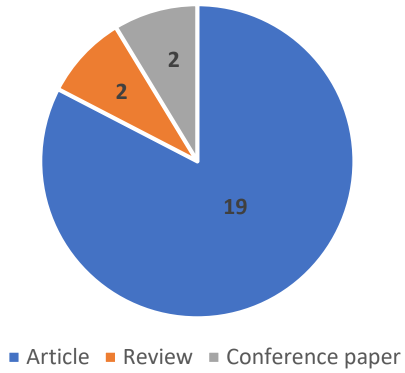

Figure 3. Documents by type

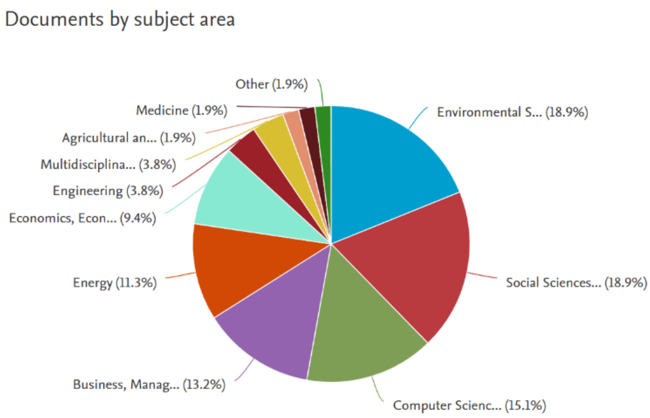

Figure 4. Documents by subject area

Analyzing financial literacy and financial sustainability, we found that most research papers have been published in the past two years (2023 and 2024). The research on financial literacy and financial sustainability is 19 journal articles. The diverse subject area distribution suggests research contributions across environmental and social science. These answer the RQ1.

4.2 *Most Global Cited Documents*

Table 1 shows the document with the highest number of citations, showing the difference in the impact and influence of each article in the academic world. Swiecka et al.(2020), with 57 citations, have the most significant influence on this list. This article contributes significantly to understanding financial literacy in Poland and possibly beyond the country. Weedige et al.(2019) and Abiola et al.(2021) also have pretty high citations, with 40 and 35 citations, respectively. Their research focuses on insurance and financial literacy in the small business sector, which are relevant to personal and business finance policies and practices. Caplinska & Ohotina (2019), with 27 citations, provide insight into the trend of financial literacy among young people, a topic that is increasingly important in an increasingly digital world. Siri & Zhu (2019), with 25 citations, focuses on sustainability risks and their impact on investor protection, reflecting the growing trend of attention to sustainability issues in the financial world. Although more recent, Zhang & Chatterjee (2023) only got 13 citations, which suggests that the impact of this article may still be in the development stage. Holmes (2015), although not directly related to financial literacy, has the same number of citations (13), indicating that socio-economic change in pastoralist systems also receives more limited attention in this context.

Table 1. Most Global Cited Documents

Title	Authors	Citations
Financial literacy: The case of Poland	c	57
Decision making in personal insurance: Impact of insurance literacy	Weedige et al.(2019)	40
Financial literacy, financial capabilities, and sustainable business model practice among small business owners in Nigeria	Abiola et al.(2021)	35
Analysis of financial literacy tendencies with young people	Caplinska & Ohotina (2019)	27
Will the EU Commission integrate sustainability risks and factors into the investor protection regime? A Research Agenda	Siri & Zhu (2019)	25
Financial Well-Being in the United States: The Roles of Financial Literacy and Financial Stress	Zhang & Chatterjee (2023)	13
Rangeland pastoralism in Northern Australia: Change and sustainability	Holmes (2015)	13

4.3 *Most Relevant Sources*

Based on Table 2 of the Most Relevant Sources in the field of financial literacy and financial sustainability, it was found that Sustainability (Switzerland) CiteScore 6.8 (Q1) published many articles with a total of 6 articles. The Q1 journal dominates the most relevant sources that show high quality and relevance in financial literacy and financial sustainability, such as Sustainability (Switzerland), Current Opinion in Environmental Sustainability, International Journal of Banking Marketing, Journal of Banking and Finance, and Global Health Action. Furthermore, the Q2 to Q3 Journals that published articles on financial literacy and financial sustainability showed variations in quality coverage.

