Assessing the Authors and Source Impact of Financial Literacy: A Bibliometric Analysis Using R

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Abstract

Using a bibliometric analysis, the goal of this review is to assess and systematically document the author and source's impact on the area of financial literacy. Using R Studio, information is compiled and analysed from Scopus databases. We gathered a searchable database of the 1737 most relevant papers from 2018 to 2022. Assuming the trend continues, the number of publications dedicated to financial literacy is expected to rise between 2018 and 2022. During that period, it was seen that the authors and journals contributed significant impact with a high reputation. The most influential authors and sources on the topic are identified by the bibliometric analysis done using R. It demonstrates the writers' comprehensive knowledge and grasp of their speciality topic. Furthermore, this review aids readers in determining the most relevant source for future study of the scientific and empirical article.

Keywords: financial literacy, R studio, bibliometric analysis, author, source impact

1. Introduction

Everyone today needs to acquire the skill of financial literacy to make it through the challenging environment of the modern financial system (Ansar et al., 2019). Personal financial security and the health of the financial system and the economy are significant reasons why educating the public on money matters is crucial. To be financially literate is to have all the information, knowledge, skills, attitudes, and behaviours that will allow you to make sound decisions about your money and ultimately improve your financial situation (OECD-INFE 2020). People are ill-equipped to make decisions concerning money management if they lack a foundational understanding of economics. Those that are financially educated can make sound decisions about their money, whether it be saving, investing, borrowing, or other financial activities (Klapper et al., 2015).

According to Lusardi (2019), living in an industrialised society is problematic without being literate. Individuals are financially literate if they have the knowledge, understanding, and abilities to manage their finances. Individuals with higher levels of financial literacy are more likely to plan for retirement, have more diversified portfolios, prefer adjustable-rate mortgages instead of less risky mortgages, and select mutual funds with lower fees (Goda et al., 2022: Bouteraa et al., 2021a; Bouteraa et al., 2022b; Bouteraa et al., 2023c; Wong et al., 2022; Ansar et al., 2019; Gathergood & Weber, 2017; Von Gaudecker, 2015). On the other hand, people with significant financial abilities plan and save for retirement more effectively (Lusardi et al., 2017).

1.1 Financial Literacy

Financial literacy has been described in various ways, and there is currently a lack of universally acknowledged, clear and precise definition of financial literacy. Annamaria Lusardi noted that low financial literacy "can have negative effects on the day-to-day financial management of a person or family." *Financial literacy* is defined as the knowledge of basic financial concepts and the ability to perform simple computations (Lusardi et al., 2017), the ability to use the information and resources that are essential to achieving and maintaining his/her financial well-being (Jumpstart Coalition, 2018), a person's competency for managing money (Remund, 2010), personal finance knowledge and application (Huston, 2010), and the ability to make informed judgments and effective decisions regarding one's financial situation (Noctor et al., 1992).

Most of the previous bibliometric studies on financial literacy have focused on SMEs (Moline-Garcia et al., 2022), well-being (Suri & Jindal, 2022), investors (Ansari et al., 2022), behavioral finance (Bharati Singh, 2021), and digital financial literacy (Kartini et al., 2022) (see Table 1). None of them does assessing the authors and source impact of financial literacy. Therefore, this study aims to analyze and assess previous research on financial literacy. This study assesses financial literacy's most prominent contributors (authors and sources).

Table 1: Summary of previous studies in Financial Literacy using a bibliometric method

Author	Title
Antonio Moline-Garcia et al., 2022	Financial literacy in SMEs: a bibliometric analysis and a systematic literature review of an emerging research field
Ankit Suri and Lokesh Jindal, 2022	Financial literacy for well-being: Scientific mapping and bibliometric analysis
Ansari et al., 2022	A Study of Financial Literacy of Investors—A Bibliometric Analysis
Bharati Singh, 2021	A Bibliometric Analysis of Behavioural Finance and Behavioural Accounting
Kartini et al., 2022	Mapping Of Digital Financial Literacy Research: A Bibliometric Review
Hidayat and Sudana, 2021	Bibliometric Study on Financial Literacy between 1984–2021

