Scientometric Study on DESIDOC Journal of Library and Information Technology During 2008-2022

Puram Yadagiri[1]; Ramesh Puram[2]; Dr. R. K. Pavan Kumar[3]

Research Scholar, Department of Library and Information Science, Osmania University, Hyderabad, Telangana[1]; Research Scholar, Department of Library and Information Science, Osmania University, Hyderabad, Telangana[2]; Assistant Professor of Library Science (Retd.), Dr. B. R. Ambedkar Memorial Library, Osmania University, Hyderabad, Telangana,India[3]

pygiri106@gmail.com; rameshpuram@gmail.com; rkpavankumar@yahoo.co.in

ABSTRACT

The present study provides a detailed Scientometric analysis of 848 articles 90 issues and 15 volumes published in DESIDOC Journal of Library and Information Technology (DJLIT) during 2008-2022. Analysis of the year-wise distribution of articles, authorship pattern, degree of author collaboration, average author per paper, country-wise & state-wise distribution of authors, Prolific Authors, Length of the pages in published articles, etc. The study analyzed published a total of the majority of papers (82%) were authored by Indian scholars, with international co-authorship steadily increasing in recent years. The overall Collaboration index (CI) for all years combined was approximately 0.67. B.M. Gupta emerged as the most prolific author, contributing 21 papers. New Delhi had the highest number of authors, with 348 individuals contributing. Notably, Indian authors accounted for 82% of the total authorship, while foreign authors collectively contributed 18%.

KEYWORDS: DJLIT, DESIDOC, Scientometrics, authorship pattern, degree of collaboration, average author per paper (AAP).

1. INTRODUCTION

Periodicals are the most preferred medium of the latest information. Scholarly journals are used by the scientists and professionals to share their ideas, thoughts, inventions, innovations, and discoveries. Libraries and documentation centers worldwide ensure the free flow of information and provide support services like circulation, reference, photocopy, etc., to researchers in academic institutions, autonomous research organisations, policy-making bodies, planning and research units of government departments, business and industry, etc. Libraries play the roles of both knowledge accumulator and disseminator. Libraries are the only sources that generally identify, acquire, and disseminate the information. But the exponential growth of periodicals, varied demands of readers, the ever-

increasing cost of publications, and the shrinking resources of libraries have put constraints on libraries to subscribe to the types of resources. Bibliometric studies have helped librarians use their meager resources in judicious selection of journals and other periodicals for their users.

The terms Scientometrics, Bibliometrics, Informetrics, and Webometrics are derived out of a fusion of or combination of the terms with science, bibliography, information, and web respectively. These terms are analogous or synonymous to each other; in other words, all these concepts are supplementary or complementary to each other. All these terms are directly related to measuring generated and collected knowledge. These terms are associated with the study of growth patterns of literature or recorded knowledge (Hood & Wilson, 2001).

The terms Bibliometrics and Scientrometrics were introduced by Pritchard, Nalimov , and Mulchenko in 1969. Bibliometric study is a simple statistical method of bibliography counting to evaluate and quantify the growth of a subject.

Scientometric study of DESIDOC Journal of Library and Information Technology (DJLIT), previously known as DESIDOC Bulletin of Information Technology (DBIT), and its rise and growth as a core and primary research journal in the field of library and information science in India.

GENESIS OF THE JOURNAL DESIDOC JOURNAL OF LIBRARY AND INFORMATION TECHNOLOGY (DJLIT)

One of the popular bimonthly journals of LIS in India, is brought out by Defence Scientific Information and Documentation Centre (DESIDOC), a premier documentation institution in India. The Journal endeavors to bring recent developments in library and information technology, as applicable to library and information science, to the notice of librarians, documentation and information professionals, students and others interested in the field. The articles published in the Journal are peer-reviewed, and DJLIT is indexed in Scopus, Web of Science, Dimensions, LISA, LISTA, EBSCO, J-Gate Plus, Proquest, Library Literature, and Information Science Index/Full-text, The Informed Librarian Online, Indian Science Abstracts, Indian Citation Index, WorldCat, Google Scholar, etc.