Table 2. Most Relevant Sources

Sources	Articles	CiteScore/Quartile
Sustainability (Switzerland)	6	6.8/Q1
Current Opinion in Environmental Sustainability	1	13.8/Q1
International Journal of Bank Marketing	1	10.7/Q1
Journal of Banking and Finance	1	6.4/Q1
Global Health Action	1	5.1/Q1
Australasian Accounting, Business and Finance Journal	1	3.9/Q2
Asian Economic and Financial Review	1	1.8/Q2
Abierta Hall	1	2.0/Q3
International Journal of Business and Globalisation	1	0.7/Q4
Edelweiss Applied Science and Technology	1	0.5/Q4

4.4 *Most Local Cited Sources*

The findings of this study related to the Most Local Cited Source are shown in Figure 5. Lusardi A became the source with the highest number of local citations at 24 citations, far surpassing other sources. This shows the dominance of Lusardi A's ideas or contributions in the context of relevant research. Gutsche G came in second with nine citations, which is also significant compared to other authors. Other sources, such as Ajzen I, Bauer R, and Hair J F, have the same number of citations, 6. Other authors, including Kahneman D. and Eniola A A, have five citations, while Anggadwita G. has four.

Lusardi A is most likely one of the lead authors in this study, particularly in related fields (e.g., financial literacy, when viewed from research trends). Gutsche G shows considerable influence, although not as large as Lusardi A. Authors such as Ajzen I and Hair J F are known for their contributions to research methods and psychological theories, such as the "Theory of Planned Behavior" (Ajzen) and statistical analysis (Hair J F), which are likely used to support research methodologies. Figure 6 shows a combination of references from authors that focus on financial literacy or economic behavior (Lusardi A, Gutsche G, Klapper L), psychology and behavior (Ajzen I, Kahneman D), and research methods (Hair J F, Bauer R). Using high-citation references shows an effort to base research on a strong and relevant theory. The dominance of Lusardi A. and Gutsche G.'s quotes can mean a robust focus on their literature. This can be a strength, but it is also risky if perspectives from other sources are under-considered.

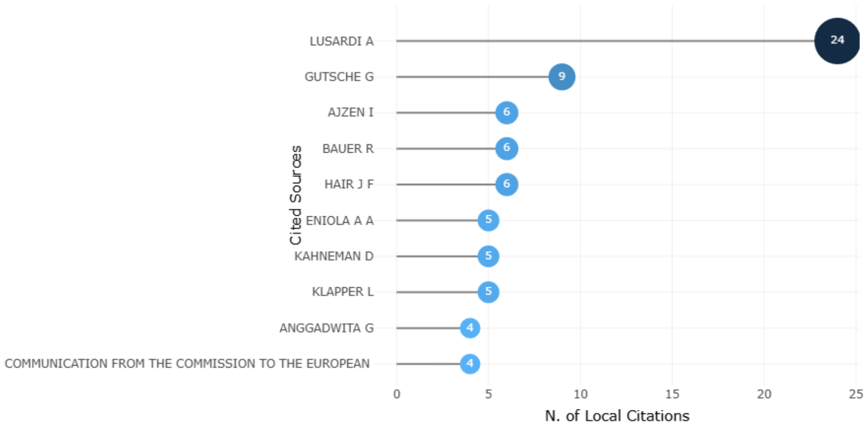

Figure 5. Most Local Cited Sources (from Reference Lists)

The above findings are used to answer RQ2 that Most Global Cited Documents is an article titled "Financial Literacy: The Case of Poland" written by Swiecka et al.(2020) with the idea that Financial literacy is a path to sustainability and has an important role in ensuring the financial sustainability of individuals, families, enterprises and national economies, Then Most Relevant Sources is a Sustainability journal with a total of 6 articles CiteScore 6.8 Quartile 1 and Most Local Cited Sources from Lusardi A with 24 citations.

4.5 *Three-field plots*

Three-field plots, like Figure 6, commonly used for bibliometric analysis, visualize the relationships between three categories of information. In this context, the three fields (CR, AU, DE) represent CR (Cited References), which refers to references cited in the research work. AU (Authors): The author's name involved in the research work. DE (Keywords or Domains): The topic or keywords that the research focuses on.

