



Trends in Information Management (TRIM) Journal: A Bibliometric Analysis

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Abstract

Purpose: The main aim of the study is to assess the amount of research published in only LIS journal from Jammu & Kashmir, enjoying fair amount of readership at global level and to see how far the journal is being preferred by local, national and international LIS professionals to publish their research results. Present study examines article distribution pattern of the journal, authorship pattern, geographical distribution of authors and citation analysis.

Methodology/Approach: Data was retrieved from the website of the "Trends in Information Management (TRIM)" journal published during the period 2005-2012. 95 articles were scanned from 08 (eight) volumes of the journal.

Findings: 95 articles were published along with 24 book reviews, contributed by 126 authors from 13 countries. India emerges the largest contributor with maximum of 63 articles, majority of them i.e. 35 articles contributed from state of Jammu & Kashmir. Maximum no. of 41 articles contributed are single authored. Further, a total of 1403 references have been cited with an average of 14.76 references/article.

Practical Implications: Bibliometric studies are important for that fact that these act as SWOT (Strength, Weakness, Opportunities and Threats) tool to analyze and evaluate the amount of research activities being undertaken by professionals of a particular science. Accordingly, policy makers can identify areas, which require attention and suggest measures to plug voids if any.

Key Words: Trends in Information Management (TRIM), Bibliometrics, Scientometrics, Reference distribution, Authorship pattern, Quantitative techniques, Citation analysis

Paper Type: Research

Introduction

Pitchard (1969) is considered as the founding father of the term bibliometrics. Professionals from different walks however had been arguing that prior to bibliometrics terms like *Librametrics*, *Econometrics*, *Psychometrics*, *Scientometrics*, *Biometrics*, etc were already in vogue. He coined the term in 1969 in his publication entitled "Statistical bibliography of bibliometrics". He defines the term as "the application of mathematical and statistical methods to books and other media of communication". Bibliometrics as we know is a fusion of "biblio" and "metrics"; metrics is about the mathematical applications to a given field and "biblio" on the other hand as we know means pertaining to books, so conjoining the both makes it bibliometrics. Therefore, bibliometrics is more about application of tools to understand the productivity of any given field with quantitative techniques, which for the

given fact means quantitative evaluation of literature by mathematical and statistical applications.

Need, purpose and importance of carrying out bibliometric studies varies considerably from researcher to researcher, most commonly these bibliometric studies are undertaken to assess the research productivity of an institution, organization, publications of particular subject or field etc. Basic purpose of undertaking such kind of studies is mostly to evaluate research output of a particular subject during a particular period. Journals are considered as the primary sources of information that publish research results and to have a better understanding of the research growth and output of a particular discipline. It is always advisable to analyze journals of repute to assess the research growth by using quantitative techniques. Bibliometric techniques of research evaluation give us a better idea and understanding about the research growth and future prospects of a particular discipline. The current study takes into account the bibliometric analysis of the first Kashmiri journal in the field of Library and Information Science.

About the journal

TRIM is an eight years old journal, but on observing the quality of research articles published in it, the journal has already carved a place for itself and is being seen as one of the leading potential journals in the field of Library and Information Sciences in India. The journal enjoys fair amount of popularity among the professional circles outside the country. The journal apart from giving fair amount of coverage to variety of articles pertaining to different areas of library profession, has given special converge by publishing special issues on topics like “open access publishing”, “open source softwares”, “oriental librarianship” etc. However, more interesting fact about the journal is, that in each issue library professionals from outside the country have contributed at least one or more articles and publishing book review in almost each volume has been the regular feature of the journal.

Review of Literature

There is a growing trend among library professionals to undertake bibliometric studies to assess the research output of scholarly content published by research journals all across the globe. Moreover, rightly so, for the fact, that studies of such nature help us to develop better understanding about growth, trend and future prospects of research in a particular discipline. If we see, researchers in various disciplines have already undertaken numerous bibliometrics studies all across the globe.

Mete and Deshmukh (1994) analyzed 202 articles published during the period 1984-1993 in *Annals of Library and Information Studies* and

observed that source journal is the most cited publication. The researchers further observed that half life period of the books are 8 years which compared to journals is 12 years. Moreover, **Deshmukh (2011)** undertook a similar study after a gap of 17 years on same journal and found that articles published between 1997-2010 and revealed that half life period of journals stands at 14 years which compared to books is far better, as the same stands at 9 years. Comparing both the studies of same author reveals that half-life period both in the case of books as well as in the case of journals has improved. **Tiew (1998)** on the similar lines studied *Journal of Natural Rubber Research*, **Vij and Bedi (1999)** studied *Defense Science Journal*. Similarly, various other researchers carried out studies in the field of bibliometric analysis (**Das, 2000; Dutta and Sen 2000; Dutta and Sen, 2001; Hazarik Goswami & Das, 2003; Sivasubramanian, 2000; Sivasubramanian, 2003**).

