NAVIGATING THE RUPEES: A BIBLIOMETRIC AND NETWORK ANALYSIS OF INDIA'S FINANCIAL LITERACY SCENARIO

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The foundational component of RBI's developmental function is financial literacy. Despite the abundance of programmes, financial education remains mostly unexplored. The purpose of this study is to investigate the topic's conceptual framework and offer a comprehensive understanding of financial literacy in India. The scholarly literature on financial literacy in the Indian context is the main focus, and trends, key writers, theme clusters, and the most pertinent and often cited works and authors are identified. With the use of R software, a comprehensive bibliometric study is carried out on 414 Scopus indexed publications, encompassing keyword network analysis and citation analysis through the use of VOS viewer.
KEYWORDS: *Financial literacy, Bibliometric analysis, R Software, VOS viewer*

INTRODUCTION

As per the latest financial literacy and inclusion survey conducted by NCFE (National Centre for Financial Education) in 2019 just 27% of the Indian population is financially literate, signifying that only one in five Indians is capable of handling one of the most vital facets of human well-being. As concerned to financial literacy financial behavior and financial attitude are just important as financial knowledge. So majority of the studies are mainly concentrating on financial attitude, financial behavior and financial knowledge (Rai et.al. 2019, Dogra et.al. 2021, Singh et.al. 2020, Agarwalla et.al. 2015). Financial literacy is the awareness, understanding, skill, attitude, and behaviour required to make wise financial decisions and attain personal financial well-being. NCFE has been implementing various programs for a financially aware and empowered India, like Money Smart School Program (MSSP), Financial Education Training Programme (FETP), Financial Awareness and Consumer Training (FACT) and Financial Education Program for Adult (FEPA). Financial literacy must be promoted to empower people, improve their financial capacities and promote a stronger and more resilient economy. From an early age, parents' ought to have money conversations with their children for understanding the children the need for financial well-being (Utkarsh et.al. 2020).

Alan Greenspan, former chairman of US Federal Reserve, once said that "the number one problem in today's generation and economy is the lack of financial literacy". Being a country like India it is imperative for achieving full-fledged financial inclusion for a better tomorrow. So many scholarly articles are there concerning the concept of financial literacy. Socio- economic scenario of the people will definitely have influence on their financial literacy level. Majority of the Indian studies are incorporated various socio-economic factors like age, gender, occupation, educational qualification (Kandari et.al. 2021, Jayanthi & Rau 2017, Banerjee & Roy 2020, Dogra et.al. 2021, Bharucha 2017, Jayanthi & Rau 2018).

As we are on the right path to achieve these in coming days it is necessary to have a deep knowledge about the existing literatures available on this area. The literature on the state of financial literacy in India offers a comprehensive analysis of the prospects,

challenges, and changing dynamics. Researchers have investigated multiple facets of financial literacy, encompassing its theoretical foundations and the effects of literacy initiatives on the welfare of individuals and the community. That would help us to lift the veil about the unexplored area and will lead to extensive studies in those areas. This study aims to get a deep insight about the intellectual structure of the financial literacy in Indian context. We traverse the rupees not just in terms of money but also in terms of the abundance of information about financial literacy in the Indian setting.

METHODOLOGY

A bibliometric approach is used to review the studies related to financial literacy in India. Utilising a quantitative approach, bibliometrics assess academic publications, citations, and other bibliographic data to uncover patterns, trends, and the impact of scholarly work in a certain field of study. This method is commonly used in scientific and academic research to assess the impact of publications, identify key authors or journals, and analyse the overall structure of a research domain. The major data bases like Scopus, Web of Science, etc. are making use of these type of analysis. The studies based on Indian financial literacy in the Scopus database is in the period of 1977-2024. The bibliometric analysis further looks at numerous study methodology concerns, author evaluations of various themes and subject matter, citations to one's own work, and the value of other academic works. Specific topic-wise bibliometric analysis is very useful for the further investigation and also for in-depth analysis of the existing scenario. In relation to the systematic literature reviews this bibliometric analysis is able to produce co-occurrence, co-authorship and network analysis and to present the outcome in an easy understood manner. the objective of the study is to find the conceptual structure of the scholarly articles produced in Scopus database in relation to the concept of financial literacy. The Scopus database is selected because of its comprehensive coverage of extensive literatures and also due to its global perspective of studies along with robust citation analysis features.