Detailed Analysis of CR (Cited References): A list of frequently cited references is displayed on the left side. For example, Lusardi A, Mitchell OS seems to be a dominant reference, especially in financial literacy. Other references such as Abdelkafi N, Tauscher K, Aaker DA, and Kumar V point to diversity in domains that include sustainability marketing and business models. AU (Authors): In the middle, some author names, such as Liu Y, Castrom, and Dewi, associate references with specific keywords or domains. These names indicate who plays an important role in bridging the fields of financial literacy, sustainability, and technology. DE (Domains/Keywords): On the right side, keywords such as financial literacy, sustainable finance, artificial intelligence (AI), and blockchain technology indicate research topics often discussed. These keywords highlight the relevance of sustainability and financial technology in modern research.

The lines connecting the three columns show the relationship between the reference, the author, and the topic. Bold lines indicate stronger relationships or frequent references used in a particular domain by a particular author. The research focuses on financial literacy, sustainability, and financial technologies such as AI and blockchain. Lusardi A, Mitchell OS is one of the primary references, showing the dominance of financial literacy in this study. Writers like Liu Y and Castro became key linkages in integrating essential topics. Keywords such as financial literacy and sustainable finance stand out, reflecting global attention to sustainability and financial management issues. Overall, this Three-Field Plot provides in-depth insight into the connections between references, authors, and research topics, demonstrating that financial literacy and sustainability are interconnected in academic literature today.

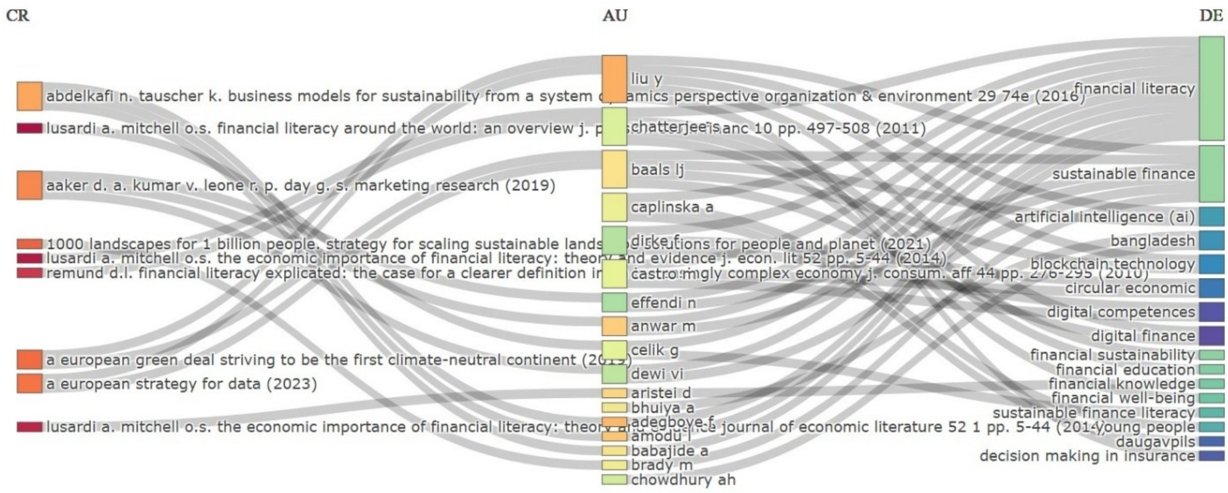

Figure 6. Three-Field Plot

4.6 *WordCloud*

Based on Figure 7, the main words that appear in large sizes are "Finance," "Decision Making," and "Literacy," which are the most significant, indicating that the central theme of the research focuses on financial literacy and decision-making. Meanwhile, the emerging supporting words "Knowledge," "Education," and "Poverty" reinforce the focus on aspects of education and its impact on poverty. "Malaysia" and "Bangladesh" indicate the relevant geographical context. Based on the theme analysis, it was found that Financial Themes, Words such as "Finance," "Bankruptcy," and "Business Transaction," show an emphasis on financial management, risk, and business transactions, which are relevant to the issue of financial literacy. Education and Literacy: words like "Education," "Knowledge," "E-learning," and "Adult" indicate an education-based approach to improving literacy, especially among adults. Gender and Socioeconomics: "Male" and "Female" highlight gender-based discussions. The relationship between "Poverty" and financial literacy indicates that this study may explore how literacy can reduce poverty.

