
A Bibliometric Analysis of Financial Inclusion in India

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Abstract

The objective of this study is to conduct a bibliometric analysis of FI using R-Studio and VOSviewer. The researcher searched for relevant material in the Lens database using the phrases "financial inclusion" and "economic empowerment." The search produced 237 articles published in India between 2020 and 2024. The author evaluated a total of 237 articles, categorizing them by source, author, year, and keyword cluster. There was a significant increase in research after 2016. This upward trend remained consistent from 2020 to 2023. The "Journal of Social and Economic Development" and "SSRN Electronic Journal" hold widespread recognition as the most esteemed publications in this field. The publications authored by Mathew, J.L., and Mishra, S. have had a significant influence. This study demonstrated the utility of bibliometric analysis, particularly in the context of impact factor. The rationale for this research is to attain an enhanced understanding of the application of the inclusive paradigm in the field of financial inclusion and to assess the current state of research on the concept of financial inclusion.

Key Words: Financial Inclusion, Bibliometric, Biblioshiny, VOSviewer

Introduction

The term "economic empowerment" (EE) refers to a process that has the potential to influence an economy's growth in a way that improves people's financial situation. People feel more empowered, and the entire community gains more stability when they have more financial control over their lives. Some of the strategies used to achieve this objective include providing financial services, encouraging entrepreneurial endeavors, and improving skills for income generation. The National Rural Livelihood Mission (NRLM) of the Indian government has successfully generated employment equity by providing the necessary skill set and opportunities to create capital. These inevitably contribute to positive changes of eradicating poverty and enhancing sustainable development in the country (Ministry of Rural Development 2020). Approved financial goods and services are considered in determining a country's economic growth level. Christine (2014) observed that, through implementation of the FI model, remarkable growth and development of a country can be achieved in a way that is more inclusive. Thus, it is the way of providing socially marginalized segments of population with a wide range of financial products and services at an affordable price (Leeladhar, 2005; Ababio et al., 2020). The outreach is one of the tasks of financial inclusion that aims to improve the access to banking and other financial services. It deals with the activities undertaken by the banking institutions to extend the network and capture new customers (Chakravarty & Pal, 2013). Financial institutions offer almost all classifications of financial products and services. These institutions focus on strengthening the economy of the people with the aim of eradicating poverty level and improving the quality of living. Lal (2017) points out that FI is widely recognized as a valuable service, which can boost the economy, fight poverty and tackle the problem of income distribution. It is a never-ending process that makes it certain that every person within each society, starting with the needy and marginalized ones, receives equal chances of engaging in the financial sectors. This encompasses finding and providing deposits and withdrawals, savings, credit, and insurance, but in a more formal manner (Huang et al., 2020; Panakaje et al., 2023). Al-Naqira et al. (2019) have pointed out that FI plays a critical role in the course of the accomplishment of financial sustainability and economic development goals. Rewilak (2017) has reported an actual increase in the

volume of FI in the poor countries and the FI may have positive impacts on poverty alleviation and economic development. In addition, one of the remarkable measures to combat FI is a cost-effective model of delivering financial service options to the target audience that can hardly address to conventional credit institutions. It means that socially excluded people can now access the basic needs because of the new formulated banking system (Ozili, 2018).