The study covers articles in Scopus from 1977 to 2044 related to the topic 'financial literacy in India'. The search key word is 'financial literacy' and 'India'. 414 documents were obtained as result of this search. The study covers most productive authors, journals, and publications in the subject of women's financial literacy research are identified, as well as the publishing and citation trends. It also includes key word co-occurrence analysis to identify the intellectual structure of the financial literacy concept in India. The study is conducted with R Software and VOS viewer software. The study results were in the form of tables, figures and text based on the input given into the R Software and VOS viewer software. The study work flow chart is shown below.
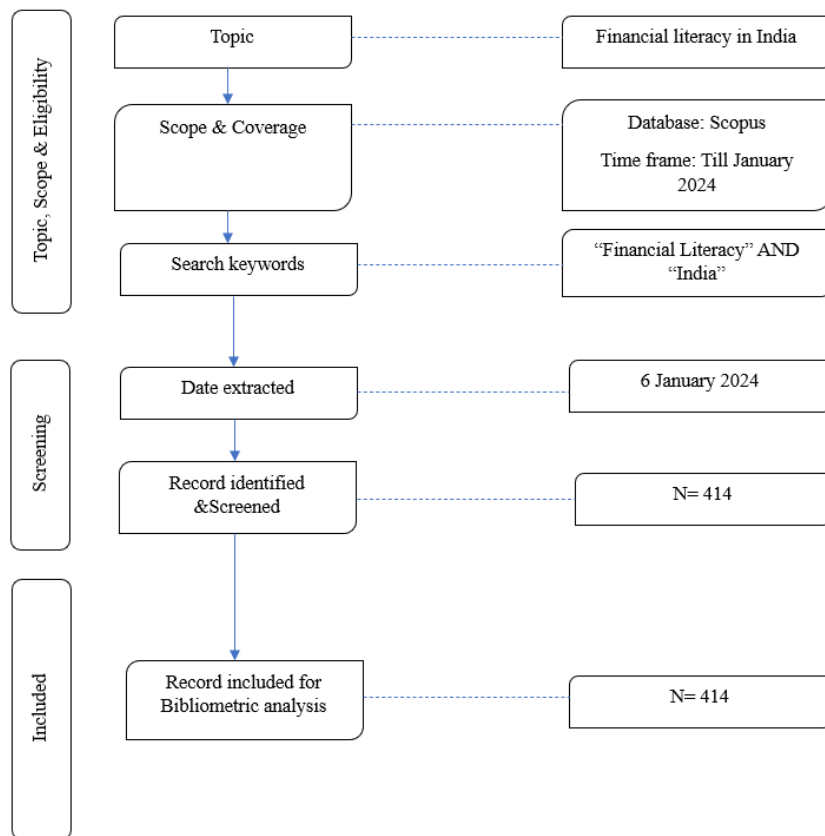
Figure 1 Study work flowchart

ANALYSIS AND FINDINGS

Studies related to Indian Financial literacy is began from 1977, up to 6 January 2024 we have 414 documents obtained from 285 sources including books, journals, etc. Document types include article, book, book chapter, conference paper, conference review, erratum, letter, note and review. There are altogether 1072 authors keywords from 954 authors. Among these single authored documents is just 66 and their collaboration index is 2.64.

Overview

MAIN INFORMATION ABOUT DATA

Timespan	1977:2024
Sources (journals, books, etc)	285
Documents	414
Average years from publication	6.07
Average citations per documents	10.04
Average citations per year per doc	1.343
References	1
Document types	
Article	338
Book	2
Book chapter	25
Conference paper	30
Conference review	4
Erratum	1
Letter	1
Note	1
Review	12
Document contents	
Keywords plus (id)	0
Author's keywords (de)	1072
Authors	
Authors	954
Author appearances	1128
Authors of single-authored documents	66
Authors of multi-authored documents	888
Authors collaboration	
Single-authored documents	68
Documents per author	0.434
Authors per document	2.3
Co-authors per documents	2.72
Collaboration index	2.64

