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Mapping of Scholarly Research Output and Impact of E-Resources Research in India: A 15 Years of Bibliometrics Analysis (2010-2024)

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Abstract

This study provides a comprehensive bibliometric analysis of research trends on e-resources in India within the field of Library and Information Science (LIS). A total of 536 publications were reviewed indexed in the Scopus database between 2010 and and analyzed using bibliometric tools such as Biblioshiny. The study examined the important metrics like national and international contributions, authorship trends, collaboration, publication growth, institutional productivity, keyword co-occurrence, and citation impact. . The findings reveal that between 2020 and 2021 a significant rise in publications, with 355 and 392 publications, respectively. The United States and Australia emerged as leading collaborators with 13 and 6 respectively, with majority of research outputs from institutions like the University of Delhi (21), Alagappa University (16), and University of Kashmir (15). Journal articles (414) dominated the publication type, while "e-resources (156)," "India (44)," "and "Electronic resources (44)" were among the most frequently used keywords, indicating the thematic priorities of the research community. The study reported that increased in international partnerships over time. Most of publication published in Library Philosophy and Practice. The study identified that Balasubramanian, P. has the highest number of publications (12) among other with highest number of publications.

Keywords: Information Technology, Digital Age, Electronic-Resources, and E-resources, Bibliometrics

Introduction:

The way that information is accessed, shared, and used has changed dramatically in the quickly changing digital age. Electronic resources, also known as e-resources, are essential to this revolution because they offer a flexible and effective way to obtain information. The term "e-resources" refers to a broad category of digital content, such as databases, electronic books, journals, multimedia, and other online resources. E-resources have revolutionized the way people can access information, offering previously unheard-of possibilities for study, instruction, and amusement. The role of electronic resources is expected to grow as technology develops further, influencing how knowledge is acquired and information is disseminated in the future. (Kavithanjali, 2019; Padval, 2022; Wagay & Sehga, 2021). An important advantage of e-resources is their accessibility. Digital content can be accessed virtually anywhere with an internet connection, eliminating regional limitations and promoting international information sharing. E-resources usually include robust search capabilities that enable users to locate specific information within vast repositories in a swift manner. Comparing this to traditional approaches, it saves time and enhances

research capabilities. Many electronic resources include interactive elements such as hyperlinks, multimedia content, and dynamic features. This interactivity enhances user comprehension and engagement while creating a more immersive learning or research experience. E-resources are often less expensive than their print counterparts. Because digital content requires less money for distribution, printing, and physical storage, it is more financially feasible for both individuals and organizations. Compared to traditional print media, e-resource publication cycles are usually faster. (Tella & Sharma, 2014; Thanuskodi, 2012). This timeliness is particularly important in fields where it's critical to stay up to date with the latest information. Depending on their individual preferences, users can frequently customize their e-resource experience. To make the experience more user-centric, this can entail changing the text size, applying annotation tools, or customizing search parameters. By lowering the need for paper and the carbon footprint connected with traditional publishing, the move to electronic resources supports environmental sustainability initiatives. Even though e-resources have many advantages, there are drawbacks as well, including problems with digital literacy, unequal access, and worries about privacy and data security. To ensure a smooth and inclusive transition to digital information ecosystems, organizations and individuals implementing e-resources must responsibly navigate these challenges. (Chandel & Saikia, 2012; Kenchakkanavar, 2014; Swain, 2010). India is a vast country with diverse demographics and geographical spread. E-resources enable easier access to information for researchers, students, professionals, and the general public, bridging the gap between urban and rural areas. E-resources facilitate collaboration and knowledge sharing among researchers not only within India but also globally. This fosters interdisciplinary research and allows Indian researchers to stay updated with the latest developments in their respective fields (Haridasan & Khan, 2009). Investing in research on e-resources drives technological advancement in areas such as digital libraries, data management, search algorithms, and user interfaces, benefiting both the research community and society at large. So, it gives enthusiasm to know about the research trends on e-resources in India.