Helping the economically disadvantaged get access to financial and non-financial resources is essential to the EE strategy. This programme makes sure that persons with low incomes may get the help they need to join the financial mainstream and start contributing to the economy. By providing individuals with the resources to create their own economic opportunities, FI may be a powerful instrument for inclusive and strong development (Kim et al., 2018; Nizam et al., 2020; Pal et al., 2022). Governments place top priority to FI as the ultimate goal of development strategies. It is a separate component of the development agenda that is intended to encourage more people to use the government-provided financial services and products. Every individual in any economic paradigm need a way to generate revenue. FI gives people a bigger role in the economy by increasing the number of people who can invest their money in financial assets (Bruhn & Love, 2014). The purpose is to let unbanked population to be included into the path of the country's evolution by becoming formally financially included. This innovation may assist the poor individuals with how they handle resources, gain access to opportunities as well as enhancing their daily lives (Bongomin et al., 2018; Singh et al., 2021; Ogbari et al., 2024). Zins and Weill (2016) pointed out, FI entails having an account with a bank or other such institution that allows one to save, borrow, enter into insurance, and/or payment services. It is found that improvements in access to financial services result in better efficiency as well as reduces the reliance on non sustainable informal sources of credit services (Sarma and Pais 2011; Venkatesa et al., 2024). As stated by Claessens et al. (2000), the formation of the financial institutions and the availability of the financing options are essential for elimination of poverty, for balancing the growth between the urban and rural areas and for stimulating the economic growth in the rural areas. Mahjabeen (2008) noted that many people see an immediate rise in income in areas where there are significant advancements in financial growth. According to Bhat and Mohan (2020), FI is an essential development instrument that governments and NGOs utilize to provide assistance to the world's poorest families.

In a rising nation like India, a vital financial system is therefore necessary for society's development. This is because an economy cannot function without its financial system. The advancement of civilization will be utterly impossible without this crucial component. In the future, it is crucial to prioritize the expansion of the financial sector and the financial well-being of every citizen in the nation. Accordingly, the goal of India's financial institutions is to prove that all citizens have equal access to all of the country's financial goods. In recent years, more and more people have come to see how important it is to establish rules and regulations for banks and other financial organizations. As such, there has been a shift in emphasis towards financial policies that are inclusive. The goal of reducing poverty and rising family income has led to the implementation of several policies. As a result, a multitude of scholarly works delve deeply into the topic of Financial Inclusion (FI) and its impact on Economic Empowerment (EE). Although there is an increasing amount of academic literature on the subject, there is still a lack of bibliometric analysis in this area. Furthermore, there is a dearth of FI and EE bibliometric analyses that make use of the Lens database. The researcher made an effort to use the Lens database for a bibliometric study of FI and its impact on EE in India.

The research provides its results in a systematic manner. The first part provides an introduction to the study, which is then followed by methodology and then a summary of findings with subsequent discussion of their implications. The study concludes by addressing the limitations and drawing conclusions.

Material and Methods

The research used R-Studio and VOSviewer to do bibliometric analysis. This method is powerful for sifting through mountains of unsystematic material in search of insights and a bird's-eye perspective of the scientific literature on any particular topic. This technique is of immense significance to the way modern academics evaluate and analyze a variety of difficulties in the research (Sigala and et al., 2021; Rashid Mohammad Firoz Ahmad, 2023). The intention of this logical method is to identify patterns and correlations in scholarly writings. According to Oladinrin et al. (2023), VOSviewer enables a more thorough examination of the topic by concentrating on aspects like influential contributors, potentially game-changing ideas, and globally significant concepts. The author has searched the lens database for articles that mention 'FI' and 'EE' either in the title or abstract. Additionally, this analysis only includes publications published in India between 2020 and 2024. The researcher

narrowed the pool of publications to 237 after carefully considering all applicable exclusion criteria.

Results

The researcher examined the bibliometric data gathered from the Lens database year-wise, source-wise, author-wise, publication-wise, trend-wise, and cluster-wise. It is conducted to identify research patterns within the field of FI.