1.2 Bibliometric Analysis

Typically, the objectives of bibliometric analysis studies are to evaluate research trends, assess the influence of publications, or show bibliometric networks based on a specific research domain or topic (Lada et al., 2023; Ahmi, 2022; Nicole et al., 2022). In addition, bibliometric analysis is helpful since it can uncover and forecast future research ideas (Paul & Criado, 2020). Consequently, this study uses the methods of bibliometric analysis to evaluate and systematically document the author and source's influence on the field of financial literacy, utilizing R Studio. This bibliometric investigation aims to address the following research questions.

1.3 Research Question

The following research questions (RQ) demonstrate the review activities and process using bibliometric (i.e., R studio).

Table 2. Research Questions (RQ)

No.	RQ	Analysis Protocol
1	What is the current state and trend of publication in Financial Literacy?	• Document Type • Source type • Total number of contributors • Number of publications by year/ country • Annual growth rate.
2	What are the most influential contributors to Financial Literacy?	• Most influential authors • Most relevant sources

After providing a brief overview of key financial literacy definitions, this article delves into a more in-depth discussion and analysis. First, the investigation's procedures are detailed in the paper's methodology section, including the data search, collection, extraction, and analysis.

The subsequent section describes the study's findings. Finally, this paper's conclusion section outlines the findings of the study.

2. Methodology

2.1 Searching Strategy

A search strategy is a set of search phrases organized logically. The search strategy will use keyword search principles for accurate and comprehensive results (Zakaria et al., 2021). This study used a flow diagram and bibliometric analyses (See Figure 1). This method comprehensively analyses the knowledge acquired over time (Zakaria et al., 2021). Typically, bibliographic data is filtered and enhanced using bibliometric methods, such as discovering relevant publications in a database (such as Scopus). The bibliometric analysis permits the identification and forecasting of future research themes (Paul & Criado, 2020). Scopus, an Elsevier database, contains more than 50 million entries from more than 5,000 articles (De Mauro et al., 2016). At the same time, our institution obtained the Scopus database. Therefore, this study chose the Scopus database as a primary data source.
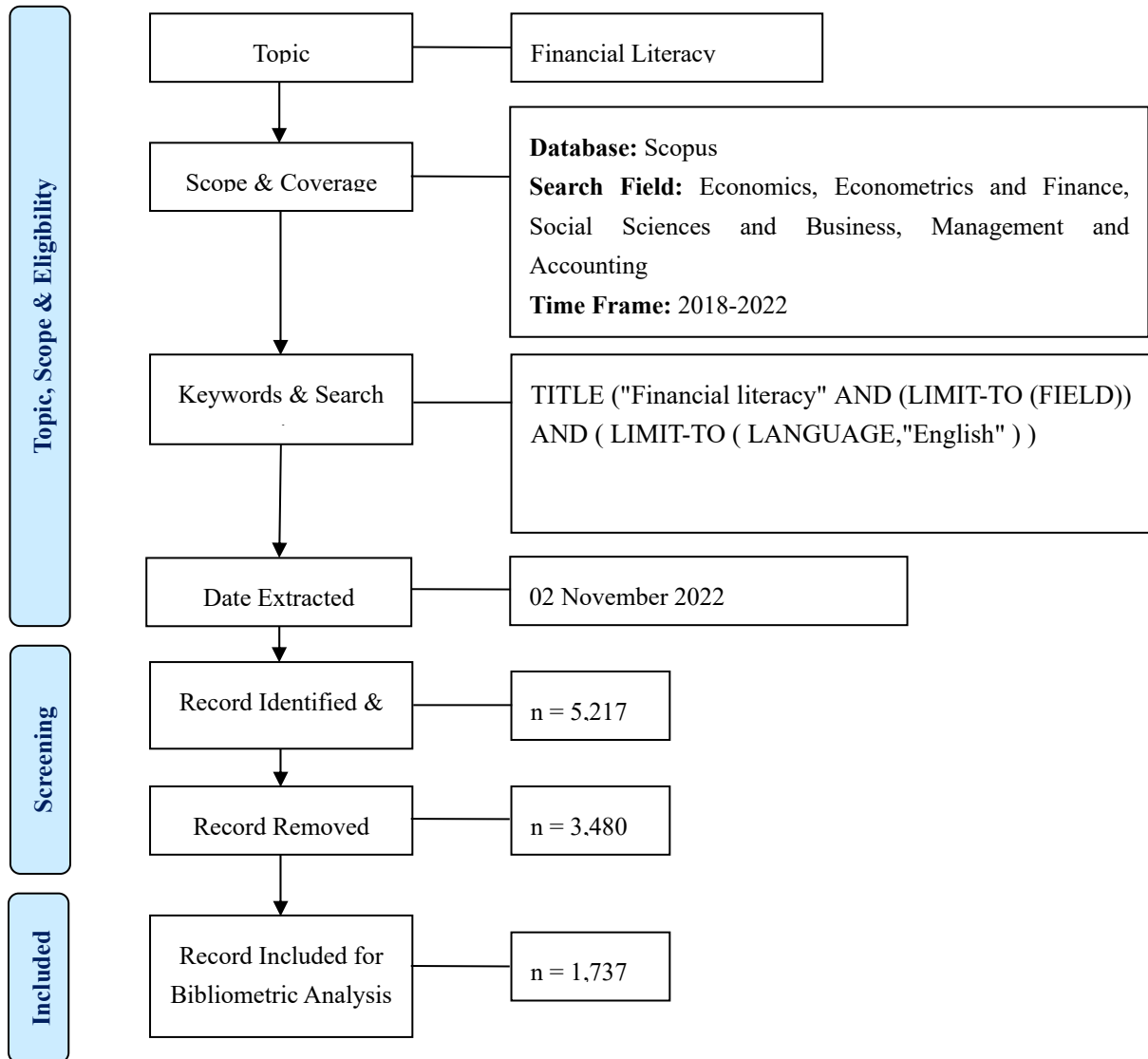
Figure 1. Flow diagram of the search strategy