Figure 7. WordCloud

4.7 *TreeMap*

Based on Figure 8, it was found that the main topic with the most significant percentage was "sustainability," with a value of 5 and a percentage of 7%. This indicates that this topic is the dataset's primary or most frequent focus. Medium-sized topics such as "literacy," "decision-making," and "finance" each had a score of 3 with a percentage of 4%. These topics are quite dominant but not as big as sustainability. Topics with small portions such as "female," "male," "Bangladesh," "Malaysia," and "poverty" have a value of 2 (3%). These topics occupy an intermediate position in terms of dominance. Topics with a tiny portion with a value of 1 (1%) such as "data set," "competition," "e-learning," and "financial crisis." These topics appear with a lower frequency in the dataset.

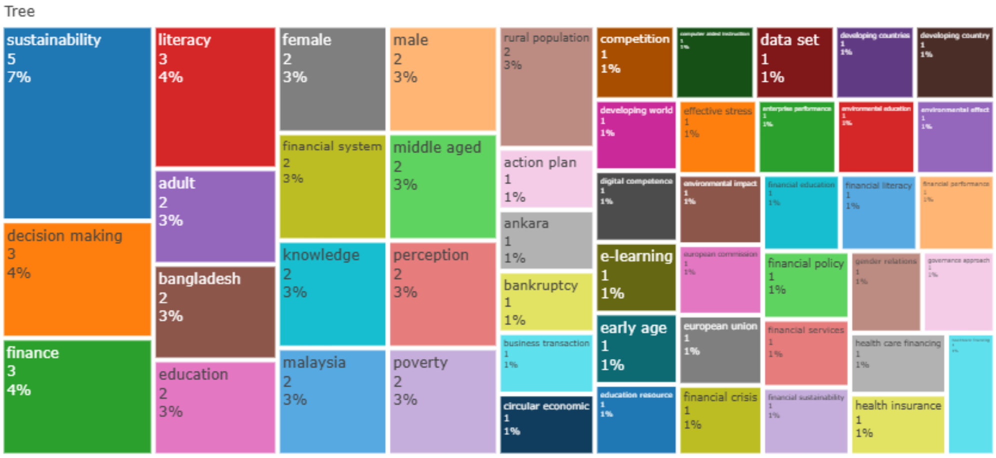

Figure 8. TreeMap

The above findings are used to answer RQ3 that Three-Field Plots found CR (Cited References) is Lusardi A, Mitchell OS, and AU (Authors) as Liu Y with specific keywords or domains and DE (Keywords or Domain) such as financial literacy and sustainable finance, WordCloud are indicating that central theme of the research focuses on financial literacy and decision-making. Treemap is "sustainability" with a value of 5 and a percentage of 7%.

4.8 *Network Visualization Co-occurrence*

Figure 9 provides a visualization of the co-occurrence network, showing the nodes representing a specific term or topic. A node's size indicates the frequency or importance level of a term. Edges indicate the relationship or linkage between terms, and the line's thickness indicates the relationship's strength. "Financial Literacy" is the largest and most prominent node that indicates this topic is central to the network and most often appears or is most associated with other terms. "Sustainability" and "Finance" are also seen as essential topics in this network, but to a lesser extent than "Financial Literacy". The red cluster focuses on "financial knowledge," "young people," and "household finance." This shows the close relationship between financial education and certain groups, such as young people and households. The green cluster is related to "sustainable finance," "financial sustainability," and "Malaysia." This group focuses on the sustainability aspects of finance. Blue clusters with keywords such as "literacy," "decision-making," and "poverty." This group indicates a link between literacy, decision-making, and poverty. The yellow cluster with the keywords "sustainability," "financial system," and "financial well-being."