Research objectives

1. To examine the growth pattern of research output on E-resources over the past 15 years (2010-2024) and identify trends in publications;
2. To determine the distribution of research across different document types, such as articles, book chapters, reviews, and other publication formats.
3. To identify the top authors, organizations, and funding sponsors contributing to e-resources research, highlighting their significant contributions to the field.
4. To explore the geographic distribution of research on E-resources, identifying the leading countries with which Indian scientists make collaborations;
5. To examined the authorship and collaboration pattern in Indian E-resources research

Review of Related Literature

There have been a large number of studies investigatedon bibliometric and scientometric using various thematic and geographic areas (Gupta & Dhawan, 2019; Parabhoi, 2019; Prakashe & Tayade, 2015; Singh & Kumar, 2021) for instances (Singh & Kumar, 2021), reported that the infrastructure supporting research and education standards in academic institutions has been greatly improved by electronic resources. Law schools in India observed a wide range of developmental support mechanisms as professional academic entities. To meet the varied needs of their students, these law schools have well-equipped libraries with

electronic resources. (Haridasan & Khan, 2009) highlighted the pivotal role that electronic resources play in library collections, with substantial investments made in their development and management. Specifically focusing on the National E-resource Documentation Centre (NASSDOC) library in New Delhi, India. Key findings indicate a high awareness among respondents regarding various e-resources such as e-books, e-journals, e-encyclopedias, e-theses, CD-ROM databases, e-mail, internet, and the Online Public Access Catalog (OPAC). A significant number of research scholars and faculty members actively use these e-resources for their research endeavors. (Prakashe & Tayade, 2015) carried out research on the management of e-resources in Indian management institute libraries. Determining the availability of various e-resource types is the primary goal. Subscriptions to electronic resources through consortiums, library network memberships, and cooperation with libraries. Some recommendations had given for improving the e-resources services. A resource sharing model has been put forth that promises to maximize e-resource availability while simultaneously expanding their accessibility and reach. (Yadav et al., 2019) studied a total of 167 research articles on "e-resources" during 1993-2018 using Scopus database. Fluctuation was found in annual growth rate during the period of study. The study reported that Desidoc Journal of Library and Information Technology was top sources of publications with 31 papers (Aslam et al., 2021) examined “Digital and Online Resources of Academic Libraries” within a specific time span 1981 to 2020 using data from the Science Citation Index (SCI) database and Web of Science (Core Collection) .The results show that the published documents on the topic was “electronic books”. The study exhibits that the English language has been used the most to write documents and 2011-2015 has been considered the when most articles published. The United States was the top country. (Gupta & Dhawan, 2019) studied 2086 publications indexed in Scopus database covering period 1994-2017. The study highlights the increasing significance of "E-resources in libraries" as a research subject within the field of library and information science. However, it notes that the global research on this topic across the top 15 most productive countries is characterized by a high degree of skewness. This implies that there might be an uneven distribution of research contributions or productivity among these countries. (Pall, 2019) studied E-resources Research output of India publication from 2008 to 2017, 1071 Indian publications on e-resources as covered in Scopus database. This study sheds light on the Indian perspective in the domain of e-resources, providing insights into collaboration patterns and the distribution of research output across prominent journals.

(Parabhoi et al., 2023) examined research contributions by authors from Shimla district, Himachal Pradesh, by gender using Scopus database from 1999 to 2018. The study reported that male first authors produced more papers as compared to females, and demonstrated a higher overall publication growth out of 2,881 publications. But in 2009 and 2016, the number of citations to papers written by women increased more. In 2011, men's annual publication growth peaked at 179 papers, while women's was 92 in 2015 and 2016. From 2002 to 2007, the number of publications with male authors rose steadily; however, starting in 2008, they started to gradually decline.

(Parabhoi & Verma, 2024) examined research performance in anthropology research in five selected South Asian countries using scientometric indicators of 5,371 publications, and reviewed the publications published from 2003 to 2022, using scientometric indicators. Study reported that, articles were the most common types of publication and book chapters contributed (63.4%) and (19.96%) respectively. Most publications (4,332) were published in India, with the University of Delhi (408) and Jawaharlal Nehru University (308) being the largest institutional contributors. Nepal led in international cooperation,

followed by Sri Lanka and Bangladesh, and India and Pakistan were low in cooperation. The best-known publication source was the journal Economic and Political Weekly.