2.2 Inclusion and Exclusion Criteria

Initially, all search results are reviewed for titles and abstracts following previously set criteria (See Table 3). Then, they evaluated and summarized all the papers that had passed the initial screening phase. Every piece of research is based on its publishing volume, the most prominent journals and authors, and the most discussed study topics. Due to the abundance of literature on financial literacy, we chose to compile a database of 1,737 publications published between 2018 and 2022.

Table 3. Search criteria

Scopus Category	Searching criteria.	No of article
Topic	"Financial And Literacy"	5,217
Research years	2018–2022	3.062
Subject Area	Economics / Econometrics and Finance / Social Sciences and Business, Management and Accounting	2,076
Document Type	Articles	1,791
Source Type	Journal	1,791
Language	English	1,737

2.3 Extraction Techniques

According to Table 3, 1,737 journal articles were exported in an application-friendly manner. The downloaded database was extensively analyzed to enhance the precision of the research. The extraction procedure begins with a search for the terms "Financial AND Literacy". Excel (.csv) and R were utilized for this study. R is a free bibliometric academic programme presenting bibliometric maps graphically. The final Scopus database offers the most valuable article title, author, keyword, citation, and reference information, including all citations.

3. Results

3.1 Document Profiles

The found articles covered the years 2018 to 2022. Only after the year 2018 did publications become more organised, and their quantity began to expand gradually and consistently. Based on the total number of 1,739 documents considered (Table 4), the yearly growth rate is 23.42 percent, and the average number of citations per document is 5,332, while the total number of references is 82,260. In addition, most of the research in this field is published as articles (100 percent).

