

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

June 2023

A Bibliometric research output of DESIDOC Journal of Library and Information Technology from 2018-2022: A study

GULAB DEVI

rosechoudhary642@gmail.com

Rakhi Khatik RK

rakhikhatik2407@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Arts and Humanities Commons](#), and the [Scholarly Communication Commons](#)

DEVI, GULAB and Khatik, Rakhi RK, "A Bibliometric research output of DESIDOC Journal of Library and Information Technology from 2018-2022: A study" (2023). *Library Philosophy and Practice (e-journal)*. 7751.

<https://digitalcommons.unl.edu/libphilprac/7751>

**A Bibliometric research output of DESIDOC Journal of Library and Information
Technology from 2018-2022: A study**

Dr.Gulab Devi (First Author)

Librarian

Government Autonomous Girls PG College of Excellence Sagar, MP

rosechoudhary642@gmail.com

9131791680

and

Rakhi Khatik (Second Author)

Guest Faculty

Government Autonomous Girls PG College of Excellence Sagar, MP

rakhikhatik2407@gmail.com

9826448109

Abstract

The study examines of DESIDOC journal of Library and Information Technology during 2018-2022. Data were collected by DESIDOC websites and download from journal DESIDOC journal of Library and Information Technology <https://publications.drdo.gov.in/ojs/index.php/djlit/index>. Total numbers of 256 articles were published during 2018-2022. Data were analysed in MS excel worksheet for the research. The study revealed that the maximum articles are by two author 117 (45.70%) and maximum articles were 12 published volume 2 in 2019. Degree of Collaboration is 0.28. Finding of study show page length of Article were 7 pages long have the maximum with 71 (27.73%).

Keyword: Bibliometric analysis, Degree of Collaboration, Citation analysis, Authorship pattern, DESIDOC journal of Library and Information Technology.

Introduction

Scientific journals have been the focus of bibliometric research, which primarily base their findings on information components as author, title, subject, citations, and others. This kind of study offers useful indicators for trends, scientific output, the emphasis of research in various domains, and publication preferences among researchers. The statistical evaluation of books, papers, or other publications is known as Bibliometric. The analyses are used to monitor the output and influence of authors or researchers. This can support funding and grants as well as tenure and promotion. The determination of journal impact factors, which might assist you in choosing which journal to publish in, is also done using Bibliometric.

DESIDOC Journal of Library and Information Technology (DJLIT) were started since 1981. It is a double-blind, open access, bi-monthly journal. DESIDOC journal publish original research reviews articles cover up to library and information, IT activates services related to library science. It is also covered major subject included knowledge management, Information system, collection building and management, libraries services etc.

Review of Literature

Revealed a study on the bibliometrics of LIS articles published in India. The authors used a sample of 934 publications from the Science Citation Index database between 1951 and 2010 (Chauhan & Mahajan, 2017). According to study analysis, there were more annual publications mostly between the years 1992 and 1997 and 2004 and 2007. United States produced 37% of all relevant articles, followed by India with 8.0% and Canada with 4.8%. The most publications were published in Science of the Total Environment, then in Toxicology and Journal American Water Works Association. There is also a list of the top keywords in usage. In the 17year period, "cadmium" was the most frequently used author keyword. (Ho Yuh-Shan, 2007). This investigation explores bibliometric aspects like article distribution, year-wise growth of publications, authorship pattern of publication their level of collaboration, and an average rate of publication per author. The Journal of Indian Library Association (JILA) published 107 research articles from contributors across the country. between 2015 and 2019. Individual authors authored 47.67% of academic articles in 2019, which was the year with the highest growth rate of 21.73%. The study's results show the strength of the Journal, which is important for its future growth. Rahul Pandey and Shikha Awasthi (2019). Examine the study on bibliometric analysis of articles from the "International research journal of Library and information science" that were published between 2011 and 2014. It was discovered that in 2012, 2013 and 2014, the majority of issues—9 out of 12—each provided 15 articles. Maximum State-level contributions come from Tamilnadu, with 24 (22.64%), while the country-level contributions come from India, with 106 (65.03%), and the lowest State-level contributions come from Pondicherry, Asham, and Telangana, with 1 (0.94%), Zambia, the United States, and Bahrain, Iran (0.61%). (Kashyap, Santu Ram, 2017).