Kumar and Kumar (2005) studied the articles published between 1993-2004 in the *Journal of Oil Seed and Research*. While analyzing 8093 citations of articles, the researchers observed that nearly 70% citations are given under main articles and 30% under short communications and other write-ups. **Gunasekarn, Batcha, Sadik and Sivaraman (2006)** analyzed the research output of chemical science research in India and their publication in journals having impact factor. **Verma, Tamrakar and Sharma (2007)** analyzed 131 articles published in *Annals of Library and Information Science* during the period 1999-2005 and observed that there are more single author contributions with Delhi topping the list for most contributions. The researchers further observed that that the source journal. Another related study includes the one carried out by **Sam (2008)**.

Ram (2010) analyzed 15 years data of *PubMed* on Artemisia (Artemisia Annua). **Dixit and Katore (2007)** under took study on *Journal of Indian Cotton Improvement* for articles published from 1995-2004. The researchers analyzed 3521 citation of 327 articles and observed that 71.93% citations are from source journal. **Rattan and Gupta (2012); Bakri and Willett (2008); Tiew, Abdullah and Kaur (2002)** in their study undertaken on Malaysian Journal of Library and information Science, observed that 27% articles were single authored and 73% joint authored publications with maximum contribution from host country, viz Malaysia.

Objectives

The present study has been undertaken with the following objectives:

- To analyze the articles published during the period 2005-2012.
- To analyze the authorship pattern and their geographical affiliation with number of contributions.

- Ranking of countries according to number of articles, authors and contributors.
- To analyze average articles published per volume and reference distribution pattern with average references per article.

Methodology

In the present study, data-mining is done and accordingly the data required for analysis was retrieved from the homepage of journal, available at <http://ojs.uok.edu.in/ojs/index.php/crdr/issue/archive>. Articles published during the period 2005-2012 were scanned. The relevant information was extracted and analyzed. In all 95 articles were scanned from 8 (Eight) volumes of the journal from Vol. 1 to 8.

Findings*

Article distribution

There is a steady increase in the number of articles published in each volume of the journal. Volume 7 has recorded a maximum of 21 (22.10%) articles, with issue no. 2 (Vol. 7) published as special issue dedicated to *open source software's* and an average of 10.50 articles in each issue of Vol. 7. Similarly, a minimum of six articles were published in Vol. 1 (6.31%), which can be owed to the fact that Vol. 1 had a solo issue. Furthermore, on an average 6.33 articles were published in each volume. A detailed description about the volume wise distribution of the articles can be had from **Table 1**.

Table 1: Volume wise distribution of articles

Year	Vol.	No. of Issues	Distribution of articles		Total articles	Average Articles per issue
			Issue 1	Issue 2		
2005	1	1	6	-	6 (6.31)	6.00
2006	2	2	5	5	10 (10.52)	5.00
2007	3	2	5	6	11 (11.57)	5.50
2008	4	2	7	5	12 (12.63)	6.00
2009	5	2	7	6	13 (13.68)	6.50
2010	6	2	6	6	12 (12.63)	6.00
2011	7	2	5	16	21 (22.10)	10.50
2012	8	2	5	5	10 (10.52)	05.00
		15	46 (48.42)	49 (51.97)	95 (100)	6.33

Figures in parentheses indicate percentage

* Percentage at all the places has been drawn maximum up to two decimal places and has not been rounded off at any places which as a result can show slight variation while adding the percentages.

Book Reviews Distribution

Publication of book reviews has been the regular feature of the journal except for Vol. 7. On an average 1.60 reviews have been published in each issue. During the initial years of publication, the journal has shown a good consistency in publishing book reviews but towards the later years, there is a gradual decline in the same. A maximum of 06 reviews were published in the Vol. 2 (**Table 2**).