Table 4. Document profiles

Description	Results
Main Information About Data	
Timespan	**2018:2022**
Sources (Journals, Books, etc)	751
Documents	**1,737**
Annual Growth Rate %	**23.42**
Document Average Age	1.6
Average citations per doc	5.332
References	**82,260**
Document Contents	
Keywords Plus (ID)	1,443
Author's Keywords (DE)	4,169
Authors	
Authors	4,081
Authors of single-authored docs	273
Authors Collaboration	
Single-authored docs	297
Co-Authors per Doc	2.85
International co-authorships %	19.75
Document Types	
Article	1,737 (100%)

3.2 RQ1: What Is the Current State and Trend of Publication in Financial Literacy

As illustrated in Figure 2 and Table 5, the quantity of publications related to financial literacy has expanded over time. According to the number of publications, the issue and scope of the study on financial literacy have garnered considerable attention in previous research. According to preliminary statistics from the Scopus database, the topic of financial literacy began to receive increased attention in 2014 and has continued to do so until the present day.
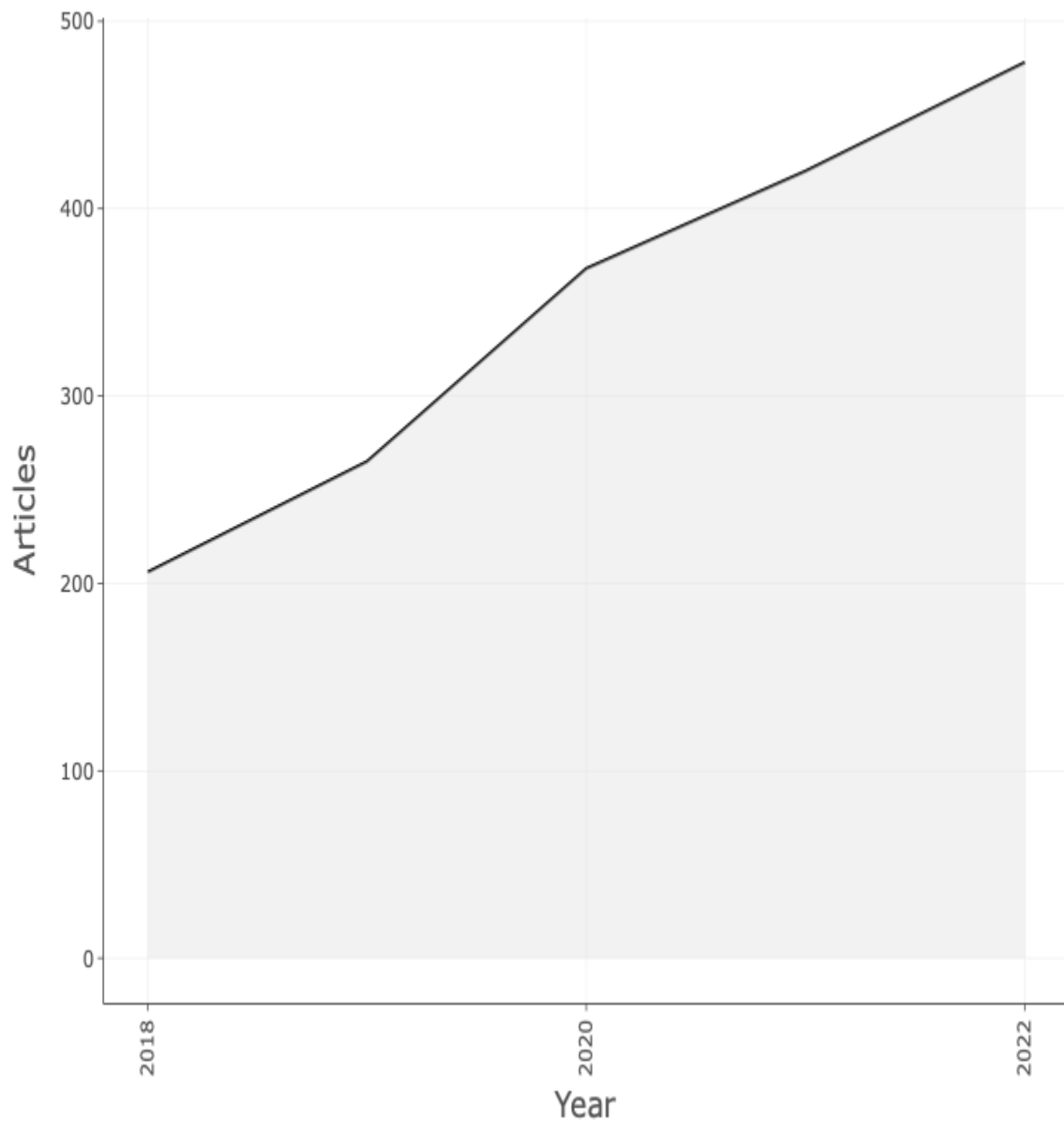
Figure 2. Annual scientific production (Total published articles from 2018–2022)