Objective

1. To find out of volume- wise contribution.
2. To analysis of authorship pattern during 2018-2022.
3. To know the Degree of Collaboration.
4. To find out of length of the journal article
5. To find out the number of references.
6. To analysis of country wise distribution of articles.

Table 1 Volume-Wise Contribution 2018-2022

Year	Volume	Issues						Total
		1	2	3	4	5	6	
2018	38	11	11	11	10	10	8	61

2019	39	7	12	8	9	7	8	51
2020	40	7	8	7	7	8	11	48
2021	41	8	11	7	10	8	8	52
2022	42	7	6	7	8	8	8	44
Total		40 (15.63)	48 (18.75)	40 (15.63)	44 (17.19)	41 (16.02)	43 (16.80)	256 (100)

Table 1 represents the volume and issue details of published articles in the journal during 2018-2022. Volume number 39 shows the maximum 12 articles published 2019, followed by 11 articles in volume 38 and 40 in 2018 and 2020.

Table 2 Author Pattern of Articles

Year	Vol. no	Single author	Two author	Three author	Four author	Four more than author	Total
2018	38	15	28	13	3	2	61
2019	39	14	25	9	2	1	51
2020	40	14	21	6	4	3	48
2021	41	8	22	9	7	6	52
2022	42	5	21	12	4	2	44
TOTAL	5	56	117	49	20	14	256
Percentage		21.88	45.70	19.14	7.81	5.47	100

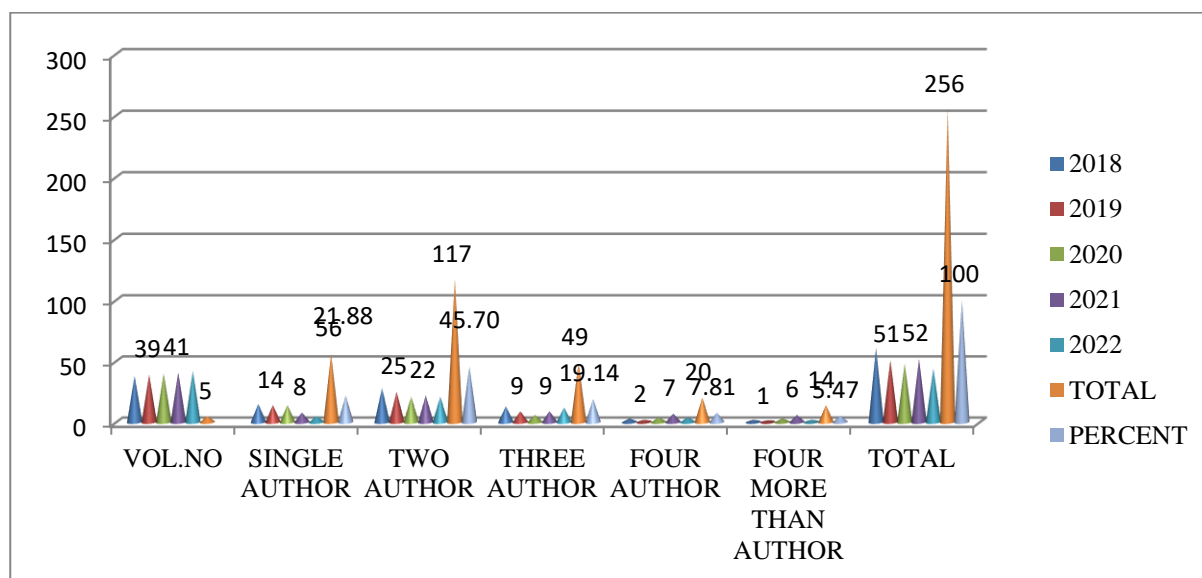
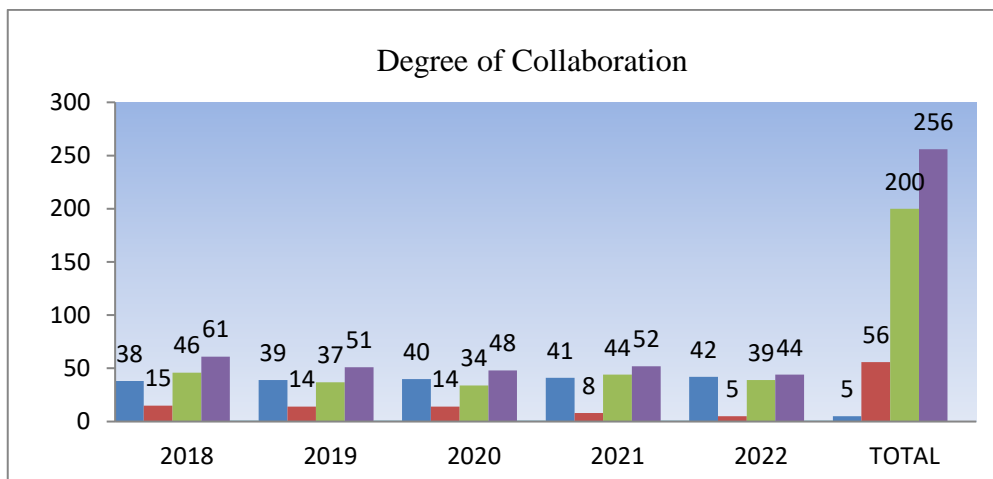