(Parabhoi & Verma, 2023) conducted a bibliometric study to examined 2,410 publications, to assess research trends in Indian sociology publications from 1991 to 2020 using bibliometric indicators. The number of publications and citations increased and decreased over time. Indian sociologists published in a variety of formats, according to the results, with Economic and Political Weekly being the most popular publication. Instead of being co-authored, over half of the publications were written by a single author. Leading contributors were the University of Delhi and Jawaharlal Nehru University. The most often used keyword was "India," and Indian sociologists mostly worked with developed nations like the United States and the United Kingdom.

(Nath et al., 2024) used a scientometric approach to examine global research trends on vitamin D deficiency from 2014 to 2023, based on 28,916 publications that were indexed in the Scopus database. VOSviewer and Microsoft Excel 2021 were used to analyze bibliographic data that had been extracted in CSV format. According to the results, 2021 was the most productive year, with 70% of all publications being journal articles. With 93% to 53% of the documents published in English, it was the most common language. In terms of publications, the US was the top country, followed by China, the UK, Italy, and India. Medicine made up the largest %age of all subject areas (53 %), followed by genetics, biochemistry, and molecular biology (13 %). The most active university in this field of study is Harvard Medical School. In order to help direct future research, foster international cooperation, and guide strategic funding decisions in the field of vitamin D deficiency, the study also identified important journals, significant contributors, and international collaboration networks.

Data and Methodology

The data for the study retrieved from Scopus database for the period 2010-2024 applying the following search strategy: (TITLE-ABS-KEY ("E-resources") OR ("Library e-resources") OR ("Electronic resource management") OR ("digital resources") AND AFFILCOUNTRY ("India")) AND PUBYEAR > 2009 AND PUBYEAR < 2025) and exported data on 13-06-2025.

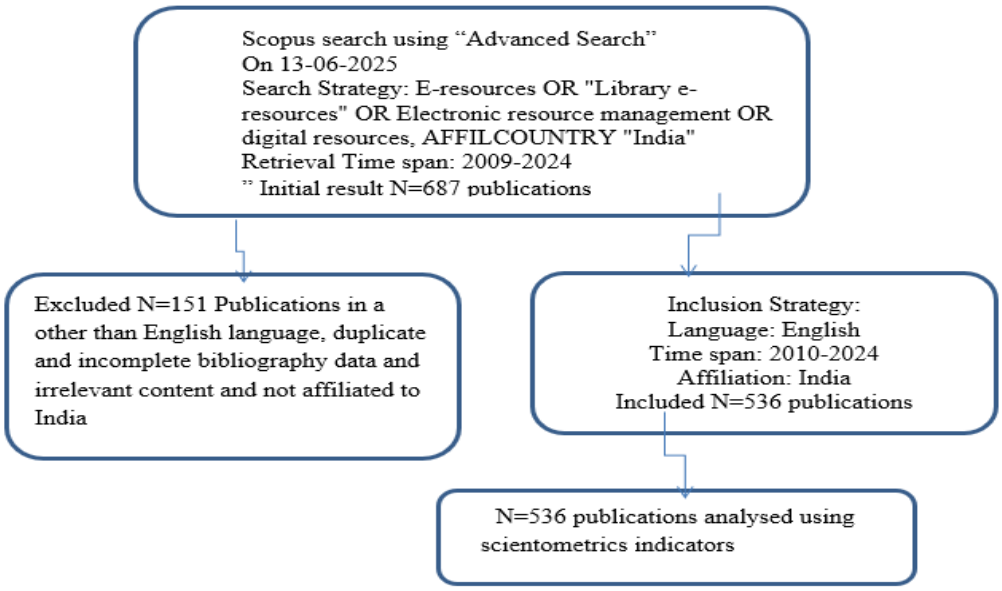

Figure 1: Study design

The study applied the "year tag" to restrict the search to the years 2010-2024 (Fifteen Years) and focused on various document types, including articles, conference papers and reviews etc, published in English language and affiliated to India. Extracted bibliographic details, including author names, document titles, publication years, source titles, citation counts, publication types, DOIs, serial identifiers, publisher information, editor(s), language, correspondence address, concise source title, affiliations, and funding. Initially a total 687 documents found and all raw data has been scrutinized (duplicate check, irrelevant data, language and year of Publications). After sunnitised a 536 documents were included for analysis using various bibliometric indicators (authorship, citations, year wise growth and national and international collaboration, authorship pattern and prominent authors and organization subject area, document type, etc.). The data were analyzed using Biblioshiny, and Ms-Excell software.