Descriptive Analysis

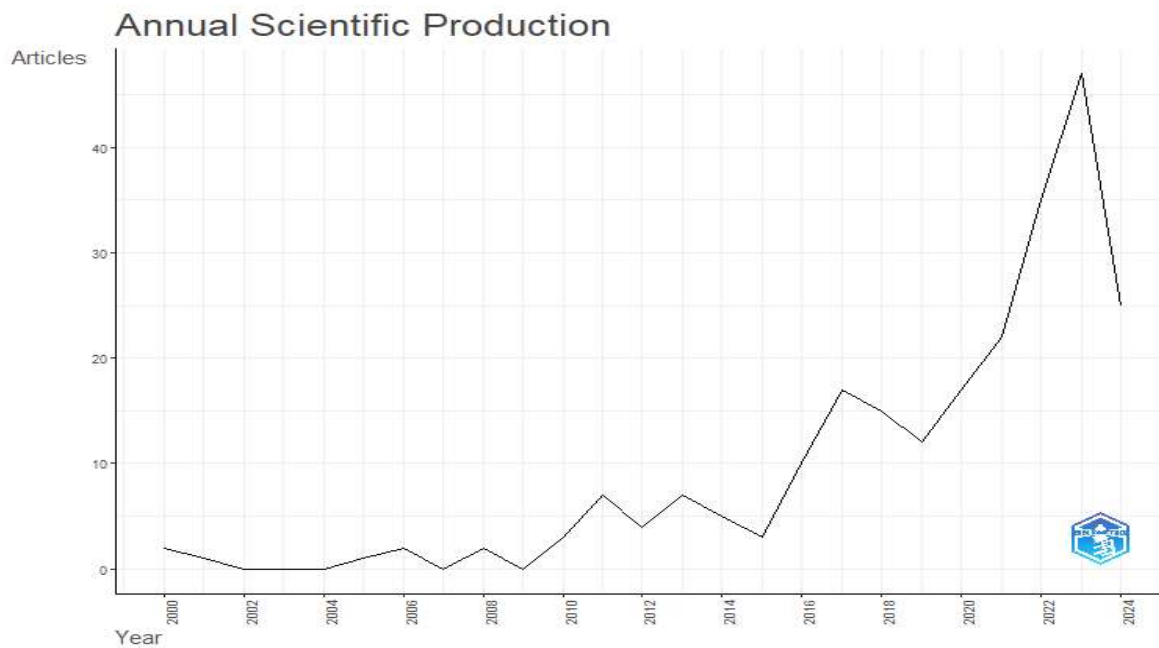
Table-1: Main information

Description	Results
Time span	2000:2024
Sources (Journals, Books, etc)	148
Documents	237
Annual Growth Rate %	11.1
Document Average Age	4.61
Average citations per doc	11.3
References	7580
AUTHORS	
Authors	829
Authors of single-authored docs	55
AUTHORS COLLABORATION	
Single-authored docs	59
Co-Authors per Doc	4.03
International co-authorships%	0
DOCUMENT TYPES	
Book chapter	8
Conference proceedings article	1
Journal article	217
Journal issue	2
other	7
Preprint	1
Report	1

Source: Biblioshiny report

Table 1 presents an overview of the main results from the Lens database for 237 publications published in India between 2000 and 2024. 148 journals and books published these articles, exhibiting an annual growth rate of 11.1% and citations per document of 11.3. A total of 824 authors have contributed to these journals, and only 59 of them have been single authors. It is clear from the figure that there were fewer published documents during the period 2000–2015, but they started increasing in 2016. It is also clear from Fig. 1 that the number of articles has increased considerably during 2023. The year 2023 recorded the highest number of publications at 47, while 2022 saw 22 publications.

Fig-1: Annual scientific production



Publication and citation trend

A total of 237 documents have received 26478 citations, averaging 133.9 citations annually (Table 2, Fig. 2). 2010 recorded the highest number of citations (642), followed by 2021 with 266 citations and 2011 with 267 citations. Average citations reached their maximum (214.33) in 2010.