Table shows that the total 256 articles published in 256 volumes of the journal is shown in Table 1 and figure above. The maximum articles are by two author 117 (45.70%), followed by single authors 56 (21.88%) articles, followed by three author 49 (19.14) articles, four authors are 20 (7.81) articles and more than four authors are with 14 (5.47) articles.

Table 3 Degree of Collaboration

Year	Volume	Single author NS	Multi author NM	NS+NM	Degree of
------	--------	------------------	-----------------	-------	-----------

					collaboration
2018	38	15	46	61	0.75
2019	39	14	37	51	0.73
2020	40	14	34	48	0.71
2021	41	8	44	52	0.85
2022	42	5	39	44	0.89
TOTAL	5	56	200	256	0.28



The degree of collaboration is calculated by the formula given by K. Subramanyam.

DC= Degree of Collaboration

Nm= Number of multi-authored papers

Ns= Number of single authored papers

$DC = \frac{Nm}{Nm + Ns}$

Here, $DC = \frac{200}{56 + 200} = 0.28$

Table 4 Issues-Wise distribution of Article

Year	Issue	Article	Percentage
2018	1	11	4.30
	2	11	4.30
	3	11	4.30
	4	10	3.91
	5	10	3.91
	6	8	3.13
2019	1	7	2.73
	2	12	4.69
	3	8	3.13
	4	9	3.52
	5	7	2.73
	6	8	3.13

2020	1	7	2.73
	2	8	3.13
	3	7	2.73
	4	7	2.73
	5	8	3.13
	6	11	4.30
2021	1	8	3.13
	2	11	4.30
	3	7	2.73
	4	10	3.91
	5	8	3.13
	6	8	3.13
2022	1	7	2.73
	2	6	2.34
	3	7	2.73
	4	8	3.13
	5	8	3.13
	6	8	3.13
TOTAL	30	256	100

From the Table 4, it is clear that the number of articles in each issue varies from 1 to 6. The Maximum number of articles 12 (4.69%) is in the Issue no.2 of 2019 and the lowest number 6(2.34%) is in the 2nd issue of 2022. There is a slow increase in the number of articles from year 2019 to 2018.

Table 5 Cumulative of Distribution o Article

Year	Issue	Article	Cumulative frequency	Cumulative Percentage
2018	1	11	11	4.30
	2	11	22	8.59
	3	11	33	12.89
	4	10	43	16.80
	5	10	53	20.70
	6	8	61	23.83
2019	1	7	68	26.56
	2	12	80	31.25
	3	8	88	34.38
	4	9	97	37.89
	5	7	104	40.63
	6	8	112	43.75
2020	1	7	119	46.48
	2	8	127	49.61

	3	7	134	52.34
	4	7	141	55.08
	5	8	149	58.20
	6	11	160	62.50
2021	1	8	168	65.63
	2	11	179	69.92
	3	7	186	72.66
	4	10	196	76.56
	5	8	204	79.69
	6	8	212	82.81
2022	1	7	219	85.55
	2	6	225	87.89
	3	7	232	90.63
	4	8	240	93.75
	5	8	248	96.88
	6	8	256	100
TOTAL	30	256		