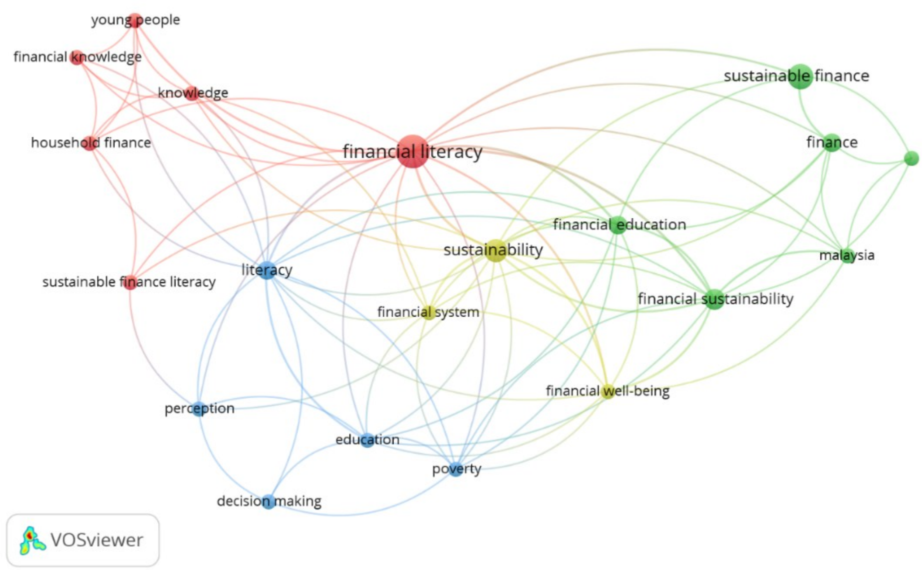

Figure 9. Network Visualization Co-occurrence

4.9 *Overlay Visualization*

Figure 10 is an overlay visualization of the network of relationships between terms using VOSviewer, with an additional time overlay showing the development of terms from year to year based on the color scale. The blue to yellow scale indicates the time from 2021 (dark blue) to 2023 (light yellow). The newer term (2023) is yellower, while the older term (2021) is blue. Older terms (in blue) such as "Young People," "Knowledge," and "Household Finance." These topics appeared more often at the beginning of the study (2021-2022). Newer terms (yellow) such as "Sustainable Finance Literacy" and "Financial Sustainability." This shows that the focus on financial sustainability has grown in recent years. The above findings are used to answer RQ4.

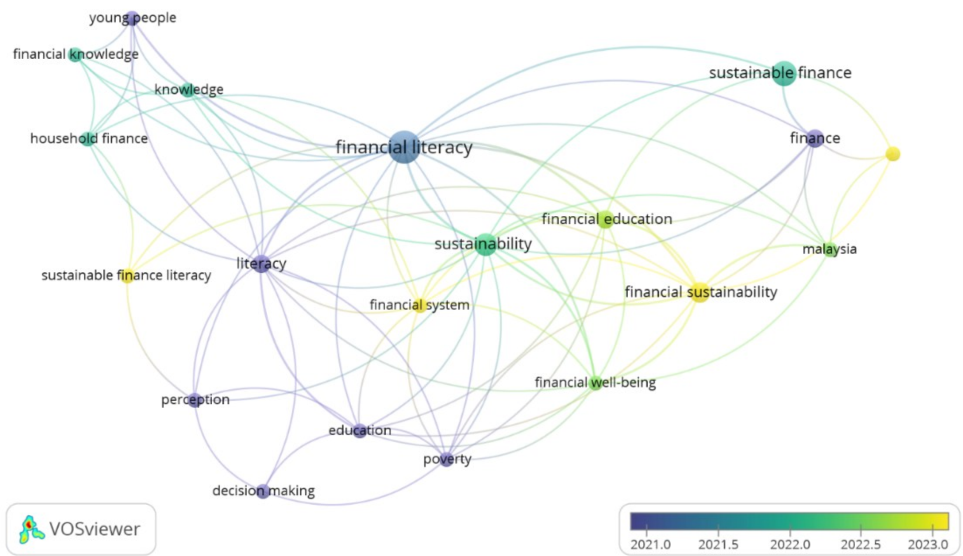

Figure 10. Overlay Visualization

Conclusion

These studies provide a broader picture of how financial literacy affects the financial lives of individuals, businesses, and society and how new issues, such as sustainability, will become increasingly important in future financial studies. Financial literacy remains a key focus, both in the context of individuals and small businesses and in broader social and economic contexts, such as sustainability and risk management. Some studies focus on the context of a particular country or region (e.g., Poland, Nigeria, the United States), which shows that financial literacy is strongly influenced by each country's social, economic, and policy contexts. Research that links financial literacy to sustainability, both in investor protection and business models, shows that this topic is becoming increasingly relevant as global environmental challenges increase.