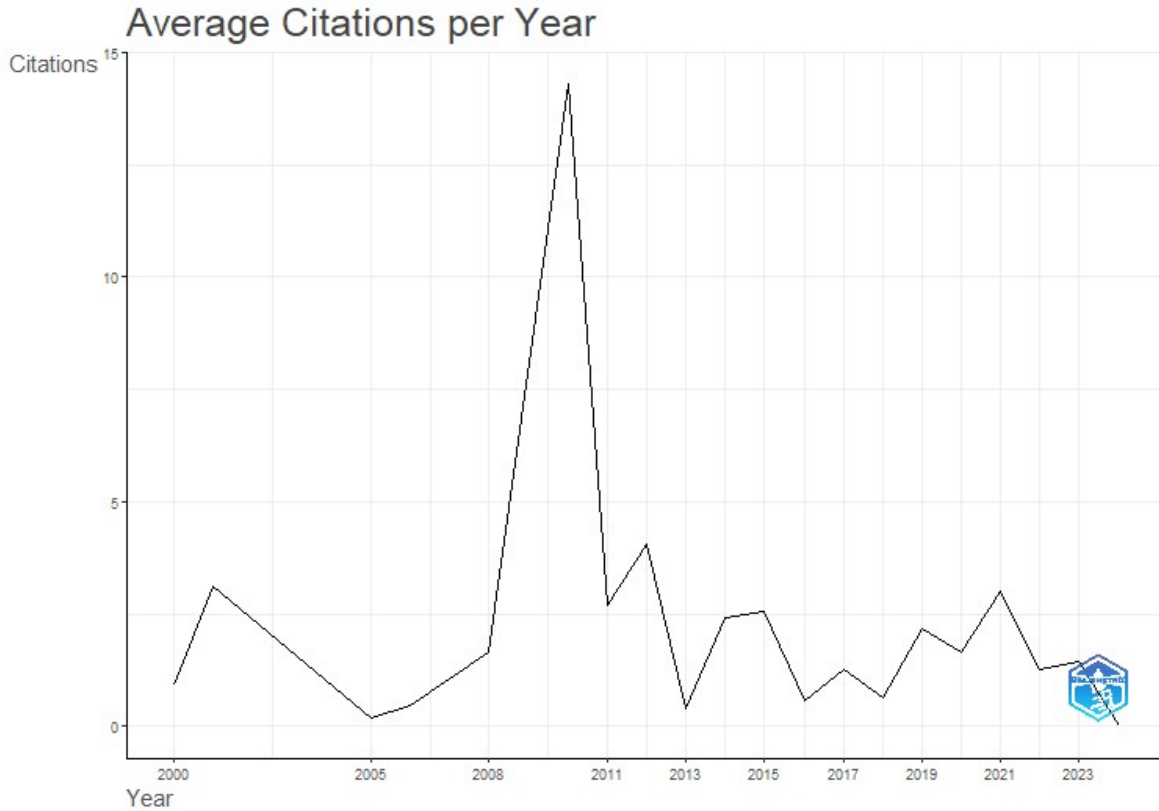
Table-2: Citations trend

Year	Total Citations (TC)	Mean TC per Article	N	Mean TC per Year	Citable Years
2000	46	23	2	0.92	25
2001	75	75	1	3.12	24
2005	4	4	1	0.2	20
2006	18	9	2	0.47	19
2008	56	28	2	1.65	17
2010	642	214.33	3	14.29	15
2011	264	37.71	7	2.69	14
2012	211	52.75	4	4.06	13
2013	32	4.57	7	0.38	12
2014	133	26.6	5	2.42	11
2015	77	25.67	3	2.57	10
2016	51	5.1	10	0.57	9
2017	172	10.12	17	1.26	8
2018	67	4.47	15	0.64	7
2019	157	13.08	12	2.18	6
2020	141	8.29	17	1.66	5
2021	266	12.09	22	3.02	4
2022	131	3.74	35	1.25	3