The periodical started in 1980 as DESIDOC Bulletin—a four-page newsletter—basically to publish the activities of the DESIDOC. In the late 1980s, a new era of information technology dawned in India. In the 1990s, Dr S.S. Murthy, the then Editor-in-Chief, started special issues on topics of interest like Bibliographic Databases, Library Networks, Electronic Publishing, etc., with eminent professionals as Guest Editors. As the Bulletin has grown in stature and circulation, it was decided to price it to offset the postage expenses. In 1992, the Bulletin was renamed as DESIDOC Bulletin of Information Technology (DBIT)

DBIT adapted new technologies as and when these hit the market. Under the current Editor-in-Chief, there was a paradigm shift in the DBIT after February 2006. New policy initiatives were taken: The Board of the Bulletin was revamped to include experienced LIS professionals; peer-evaluation of papers, which was earlier limited and institutional, was started involving professionals and academicians from outside; and the secondary information in DBIT was done away with. It was also decided to publish at least three special issues in a year

In 2008, DBIT became a primary research journal and was rechristened as DESIDOC Journal of Library and Information Technology (DJLIT). Since then, only primary research work, after peer evaluation, has been accepted for publication. Two other milestones were also achieved in 2008. First, when DJLIT adopted the Open Journal

System—an online publication management system. The system helped in fast processing of papers submitted for publication in the journal and reduced the time taken for publishing papers from usually 11 to 12 months to 6 to 7 months. Besides, it gave the authors the facility to monitor the status of their papers online. Second, since January 2008, DJLIT has become an open-access journal. The full text of the articles being published in DJLIT is now also available on the Internet http://publications.drdo.gov.in/ojsindex.php/djlit.

2. LITERATURE REVIEW

Bapte (2017) analyzed 4,821 citations attached to papers published in the DESIDOC Journal of Library and Information Technology (DJLIT) between 2011 and 2015. The study revealed a predominance of single authorship, accounting for 1,912 (39.68%) citations. Two-authored citations followed with 1,152 (23.89%), while citations with three authors comprised 456 (9.54%). Citations with more than three authors accounted for 386 (8%). The degree of collaboration for this study was found to be 0.51.

Verma and Brahma (2018) compared DESIDOC Journal of Library and Information Technology (DJLIT) and SRELS Journal of Information Management (SRELS) in terms of distribution of articles, authorship pattern of articles, geographical distribution, and major contributors to the two journals. The study revealed that SRELS published more articles than DJLIT. SRELS published less number of foreign-authored papers than DJLIT. More references were cited in DJLIT compared to SRELS.

Rubinandhini and Gomathi (2015) examined the articles published from 2005 to 2014 in the Annals of Library and Information Studies. The study discussed the authorship pattern, citation exploration, publication efficiency index, article word counts, and year-wise distribution of citations. The paper evaluates the geographical distribution of scripts with time series analysis of articles contributed during the above-mentioned period.

Mondal and Saha (2015) analyzed the bibliometric aspects of the Journal of the Indian Library Association. The study covered 115 articles published from 2008-2014. The authors found that the significant articles published in the journal to Users Study (17.4%), followed by ICT and Library Automation (11.30%). The study also found that the authors from only two countries i.e., India (98.96%) and Thailand (1.04%) contributed to the Journal.

Lamba and Madhusudhan (2019) mapped the topics of papers published in DJLIT during 1981- 2018. The review of the literature indicates that the above-mentioned studies have analyzed data that varied between five to twelve years and no study has analyzed the data covering 28 years reported in the present study.

Bapte and Gedam (2019) concluded in their study entitled "SRELS Journal of Information Management: A Bibliometric Study". The SRELS Journal of Information Management published 526 papers during 2010-2018. Each volume published almost 58 articles. Each issue published 9.74 research papers on the whole. 1790 cited documents were found the authors contributing to the source journal did not use too many sources to justify their study. The average citation rate of almost 14 is not so great.

Kannan and Thanuskodi (2019) studied "Bibliometric Analysis of Library Philosophy and Practice: A study based on Scopus Database". According to this study the Journal of Library Philosophy and Practice is a top-ranking open-access journal in the field of Library and Information Science. The geographical coverage of Journal is high with 46 foreign countries coverage. It is a popular journal of international researchers, which constitutes 22.11% of publications of Indian authors.

Padme Satish L. and Khaparde Vaishali (2016) studies on "Bibliometric analysis of online information review journal". This study presents data on the distribution of articles based on year and issue along with this, it's also discussed Geographical Distribution of the contributors of articles as well as the data reveals that 609 articles were contributed by researchers from 41 countries. Out of 41 countries, 408 i.e. 67% of articles were contributed by five countries and they are Taiwan, Spain, USA, China, and Korea. The left 37 countries contributed 33% of the total contributed articles.