Table 5 reveals the cumulative distribution of articles in DESIDOC journal of library and information technology from 2018 to 2022 and its percentage

Table 6 Page length of Articles-Wise Contribution

Page Length	2018						2019						2020						2021						2022						Total	Percentage
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6		
2																			1												1	0.39
3	1						1																								2	0.78
4	1	1						1								1															4	1.56
5	2		2	2	1		1	1	2							1	2	2			3		1		1	1					22	8.59
6	2	2	2		2	2	1	1	1	2	1		1	2	1	1	2	3		3	1	2	5	1			1	2	2	1	44	17.19
7	4	5	2	4	3	4	3	4	2	4	2	2	1	1	3	3	1	3	2	1	2	2	1	1	2	2	1	3	2	1	71	27.73
8	1	2	3	3	4		3	4	2		4	2	3	1	1	1	2	2		3	1	1		2	2	1			2		50	19.53
9		1	2	1		2		1	1			2	2	3	2	1	1	1	1	2	2	1		2	1	1		1	1		32	12.50
10										1	2		1							1		1	1	1	1	3	1		4	18	7.03	
11																						1						1		2	0.78	
12															1									1			1			3	1.17	
13																				1									2	3	1.17	
14																			1							1				2	0.78	
15																		1												1	0.39	
16																																
17																			1											1	0.39	
Total	11	11	11	10	10	8	7	12	8	9	7	8	7	8	7	7	8	11	8	11	7	10	8	8	7	6	7	8	8	8	256	100

Table 6 shows the length of papers of articles published during the time 2018-2022. Article 6 pages long have the top position maximum with 71 (27.73%), followed by 50 (19.53 %) articles that are 7 pages long, 44 (17.19 %) articles that are 6 pages long, and 32 (12.52 %) articles that are 9, 22 (8.59%) articles are 5 pages long, 18 (7.03%) articles are 10 pages long, 4 (1.53%) articles are 4 pages long, 3 (1.17%) articles are 3-3 pages long.

Table 7 Country- Wise Contribution of Article

Country	2018						2019						2020						2021						2022						Total	Percentage
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6		
INDIA	10	10	9	7	10	6	5	10	8	3	5	5	6	5	7	6	7	8	7	6	5	8	5	6	4	5	6	5	6	7	197	76.95
IRAN			2						2					2					2			2					1	1		12	4.69	
INDONESIA						1								1			2		1	1		1		1	1	1	2	1	1	14	5.47	
SRI LANKA							1											1						1						3	1.17	
BANGLADESH																				1				1						2	0.78	
SOUTH AFRICA		1				1		1															1							4	1.56	
NIGERIA								1		2	1		1									1								6	2.34	
RUSSIA										1												1								2	0.78	
SOUDI ARABIA				1																										1	0.39	
PHILIPPINESS																							1							1	0.39	
MALAYSIA											1									1										2	0.78	
ITALY																	1													1	0.39	
SPAIN												1					1													2	0.78	
WEST AFRICA																1														1	0.39	
NORTH AMERICA												1																		1	0.39	
IRAQ												1																		1	0.39	
FIJI							1			1																				2	0.78	
JORDAN			1																											1	0.39	
ROMANIA			1																											1	0.39	
SOUTH AMERICA																												1		1	0.39	
AFRICA																			1											1	0.39	
TOTAL	10	11	11	10	10	8	7	12	8	9	7	8	7	8	7	7	8	11	8	11	7	10	8	8	7	6	7	8	8	9	256	100

From the Table 4, it is clear that the country having highest contribution of articles in DESIDOC journal of library and information technology is India (76.95%) and Indonesia (5.47%) is in the second position. While Iran contributed 4 articles (4.69%), all other countries have only one article.