Table 2: Volume wise distribution of book reviews

Year	Vol	Issues	Distribution of Book Reviews		Total Reviews
			Issue 1	Issue 2	
2005	1	1	3	-	3 (12.50)
2006	2	2	3	3	6 (25.00)
2007	3	2	2	2	4 (16.66)
2008	4	2	2	3	5 (20.83)
2009	5	2	2	1	3 (12.50)
2010	6	2	0	1	1 (4.16)
2011	7	2	0	0	0 (0.00)
2012	8	2	0	2	2 (8.33)
		15	12 (50.00)	12 (50.00)	24 (100)

Figures in parentheses indicate percentage

Authorship pattern

41 publications are single authored followed by 37 articles as double authored, 11 articles as 3 authored, and 06 articles as more than three authored. Overall, 54 articles have been published on joint authorship pattern constituting 56.84% of total publication (**Table 3**).

Table 3: Volume wise authorship pattern of articles

Year	Vol.	Single author	Two authors	Three authors	> 3 authors	Total
2005	1	3	2	0	1	06
2006	2	5	3	2	0	10
2007	3	10	1	0	0	11
2008	4	6	5	1	0	12
2009	5	6	4	0	3	13
2010	6	4	6	1	1	12
2011	7	2	13	5	1	21
2012	8	5	3	2	0	10
Total		41	37	11	6	95

Geographical affiliation of authors

Two articles have been written collaboratively by authors from two different countries as such weightage has been given to both the countries and accordingly the total contributions appear 97 and the percentage has been drawn on the basis of 97 articles. Authors from 13 countries have made contributions with India ranking first (65.12%), that

can be attributed to the fact that India being the host country of the journal and as such maximum contributions are from India. India is followed by Nigeria (8.85%), Saudi Arabia (7.52%) (**Table 4**).

Table 4: Geographical affiliation of authors

Rank	Country	Total contributions
1	India	63 (64.94)
2	Nigeria	9 (9.27)
3	Saudi Arabia	5 (5.15)
4	U.S	4 (4.12)
4	U.K	4 (4.12)
5	Pakistan	2 (2.06)
5	France	2 (2.06)
5	Argentina	2 (2.06)
5	Canada	2 (2.06)
6	South Africa	1 (1.03)
6	Malaysia	1 (1.03)
6	Finland	1 (1.03)
6	Turkey	1 (1.03)
	Total	97 (100)

Figures in the parentheses indicate percentage

State wise contribution and authorship pattern of articles from India

Since most of the articles contributed are on joint authorship pattern as such, weight-age has been given to individual joint author. **Table 5** reflects 66 contributions from India which is larger than the contributions reflected in **Table 4**. The reason for this difference is because authors have collaboratively written three articles from two different states of the country, and weight-age has been given to each author individually, as such, numbers vary. Authors from 12 states have contributed articles with a maximum of 35 articles from J&K, followed by Uttar Pradesh (9 articles) and Maharashtra (5 articles).

Table 5: State wise contribution of articles from India along with authorship pattern

Rank	State	No. of Authors				Total Articles
		1	2	3	> 3	
1	Jammu & Kashmir	14	15	6		35 (53.03)
2	Uttar Pradesh	3	4	2		9 (13.63)
3	Maharashtra	3	1	1		5 (7.57)
4	Rajasthan	3	1			4 (6.06)
5	Karnataka		3			3 (4.54)
6	Punjab	1	1			2 (3.03)
6	New Delhi	1	1			2 (3.03)
6	Chandigarh	1		1		2 (3.03)
7	Uttarakhand		1			1 (1.51)
7	Meghalaya		1			1 (1.51)
7	Tamil Nadu			1		1 (1.51)
7	Gujarat				1	1 (1.51)
		26	28	11	1	66 (100)

Figures in parentheses indicate percentage

Key contributors along with pattern of article distribution

Eradicating the repetition of authors, 126 authors have contributed to the journal. *S.M Shafi* has contributed a maximum of 7 articles (4.00%), followed by *M. Ahmed*, who has contributed a maximum of 5 articles. *Tariq Ahmad Shah*, *S.M.K Quadri*, *Sumeer Gul* and *L. Sharif* have contributed 4 articles each and are placed jointly at third spot. Apart from this, four authors have contributed 3 articles each, nineteen authors have contributed 2 articles each and ninety-seven authors have contributed 1 article each (Table 6).