Table 1 Main information about the data

It is clear from the data that there was a tremendous change in the number of studies after 2014. Until then the studies were in single number but in 2015 (15 documents) it is doubled as compared to 2014 (7 documents) and it is shown in Figure 2.
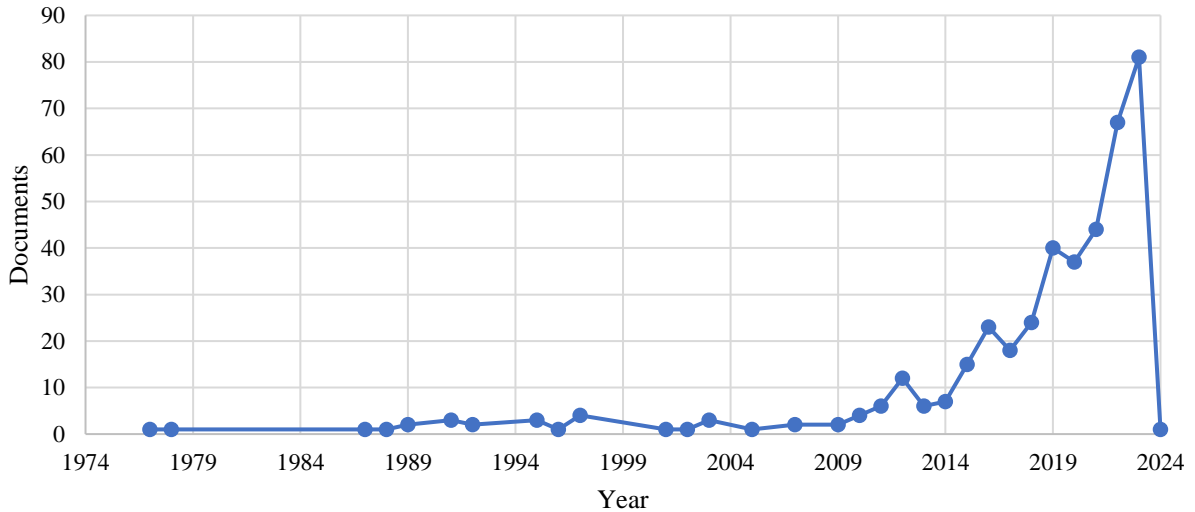
Figure 2 Documents by Year

The annual scientific production is shown in the Figure 3. The average citation per year is higher in the year of 2011 with 7.5. The average citation per year per document is 1.343.
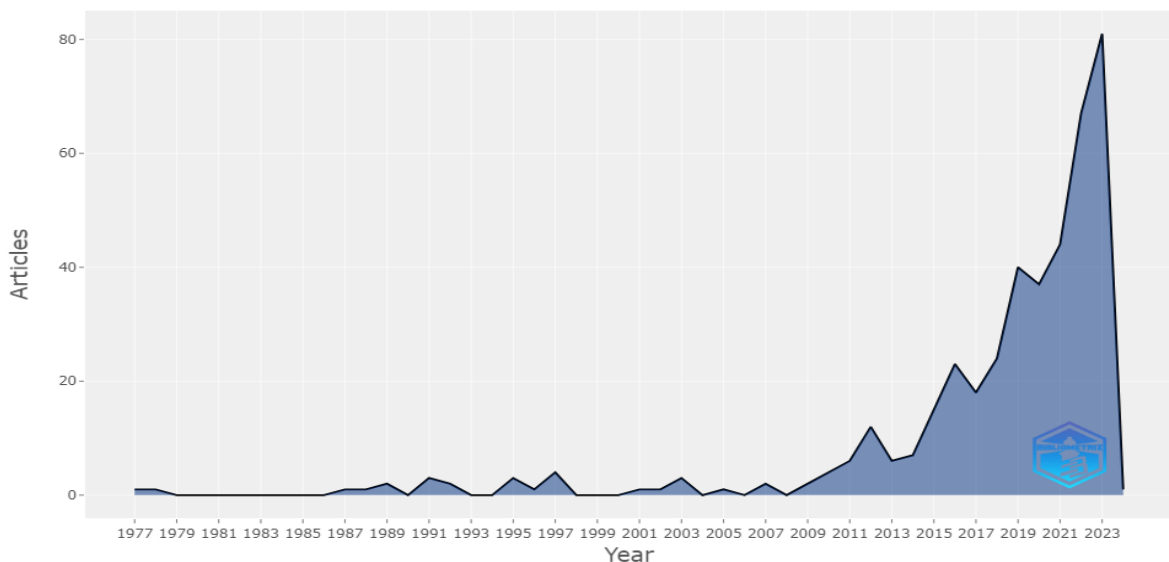
Figure 3 Annual Scientific Production