This research shows that interest in financial literacy and sustainability has increased in the past decade, especially from 2023 to 2024. The main themes that emerged involved financial literacy, decision-making, and sustainability, with significant contributions from specific literature, such as the work of Lusardi and Mitchell. The study also shows that financial literacy is closely related to poverty reduction, education, and gender, as well as the application of modern financial technologies such as AI and blockchain. Q1 journals such as Sustainability (Switzerland) dominate relevant sources, reflecting the high quality of the literature used.

Future research should better integrate aspects of financial sustainability with modern financial technology to answer global challenges. Future research in various developing countries needs to be carried out to see how financial literacy affects the financial decisions of local communities—increasing technology-based financial education programs such as e-learning to be more inclusive for specific groups such as households and youth. The implications of this study provide a strong basis for the study of literature related to financial literacy and sustainability, as well as opening up new research opportunities regarding integrating financial literacy with technology and sustainability. Public policies must be designed to promote financial education as a tool for poverty reduction and improved financial well-being.

The study's limitation is that it only focuses on publications until 2024, so it may not cover the literature trends that develop after that. The analysis relies heavily on bibliometrics, which may not fully capture the context or quality of the research. This research highlights certain regions, such as Malaysia and Bangladesh, so it does not reflect the global situation evenly. Most of the findings are based on literature and have not been supported by in-depth empirical data.

Reference

Abdullah, M. A., & Chong, R. (2014). Financial Literacy: An Exploratory Review of the Literature and Future Research. *Journal of Emerging Economies and Islamic Research*, *2*(3), 32. https://doi.org/10.24191/jeeir.v2i3.9631

Abiola, B., Osabuohien, E., Tunji-Olayeni, P., Falola, H., Amodu, L., Olokoyo, F., Adegboye, F., & Ehikioya, B. (2021). Financial literacy, financial capabilities, and sustainable business model practice among small business owners in Nigeria. *Journal of Sustainable Finance & Investment*, *13*, 1–23. https://doi.org/10.1080/20430795.2021.1962663

Aduda, J., & Kalunda, E. (2012). Financial Inclusion and Financial Sector Stability With Reference To Kenya : A Review of Literature. *Journal of Applied Finance & Banking*, *2*(6), 95–120.

Alam, N, Khan, M. S., Azad, I., Shahid, F., & Dar, A. A. (2024). Identifying the approach to financial sustainability: Navigating the complexities of earning and spending. *Edelweiss Applied Science and Technology*, *8*(4), 995–1006. https://doi.org/10.55214/25768484.v8i4.1477

Alam, Naushad, Khan, M. S., Azad, I., Shahid, F., & Dar, A. A. (2024). Identifying the approach to financial sustainability: Navigating the complexities of earning and spending. *Edelweiss Applied Science and Technology*, *8*(4), 995–1006. https://doi.org/10.55214/25768484.v8i4.1477

Aren, S., & Dinç Aydemir, S. (2014). A Literature Review on Financial Literacy. *Finansal Araştırmalar ve Çalışmalar Dergisi*, *6*(11). https://doi.org/10.14784/jfrs.2014117326

Atkinson, A., & Messy, F.-A. (2012). Measuring Financial Literacy: Results of the OECD INFE Pilot Study. In *OECD Working Papers on Finance, Insurance and Private Pensions* (Vol. 44, Issue 2).

Billings, J. S. (1881). An address on our medical literature. *British Medical Journal*, *2*(1076), 262–268. https://doi.org/10.1136/bmj.2.1076.262

Bui, T.-D., Nguyen, T.-P.-T., Sethanan, K., Chiu, A. S., & Tseng, M.-L. (2024). Natural resource management in Vietnam: Merging circular economy practices and financial sustainability approach. *Journal of Cleaner Production*, *480*. https://doi.org/10.1016/j.jclepro.2024.144094

Caplinska, A., & Ohotina, A. (2019). Analysis of financial literacy tendencies with young people. *Entrepreneurship and Sustainability Issues*, *6*(4), 1736–1749. https://doi.org/10.9770/jesi.2019.6.4(13)

Damayanti, R., Al-shami, S. S. A., AB Rahim, B. R., & Setya, M. F. (2018). Factors that influence financial literacy on small medium enterprises: A literature review. *Opcion*, *34*(86), 1540–1557.