2023	135	2.87	47	1.44	2
2024	0	0	25	0	1

Source: Biblioshiny report

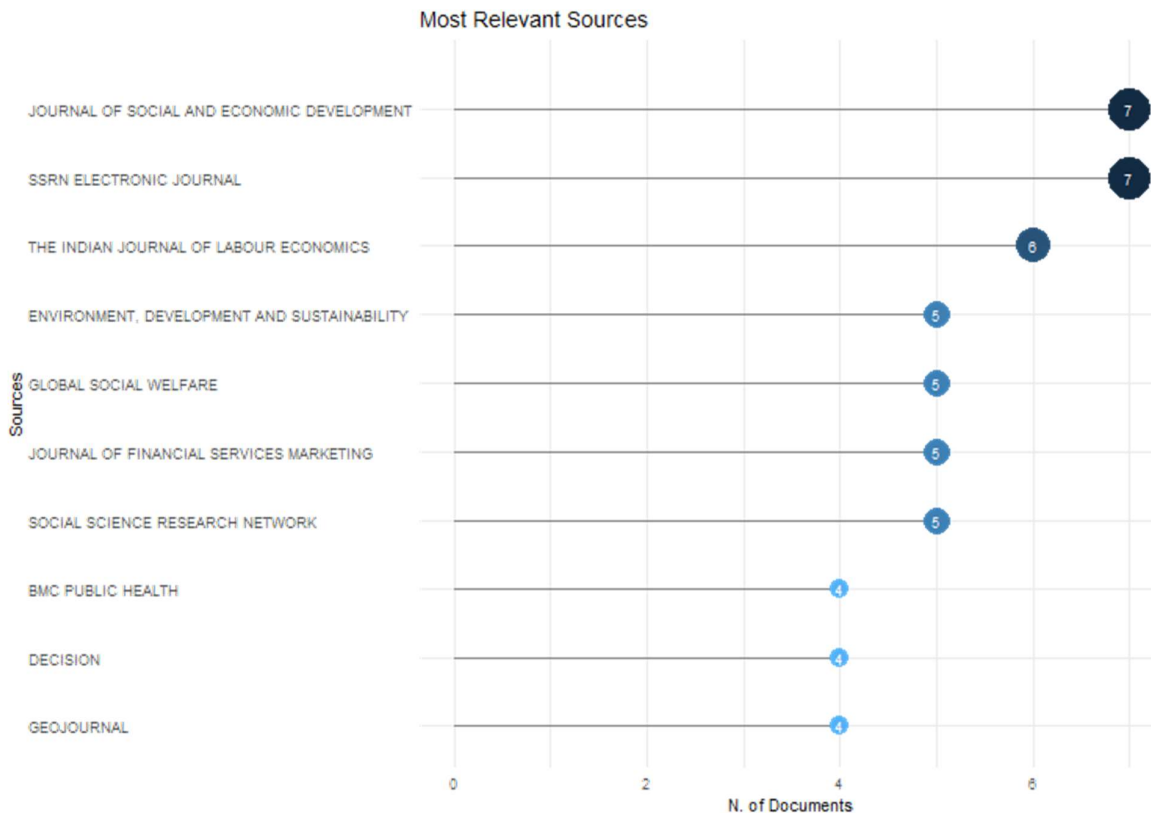
Fig. No.-2: Citation trend



Relevant source

Figure 3 below lists the top ten most relevant journals that have published a large number of documents. The two most popular journals, 'JOURNAL OF SOCIAL AND ECONOMIC DEVELOPMENT' and 'SSRN ELECTRONIC JOURNAL', have published seven articles each. 'THE INDIAN JOURNAL OF LABOUR ECONOMICS' secured the second position with six published documents, while the journals 'ENVIRONMENT, DEVELOPMENT, AND SUSTAINABILITY', 'GLOBAL SOCIAL WELFARE', 'JOURNAL OF FINANCIAL SERVICES MARKETING', and 'SOCIAL SCIENCE RESEARCH NETWORK' ranked third with five publications (NP).

Fig. No-3: Most relevant source



Source Impact

Van Eck and Waltman (2008) describe the h-index function as a tool that computes other related metrics, like the g-index and m-index, for authors within a bibliographic collection. Out of 94 sources, 'THE INDIAN JOURNAL OF LABOUR ECONOMICS' stands out with an h-index of 4, a g-index of 5, 6 publications, and a total of 33 citations. The journals 'BMC PUBLIC HEALTH', 'DECISION', 'INDIAN JOURNAL OF PAEDIATRICS', 'JOURNAL OF SOCIAL AND ECONOMIC DEVELOPMENT', and 'THE INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY' follow with an h-index of 3. 'JOURNAL OF SOCIAL AND ECONOMIC DEVELOPMENT' records the maximum g-index of 6.