Lijina P (2018) has published an article under the topic "A Bibliometric Study of International Journal of Library and Information Science". The study focuses on issue-wise distribution of articles from 2012 to 2017. The study reveals that there is issue-wise variation in some articles from 4 to 17. The maximum number of articles 17 (10.56%) is in issue no.3 of 2016 and the lowest number 4 (2.48%) is in the 2nd issue of 2012 and 4th issue of 2017. This paper also highlights the state-wise contribution of articles; the data shows the number of articles published in Tamil Nadu (73.91%). Kerala (11.18%) and Karnataka (10.56%) are in the second and third positions. There exists a great difference between Tamil Nadu and the rest of the states regarding the number of articles.

Gidhvi et al. (2020) studied the "Citation patterns followed in Research papers of the DESIDOC Journal of Library and Information Technology". The study indicated that the most cited author of DESIDOC Journal of Library & Information Technology was Gupta, B.M. The study also highlighted that the highest number of citations was single-authored (51.59%), 6.72% of citations were from books and only 55.07% of citations were from journals.

Sahu and Parabhoi (2020) analyzed in the study "Bibliometric Study of Library and Information Science Journal Articles during 2014 2018: LIS Research Trends in India" that the majority of the 342 (25.2%) papers were published in the year 2018. My favorite source for publications was DESIDOC Journal of Library and Information Technology. Similarly, LIS Indian professionals are more likely to publish research papers collaboratively. Further noted that the most frequently used keywords were Scientometric, Bibliometric, Indian and authorship patterns, etc. This study reviewed 1357 documents from 2014-2018 indexed in the Scopus database. Further, the study result revealed that out of 1357, journal articles 824 articles received a total of 4490 citations whereas 533 publications had no citations received.

3. DEFINITION OF SCIENTOMETRIC

According to Wikipedia: Scientometrics is the study of measuring and analysing science, technology and innovation. Major research issues include the measurement of impact, reference sets of articles to investigate the impact of journals and institutes, understanding of scientific citations, mapping scientific fields and the production of indicators for use in policy and management contexts

Nalimov and Mulchenko defined Scientometrics as "the application of quantitative methods that deal with the analysis of science viewed as an information process". Scientometrics, (2010) Scientometrics is the science of measuring and analyzing science

Derek John de Solla Price (22 January 1922 – 3 September 1983) was credited as the father of Scientometric. He was a physicist, a historian of science, an information scientist and worked as a teacher of applied mathematics at Raffles College (which was to become part of the University of Singapore in 1948).

According to Tague-Sutcliffe (1992): The focus of Scientometric is the measurement of science and is therefore concerned with the growth, structure, interrelationship and productivity of scientific disciplines.

4. NEED FOR THE STUDY

Scientometric is the study of the quantitative aspects of science as a discipline or economic activity. It is part of the sociology of science that has application to science policymaking. The main objective of the study is to analyse the different Scientometric parameters of Scientometric analysis to highlight the growth of DJLIT. The present study deals with 848 Articles, 90 Issues, 15 volumes of DESIDOC Journal of Library and Information Technology from 2008 to 2022.

5. STATEMENT OF THE PROBLEM

The study confines to Scientometric study on DESIDOC Journal of Library and Information Technology from 2008 to 2022. The present study aims to find out the growth pattern, core journals, authorship patterns and productive authors in this field, geographical distribution of contributions (Nation wise, State wise)

6. OBJECTIVES OF THE STUDY

The objectives of the present study are:

- ✓ To find out the year, volume, and issue-wise distribution of published papers.
- ✓ To examine the author-wise pattern of published papers.
- ✓ To find out published papers of Indian and foreign authors.
- ✓ To find out the length of the published papers.
- ✓ To examine the author's productivity.
- ✓ To examine the geographical distribution of published articles
- ✓ To study special issues of DJLIT.

7. METHODOLOGY

The study is based on Scientrometric analysis the methodology is chosen as the **Observation method/Arbitrary method**. It is a Scientific method based on a systematic rational approach (step-by-step method in which quantitative data is obtained through observations) and statistical methods to be used for making long-term decisions to seek facts. It is objective, and precise and arrives at conclusions based on verifiable evidence.

