Research Output Of Desidoc Journal Of Library And Information Technology: A Scientometric Analysis

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Abstract - This paper analysed the 362 articles published in the DESIDOC journal of library and information technology (2012-2016) by using Scopus database. It covers the areas like year wise research output, types of documents, ranking of authors, authorship pattern, Institutions with their research output and country wise distribution of contributions etc. At the time of data analysis 362 articles were published during the period 2012-2017. The data were analysed and tabulated as per objectives. Contributions were made from 24 different countries across the world to the journal during the study period.

Keywords: Scientometric, Journal, DESIDOC journal of library and information technology

Introduction

Scientometrics is one of the most important measures for the assessment of scientific productions. Scientometrics is the study of measuring and analysing science, technology and innovation. At present the scientometrics study is one of the truly interdisciplinary research fields extended to almost all scientific fields, mainly by producing statistics on scientific publications indexed in databases (Singh, 2014) cited in (Singh et al., 2017) The field of library and information science (LIS) has developed several quantitative methods to study the various aspects of subjects. The different metrics of LIS are continuously increasing, starting from librametrics, bibliometrics, scientometrics, informatics, webometrics, netometrics to cybernetics (Khan, 2016) cited in (Singh et al., 2017). The present study explores the blueprints of scholarly communication of DESIDOC journal of library and information technology from the year 2012-2017 and determines to exposure the quality of contributions of this journal towards library and information science literature.

About the Journal

Started in 1981, DESIDOC Journal of Library & Information Technology (DJLIT) is a peer-reviewed, open access, bi-monthly journal that publishes original research and review papers related to library science and IT applied to library activities, services, and products. Major subject fields covered include: Information systems, Knowledge management, Collection building & management, Information behaviour & retrieval, Librarianship/library management, Library & information services, Records management & preservation, etc. It is meant for librarians, documentation and information professionals, researchers, students and others interested in the field (http://publications.drdo.gov.in/ojs/index.php/djlit).

Review of Related Literature

Khan (2016) studied and reported that majority of the authors preferred journals as an information source for writing of scholarly communication. It was suggested by the author

that the journal should try to get high-quality papers from foreign authors too, which may be useful in enhancing its global impact and reputation. Singh et al. (2017) scrutinized the seven volumes of Partnership: the Canadian journal of library and information practice and research (2010-2016) and shows that single authors 187(71.92%) dominated the joint authors. It was clear from their study that Canada has contributed the highest number of articles. In similar study conducted by, (Singh et al., 2017; Verma & Singh, 2017; Singh, 2017) observed various aspects e.g. year wise distribution of article, authorship pattern, most prolific authors, geographical distribution of authors, bibliographic form used for citations and length of article etc. After analyzing bibliographic forms 3685 references were found in the 283 articles. It was clear that only four different countries across the world have contributed research articles to this journal during the period of study. Sanni and Zainab (2010) studied the scholarly communication published in Medical Journal of Malaysia during 2004-2008 and found 28(4.82%) of contributions were made by Malaysian authors with foreign collaboration. Suresh et al. (2015) analysed the Indian Journal of Horticulture 2010-2014 and found that 97.33 % of the papers were published by multi author. It was revealed that the Growth rate is 0.41 in 2010 and which decreased up to 0.19 in 2014 and most of the articles contributed from India.

Objectives

In this study the following objectives were formulated as:

- To analyse the chronological growth of articles during 2012-2017;
- To examine the types of contribution;
- To identify the authorship pattern;
- To study the ranking of author;
- To find out the prolific institute;
- To examine the country wise distribution of research output;

Methodology

The data were collected from Scopus database which is the largest abstract and citation database of peer-reviewed literature: scientific journals, books and conference proceedings published by Elsevier. After collecting all the required bibliographic data of 362 articles published in DESIDOC Journal of Library & Information Technology (DJLIT), it was analysed and represented in tabular form for reporting the study result. All the bibliographic details related to each published article such as year wise research output, types of documents, authorship pattern, ranking of author, prolific institutions and country wise distribution of the contributors etc are recorded for the purpose of analysis.

Results and Analysis

Year wise research

It was clear from the Table 1 that maximum number of contributions 69(19.06 percentage) were published in the year 2012, followed by 66(18.23 percentage) publications in the year 2013, whereas minimum 51(14.09 percentage) number were published in the year 2016. It was concluded that maximum number of contributions 69(19.06 percentage) were published in the year 2012.