Most Relevant Sources

The most relevant source of the study is Indian Journal of Finance (14 documents were published in this journal). Then 9 documents were published in both International Journal of Social Economics and Managerial Finance. Economic and Political weekly comes next with 8 documents followed by Finance India with 7 documents. It is depicted in Figure 4
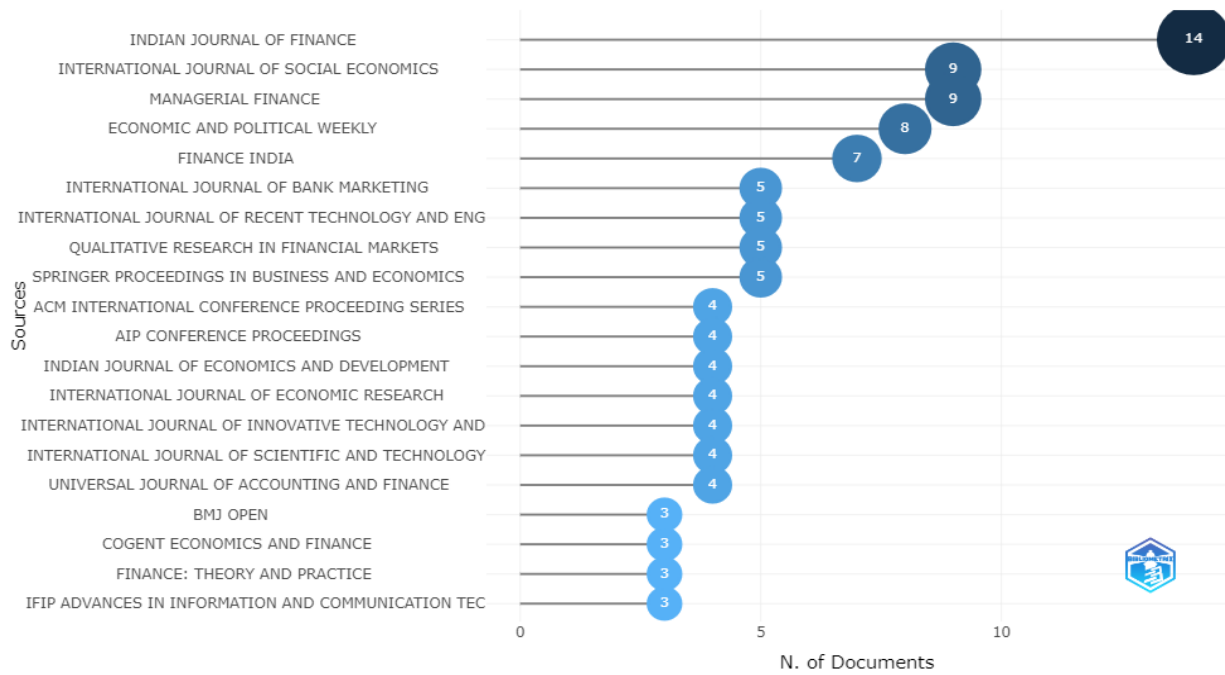
Figure 4 Most Relevant Sources

Indian Journal of Finance and Managerial Finance have high source local impact by H index of 5. The source growth was rapidly increased by the year of 2015.

Most Contributing Authors

The major 10 authors related to Indian financial literacy is shown in Table 2. Rastogi S is the most relevant author with 7 documents. Then comes Gupta S by 6 documents. 5 documents were contributed by three authors namely Kandpal V, Maji SK and Sharma A.

| AUTHORS	ARTICLES	ARTICLES FRACTIONALIZED
RASTOGI S	7	2.25
Gupta S	6	1.77
Kandpal V	5	3.17
Maji Sk	5	2.50
Sharma A	5	1.78
Das S	4	2.00
Kumar J	4	1.42
Sharma M	4	1.16
Sharma S	4	1.67
Singh A	4	1.87

Table 2 Most relevant Authors

Rastogi S is published studies from 2018 having highest H index of 5 but Gupta S is the pioneer and he is published from 1978 and from 2019 onwards regularly published studies in relation to this. He is the most consistent author in the area of financial literacy in Indian context. Sharma A and Kumar J were started to publish from 2014 but Maji SK were published whole his 5 documents in 2023. While analysing authors production over time it is evident that majority authors are came in to the scenario after 2014.

Most Globally Cited Documents

The most globally cited document is Cole S, 2011, Journal of Finance with 263 citations. Following this Medhi I, 2011, ACM Transactions on computer-human interaction has 206 citations. It is shown in Figure 5
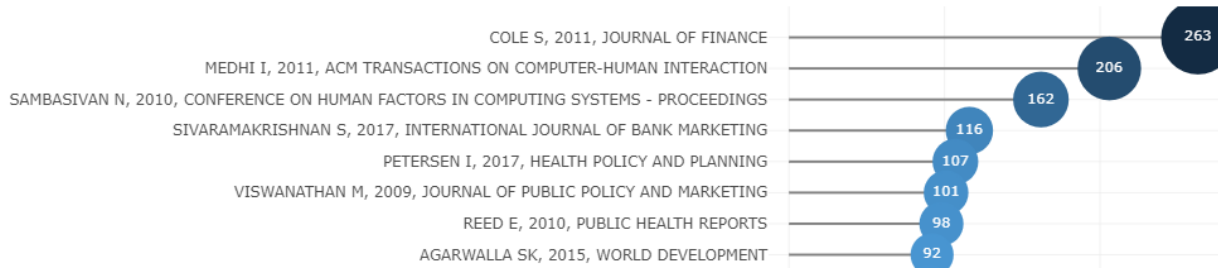
Figure 5 Most global cited documents

Trending Terms

Most recent trend topic in relation to financial literacy is fintech. This term frequency is 10 in 2023. Risk tolerance is the subsequent one with frequency of 5. Financial inclusion is the most studied concept in relation to financial literacy and that was in 2021. In 2022 PMJDY and Covid 19 are the trend topics in the financial literacy aspect. It is known that the major components of financial literacy are financial knowledge, financial attitude and financial behavior.