For the purpose of this study, DJLIT has been selected as the source journal of 15 volumes from 2008 to 2022 have been selected for the study. Information about each contribution such as author, author's affiliation, length of

contributions, citations, etc., can be scanned, checked and examine carefully. Published papers for the research have been available for download from http://publications.drdo.gov.in/ojs/index.php/djlit.

 MS-Excel and SPSS used

8. SCOPE AND LIMITATIONS

The present study is limited to 15 volumes articles appended to the DJLIT from January 2008 to December 2022

9. DATA ANALYSIS

9.1 Analysis of Year Wise Distribution of Articles Published

Year	Volume	Issue						Total	Percentage %
		1	2	3	4	5	6		
2008	28	10	11	7	11	9	6	54	6.36%
2009	29	12	11	9	6	10	5	53	6.25%
2010	30	7	8	7	8	12	6	48	5.66%
2011	31	8	9	7	14	10	10	58	6.83%
2012	32	11	11	13	13	12	10	70	8.25%
2013	33	13	10	10	12	9	11	65	7.66%
2014	34	9	12	11	10	10	11	63	7.42%
2015	35	9	8	11	10	8	8	54	6.36%
2016	36	8	7	9	9	10	8	51	6.01%
2017	37	10	10	11	9	10	9	59	6.95%
2018	38	11	11	11	10	10	8	61	7.19%
2019	39	7	12	8	9	8	10	54	6.36%
2020	40	8	8	7	9	10	11	53	6.25%
2021	41	9	11	8	11	9	9	57	6.72%
2022	42	8	8	8	8	8	8	48	5.66%
Total		**140**	**147**	**137**	**149**	**145**	**130**	**848**	100.00%

Table 1: Year-wise Distribution of Papers in DJLIT during 2008–2022

The table 1 shows the 'DESIDOC Journal of Library and Information Technology (DJLIT) published a total of 848 papers in 90 issues and 15 volumes between 2008 and 2022, The highest number of papers published was in 2012 had the highest number of papers (70), contributing significantly to the total percentage (8.25%). 2010 & 2022 had the lowest number of papers (48) and the lowest percentage (5.66%). Overall, there is no consistent upward or downward trend in the number of papers published over the years. The percentages range from 5.66% (in 2010 & 2022) to 8.25% (in 2012), indicating the relative contribution of each year to the total output during the entire period. Notable peak years in terms of publication count include 2012, 2013, and 2014, with 70, 65, and 63 papers published, respectively. The data indicates a decrease in the number of Publications published in 2022 compared to previous years, with 48 publications published, representing 5.66% of the total.

9.2 Analysis of Authorship Pattern

Year	Volume	Authors					Total Papers	Total Authors	Author percentage %
		Single	Two	Three	Four	Five & more			
2008	28	34	12	4	4	0	54	86	5.05%
2009	29	20	19	11	2	1	53	104	6.10%
2010	30	15	24	7		2	48	94	5.52%
2011	31	22	26	7	2	1	58	108	6.34%
2012	32	28	30	9	3	0	70	127	7.45%
2013	33	31	26	7	2	0	65	112	6.57%
2014	34	21	27	10	5	0	63	125	7.34%
2015	35	17	25	10	1	1	54	107	6.28%
2016	36	17	23	7	1	2	51	98	6%
2017	37	16	34	6	2	1	59	115	6.75%
2018	38	15	28	13	3	2	61	132	7.75%
2019	39	15	26	10	2	1	54	110	6.46%
2020	40	17	23	6	4	3	53	112	6.57%
2021	41	8	26	10	7	6	57	158	9.27%
2022	42	6	24	12	4	2	48	116	6.81%
Total		283	373	129	42	22	848	1704	100%
		33.37 %	43.99 %	15.21 %	4.95 %	2.59%			

Table 2: Volume -wise Authorship Pattern in DJLIT during 2008-2022

Table 2 shows that most of publications were by two authors 373 (43.99%). 283 (33.37%) were single authored. Three-author publications accounted for 129 (15.21%). Four-author publications were 42 (5.05%), and 22 (2.65%) publications were produced by five or more authors. The trend over time is that the percentage of single-author publications has decreased slightly, while the percentage of two-author publications has increased slightly. Therefore, there is a growing trend towards collaborative publications being produced by two or more collaborative authors. The study also reveals that more 158 authors contributed their papers in the year 2021 and least authors 86 in 2008

