

Foreign Authorship Pattern in Selected Library and Information Science Journals of India

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ABSTRACT

Foreign authorship pattern to three leading Indian library and information science (LIS) journals during 2008 to 2017 has been examined to identify the acceptability and popularity of Indian LIS journals among foreign authors. The present study investigates the authorship pattern in terms of different aspects like journals, years, collaborations, prolific authors, countries, research areas, cited papers and citations. It is found that in last 10 year the three LIS journals publish total 186 foreign authored article having total 1267 citation and two-authored papers are predominant. Besides, the authors from *Nigeria* share maximum articles followed by USA. It is recommended that the Indian LIS authors need to emphasis more on international collaboration to output more foreign authored contributions in national level journals to enrich journals literature.

Keywords: Foreign collaboration; Authorship pattern; Bibliometrics; Annals of Library and Information Studies; DESIDOC Journal of Library & Information Technology; SRELS Journal of Information Management.

1. INTRODUCTION

Research is now-a-days no more carried out by independently rather than it is a collaborative effort of individuals, institutions and countries. In the new era of Globalisation, research collaborated or co-authored with foreign authors now becomes a prestigious practice to develop individual's capability and research performance. International collaboration also strengthens the country's knowledge base as well as useful to expand the subject scope as per international standard. Meanwhile, publication of these contributions also increases the status and reputation of a journal. It is worthwhile to mention that the scholarly content of such journals will also be enriched and thereby will help to achieve wider international recognition, readership and impact¹. The present analytical study is an attempt to depict the foreign authored contributions to leading Indian LIS journals during the last decade.

2. LITERATURE REVIEW

The literature review highlighted the papers on foreign authored contribution in Indian LIS journals. For instance,

Verma², *et al.* analysed total 131 paper of the *Annals of Library and Information Studies* (ALIS) journal during 1999-2005 and stated that the two foreign countries i.e. *Nigeria* and *Nepal* shared highest contributions.

In another study, Jena³, *et al.* analysed the publication trends in ALIS during 2002 to 2010 and depicted that among

11 foreign countries, *Nigeria* followed by *Netherlands* and *USA* shared maximum contributions.

Bansal⁴ measured the pattern and growth of article published in the *DESIDOC Journal of Library & Information Technology* (DJLIT) during the period of 2001-2012 and showed that authors from USA, UK and Singapore published eight article from each. In total foreign authors originating from 21 different countries produced 40 article. Besides, Indian authors produced 6 article collaborating with foreign authors.

Pandita⁵ in his paper examined the article published in DJLIT journal during 2003-2012 and reported that out of 22 foreign countries, *Singapore*, *UK* and *USA* contributed maximum 8 article each.

Mamdapur⁶, *et al.* assessed the article in *SRELS Journal of Information Management* (SRELS) during 2004-2013 and revealed that authors from 16 foreign countries published article in the journals. Of these, *Kenya* and *USA* lead the table of most productive countries.

Patil⁷ studied the 249 article of *Herald of Library Science* journal from 1995 to 2005 and found that 17 foreign countries shared 48 article. Among foreign countries, *Nigeria* ranked the leading positions followed by *USA*.

Mondal and Raychoudhury¹ evaluated the contribution of foreign authors in 12 Indian LIS journals during 2004-2015 and stated that the *COLLNET Journal of Scientometrics and Information Management* (CJSIM) published highest foreign authored article. Out of 57 contributing countries, *Nigeria* and *Iran* ranked top two positions consecutively.

In their another study, Mondal & Jana⁸ investigated the

collaboration trend of three leading Indian LIS journals during 2012-2017 and showed that foreign LIS authors contributed 115 article. Furthermore, the Indian LIS authors collaborated with foreign authors to produce 11 article.

The literature review demonstrates the trend of foreign authors' contribution in different Indian LIS journals. However, the extent of contribution varies from time to time and from one journal to another journal. Hence, the present study evaluates the leading Indian LIS journals on the basis of foreign authorship trend.