Results and Analysis

Trend of Publications

An examination of research publications in the E-resources research from 2010 to 2024 shows a vibrant and changing academic environment with clear stages of expansion, change, and stability. The publication trend shows a moderate but uneven increase between 2015 and 2018, which may be due to changes in funding and priorities for research. 2019 marks a significant turning point, as evidenced by a sharp increase to 92 publications, the highest number during the entire period. This suggests a surge in research activity, which could be attributed to changes in policy, increased academic collaboration, or the growth of open-access platforms. The number of publications steadily rises after 2020, despite a minor drop, indicating the development of the research infrastructure and ongoing scholarly interest in the area. The comparative trend, taken as a whole, highlights a revolutionary shift in E-resources research from foundational development to a period of high and steady scholarly productivity. The publication higher in recent year especially after 2018, excluding in the year 2022 with 35 publications.

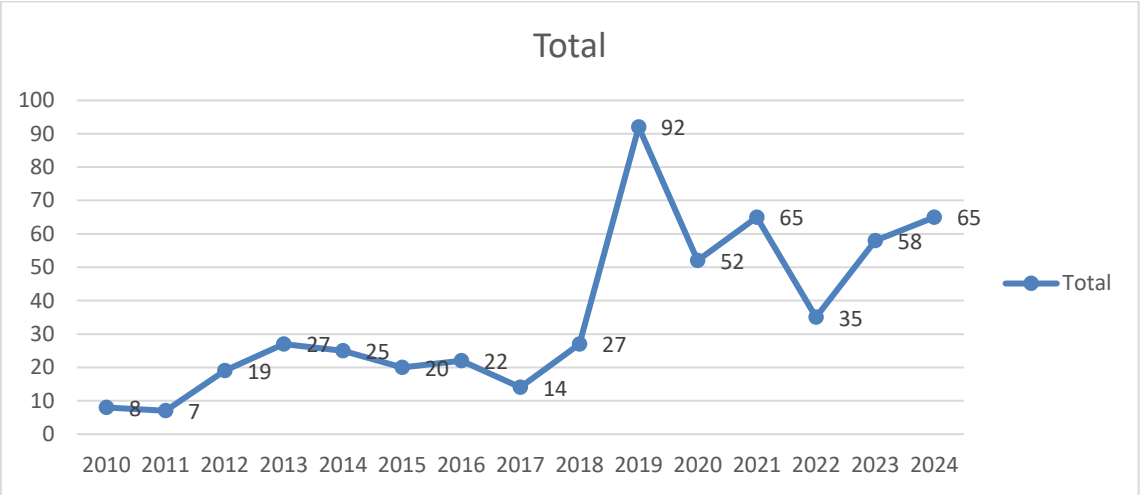

Figure 1 Trend of Publications and Citations

Distribution of document Type

The analysis of document types in terms of quantity and citations within the E-resource research data revealed, a dominant preference for journal articles, which constitute 77.24 % (414 documents) of the total 536 publications and account for 85.28 % (1,965 citations) of total citations. The importance of articles as

the main medium for scholarly communication and impact is highlighted by this. While books are relatively rare (1.31 %), they have a low citation uptake (7 citations), while book chapters are the second most common format with 13.99 % (75 documents) and 141 citations. Because conference papers are frequently preliminary or regionally focused, they contribute 4–29 % of documents (23) but have a relatively lower citation impact (43 citations). Reviews have a relatively high visibility with 101 citations, despite making up only 2–61% of the total (14 documents), demonstrating their role in knowledge synthesis. Together, marginal formats like letters, notes, and brief surveys make up a very small portion of citations—less than 1% of all citations. Overall, the distribution demonstrates how peer-reviewed articles dominate the research landscape, while other formats, while useful for certain applications—play a supporting role in scholarly dissemination and influence.