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Year	Documents	%	
2012	69	19.06	
2013	66	18.23	
2014	63	17.4	
2015	54	14.92	
2016	51	14.09	
2017	59	16.3	
Total	362	100	

Table 1: Year wise research output

Types of Document

Table 2 shows that the types of documents published in DESIDOC Journal of Library & Information Technology (DJLIT) are categorized into different types given below. Out of these all types, article 340 (93.92 percentage) followed by editorial 13 (3.59 percentage), review 7 (1.93 percentage), note 2 (0.55 percentage). The findings shows that articles 340(93.92%) dominated the other forms of documents in the DESIDOC journal of library and information technology (DJLIT).

Table 2: Types of Document

Type	Documents	%
Article	340	93.92
Editorial	13	3.59
Review	7	1.93
Note	2	0.55
Total	362	100.00

Prolific Authors

Table 3 reveals ranking of authors who have contributed articles in the different issues of DESIDOC Journal of Library & Information Technology (DJLIT) during the study period. The authors having same amount of contributions have been considered in the same rank. It is revealed that Gupta, B.M. has positioned top rank in the list by contributing 11 articles followed by Ramaiah, C.K. scored second rank in the list by contributing 9 articles, Gupta, R. scored third in the list by contributing 7 articles, Madhusudhan, M. Scored fourth rank in the list by contributing 6 articles, Garg, K.C., Pandita, R. and Ram, S. scored fifth rank in the list by contributing 5 articles each. Where as Bansode, S.Y., Bhanumurthy, K., Bhardwaj, R.K., Kumar, S., Kumbhar, R., Singh, K.P. scored the sixth rank by contributing 4 articles each. It is clear from the findings that Gupta, B. M. has positioned top rank by contributing 11 articles and also dominated the author rank list.

Table 3: Prolific Author

Author	Documents	Rank
Gupta, B.M.	11	1
Ramaiah, C.K.	9	2
Gupta, R.	7	3
Madhusudhan, M.	6	4
Garg, K.C.	5	5
Pandita, R.	5	5
Ram, S.	5	5
Bansode, S.Y.	4	6
Bhanumurthy, K.	4	6
Bhardwaj, R.K.	4	6
Kumar, S.	4	6
Kumbhar, R.	4	6
Singh, K.P.	4	6

Authorship Pattern

It is clear from the table 4 that single authors have contributed 130(35.91 percentage) dominated by two authors 165 (45.58 percentage) followed by three authors 50 (13.81 percentage), four authors 12 (3.31 percentage). However, the contribution of five authors 5 (1.38 percentage) is relatively minimum. This analysis indicates that two authors' contribution is more predominant than the single, three, four and five authors.

Table 4: Authorship Pattern

Year	Single	Two	Three Four		Five	Total
2012	27	30	10 1 1		69	
2013	30	26	8	8 2		66
2014	21	28	9	5		63
2015	18	25	9	5 1 1		54
2016	18	22	8	1	2	51
2017	16	34	6	2	1	59
Total	130	165	50 12 5		362	
	(35.91%)	(45.58%)	(13.81%)	(3.31%)	(1.38%)	(100.00)

Prolific Institutions with their Research Contribution

Table 5 presents the prolific institutions of the DESIDOC Journal of Library & Information Technology (DJLIT) during the study. It is revealed that University of Delhi contributed the maximum number of documents 30 numbers followed by Council of Scientific and Industrial Research India 15 numbers. However Indian Institute of Technology Delhi contributed the minimum number of 5 documents during the study. It is revealed that University of Delhi contributed the maximum number of 30 documents.

Table 5: Prolific Institutions with their Research Contribution

Affiliation	Documents	Rank
University of Delhi	30	1
Council of Scientific and Industrial Research India	15	2
Pondicherry University	11	3

Defence Research and Development Organisation India	11	3
Banaras Hindu University	10	4
University of Kashmir	9	5
Jawaharlal Nehru University	9	5
Indian National Science Academy	9	5
National Institute of Science Technology and	8	6
Development Studies India		
Panjab University	6	7
Karnatak University India	6	7
Indira Gandhi National Open University	6	7
University of Pune	5	8
Punjabi University Patiala	5	8
Rashtrasant Tukadoji Maharaj Nagpur University	5	8
Manipal Academy of Higher Education	5	8
University of Kerala	5	8
Indian Institute of Technology Delhi	5	8

Country wise (Geographical distribution) of Articles

Table 6 reveals that the geographical distribution of contributors country-wise. It was found that there are 362 contributions made by the authors from 24 different countries. Out of the total 362 contributors, India contributed the highest number of articles 320 of total contributions followed by Nigeria 10, United States 7 and Fiji 3. However Bangladesh, Germany, Greece, Malaysia, Singapore, South Africa, Spain and Sudan are contributed 2 articles each. Argentina, Botswana, Iran, Oman, Portugal, Slovenia, Swaziland, Thailand, Turkey, United Arab Emirates and United Kingdom contributed 1 article each. The overall analysis indicates that DESIDOC Journal of Library & Information Technology (DJLIT) has set policy for considerations of the quality articles. The finding indicates that out of the total 362 contributors, India contributed the highest number of articles 320.