3. OBJECTIVES OF THE STUDY

The present study highlights the foreign authors' contribution in leading Indian LIS journals to find out their publication behavior, trend and impact. The main objectives are as follows

- Report the journal and year wise distribution of the article
- Illustrate the authorship pattern and collaboration trend,
- Reveal most prolific authors
- Identify most productive countries and research areas
- Depict the most cited papers and
- Examine the citation details.

4. DATA SOURCE, LIMITATIONS AND METHODOLOGY

The present bibliometric study is restricted to research 'article' publications of foreign affiliated authors in three leading Indian LIS journals during the period of 2008 to 2017. The study considers only those article where at least one author appears from foreign country. However, the article by the popular Indian author 'B. K. Sen' have been excluded from the selected article though sometimes he used foreign affiliation. The author is well known to all of the LIS professionals as one of the great Indian authors. Furthermore, it is found that few authors have used more than one affiliation. In those cases, only first affiliation has been selected for consideration.

The three leading Indian LIS journals⁹ are *Annals of Library and Information Studies*, *DESIDOC Journal of Library & Information Technology* and *SRELS Journal of Information Management*. These promising journals have long traditional history of scholarly publications in Indian LIS discipline and have completed the volumes of 65, 38, and 55 respectively in the year 2018.

Total 186 article have been taken up for the study and manually retrieved from the archive of the respective journals website¹⁰⁻¹². Then the bibliographical details have been collected and saved to MS-Excel file. The data are then analysed and presented in tabular and graphical format for interpretation. Further, the Google Scholar online database¹³ has also been consulted during 2nd week of August, 2018 to get the citation impact of the article.

5. RESULTS AND DISCUSSIONS

The analysed data are categorised and interpreted in respect of different criteria like journals, years, collaborations, prolific authors, countries, research areas, cited papers, citations.

5.1 Journal wise Distribution of Article

Table 1 reveals the contribution of foreign authors to leading Indian LIS journals. During the study period, the three LIS journals publish total 186 article which also received a total of 1267 citation having average citations of 6.81 per article and h-index of 16. Of these, 23 article are produced by foreign authors collaborated with Indian authors and the remaining article i.e. 163 are written by the foreign affiliated authors. The DJLIT journal publishes maximum number of 77 foreign authored article whereas the SRELS journal share minimum of 39 article.

Table 1. Distribution of articles by journals

Journals	Foreigner co-authored with Indian authors	Foreign authored articles	Total articles
ALIS	03	67	70
DJLIT	11	66	77
SRELS	09	30	39
Total	23	163	186
Times cited	103	1164	1267
Avg. citations per article	4.48	7.14	6.81
h-index	05	16	16

5.2 Year wise Distribution of Article

Table 2 and Fig. 1 illustrate the data related to years and their share of the total number of article. Out of 186 article, highest numbers of 32 article (17.20 %) have been published in the year 2013 followed by 24 article (12.90 %) in 2008 and 23 article (12.36 %) in 2017. Further, 24 article published in 2008 receive maximum an average citation of 19.37 per article with h-index of 8. Hence, during the last 10 year, an overall fluctuating trend has been seen in the foreign authored publication trend.

Table 2. Distribution of articles by years

Year	No. of articles	% of articles	Times cited	Avg. citations per article	h-index
2008	24	12.90	465	19.37	8
2009	07	3.76	53	7.57	5
2010	12	6.45	110	9.16	6
2011	20	10.75	263	13.15	10
2012	18	9.7	127	7.05	07
2013	32	17.20	100	3.12	05
2014	17	9.14	71	4.17	05
2015	17	9.14	58	3.411	05
2016	16	8.60	09	0.56	02
2017	23	12.36	11	0.48	02
Total	186	100	1267	6.81	16

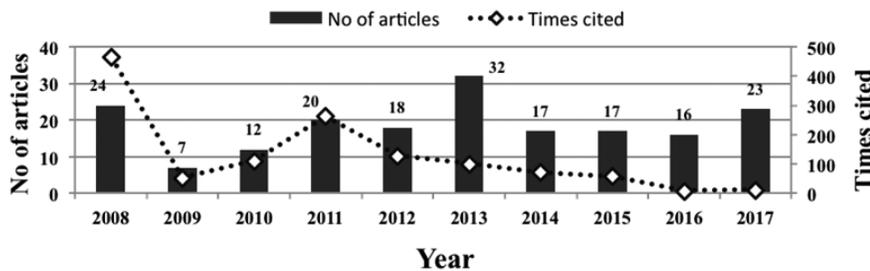


Figure 1. Year wise distribution of articles.