Table 1 Distribution of document Type

Doc Types	Total Citation	No of Doc	% of Doc
Article	1965	414	77.24
Book	7	7	1.31
Book Chapter	141	75	13.99
Conference Paper	43	23	4.29
Letter	1	1	0.19
Note	10	1	0.19
Review	101	14	2.61
Short Survey	36	1	0.19
Grand Total	2304	536	100

Most Contributing Authors

Table 2 shows the list of most contributed authors from which it is elicited that Balasubramanian, P. has the highest number of publications (12) among the listed in top authors which reflect a significant impact, indicating the influence and visibility of Balasubramanian, P. work in the academic community. So, Balasubramanian, P. emerges as the most contributing author in terms of the number of publications, citations, and Bhat, N.A. (Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir) and Bhardwaj, R.K. (St. Stephen's College, New Delhi) are also notable contributors with 10 and 09 publications, respectively. It is also observed that Authors are affiliated with prestigious institutions such JNU , University of Kashmir, and Assam University.

Table 2 Most Contributing Authors

Rank	Name	Affiliation	No of Doc
1	Balasubramanian, P.	Manonmaniam Sundaranar University	12
2	Bhat, N.A.	Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir	10
3	Bhardwaj, R.K.	St. Stephen's College, New Delhi	9
4	Thanuskodi, S.	Central University of Tamil Nadu	8
5	Kumar, V.	FLAME University, Pune	6
6	Baskaran, C.	Alagappa University	5

7	Ganaie, S.A.	University of Kashmir	5
8	Sinha, M.K.	Assam University	5
9	Thirumagal, A.	Manonmaniam Sundaranar University	5
10	Tripathi, M.	Jawaharlal Nehru University	5

Top Sources of Publications

Library Philosophy and Practice lists the top of the journals in which highest 151 papers are published and originated from United States, followed by DESIDOC Journal of Library and Information Technology (52) papers and Indian Journal of Information Sources and Services (20) papers. It is evident from the table that both Indian and foreign countries originated journals were found, indicating their significant contributions to research in various fields in Library and Information science. Electronic Library and Annals of Library and Information Studies also have notable representation, each contributed 13 publications. Journal of Indian Library Association contributed 11 publications. Other journals were also contributed small number of publications.

Table 3 Top Journals

Rank	Source	Time Cited	No of Doc	% of Doc
1	Library Philosophy and Practice	277	151	28.17
2	DESIDOC Journal of Library and Information Technology	273	52	9.7
3	Indian Journal of Information Sources and Services	58	20	3.73
4	Electronic Library	366	13	2.43
5	Annals of Library And Information Studies	68	13	2.43
6	Journal of Indian Library Association	3	11	2.05
7	2015 4th International Symposium On Emerging Trends And Technologies In Libraries And Information Services, ETTLIS 2015 - Proceedings	21	7	1.31
8	Library Management	30	6	1.12
9	Digital Library Perspectives	33	5	0.93
10	E-Discovery Tools and Applications in Modern Libraries	11	5	0.93
	Grand Total	2304	536	

Top 10 Most Funding Organizations

Table 4 shows that the majority of the top funding sponsors are based in India, which indicates that the nation makes a substantial contribution to research activity on E-resource research. With a focus on dedication to scientific research, the Department of Science and Technology (DST), Ministry of Science and Technology, India (05), India list, comes in first, followed by the Indian Council of Agricultural Research (04) and the Ministry of Human Resource Development (04). A growing convergence between technological advancement and societal impact is evident in the active involvement of agencies that are traditionally associated with scientific and technological research, such as the Ministry of Electronics and Information Technology (MeitY) and the Council of Scientific and Industrial Research (CSIR), each of which funds 03 papers. On the other hand, only two papers are attributed to the Indian Council of Social Science Research (ICSSR), the main organization for the social sciences, which may indicate either low

visibility or underreporting in indexed databases. Furthermore, through internal or competitive grants, eminent academic institutions like the University of Delhi, the University Grants Committee, and the Indian Institute of Technology Delhi each contributed two papers. All things considered, the data highlights how E-resource research funding in India is changing, characterized by strong institutional participation and interdisciplinary collaboration.