Faulkner, A. E. (2015). A Systematic Review of Financial Literacy as a Termed Concept: More Questions Than Answers. *Journal of Business and Finance Librarianship*, *20*, 7–26. https://doi.org/10.1080/08963568.2015.982446

Filippini, M., Leippold, M., & Wekhof, T. (2024). Sustainable finance literacy and the determinants of sustainable investing. *Journal of Banking and Finance*, *163*(March 2023), 107167. https://doi.org/10.1016/j.jbankfin.2024.107167

Gallego-Losada, R., Montero-Navarro, A., Rodríguez-Sánchez, J.-L., & González-Torres, T. (2022). Retirement planning and financial literacy, at the crossroads. A bibliometric analysis. *Finance Research Letters*, *44*. https://doi.org/10.1016/j.frl.2021.102109

Goyal, K., & Kumar, S. (2021). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies*, *45*(1), 80–105. https://doi.org/10.1111/ijcs.12605

Harun, H. F., Sarman, M. A., & Kamaruddin, S. H. (2024). Determinants of Islamic Financial Literacy in OIC Countries: A Comprehensive Systematic Review and Analysis. *Journal of Economic Cooperation and Development*, *45*(1), 227–248. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85203831400&partnerID=40&md5=2e1dc9d00ff42d37db1e62f1d47151ee

Heersmink, R., van den Hoven, J., van Eck, N. J., & van Berg, J. den. (2011). Bibliometric mapping of computer and information ethics. *Ethics and Information Technology*, *13*(3), 241–249. https://doi.org/10.1007/s10676-011-9273-7

Holmes, P. R. (2015). Rangeland pastoralism in northern Australia: Change and sustainability. *The Rangeland Journal*, *37*, 609–616. https://doi.org/10.1071/RJ15051

Huston, S. J. (2010). Measuring Financial Literacy. *The Journal of Consumer Affairs*, *44*(2), 296–316. https://doi.org/http://www.jstor.org/stable/23859793

Idris, A., Rahmawati, A., & Surwanti, A. (2023). Theoretical Models of Financial Literacy: A Bibliometric Analysis and Literature Review. *Asian Journal of Business and Accounting*, *16*(1), 89–127. https://doi.org/10.22452/ajba.vol16no1.4

Ingale, K. K., & Paluri, R. A. (2020). Financial literacy and financial behaviour: a bibliometric analysis. *Review of Behavioral Finance*, *14*(1), 130–154. https://doi.org/10.1108/RBF-06-2020-0141

Kadoya, Y., Khan, M. S. R., Hamada, T., & Dominguez, A. (2018). Financial literacy and anxiety about life in old age: evidence from the USA. *Review of Economics of the Household*, *16*(3), 859–878. https://doi.org/10.1007/s11150-017-9401-1

Karakurum-Ozdemir, K., Kokkizil, M., & Uysal, G. (2019). Financial Literacy in Developing Countries. *Social Indicators Research*, *143*(1), 325–353. https://doi.org/10.1007/s11205-018-1952-x

Khan, F., Siddiqui, M. A., & Imtiaz, S. (2022). Cogent Business & Management Role of financial literacy in achieving financial inclusion : A review , synthesis and research agenda Role of financial literacy in achieving financial inclusion : A review , synthesis and research agenda. *Cogent Business & Management*, *9*(1), 1–37. https://doi.org/10.1080/23311975.2022.2034236

Lagoarde-Ségot, T. (2024). Greenwashing and sustainable finance: an approach anchored in the philosophy of science. *Current Opinion in Environmental Sustainability*, *66*, 101397. https://doi.org/10.1016/j.cosust.2023.101397

Lusardi, A., & Mitchell, O. S. (2011). Financial Literacy Around the World: An Overview. *SSRN Electronic Journal*, *February*. https://doi.org/10.2139/ssrn.1810551

Mediawati, E., & Rasyid, S. (2024). New trends and directions in local government finance research: A bibliometric analysis. *Public and Municipal Finance*, *13*(1), 137–149. https://doi.org/10.21511/pmf.13(1).2024.11