Besides these components financial inclusion, financial education and economic development are the important concepts studied with financial literacy.

Using VOSviewer keyword co-occurrence analysis is done by creating network maps. The minimum number of keywords are set to be 5 and out of 1072 keywords the documents satisfying the threshold limit are 25.
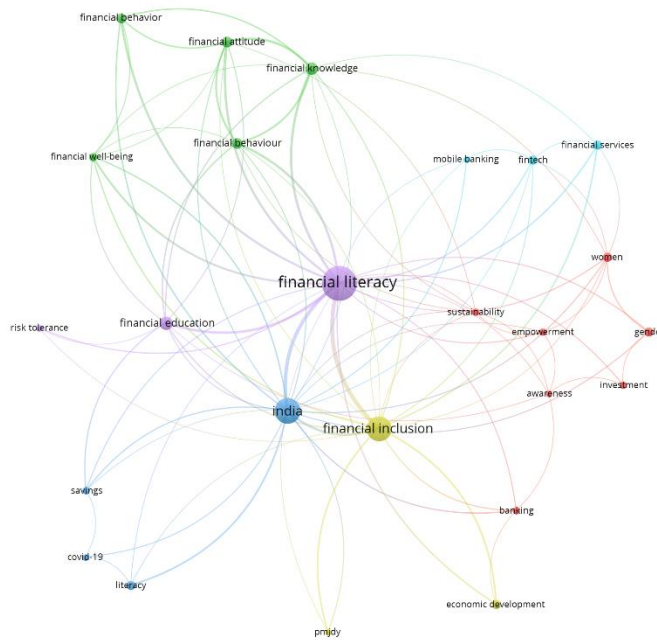
Figure 6 Network visualisation

By analysing the keyword co-occurrence, we have obtained 6 clusters of 25 items. The largest cluster with 7 items is comprised of awareness, banking, empowerment, gender, investment, sustainability and women (shown in red colour in Figure 6). The smallest cluster is comprised of financial services, fintech and mobile banking. As it is pertaining to the new age of digitalisation it should be explored further for spreading the concept base of financial literacy.

CONCLUSION

In the present study, we made an effort to thoroughly examine and assess the literature on financial literacy in Indian context. The bibliometric analysis reveals the most prominent authors, most cited works, annual scientific production and most relevant sources. It is observed that Rastogi S (with 7 works) and Gupta S (with 6 works) are the most eminent authors in this area. Indian Journal of Finance is the most relevant source with 14 documents followed by International Journal of Social Economics and Managerial Finance (both with 9 documents each). Further, keyword co-occurrence analysis revealed six clusters and it depicts the frequent interaction between the keywords used. From this we can identify the trending topics, here it is fintech followed by risk tolerance. The largest

cluster in red includes awareness, banking, empowerment, gender, investment, sustainability and women. It specifies the essentiality of financial literacy awareness and also its influence in banking and investment activities. It also includes special concern on gender particularly on women. The second largest cluster (represented in green) deals with the components of financial literacy namely financial attitude, financial knowledge and financial behavior and it also includes financial well-being. It clearly depicts the relationship between financial literacy components and its ultimate financial well-being. Third cluster (represented in blue) includes items like covid-19, India, literacy and savings which is most generally related recent topics with financial literacy. The fourth cluster (represented in yellow) deals with the final expected outcome of financial literacy and it includes items like economic development, financial inclusion and PMJDY. Fifth cluster (represented in purple) includes financial education, financial literacy and risk tolerance. Sixth cluster (represented in light blue) includes terms in service oriented like financial services, fintech and mobile banking. It highlights the importance of financial literacy in this technology driven era. Various studies in this area covered almost all-important factors related to financial literacy and a country like India we should have focus on these to achieve ultimate financial well-being. It is evident from the literature analysis that it is not only concerned with just literacy but also contribute to the economic development and financial inclusion. Further studies may be conducted by researchers about the influence of fintech on financial literacy and on mobile banking or financial services.

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