5.3 Journal wise Distribution of Authorship Pattern and Collaboration Trend

Table 3 sketches the authorship pattern and collaboration trend of the foreign authored contributions. Out of total 186 articles, highest numbers of 73 article (39.25 %) are two-authored followed by single authored with 69 (37.1 %) article and three authored with 25 article (13.44 %). However, more than four authored contributions are found quite less. The Collaborative Index (CI) and the Collaborative Coefficient (CC) are found maximum i.e. 2.06 and 0.39 respectively in 70 articles of ALIS journal whereas the collaboration trend has been found minimum in DJLIT articles.

Table 3. Collaboration trend by journals

Journals	Authorship						Total articles	CI	CC
	Single	Two	Three	Four	Five	Six			
ALIS	22	33	9	2	3	1	70	2.06	0.39
DJLIT	31	28	10	6	2	--	77	1.96	0.34
SRELS	16	12	6	4	1	--	39	2.02	0.35
Total =	69	73	25	12	6	1	186	2.01	0.36
% of articles	37.1	39.25	13.44	6.45	3.22	0.54	100	--	--

Table 4. Most prolific authors who contributed at least 4 article

Authors	Country	No of articles	Distribution of articles	Times cited	Avg. citations per paper
Chennupati K Ramaiah	India	05	DJLIT (5)	33	6.6
Constantine Matoke Nyamboga	Kenya	05	SRELS (5)	02	0.4
Raymond Wafula Ongus	Kenya	05	SRELS (5)	02	0.4
Pradeepa Wijetunge	Sri Lanka	04	ALIS (3), DJLIT (1)	16	04
Ronald Rousseau	Belgium	04	ALIS (2), DJLIT (1), SRELS (1)	27	6.75
Wole M. Olatokun	Nigeria	04	ALIS (4)	23	5.75

The mathematical formula for calculation of collaboration tools are as follows¹⁴.

$$\text{Collaborative Index (CI)} = \frac{\sum_{j=1}^K j \cdot f_j}{N}$$

where j is number of author(s), f_j is the number of j - authored research papers published in a discipline during a certain period of time, N is the total number of research papers published in a discipline during a certain period of time and K is the greatest number of collaborated authors per paper in a discipline.

$$\text{Collaborative Coefficient (CC)} = 1 - \frac{\sum_{j=1}^K \left(\frac{1}{j}\right) f_j}{N}$$

where j is number of author(s), f_j is the number of j -authored research papers, N is the total number of research papers and K is the greatest number of authors per paper.

5.4 Most Prolific Authors

Table 4 reveals the most prolific authors who contributed minimum 04 article during the study period. Out of most productive 6 author, Chennupati K Ramaiah, the Indian author collaborates with foreign affiliated authors and contributes maximum of 5 article in DJLIT journal. Meanwhile, two authors from Kenya i.e. Constantine Matoke Nyamboga and Raymond Wafula Ongus also share 5 article each in SRELS journal. However, the article of the great Belgium author i.e. Ronald Rousseau received maximum average citations per paper.

5.5 Country wise Distribution of Article

The leading country-wise distribution of article contributed by foreign authors is depicted in Table 5. The geographical distribution of article is decided on the basis of the address of authors' affiliation mentioned in the article. The authors from Nigeria publish highest number of 36 article in leading Indian LIS journals and prefers ALIS journal over the other two journals. This is followed by USA with 20 article and Sri Lanka with 17 article respectively. Nonetheless, the USA originated papers cited 367 time with maximum average citations of 18.35 per paper. Few collaborated article come in more than one country.