Table 4 Funding Sponsors

Rank	Funding Agency	No of Doc
1	Department of Science and Technology (DST), Ministry of Science and Technology, India	5
2	Indian Council of Agricultural Research	4
3	Ministry of Human Resource Development	4
4	Council of Scientific and Industrial Research, India	3
5	Ministry of Electronics and Information technology	3
6	Department of Biotechnology, Ministry of Science and Technology, India	2
7	Indian Council of E-resourceResearch	2
8	Indian Institute of Technology Delhi	2
9	University Grants Committee	2
10	University of Delhi	2

Top 10 Most Productive Indian Organizations

The University of Delhi has the highest number of papers 21 contributed, indicating a strong presence in E-resource research followed by Alagappa University such as 16, and University of Kashmir 15 are also prominent institutes published papers in E-resources research in India. Panjab University contributed (12) papers, was actively involved in research activities. The Aligarh Muslim University, Annamalai University, Jawaharlal Nehru University and Manonmaniam Sundaranar University each contributed 11 of papers. It was evident from the table that diverse range of institutes from central university to general Universities, are conducting research and published papers in the field of E-resources research during 2010-2024.

Table 5 Major Institutes

Rank	Affiliation	Articles
1	University of Delhi	21
2	Alagappa University	16
3	University of Kashmir	15
4	Panjab University	12
5	Aligarh Muslim University	11
6	Annamalai University	11
7	Jawaharlal Nehru University	11
8	Manonmaniam Sundaranar University	11
9	Indian Agricultural Research Institute	9

10	Indian Institute of Technology Bombay	7

Collaboration among Countries

Indian E-resource research has a strong partnership with a number of international research leaders, according to an analysis of international collaboration based on co-authored publications and citation impact. The US stands out as the most important partner, with 223 citations and 13 joint publications with Indian researchers, demonstrating both a high level of research output and a significant impact. With 96 citations and 6 collaborative papers, Australia comes in second, demonstrating significant and active participation. Further highlighting India's research connectivity with eminent international academic centers are the United Kingdom (4 papers, 52 citations) and Saudi Arabia (5 papers, 45 citations), two other important partners. Collaborations with nations such as South Korea (3 papers, 30 citations), Brazil, Portugal, and Zambia (each with 3 papers but fewer citations). Interestingly, Canada received a high citation count of 67, indicating high-quality and well-cited collaborative work, even though they only contributed two papers. In the social sciences, this pattern illustrates India's growing global research network, which is characterized by both established alliances with developed countries and newer connections with nations in other regions. This increases the international recognition and scholarly impact of Indian research.

Table 6 Collaboration among Countries

Rank	Country	Documents	Citations
1	United States	13	223
2	Australia	6	96
3	Saudi Arabia	5	45
4	United Kingdom	4	52
5	Brazil	3	8
6	Portugal	3	6
7	South Korea	3	30
8	Zambia	3	6
9	Belgium	2	5
10	Canada	2	67

Growth of National and International collaboration paper

According to an analysis of e-resource research publications published in India between 2010 and 2024, 355 (85 %) of the papers were the product of domestic partnerships, while only 59 (14 %) involved international co-authorship. According to this, there are more national partnerships than international ones. Despite some oscillations, including a significant decline in 2017 (7 papers), national collaboration showed strong local academic networks, peaking in 2019 (67 papers) and 2021 (46 papers). But, particularly after 2018, international cooperation grew gradually but remained modest. The highest outputs (10–11 papers annually) were produced in 2019 and 2022 as well as in 2023–2024. Despite this increasing trend, there were no internationally co-authored papers in 2010, 2015, or 2017, indicating uneven global engagement. It is evident from the proportion of national to international papers that cross-border research is becoming increasingly important. Although domestic collaboration still dominates, the rise in

international partnerships in recent years suggests a shifting dynamic that could increase research diversity and global visibility.

Table 7 Trends of National and International Collaboration paper 2010-2024

Year	International	National
2010	1	3
2011	0	6
2012	1	14
2013	1	17
2014	3	11
2015	0	14
2016	1	15
2017	0	7
2018	1	21
2019	10	67
2020	7	37
2021	2	46
2022	10	17
2023	11	37
2024	11	43
Total	59	355

Authorship Pattern:

From the below table it is clearly indicates that collaborative works have a clear citation advantage. Papers with multiple authors receive significantly more citations than works with just one author, according to an analysis of 536 publications on E-resources research. Larger teams of five or more authors produced the most influential publications, with an average citation count of 12.94 ACPP, despite having only sixteen papers. Collaborations with four to five authors are also fruitful (5.82-5.95 ACPP). The majority of papers (256) have two authors, but their influence is only moderate (3.81 ACPP). Interestingly, compared to their volume (81 papers), three-author papers perform worse (3point 38 ACPP). There are only four of the 122 single-authored papers. 01 ACPP. These results suggest that research collaboration greatly increases academic impact, particularly in larger teams.