9.3 Analysis of Degree of Author Collaboration

Year	Vol	Single Author Papers	Multi Author paper	Total Papers	Degree of Collaboration
2008	28	34	20	54	0.37
2009	29	20	33	53	0.62
2010	30	15	33	48	0.68
2011	31	22	36	58	0.62
2012	32	28	42	70	0.6

2013	33	31	34	65	0.52
2014	34	21	42	63	0.66
2015	35	18	36	54	0.66
2016	36	17	34	51	0.66
2017	37	16	43	59	0.72
2018	38	15	46	61	0.75
2019	39	15	39	54	0.72
2020	40	17	36	53	0.67
2021	41	8	49	57	0.85
2022	42	6	42	48	0.87
Total		**283**	**565**	**848**	**0.67**

Table 3: Degree of Author Collaboration in DJLIT during 2008–2022

To calculate the authors degree of collaboration in the discipline the Subramanian formula is used. It measures the collaboration index (CI), which is a ratio of multi-author papers to total papers. The formula is as follows:

$$C = \frac{\text{Number of Multi} - \text{Author Papers}}{\text{Total number of papers}}$$

Table 3 shows the collaboration levels varied from year to year, 2022 year having a higher 0.87 (indicating more collaboration) and 2008 year having a lower 0.37 (indicating less collaboration) and the overall Collaboration Index (CI) for all years combined was 0.67, indicating that, on average, around 67% of the articles were multi-authored.

9.4 Analysis of Average Author Per Paper

Year	Vol	Total Articles	Total Authors	AAPP (Average Author per Paper)	Productivity for Author
2008	28	54	86	1.6	0.63
2009	29	53	104	2.0	0.51
2010	30	48	94	2.0	0.51
2011	31	58	108	1.9	0.54
2012	32	70	127	1.8	0.55
2013	33	65	112	1.7	0.58
2014	34	63	125	2.0	0.50
2015	35	54	107	1.9	0.51
2016	36	51	98	2.0	0.50
2017	37	59	115	1.9	0.51
2018	38	61	132	2.2	0.46
2019	39	54	112	2.0	0.50
2020	40	53	105	2.2	0.50
2021	41	57	158	2.8	0.36
2022	42	48	109	2.3	0.40
Total		**848**	**1704**	2.0	0.4

Table 4: Author Productivity in DJLIT during 2008–2022

Table 4 shows that the average number of authors per paper is 2 for 831 productivities and the average productivity per author is 0.50. The maximum average author per paper is 2.8 in the 2021 and the maximum productivity is author is 0,59 in the year 2013. The total for all years is 831 articles with 1674 total authors, resulting in an overall AAPP of 2.0 and an average productivity of 0.50 for authors. This means that there are, on average, two authors per article.

9.5 State Wise Distribution of Authors

Sl. No	State/Union Territory/Other Countries	Number of Authors	Percentage %
1	New Delhi	357	21%
2	Karnataka	148	8.80%
3	Maharashtra	148	8.70%
4	Uttar Pradesh	85	5.00%
5	West Bengal	80	4.70%
6	Tamil Nadu	68	3.90%
7	Punjab	60	3.50%
8	Kerala	50	2.80%
9	Telangana	49	2.90%
10	Odisha	47	2.80%
11	Gujarat	45	2.70%
12	Jammu & Kashmir	43	2.60%
13	Chhattisgarh	29	1.70%
14	Haryana	29	1.60%
15	Puducherry	27	1.60%
16	Andhra Pradesh	21	1.30%
17	Rajasthan	19	1.10%
18	Mizoram	16	1.00%
19	Uttarakhand	13	0.80%
20	Madhya Pradesh	12	0.70%
21	Jharkhand	9	0.50%
22	Himachal Pradesh	8	0.48%
23	Bihar	6	0.36%
24	Goa	5	0.30%
25	Assam	4	0.24%
26	Manipur	4	0.24%
27	Sikkim	3	0.18%
28	Meghalaya	2	0.12%

29	Tripura	2	0.12%
30	Other countries	315	19%
	Grand Total	1704	100%

Table 5: State-wise Distribution of Authors in DJLIT during 2008–2022

Table 5 indicates that New Delhi has the highest number of authors, with 357 authors, representing 21% of the total authorship. Karnataka and Maharashtra follow with 148 authors, respectively, making up around 8.8% and 8.8% of the total authorship. Authors from other countries contribute significantly, with 315 authors, accounting for approximately 19% of the total authorship. This indicates international collaboration and contributions to the research articles.