Table 8 Distribution of Year-Wise References

Year	Volume	Issues	Reference	Percentage
2018	38	1,2,3,4,5,6	1359	22.39
2019	39	1,2,3,4,5,6	1264	20.82
2020	40	1,2,3,4,5,6	1051	17.31
2021	41	1,2,3,4,5,6	1189	19.59
2022	42	1,2,3,4,5,6	1207	19.88
Total		30	6070	100

Table 8 clearly represent that there is moderate increase in the number of references from the year 2018 to 2019. In 2018, the total number of references is only 1359 (22.39%), whereas in 2019 it has increased to a number of 1264 (20.82%). The number of issues also increased in year 2019 and 2022.

Finding and Conclusion

The research study found that most of contribution comes from India. Total 256 articles published in the journal of DESIDOC journal of Library and Information Technology during 2018-2022 with 1359 references. The analysis shows that the numbers of issues and articles have been increased from 2018 to 2022. The Maximum number of articles 12 (4.69%) is in the Issue no.2 of 2019. The Degree of Collaboration is 0.28. The country having highest contribution of articles in DESIDOC journal of library and information technology is India (76.95%) and Indonesia (5.47%) is in the second position.

Reference

Bapte, V. (2017). DESIDOC Journal of Library and Information Technology (DJLIT): A Bibliometric Analysis of Cited References. *DESIDOC Journal of Library & Information Technology*, 37(4), 264-269. Available at: <https://doi.org/10.14429/djlit.37.4.10712>

Garg, K. & Bebi (2014). A Citation Study of Annals of Library and Information Studies (ALIS) and DESIDOC Journal of Library and Information Technology (DJLIT). *Annals of*

Library & Information Studies, 61(3), 212-216.

Available at: <http://nopr.niscair.res.in/handle/123456789/29481>

Maharana, R. K. & Das, A. K. (2014). Growth and Development of LIS Research in India during 1999-2013: A Bibliometric Analysis. *Chinese Librarianship: An International Electronic Journal*, 2014(37), 35-46. Available at: <http://www.iclc.us/cliej/cl37MD.Pdf>

Verma, M., Sinha, M. & Shukla, R. (2021). Analysing Publishing Trends in Information and Communication Technology Literature Output using Scopus Database: A Scientometrics Analysis. *World Digital Libraries: An International Journal*, 14(1), 1-21.

Available at: <https://doi.org/10.18329/09757597/2021/14104>

Jan, Asifa. "Bibliometric analysis of Indian Journal of Fisheries". *International Journal of Library & Information Science (IJLIS)*, vol. 6, no. 3, 2017, pp.06-12.

www.iaeme.com/IJLIS/issues.asp?JType=IJLIS&VType=6&IType=3. Accessed 22 February 2023.

Kashyap, Santu Ram. "A bibliometric study of International Research Journal of Library and Information Science period 2011 – 2014". *International Journal of Library & Information Science (IJLIS)*, vol.6, no.5, 2017, pp.113-121.

Sahu, Harish Kumar. "A bibliometric analysis of research contribution in Pearl: a Journal of Library and Information Science, 2012–2016". *International Journal of Library & Information Science (IJLIS)*, vol.6, no.2, 2017, pp. 26-33.

Julio Montero-Díaz, Manuel Jesús Cobo, María Gutiérrez-Salcedo, Francisco Segado-Boj, Enrique Herrera-Viedma, "A Science Mapping Analysis of Communication WoS Subject Category (1980-2013)." *Comunicar: Media Education Research Journal* 26.55 (2018): 81-91.

Santa Soriano, Alba, Carolina Lorenzo Álvarez, and Rosa María Torres Valdés. "Bibliometric analysis to identify an emerging research area: Public Relations Intelligence—a challenge to strengthen technological observatories in the network society." *Scientometrics* 115.3 (2018): 1591-1614.

Ho Yuh-Shan. "Bibliometric analysis of adsorption technology in environmental science." *Journal of Environmental Protection Science* 1.1 (2007): 1-11.

Chouhan, S.K. & Mahajan, P. Measuring quality and quantity of Indian library and information science research output. *SRELS J. Inf. Manage.*, 2017, 54(3), 125.
doi: 10.17821/srels/2017/v54i3/79954.

Pandey, Rahul and Awasthi, Shikha, "Research Publication Pattern of Journal of Indian Library Association (JILA): A Bibliometric Analysis during 2015-2019" (2021). *Library Philosophy and Practice* (ejournal). 4733
<https://digitalcommons.unl.edu/libphilprac/4733>