Table 8 Authorship Pattern in E-resources Research from 2010-2024

Authorship Pattern	Time Cited	No of Doc	ACPP
Five	131	22	5.95
Four	227	39	5.82
More Than Five	207	16	12.94
Single	489	122	4.01
Three	274	81	3.38
Two	976	256	3.81
Grand Total	2304	536	

Top Frequently Keywords

According to the keyword analysis, "e-resources" appears 156 times, dominating the thematic landscape. This indicates that the field's primary focus is on digital access and resource management. The terms "electronic resources" (42), "e-journals" (38), "e-books" (18), and "digital resources" (21) are closely related and underline the importance of digital content in academic communication and library services. The high frequency of "India" (44) suggests a strong geographic focus, whereas phrases like "internet" (25), "ICT" (22), and "digital library" (15) emphasize how technology is incorporated into library operations and services. Themes like "library services" (18), "academic libraries" (13), "higher education" (13), and "user study" (12) demonstrate the ongoing interest in user-centric research and service effectiveness. Furthermore, the existence of the terms "covid-19" (17) and "pandemic" (7) indicates recent changes in the focus of research due to international health emergencies, which have prompted the investigation of remote learning and digital access. New issues like "digital divide" (9), "user satisfaction" (9), and "information literacy" (8) show that equitable access, user experiences, and capacity-building are receiving more attention.

Fig.3 Most Frequently Occurred Keywords

Trend of Topic in E-resources Research:

Keyword trend analysis in E-resource research shows how thematic focus has changed from foundational subjects to modern digital issues. Traditional fields like information retrieval, consortia, usage statistics, and university libraries were the focus of early research (prior to 2015). With the rise in popularity of terms like e-resources, electronic resources, e-journals, digital libraries, and user studies, there has been a discernible shift toward digital access and user-centered studies since 2015. As a sign of their importance in the field, the largest nodes—such as e-resources, electronic resources, and e-journals—represent the terms that appear most frequently. The sector's quick response to global disruptions and digital shifts is reflected in the rise of emerging issues like the digital divide, online learning, COVID-19, and open access after 2020. Furthermore, a growing concern for inclusivity, digital skills, and the changing roles of academic libraries is indicated by the increased emphasis on user satisfaction, information literacy, and

higher education. All things considered, the keyword trends show how the field is moving toward technology integration, access equity, and adaptability to changes in society and education.