Table-3: Top 10 Sources

Source	h_index	g_index	m_index	TC	NP	Year
THE INDIAN JOURNAL OF LABOUR ECONOMICS	4	5	0.44	33	6	2016
BMC PUBLIC HEALTH	3	4	0.75	61	4	2021
DECISION	3	4	0.5	41	4	2019
INDIAN JOURNAL OF PEDIATRICS	3	4	0.2	35	4	2010
JOURNAL OF SOCIAL AND ECONOMIC DEVELOPMENT	3	6	0.33	48	7	2016
THE INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY	3	3	0.214	231	3	2011
BMC INTERNATIONAL HEALTH AND HUMAN RIGHTS	2	2	0.143	17	2	2011
ENVIRONMENT, DEVELOPMENT	2	5	0.25	36	5	2017

AND SUSTAINABILITY						
GEOJOURNAL	2	2	0.66	6	4	2022
HUMANITIES AND SOCIAL SCIENCES COMMUNICATIONS	2	3	1	11	4	2023

Source: Biblioshiny report

Relevant Authors

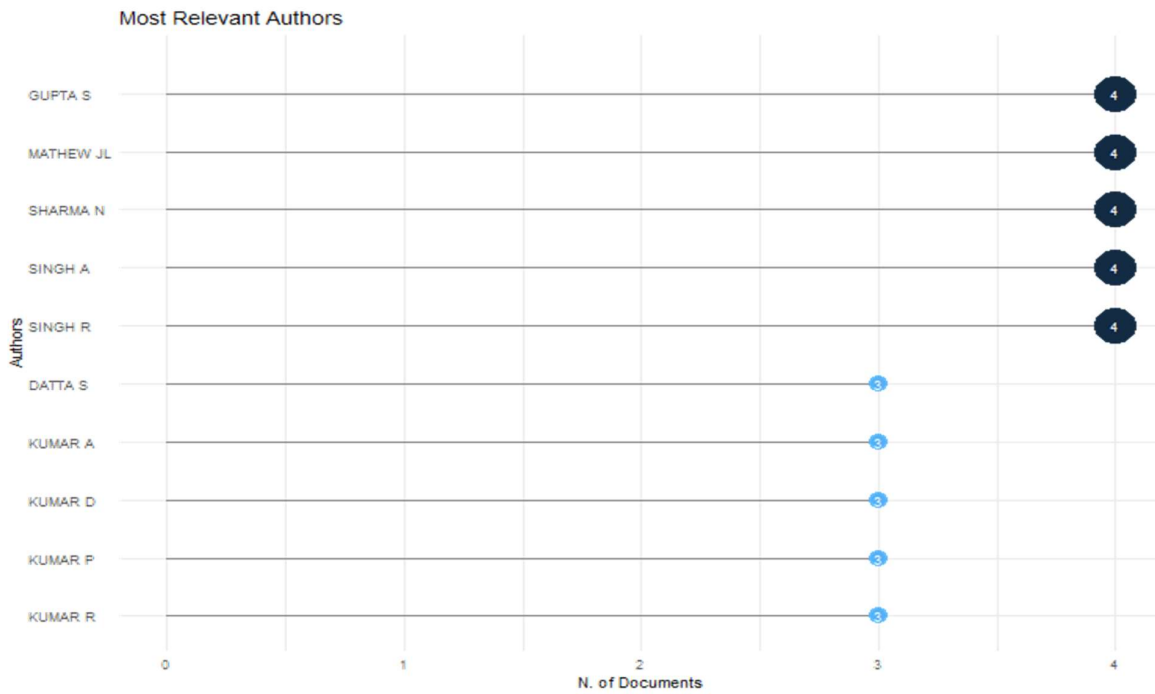
A total of 829 authors have contributed different articles and research papers in this field. Table 4 displays the list of the top 10 authors. Amongst all the authors, GUPTA, S., MATHEW, J.L., SHARMA, N., SINGH, A., and SINGH, R. have contributed the highest number of articles (4) each (Fig. 4). However, MATHEW J. L. holds the highest number of citations (215), followed by SHARMA N. with 80 citations, and Gupta S. with 44 citations. The h_index is also highest (4) for GUPTA, S., followed by SHARMA, N, with an h-index of 3. Similarly, the authors SINGH, R., KUMAR, P., KUMAR, D., and KUMAR, S. have published three papers each, and KUMAR, P., is the most cited author.