Table 6: Major Contributors and pattern of article distribution

Rank	Major contributors	No. of Authors				Total contribution
		1	2	3	>3	
1	S.M. Shafi	2	5			7 (4.00)
2	M. Ahmed		1		4	5 (2.85)
3	Tariq Ahmad Shah	1	1	2		4 (2.28)
3	S.M.K Quadri		3	1		4 (2.28)
3	Sumeer Gul		1	3		4 (2.28)
3	L. Sharif		1		3	4 (2.28)
4	Shabir Ahmed Ganaie	3				3 (1.71)
4	Zahid Ashraf Wani	1	1	1		3 (1.71)
4	Rosy Jan	1	1	1		3 (1.71)
4	A. Alharby				3	3 (1.71)
	2 papers (19 authors)	12	16	4	6	38 (21.71)
	1 paper (97 authors)	21	44	21	11	97 (55.42)
		41	74	33	27	175 (100)

Figures in parentheses indicate percentage

Pattern of reference distribution

1403 references have been cited against 95 articles, resulting in an average of 14.76 references/article. Among all highest of average of 17.85 is received by Vol. 7 while as least average of 10 is received by Vol. 1 (Table 7).

Table 7: Reference Distribution Pattern

Year	Vol.	No of Articles	No. of references		Total reference	Avg. Ref/Article
			Issue 1	Issue 2		
2005	1	6	60	-	60 (4.27)	10.00
2006	2	10	55	49	104 (07.41)	10.40
2007	3	11	66	97	163 (11.61)	14.81
2008	4	12	134	71	205 (14.61)	17.08
2009	5	13	68	139	207 (14.75)	15.92
2010	6	12	55	92	147 (10.47)	12.25
2011	7	21	138	236	374 (26.65)	17.80
2012	8	10	55	88	143 (10.19)	14.30
		95	631 (44.97)	772 (55.02)	1403 (100)	14.76

Figures in the parentheses indicate percentage

Authorship pattern of citations

604 references have been cited against 41 single authored articles, with an average of 14.73 references to each single authored article. Similarly, 542 references have been cited to 37 double-authored articles with an average of 14.63 references. Accordingly, average of 14.18 references have been cited against three authored articles; 16.80 references against each four authored articles; and 17 references to each seven authored articles. It can be augmented that there is no specific trend or pattern, which one ought to have followed in citing references under any type of authorship pattern (Table 10).

Table 10: Authorship pattern of citations

Author Type	Distribution of references Issue wise		Total References	Cumulative References	No. of articles	Average References
	No. 1	No. 2				
Single	280	324	604 (43.05)	604	41	14.73
Two	244	298	542 (38.63)	1146	37	14.64
Three	71	85	156 (11.11)	1302	11	14.18
Four	36	48	84 (05.98)	1386	5	16.80
Five	00	00	00	1386	0	00.00
Six	00	00	00	1386	0	00.00
Seven	00	17	17 (01.21)	1403	1	17.00
	631(44.97)	772 (55.02)	1403 (100)		95	14.76

Figures in parentheses indicate percentage

Conclusion

The journal during the period of study has maintained a steady pattern of publication as the growth rate of articles is promising in every issue. Moreover, each issue of the journal apart from covering research articles has regularly featured book reviews and news scan. Contribution of articles from the 13 different countries across the world corroborates the fact that journal enjoys fair amount of popularity/readership at global level. Furthermore, among the top three contributors of the journal two are from abroad. At national level, the journal has contributions from 12 different states and union territories of the country with J&K leading the list with a maximum of 35 contributions. This also gives an impression that being the host state the journal in future will also show same kind of publication distribution. Most of the research articles covered in the journal are empirical in nature. However, converge has been equally given to conceptual and other articles also. More than 56.84% articles published are on co-authorship pattern, which in fact is a growing trend among researchers all across the globe, mostly ranging from two to seven authors.