Table 5. Annual scientific production

Year	Articles
2018	206
2019	265
2020	368
2021	420
2022	478

Figure 2 and Table 5 illustrate that, from 2018 to 2022, the number of articles will continue to rise. Between 2018 and 2022, 478 publications were published, the most significant amount ever. Most papers were published in 2021 (420), followed by 2020 (368), 2019 (265), and 2018 (206).
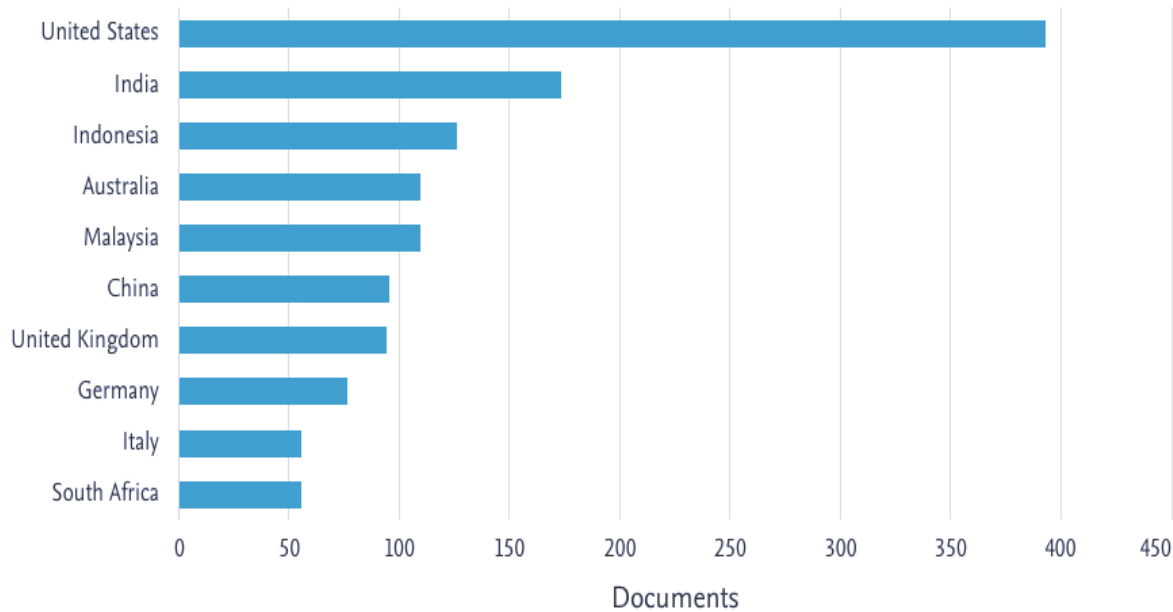

Figure 3. Top 10 highest publications by country.

Table 6. Top 10 highest publication by country

Country	Documents
United States	393
India	173
Indonesia	126
Australia	109
Malaysia	109
China	95
United Kingdom	94
Germany	76
Italy	55
South Africa	55

Following Figures 3 and Table 6, the top ten countries and categories of articles on financial literacy are displayed. In contrast, the United States (393 articles), India (173 articles), and Indonesia (126 articles) publish the most articles in this discipline. Overall, financial literacy is a hotly debated topic in the United States.