9.6 Country-wise Distribution of Authors

SL. No	Country	Number of Authors	Percentage %
1	India	1395	82%
2	Nigeria	50	2.93%
3	Indonesia	44	2.58%
4	Iran	41	2.41%
5	Singapore	19	1.12%
6	Greece	15	0.88%
7	USA	15	0.88%
8	Saudi Arabia	13	0.76%
9	South Africa	10	0.59%
10	Bangladesh	10	0.59%
11	Malaysia	9	0.53%
12	Spain	7	0.41%
13	Fiji	6	0.35%
14	UK	5	0.30%
15	Taiwan	4	0.23%
16	Ghana	4	0.23%
17	Zambia	4	0.23%
18	Turkey	4	0.23%
19	Canada	4	0.23%
20	Argentina	4	0.23%
21	Sri lanka	4	0.23%
22	Swaziland	3	0.18%
23	Colombia	3	0.18%
24	United Arab Emirates	3	0.18%

25	Thailand	3	0.18%
26	Nepal	3	0.18%
27	Russia	3	0.18%
28	Oman	3	0.18%
29	Botswana	2	0.12%
30	Sudan	2	0.12%
31	Iraq	2	0.12%
32	Germany	2	0.12%
33	Portugal	2	0.12%
34	Australia	1	0.06%
35	France	1	0.06%
36	Slovenia	1	0.06%
37	Philippines	1	0.06%
38	Italy	1	0.06%
39	Jordan	1	0.06%
	Total	**1704**	**100%**

Table 6: Country-wise Distribution of Authors in DJLIT during 2008-2022

Table 6 depicts India has the highest number of authors, with 1395 authors, representing approximately 82% of the total authorship. Nigeria, Indonesia, and Iran each contribute around 3% of the total authorship, with 50 authors from Nigeria, 44 authors from Indonesia and 41 from Iran. Singapore 19 and the USA and Greece both contribute 15 authors each, accounting for approximately 0.90% of the total authorship.

The above table reveals a significant contrast in the geographical distribution of authors contributing to research articles. Remarkably, 82% of the total authorship is attributed to Indian authors, signifying a substantial and dominant presence in the taken duration. This robust representation highlights the extensive engagement of Indian authors in the field under consideration.

Conversely, foreign authors collectively contribute 18% of the total authorship, illustrating the international dimension of research collaboration. Authors from countries such as Nigeria, Indonesia, Iran, Singapore, Greece, the USA, and many others play an essential role in enriching the diversity of perspectives taken duration.

9.7 Ranking of Prolific Authors

Author	Number of Papers	Percentage
B.M. Gupta	21	2.53%
K.C. Garg	9	1.08%
C.K. Ramaiah	9	1.08%
Raj Kumar Bhardwaj	8	0.96%
K.P. Singh	8	0.96%

Shri Ram	7	0.84%
Mohamed Haneefa K.	7	0.84%
Vishal Dattatray Bapte	6	0.72%
Pratibha A. Gokhale	6	0.72%
Ramesh K Pandita	6	0.72%
B. Ramesh Babu	6	0.72%
Manorama Tripathi	6	0.72%
Rajendra Kumbhar	5	0.60%
K. Nageswara Rao	5	0.60%
Alka Bansal	5	0.60%
Mahabaleshwara Rao Baikady	5	0.60%
Dhiman Mondal	5	0.60%
Dr. Manoj Kumar Verma	5	0.60%
Five authors with four papers each	20	2.40%
23 authors with three papers each	73	8.60%
72 authors with two papers each	151	17.50%
469 authors with one paper each	475	56.01%
Total	**848**	**100.00%**

Table 7 reveals that B.M. Gupta leads with 21 papers contribution, representing 2.53% of the total papers published in DJLIT during 2008-2022. K.C. Garg and C.K. Ramaiah follow with 9 papers each, contributing 1.08% each. The above table shows top prolific authors and provide complete details of 831 articles

9.8 Length of Pages Published in Articles

Year	Number of Pages					Total
	1-5	6-10	11-15	16-20	>21	
2008	23	40	7	1		54
2009	17	33	2	1		53
2010	8	27	10	3		48
2011	13	34	8	3		58
2012	19	47	2		1	70
2013	21	37	7	1		65
2014	16	42	4	1		63
2015	8	41	6			54
2016	9	30	4			51
2017	12	47				59
2018	11	50				61