5.6 Most Productive Research Areas

Figure 2 identifies top 10 most productive sub-domains within LIS research in which research publications carried out. Highest number of 43 article has been carried out in the

Table 5. Most prolific countries that contribute at least 6 article

Country	No of articles	Distribution of articles	Times cited	Avg. citations/paper
Nigeria	36	ALIS (24); DJLIT (10); SRELS (2).	162	4.5
USA	20	ALIS (6); DJLIT (8); SRELS (6).	367	18.35
Sri Lanka	17	ALIS (12); DJLIT (1); SRELS (4).	73	4.3
Bangladesh	14	ALIS (9); DJLIT (4); SRELS (1).	132	9.43
Iran	9	ALIS (4); DJLIT (2); SRELS (3).	26	2.88
UK	9	DJLIT (6); SRELS (3).	57	6.33
Singapore	8	DJLIT (8).	95	11.87
Belgium	6	ALIS (4); DJLIT (1); SRELS (1).	39	6.5
Canada	6	ALIS (2); DJLIT (2); SRELS (2).	26	4.33
Saudi Arabia	6	DJLIT (4); SRELS (2).	36	6
UAE	6	ALIS (1); DJLIT (2); SRELS (3).	11	1.83

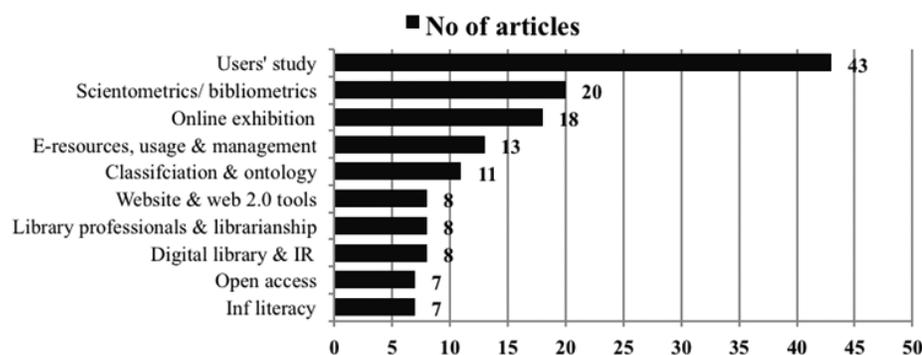


Figure 2. Most productive research areas.

Table 6. Most cited papers

Title of the article/ Authors	Source Journals	Year	Times cited
Information Literacy: Essential skills for the information/ Michael B. Eisenberg	DESIDOC Journal of Library & Information Technology	2008	292
Evaluation of usage of university websites in Bangladesh/ Anwarul Islam and Keita Tsuji	DESIDOC Journal of Library & Information Technology	2011	41
Factors affecting utilisation of electronic health information resources in universities in Uganda/ Kinengyere Annet Alison, <i>et al.</i>	Annals of Library and Information Studies	2012	30
Women's health information needs and information sources: A study of a rural oil palm business community in South-Western Nigeria/ Williams E Nwagwu and Monday Ajama	Annals of Library and Information Studies	2011	29
Web 2.0 and Libraries: Facts or Myths/ Mohammad Aqil, <i>et al.</i>	DESIDOC Journal of Library & Information Technology	2011	28

sub-domain of 'Users' study' followed by 20 article in 'Scientometrics/ bibliometrics' area and 18 article in 'Online exhibition'.

5.7 Most Cited Papers

Table 6 presents the 5 most cited papers. Out of 5 most cited papers, 3 article publish in *DJLIT* journal and remaining 2 article publish in *ALIS* journal. The *DJLIT* article on 'Information Literacy' received maximum of 292 citations.