Table 6: Geographical distribution of Articles

Country	Documents	Country	Documents
India	320	Sudan	2
Nigeria	10	Argentina	1
United States	7	Botswana	1
Saudi Arabia	4	Iran	1
Fiji	3	Oman	1
Bangladesh	2	Portugal	1
Germany	2	Slovenia	1
Greece	2	Swaziland	1
Malaysia	2	Thailand	1
Singapore	2	Turkey	1
South Africa	2	United Arab Emirates	1
Spain	2	United Kingdom	1

Major findings

- It was concluded that maximum number of contributions 69(19.06 percentage) were published in the year 2012.
- The findings shows that articles 340(93.92%) dominated the other forms of documents in the DESIDOC journal of library and information technology (DJLIT).
- It is clear from the findings that Gupta, B. M. has positioned top rank by contributing 11 articles and also dominated the author rank list.
- This analysis indicates that two authors' contribution is more predominant than the single, three, four and five authors.
- It is revealed that University of Delhi contributed the maximum number of 30 documents.
- The finding indicates that out of the total 362 contributors, India contributed the highest number of articles 320.

Conclusion

The present study explores the blueprints of scholarly communication of DESIDOC journal of library and information technology from the year 2012-2017 and determines to exposure the quality of contributions of this journal towards library and information science literature. DESIDOC Journal of Library & Information Technology (DJLIT) is an international, bimonthly, peer-reviewed, and open access. It is one of the reputed referred journal in the field of library and information science exclusively dedicated to the library and information science and its development of various aspects. The journal shows that it publishes high quality articles leading with research papers, case studies, and general reviews contributed by the advanced researchers in the field of LIS.

References:

- 1. DESIDOC Journal: (http://publications.drdo.gov.in/ojs/index.php/djlit).
- 2. Khan, Imran (2016) A scientometric analysis of DESIDOC Journal of Library & Information Technology (2010-2014), Library Hi Tech News, Vol. 33 Issue: 7, pp.8-12, https://doi.org/10.1108/LHTN-03-2016-0014
- 3. Sanni, S. A and Zainab, A. N. (2010). Google Scholar as a source for citation and impact analysis for non-ISI indexed medical journal. *Malaysian Journal of Library and Information Science*, 15 (3), pp.35-51.
- 4. Singh, J. K. (2012). A bibliometric analysis of LIBRI Journal (2001-2009), *Indian Journal of Information Sources and Services*, 2(1), 55-60.
- 5. Singh, J. K. (2014). Research Journal of Library Sciences, 1(2). 7-12.
- 6. Singh, K. (2017). Scholarly Communication in Evidence Based Library and InformationPractice from 2011-2015: A Bibliometric study. *International Journal of Next Generation Library and Technologies*, Vol. 3(4), p. 1-14.
- 7. Singh, K., Nayak, S. and Varma, A. K. (2017). A Scientometric Analysis of Partnership: the Canadian Journal of Library and Information Practice and Research

(2010-2016). *International Journal of Library and Information Studies*, Vol 7(3), pp. 81-88.

- 8. Singh, K., Varma, A. K. and Pradhan, A. (2017). Scientometric Analysis of International Journal of Library and Information Studies (IJLIS). *Knowledge Librarian: An International Peer Reviewed Bilingual E-Journal of Library and Information Science*, Vol. 4(6), p. 63-72.
- 9. Suresh, C., Hema, R. and Sankarasubramaniam, N. (2015). A Scientometric analysis of the Indian Journal of Horticulture (2010-2014). *Asia Pacific Journal of Research*, 1(34), pp.86-97.
- 10. Verma, N. and Singh, K. (2017). Research Publication to International Journal of Digital Library Services: A Scientometric Analysis. *Knowledge Librarian: An International Peer Reviewed Bilingual E-Journal of Library and Information Science*, Vol. 4(6), p. 108-114.