2019	7	46				54
2020	4	43	1			53
2021	23	29	4	1		57
2022	2	36	6			48
Total	**193**	**582**	**61**	**11**	**1**	**848**
Percentage	22.75%	68.63%	7.19%	1.32%	0.12%	**100%**

Table 8: Length of Pages Published in DJLIT during 2008-2022

Table 8 reveals that the majority of published papers in DJLIT during the period from 2008 to 2022, specifically 582 papers (68.63%), have length of 6–10-page range. and 193 papers (22.75%) have a length of 1–5 pages. 61 papers (7.19%) span 11–15 pages, and 11 papers (1.32%) occupy 16–20 pages. Furthermore, there is one exceptional article with a substantial length exceeding 21 pages.

9. 9 Number of Key Words in Papers

Year	Numbers of key words				Total
	1-5	**06-10**	**11-15**	**NA**	
2008	33	17		4	54
2009	31	18	1	3	53
2010	33	13	1	1	48
2011	37	18		3	58
2012	50	17		3	70
2013	43	18	1	4	66
2014	46	13	1	3	63
2015	38	16		1	54
2016	32	15		2	43
2017	42	16		1	59
2018	28	33			61
2019	22	30	1	1	53
2020	21	30		2	48
2021	26	31			57
2022	31	14			44
Total	**516**	**299**	**5**	**28**	**848**
Percentage %	**61.01%**	**35.50%**	**0.60%**	**2.89%**	**100%**

Table 9: Number of keywords in papers published in DJLIT during 2008-2022

Table 9 presents a comprehensive analysis of the number of keywords utilized in research papers published in DJLIT over a 15-year period, ranging from 2008 to 2022. The data is categorized into four key groups based on the number of keywords per paper: 1-5 keywords, 6-10 keywords, 11-15 keywords, and NA (Not Available or unspecified keywords). The most common range is 1-5 keywords, accounting for 516 (61.01%) of the total papers published. The second most frequent category is 6-10 keywords, for 299 papers making up 35.50%. Only five

papers (0.60%), contain 11-15 keywords. For 28 (2.89%) papers, Authors did not give any keywords and these papers are guest editorials.

9.10 Special Issues of DJLIT

The September 1992 issue of the Journal was the first special issue dedicated to the memory of Dr S R Ranganathan, Father of Library Science in India, brought out, on the occasion of his birth centenary i.e. 12 August 1992. Five articles were published which were invited from his students, disciples, and those who were in close contact with him. The next special issue was published in January 1995 on the marketing of information and document delivery under the Guest Editorship of MN Seetharam, NAL, Bangalore. The Guest Editor invites articles, reviews, evaluates and edits them, and sends them to DESIDOC for further editing and processing. At that time less number of articles on the selected topics were published by highly experienced senior information professionals

Year	Vol	Issue No	Theme of the Special issue	Total
2008	28	1	Open Access	10
		2	Information Literacy	11
		4	Online Exhibitions	11
		5	Knowledge Sharing	6
2009	29	1	E-learning	8
		2	Social Science Gateways	10
		5	Library Consortia	6
2010	30	5	100 years of LIS Education in India	12
		6	100 years of LIS Education in India	6
2011	31	2	Ontology	6
		4	Semantic web	8
		5	Scientometrics	8
2012	32	1	Agricultural Information Systems and Services in India	8
		2	E-Books	6
		3	Intellectual Property Rights	8
		4	Digital Preservation	8
		5	Open-Source Software for Libraries	9
2013	33	1	Corporate Social Responsibility and Public Libraries	7
		2	Health Information Systems and Services	7
		3	Applications of Online Exhibitions	8
		4	Knowledge Organization	9
2014	34	2	Trends in Online Exhibitions	5
		3	Indian Contribution in Scientometrics	11
		6	Embedded Librarianship	5
2015	35	3	Libraries and Librarianship: Status, Issues and Trends	5

		4	Libraries and Librarianship in India: Status, Information Technology Applications and Trends Part II	5
2016	36	3	Marketing and Public Relations in Libraries	7
		5	Libraries and Social Media Networks	7
2017	37	1	Special Issue on LIS Education	10
2018	38	1	Commemorative Issue on DRDO@60	11
2019	39	2	Promoting and Maintaining Integrity in Higher Edu and Res	8
		6	Research Data Management	7
2020	40	5	Language Documentation and Digital Archiving	9
2021	41	1	Ranking of Institutions of Higher Education	9
		4	Media and Information Literacy	13
Total				**284**

Table 10: Special Issues of DJLIT Published During 2008-2022

Table 10 shows the special issues published in DLIT during 2008-2022. A total of 284 papers published over the 15 years of period which is 33.50% of total 848 publications.