5.8 Citation wise Distribution of Article

Table 7 illustrates the data related to citation range and their share of the total number of article. Out of total 186 article, highest number of 66 article (35.5 %) cited ≥ 5 - <10 times, followed by 39 article (21 %) with ≥ 1 - <5 citation. Only 1 article received more than 200 citations and 49 article (26.34 %) remain uncited. It is seen from the table that almost half of the total article i.e. 47.34 % received within 0-4 citations.

5.9 Citation Statistics

Table 8 examines the citation details of the foreign authored article. During the study period, the total 186 article have cited 1267 times with an average citation of 6.81 per article and h-index of 16, g-index of 28 and i-10 index of 32. The 77 *DJLIT* journal article received highest 779 citation having maximum of 10.11 average citations per article whereas the 39 *SRELS* journal article receive least citations impact. Moreover, the *DJLIT* article receive maximum h-index, g-index and i-10 index of 13, 25 and 17 respectively.

6. FINDINGS

The findings of the study are reported as follows.

- The leading three Indian LIS journals publish altogether 186 article which also cited 1267 time. Of these, the *DJLIT* journal shares maximum foreign authored article closely followed by *ALIS* journal
- Highest number of 32 article (17.20 %) has been published in the year 2013 whereas minimum in the year 2009 with 7 article (3.76 %)
- Two authorship article are dominant followed by single-authored and three-authored. Overall, the average

Table 7. Citation pattern by articles

Citation range	No of articles	% articles	Cumulative %
Uncited	49	26.34	26.34
≥1 - <5	39	21	47.34
≥5 - <10	66	35.5	82.84
≥10 - <20	20	10.75	93.59
≥20 - <30	09	4.84	98.43
≥30 - <50	02	1.07	99.5
≥200 -	01	0.54	100
Total	186	100	

Collaborative Index (CI) and the Collaborative Coefficient (CC) are found 2.01 and 0.36 respectively. The average CI and CC indicate the trend towards dominance of multi-authorship collaboration trend among foreign LIS authors

- The Indian author, Chennupati K Ramaiah produces maximum article collaborating with foreign affiliated authors. However, two authors from Kenya i.e. Constantine Matoke Nyamboga and Raymond Wafula Ongus also contribute maximum article
- The authors from Nigeria publish highest number of article followed by USA and Sri Lanka. Conversely, the USA originated papers received maximum average citations
- Foreign authors carried out highest number of research study in the sub-domain of ‘Users’ study’ followed by ‘Scientometrics/ bibliometrics’ area
- Out of top cited papers, the *DJLIT* article on ‘Information Literacy’ received maximum number of citations
- Highest number of article (35.5 %) cited in the range of ≥5 - <10 times whereas 49 article (26.34 %) remain uncited
- The foreign authored article have cited total 1267 time with an average citations of 6.81 per article and h-index of 16. The *DJLIT* journal article received highest citations whereas the *SRELS* journal article receive least citations impact.

7. CONCLUSIONS

The publication scenario highlights the acceptancy and popularity of source journals to the foreign LIS authors. During the last decade, the three LIS journals publish altogether 186 foreign authored contributions with an average of 18.6 article per year and the publication trend portrays an irregular trend

Table 8. Citation report

Journals	No of articles	Sum of Times cited	Avg. Citations per article	h-index	g-index	i-10 index
ALIS	70	442	6.31	11	16	15
DJLIT	77	779	10.11	13	25	17
SRELS	39	46	1.18	4	04	0
Total =	186	1267	6.81	16	28	32

in the growth curve. Meanwhile, a dismal number of article (12.36 %) are also produced by Indian authors collaborating with foreign authors. Hence, Indian authors should give more attention on international collaboration to attract more foreign authored contributions in national journals to increase the level of internationalisation of Indian LIS journals. In this way the impact of globalisation will also boost the Indian LIS discipline.

The citation impact also points out that the *SRELS* journal literature has been lesser cited compared to other two leading journals. Therefore, the *SRELS* journal may adopt delayed open access policy for its back issues to achieve wider readership, visibility and citation impact.

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Contribution in the current study, he suggested and improved the contents of the manuscript to shape it in the final approval version.