Moed, H. F., Burger, W. J. M., Frankfort, J. G., & Van Raan, A. F. J. (1985). The use of bibliometric data for the measurement of university research performance. *Research Policy*, *14*(3), 131–149. https://doi.org/10.1016/0048-7333(85)90012-5

Molina-García, A., Diéguez-Soto, J., Galache-Laza, M. T., & Campos-Valenzuela, M. (2022). Financial literacy in SMEs: a bibliometric analysis and a systematic literature review of an emerging research field. *Review of Managerial Science*. https://doi.org/10.1007/s11846-022-00556-2

Munisamy, A., Sahid, S., & Hussin, M. (2022). Socioeconomic Sustainability for Low-Income Households: The Mediating Role of Financial Well-Being. *Sustainability (Switzerland)*, *14*(15). https://doi.org/10.3390/su14159752

Nadash, P., Miller, E. A., Simpson, E., Wylie, M., Shellito, N., Lin, Y., Jansen, T., & Cohen, M. A. (2024). Promoting Sustainability in Housing with Services: Insights From the Right Care, Right Place, Right Time Program. *Research on Aging*, *46*(2), 113–126. https://doi.org/10.1177/01640275231196904

Nathie, M., Mahdzan, N. S., Hanifa, M. H., Ahmad, W. M. W., & Zainudin, R. (2023). Islamic and Conventional Financial Literacy: Systematic and Bibliometric Literature Analyses. *Journal of King Abdulaziz University, Islamic Economics*, *36*(2), 29–60. https://doi.org/10.4197/Islec.36-2.2

Nicholas, D., & Ritchie, M. (1978). *Literature and bibliometrics*. C. Bingley.

Noctor, M., Stoney, S., & Stradling, R. (1992). Financial literacy: a discussion of concepts and competences of financial literacy and opportunities for its introduction into young people's learning. *National Foundation for Educational Research*.

Pritchard, A. (1969). Statistical bibliography or bibliometrics. *Journal of Documentation*, *25*(4), 348–349.

Siri, M., & Zhu, S. (2019). Will the EU Commission successfully integrate sustainability risks and factors in the investor protection regime? A Research Agenda. *Sustainability (Switzerland)*, *11*(22). https://doi.org/10.3390/su11226292

Swiecka, B., Yeşildağ, E., Özen, E., & Grima, S. (2020). Financial literacy: The case of Poland. *Sustainability (Switzerland)*, *12*(2), 1–17. https://doi.org/10.3390/su12020700

Totenhagen, C. J., Casper, D. M., Faber, K. M., Bosch, L. A., Wiggs, C. B., & Borden, L. M. (2015). Youth Financial Literacy: A Review of Key Considerations and Promising Delivery Methods. *Journal of Family and Economic Issues*, *36*(2), 167–191. https://doi.org/10.1007/s10834-014-9397-0

Tóth, R., Zéman, Z., Túróczi, I., Kása, R., Popp, J., & Oláh, J. (2021). The system of relationships between sustainable corporate governance and corporate financial literacy. *Polish Journal of Management Studies*, *23*(1), 418–435. https://doi.org/10.17512/pjms.2021.23.1.26

Weedige, S. S., Ouyang, H., Gao, Y., & Liu, Y. (2019). Decision making in personal insurance: Impact of insurance literacy. *Sustainability (Switzerland)*, *11*(23), 1–24. https://doi.org/10.3390/su11236795

Yucel, O., Celik, G., & Yilmaz, Z. (2023). Sustainable Investment Attitudes Based on Sustainable Finance Literacy and Perceived Environmental Impact. *Sustainability (Switzerland)*, *15*(22). https://doi.org/10.3390/su152216026

Yusuf, M., Dasawaty, E. S., Esra, M. A., Apriwenni, P., Meiden, C., & Fahlevi, M. (2024). Integrated reporting, corporate governance, and financial sustainability in Islamic banking. *Uncertain Supply Chain Management*, *12*(1), 273–290. https://doi.org/10.5267/j.uscm.2023.9.022

Zhang, Y., & Chatterjee, S. (2023). Financial Well-Being in the United States: The Roles of Financial Literacy and Financial Stress. *Sustainability (Switzerland)*, *15*(5). https://doi.org/10.3390/su15054505