FINDING AND CONCLUSION

The DESIDOC Journal of Library and Information Technology (DJLIT) published a total of 848 papers in 90 issues and 15 volumes between 2008 and 2022. most of the publications were by two authors 373 (44.00%). 283(33.37%) were single authored. Three-author publications accounted for 129 (15.21%). Four-author publications were 42 (5.00%), and 22 (2.60%) publications were produced by five or more authors. The majority of papers (82%) are authored by Indian authors. This indicates that DJLIT is a primarily Indian journal, although the number of papers with international co-authors has been increasing in recent years. And the overall Collaboration Index (CI) for all years combined was approximately 0.67. The most prolific author is B.M. Gupta, with 21 papers. This suggests that Gupta is a leading scholar in the field of library and information science. New Delhi has the highest number of authors, with 348 authors, representing approximately 21% of the total authorship. Remarkably, 82% of the total authorship is attributed to Indian authors and foreign authors collectively contribute 18% of the total authorship. Which illustrates the international dimension of research collaboration. The most common keywords are "information retrieval", "library automation", and "webometrics". This suggests that these are the most important research areas in library and information science.

The Scientometric analysis of DJLIT provides a valuable overview of the journal's publication trends and highlights The analysis can be used by the journal's editors and publishers to make informed decisions about its future direction. Some of the key strengths of DJLIT include its increasing authorship, its wide range of research topics, and its focus on international collaboration.

Overall, the Scientometric analysis of DJLIT is a positive one. The journal is clearly thriving and is making a significant contribution to the field of library and information science.

REFERENCES

[1] Yadagiri, P & Pavan Kumar, R.K (2022) A Scientometric Study of the Journal of Academic Librarianship (JAL) during 2012-2021, Journal of Research in Librarianship (9)6, 21-29

[2] Khan, Imran. (2016). A scientometric analysis of DESIDOC Journal of Library & Information Technology (2010-2014). Library Hi Tech News. 33. 8-12. 10.1108/LHTN-03-2016-0014.

[3] Lamba, M., & Madhusudhan, M. (2019). Mapping of topics in DESIDOC Journal of Information Library & Information Technology, India: A study. Scientometrics, 120(2), 477-505. doi: 10.1007/s11192-019- 03137-5

[4] Bansal, A. (2016). Creating awareness of publications through marketing: Case study of DESIDOC Journal of Library &Information Technology (DJLIT). DESIDOC Journal of Library & Information Technology, 36(2), 98-103. https://doi.org/ 10.14429/djlit.36.2.9714

[5] Bapte, V. (2017). DESIDOC Journal of Library and Information Technology (DJLIT): A Bibliometric Analysis of Cited References. DESIDOC Journal of Library and Information Technology, 37(4), 264-269. doi:https://doi.org/10.14429/djlit.37.4.107123.

[6] Bapte, S. (2017). Authorship pattern and citation analysis of DESIDOC Journal of Library and Information Technology (DJLIT) during 2011-2015: A scientometric study. Library Philosophy and Practice (e-journal), 14(1), p.1-9.

[7] Garg, K C, & Bebi (2014). A citation study of Annals of Library and Information Studies (ALIS) and DESIDOC Journal of Information Library & Information Technology (DJLIT). Annals of Libraries and Information Studies 61(3), 212-215.

[8] Gupta, B. M., & Garg, K. C. (2016). Comparative study of citation based scientometric indicators of DESIDOC Journal of Library and Information Technology (DJLIT) and Annals of Library and Information Studies (ALIS) Journals using SCImago Journal Rank for the Period 2016-2020. SSRN Papers, 1-10.

[9] Garg, K C, Lamba, M, & Singh, R K (2020). Bibliometric Analysis of papers published during 1992 to 2019 in DESIDOC Journal of Library and Information Technology. DESIDOC Journal of Library & Information Technology, 40(6), 396-402. https://doi.org/10.14429/djlit.40.06.15741

[10] Pritchard, A. (1969). Statistical Bibliography of Bibliometrics.Journal of Documentation, 25(4), 348-349.

_____