Table-4: Top 10 Authors

Author	h_index	g_index	m_index	TC	NP
SINGH A	4	4	0.57	27	4
SHARMA N	3	4	0.2	80	4
GUPTA S	2	4	0.33	44	4
MATHEW JL	2	4	0.14	215	4
SINGH R	2	4	0.25	24	4
KUMAR P	3	3	0.21	97	3
SINGH P	3	3	0.75	26	3
KUMAR D	2	3	0.13	29	3
KUMAR R	2	3	0.29	90	3
KUMAR S	2	3	0.2	11	3

Source: Biblioshiny report

Fig. No-4 Relevant Author



Analysis of author’s keyword

A total of 84 keywords have occurred 923 times in the selected documents. Out of the keywords, India (7), COVID (2), FI(2), and maternal health (2) appear twice in the data base. (Table 8)

Table-5: Author’s keyword

Words	Occurrences
India	7
Covid-19	2
Financial inclusion	2
Maternal health	2
Action group regions	1
Actors and relationships	1
adolescent girls	1
Ageing	1
Agency	1
Antenatal care	1

Source: Biblioshiny report

impacted future studies significantly. The co-occurrence of the variables enabled the identification of five clusters, linking them a total of 228 times. The word "India" is the most prevalent term, appearing seven times.

Conclusion

India is making substantial strides in solidifying its reputation as a dependable economy on the global stage. The economy has shown significant expansion across several industries. Access to financial facilities and a strong bank branch network significantly facilitate these developmental endeavors. A strong financial system is necessary to propel economic expansion, advancement, and growth. However, a significant portion of the Indian population remains unaware of these developments and unfamiliar with formal banking procedures. This study attempts to provide a foundation for further in-depth investigation on the topic with the goal of filling this gap. By assessing the number of citations, the study identified the major contributions from 2010, and by examining the number of publications, it discovered the most significant contributions from 2023. Journals-"SSRN Electronic Journal" and the "Journal of Social and Economic Development" are vital when it comes to disseminating significant research findings. Publications that have received a large number of citations from writers such as Mathew, J.L., and Mishra, S. have been a key source of encouragement. The keyword analysis clearly indicates that the primary focus of the investigation is "India".

1.1. Limitations and Further Scope of Research

1.1. In spite of the fact that there are certain limitations, the findings of this study certainly provide important information. The dataset only includes information from a limited number of authors, sources, and time periods, making it unrepresentative of the entire scope of research on this subject. When researchers revisit the dataset in the future, they can decide to include new authors and sources in order to get a more comprehensive view. Similarly, researchers could expand the scope of their research to include other databases such as Scopus and the Web of Science. In addition, the substance of the articles that have received the most citations may give insight on the driving subjects and techniques of high-impact research efforts. It is possible that further study will investigate the ways in which open access papers influence citation metrics, as well as the ways in which author and institution collaboration networks influence these metrics.

Managerial Implications

The results of this study provide a fresh perspective on the concept of financial inclusion. The author is conducting this study to enhance his understanding of inclusive financial inclusion and assess the current state of research in this area. We anticipate that the study's findings will positively impact the fields of social science and economic theory. The primary purpose of the study is to provide the framework for future in-depth research on the subject matter, which requires greater attention.

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