References

- Bakri, A., & Willett, P. (2008). The Malaysian Journal of Library and Information Science 2001-2006: A bibliometric study, *Malaysian Journal of Library & Information Science*, 13(1), 103-116. Retrieved from <http://eprints.whiterose.ac.uk/4704/2/BakriMJLIS208.pdf>
- Das, A. (2000). Bibliometric analysis of publications in plasma physics contributed by the scientists at the institute for plasma research, *IASLIC Bulletin*, 45 (4), 145-160.
- Deshmukh, P. P. (2011). Citations in Annals of Library and Information Studies, *Annals of Library and Information Studies*, 58(4), 335-361. Retrieved from [http://nopr.niscair.res.in/bitstream/123456789/13485/1/ALIS%2058\(4\)%20355-361.pdf](http://nopr.niscair.res.in/bitstream/123456789/13485/1/ALIS%2058(4)%20355-361.pdf)
- Dixit, S., & Katore, V.V. (2007). A Bibliometric Analysis of the Journal of Indian Society for Cotton Improvement (1995-2004), *Annals of Library and Information Studies*, 54 (2), 119-123. Retrieved from <http://nopr.niscair.res.in/bitstream/123456789/3244/1/ALIS%2054%282%29%20119-123.pdf>
- Dutta, B., & Sen, B. K. (2000). Indian journal of pure and applied physics: An analysis of citation pattern, *ILA Bulletin*, 36 (3), 65-68.
- Dutta, B., & Sen, B. K. (2001). Indian journal of pure and applied mathematics: An analysis of citation pattern, *IASLIC Bulletin*, 46 (4), 221-226.
- Gunasekarn, S., Batcha, M. Sadik., & Sivaraman, P. (2006). Mapping chemical science research in India: A bibliometric Study, *Annals of Library and Information Studies* 53(2), 83-95. Retrieved from <http://nopr.niscair.res.in/bitstream/123456789/4680/1/ALIS%2053%282%29%2083-95.pdf>
- Hazarika, T., Goswami, K., & Das, P. (2003). Bibliometric analysis of Indian forester: 1991-2000, *IASLIC Bulletin*, 48 (4), 213-223. Retrieved from <http://eprints.rclis.org/5828/1/pdf.pdf>
- Kumar, S., & Kumar, S. (2005). A bibliometric study of the journal of the oil seed research, since 1993-2001, *SRELS Journal of Information Management* 42(3), 305-332.
- Mete, M.V., & Deshmukh, P.P. (1996). Citation analysis of Annals of Library Science and Documentation, *Annals of Library Science and Documentation*, 43(1), 11-25.
- Pritchard, A. (1969). Statistical Bibliography or Bibliometrics? *Journal of Documentation*, 25(4), 348-349. Retrieved from http://www.academia.edu/598618/Statistical_bibliography_or_bibliometrics

- Ram, S. (2011). Research Output Artemisia (*Artemisia Annuia*): A bibliometric Study, *Annals of Library and Information Science*, 58(3), 237-248. Retrieved from <http://nopr.niscair.res.in/bitstream/123456789/12842/1/ALIS%2058%283%29%20237-248.pdf>
- Rattan, G. K., & Gupta, K. (2012). Bibliometric analysis of Malaysian Journal of Library and Information Science: 2007-2011, *International Journal of Information Dissemination and Technology*, 2(4), 307-312. Retrieved from www.ijidt.com/index.php/ijidt/article/download/246/114
- Sam, J. (2008). An analysis of Ghana Library Journal: A bibliometric study. *African Journal of Library Archives and Information Science*, 18(1), 55-62.
- Sivasubramanian, V. (2000). Journal of Indian coffee: A bibliometric study, *Annals of Library Science and Documentation*, 47 (2), 75-79. Retrieved from [http://nopr.niscair.res.in/bitstream/123456789/17921/1/ALIS%2047\(2\)%2075-79.pdf](http://nopr.niscair.res.in/bitstream/123456789/17921/1/ALIS%2047(2)%2075-79.pdf)
- Sivasubramaniam, V. (2003). Journal of planters' chronicle: A bibliometric study, *IASLIC Bulletin*, 48 (2), 119-123.
- Tiew, W. S. (1998). Journal of natural rubber research 1998-1996: A ten year bibliometric study, *IASLIC Bulletin*, 43 (2), 49-57.
- Tiew, W.S., Abdullah, A., & Kaur, K. (2002). Malaysian Journal of Library and Information Science 1996-2000: A bibliometric study, *Malaysian Journal of Library and Information Science*, 6(2), 43-56 Retrieved from <http://eprints.rclis.org/5914/1/pdf.pdf>
- Trends in Information Management. (TRIM). (n.d). Retrieved from <http://ojs.uok.edu.in/ojs/index.php/crdr/issue/archive>
- Verma, N., Tamrakar, R., & Sharma, P. (2007). An analysis of contribution in Annals of Library and information Studies. *Annals of Library and Information Studies* 54(2), 106-111. Retrieved from <http://nopr.niscair.res.in/bitstream/123456789/7497/1/ALIS%2054%282%29%20106-111.pdf>
- Vij, R., & Bedi, D. S. (1998-99). Defence science journal: A ten year bibliometric study, *ILA Bulletin*, 34 (3/4), 39-44.

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