3.3 RQ2: What Are the Most Influential Contributors to Financial Literacy

This second research topic focuses on the most influential authors and sources in financial literacy. The sample database includes the most influential authors and articles, as shown in Table 7. There are five notable authors, including Xiao J. J. (2020, 2018), Lusardi A. (2020, 2019), Mitchell O. S. (2020), and Kadayo Y. (2020, 2018). Xiao J. J. has 122 citations, whereas Lusardi A has 116 citations. According to Table 7, two papers have received the most citations. "The Impact of Digital Finance on Household Consumption: Evidence from China" and "Financial Literacy and The Need For Financial Education: Evidence and Implications" have 122 and 116 citations, respectively.

Table 7. The most influential authors

Author's Name	Title	Journal	Tc	Tcpy	Py
Xiao JJ	The Impact of Digital Finance on Household Consumption: Evidence from China	Economic Modelling	122	40.667	2020
Lusardi A	Financial Literacy and The Need for Financial Education: Evidence and Implications	Swiss Journal of Economics and Statistics	116	29	2019
Lusardi A	Financial Literacy and Financial Resilience: Evidence from Around the World	Financial Management	64	21.333	2020
Xiao JJ	Propensity to Plan, Financial Capability, and Financial Satisfaction	International Journal of Consumer Studies	50	10	2018
Mitchell OS	How Financial Literacy and Impatience Shape Retirement Wealth and Investment Behaviors	Journal of Pension Economics and Finance	42	14	2020
Kadoya Y	What Determines Financial Literacy in Japan	Journal of Pension Economics and Finance	33	11	2020
Kadoya Y	Can Financial Literacy Reduce Anxiety About Life in Old Age?	Journal of Risk Research	30	6	2018
Kadoya Y	Financial Literacy and Anxiety About Life in Old Age: Evidence from the USA	Review of Economics of The Household	28	5.6	2018

Note. TC = total citations; PY = publication year; TCpY = total citation per year.

Table 8 revealed that the sample database contained the most influential journals. In general, business and economics have dominated financial literacy publications. With 22 papers, a 12 h-index, and 329 citations, the International Journal of Consumer Studies has the most publications. International Journal of Bank Marketing has 29 publications, 317 citations and an 11 h index.

Table 8. The most influential source

No.	Journal	PY	TC	NP	*h index*	*g index*	*m index*
1	International Journal of Consumer Studies	2018	329	22	12	17	2.4
2	International Journal of Bank Marketing	2018	317	30	11	16	2.2
3	Journal of Consumer Affairs	2019	283	29	11	15	2.75
4	Journal of Behavioral and Experimental Finance	2018	148	24	8	11	1.6
5	Journal of Family and Economic Issues	2018	207	21	8	14	1.6
6	Journal of Financial Counseling and Planning	2018	180	35	8	11	1.6
7	Sustainability (Switzerland)	2018	267	43	8	14	1.6
8	European Journal of Finance	2019	100	9	6	9	1.5
9	Finance Research Letters	2018	151	17	6	12	1.2
10	Journal of Pension Economics and Finance	2018	143	17	6	11	1.2

Note. PY = publication year; TC = total citations; NP = number of publications; h = h-index; m = m index; and g = g-index.

4. Conclusion and Recommendation

Financial literacy is the understanding and use of a variety of financial abilities. These may involve budgeting, knowing how credit works, and retirement savings. In addition, financial literacy components include understanding various financial instruments, such as stocks, bonds, and ETFs, and developing an investment strategy. Financial illiteracy may result in substantial debt and bad financial choices. Consequently, evaluating author and source influence enables us to identify the most influential writers and sources in financial literacy. Numerous studies have been completed over the last several decades, but continuing research must be conducted so that the contribution to the advancement of knowledge continues to expand. In addition, a comprehensive literature review with several relevant references will boost the likelihood that a scientific paper will be published in a prestigious scientific journal.

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