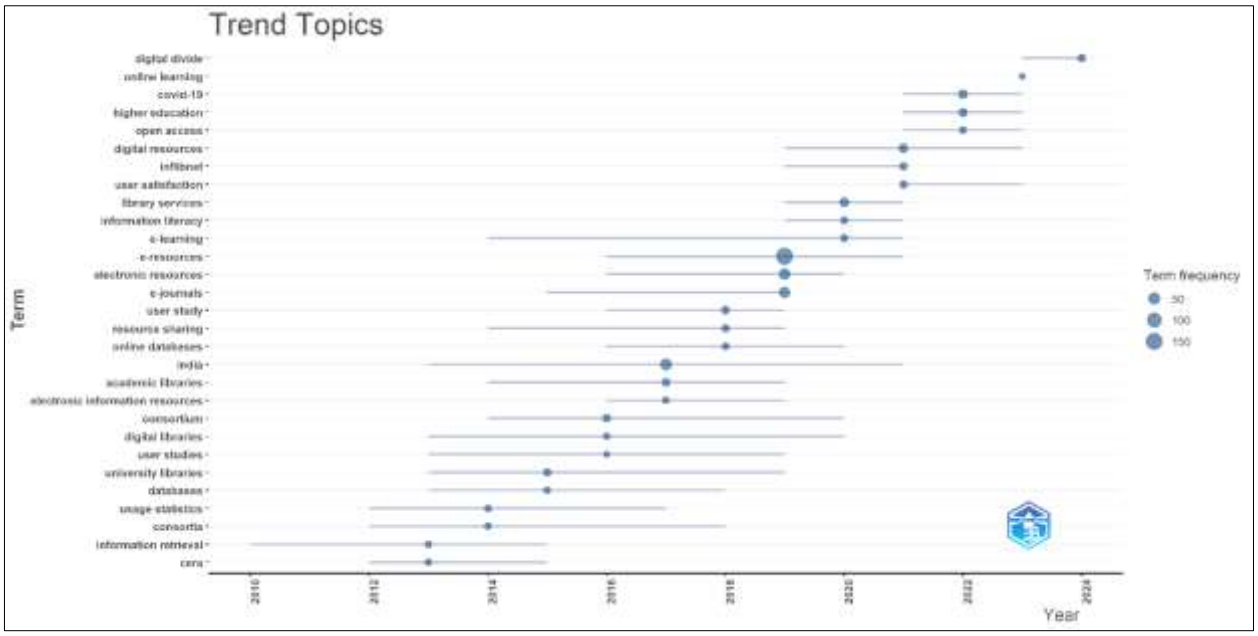

Fig.4 Trend of Topic in E-resources Research in India from 2010-2024

Discussion and Conclusion

With a focus on Indian contributions, this study provides a comprehensive bibliometric analysis of e-resource research from 2010 to 2024 in line with the stated objectives. The findings demonstrate how user expectations, the increasing use of digital resources in libraries, and technological advancements have shaped a dynamic and evolving research environment. The findings highlight that the United States remains the top collaborating country of India as it was evident from other previous studies (Gupta & Dhawan, 2019; Pall, 2019). The growth of literature on e-resources demonstrates a steady upward trajectory over the 15-year period, with noticeable surges in recent years. The publication trend shows a moderate but uneven increase between 2015 and 2018, which may be due to changes in funding and priorities for research. 2019 marks a significant turning point, as evidenced by a sharp increase to 92 publications, the highest number during the entire period. The publication trend also demonstrates how e-resources are becoming increasingly significant in academic and research libraries, especially in developing countries like India where closing the knowledge gap is seen as a strategic priority.

Based on an analysis of the document types, journal articles (414, 77.24%) make up the majority of research output, followed by, book chapters (75, 13.99%), and conference paper (23, 4.29%). Prior bibliometric analyses of document types generally found that journal articles were more prevalent but less represented Notes, short survey and books (Aslam et al., 2021; Pall, 2019; Yadav et al., 2019).

This indicates a strong preference for peer-reviewed scholarly communication, while book chapters and conference papers show the theoretical and conceptual maturity of the field. The analysis also identified a number of significant authors and institutions at the forefront of this field's research. Prior research(Pall, 2019) has reported that Indian universities like Delhi University, Alagappa University, and University of Kashmir as important contributors to the institutional landscape on E-resource research. Prior research frequently restricted its analysis to productivity metrics, such as the quantity of publications, authors, etc.

but this study identified international partner in E-resources such as The USA, Saudi Arabia, and Australian universities were well-represented. The fact that more Indian researchers are taking part in international collaborations indicates that they are becoming more well-known worldwide. High-impact publications are more likely to involve international collaborations, indicating that they improve the standard and scope of research. For scholarly work, funding support from organizations like the DST, the Indian Council of Social Science Research (ICSSR), and the University Grants Commission (UGC) was essential. This is supported by the current study. These funding organizations also demonstrated the ways in which funding agencies shape the course of research. The funding environment, which was hardly ever looked at in earlier research, is a noteworthy addition to the current analysis.

Despite making substantial volume contributions, the study also found that some authors had a high impact on citations, indicating their caliber and influence. A shift from individual to team-based research was indicated by the prevalence of multi-authored papers in India's collaboration patterns. As researchers look for interdisciplinary inputs and institutional support, this trend reflects a larger shift in scholarly communication within LIS. Strong national cooperation also indicated a robust academic network, particularly between universities and research facilities across states. Overall, the bibliometric study of e-resources research from 2010 to 2024 reveals a thriving and expanding academic area affected by the digital revolution and globalization. How active this field of study is is shown by the steadily rising number of publications, the diversity of subject areas, and the increasing number of collaborative works. With an increasing focus on technological integration, user-centric services, and digital inclusion, Indian academics and organizations have made important contributions. In order to promote innovation and tackle new issues in e-resources research, the study emphasizes the value of institutional support, global partnerships, and consistent funding. These observations can be of great use to scholars, librarians, legislators, and funding organizations who want to promote digital scholarship and fair access to information.

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