

Mapping of LIS Literature in University News: A Bibliometric Study (2013-2017)

Dr. Alka D. Wadhwana

Librarian, KES Shroff College of Arts & Commerce, Bhulabhai Desai Road, Kandivli (W), Mumbai 40006

Abstract

The paper presents the Library and Information Science (LIS) literature published in the journal 'University News' during the year 2013 to 2017. The study demonstrates the various aspects such as year wise distribution of articles, subject wise distribution of articles, length wise distribution of articles, designation, institution and gender wise distribution of authors, authorship pattern and prolific authors.

Keywords: LIS literature, University News, Bibliometric study, Authorship pattern

1. INTRODUCTION:

Mapping of the research publication of institution, specific journal or of particular subject is a buzzing area of research in the field of library and information science. Bibliometrics, Scientometrics, Citation Study, and Content analysis are the concepts supplementary and complementary to each other in their respective applications in the domain of research.

Library professionals are also involved in research activities. Research in the field of library and information science has been growing gradually as new facets are added to the subject. The field of library and information science is no longer confined to four walls of classification and cataloguing but has been broadened to embrace new concepts like automation, information retrieval, digitization, open access, and other web related technologies. The present study attempts to map Library and Information Science literature published in the journal 'University News' during the last five years i.e. 2013 to 2017.

2. UNIVERSITY NEWS:

'University News' is a weekly news journal brought out by the Association of Indian University, New Delhi which contains a mammoth of information about higher education in general and Indian higher education in particular. It is the only Indian journal referred internationally for authentic information about Indian higher education. It has a wide circulation in India and abroad.

3. RESEARCH PROBLEM:

To find the contribution of LIS professionals in the said internationally referred journal.

4. LIMITATIONS:

- Only LIS literature published in one journal has been included for the study
- The study is based on span of five years (2013 to 2017)

5. OBJECTIVES:

The major objectives of the study are:

- To find out year wise LIS publication in the 'University News'
- To find out the subject area of the articles
- To study length wise distribution of articles
- To find designation wise productivity of authors
- To analyse institution wise distribution of authors
- To find out the geographical area wise contribution of authors
- To find out the authorship pattern of articles
- To identify gender wise distribution of authors
- To identify prolific authors

6. HYPOTHESES:

1. Authorship of research articles is single-author based and collaborative authorship among LIS professionals is not so popular
2. Research productivity of male LIS professionals is more than female
3. Gender has impact on the position of the author in the article

7. METHODOLOGY:

The data is collected by referring individual issues of the journal 'University News'. Worksheet was designed for data collection. Collected data are analysed using Pivot table and statistical methods. The analysis is presented in the tabular and graphical form.

8. REVIEW OF LITERATURE:

Mukherjee (2008) analyzed the authorship pattern of scientific productions of the four most productive Indian academic institutions for the eight-year –period from 2000 to 2007. The results show that among four universities, the authors of Delhi University contributed the highest number of articles, followed by Banaras Hindu University. There is also an increasing tendency toward collaborative research among Indian authors as well as more frequent collaboration with international authors.

Gian Singh, Rekha Mittal and Moin Ahmad (2008) studied the growth and characteristics of digital library literature for the period 1998-2004 on the basis of LISA Plus and analyzed about 1000 articles. The result indicated that 61 % of the articles were single-authored; author productivity was not in agreement with Lotka's Law, except in one case where number of articles were three; the maximum number of articles were published in 2003 with English being the most productive language; maximum articles were published in the journal D-lib Magazine; distribution of articles nearly followed Bradford's Law; and USA ranked first for maximum number of journals.

S. Thanuskodi(2011) in his bibliometric analysis of the journal 'Library Herald' for the period between 2006 to 2010 analysed authorship pattern, subject wise distribution of articles, average number of references per articles, forms of documents cited, year wise distribution of cited journals, etc. The findings indicated that out of 138 articles, 72 (52.17%) articles were single authored while the remaining 66 (47.83%) articles were multi-authored. A major chunk of the contributions were from India (89.85 %) and only 10.15 % were from foreign countries.

Sada Bihari Sahu(2012) conducted a bibliometric analysis of literature in the field of Strategic Management taking Strategic Management Journal from 2002 to 2006 as the source. The study showed that the journal form constituted 72.27% (16196) of total citations (22409) and ranked first followed by book constituting 25.29%. As regard to collaboration in journal articles 44.585 articles were by joint author whereas authorship pattern in books revealed single authorship.

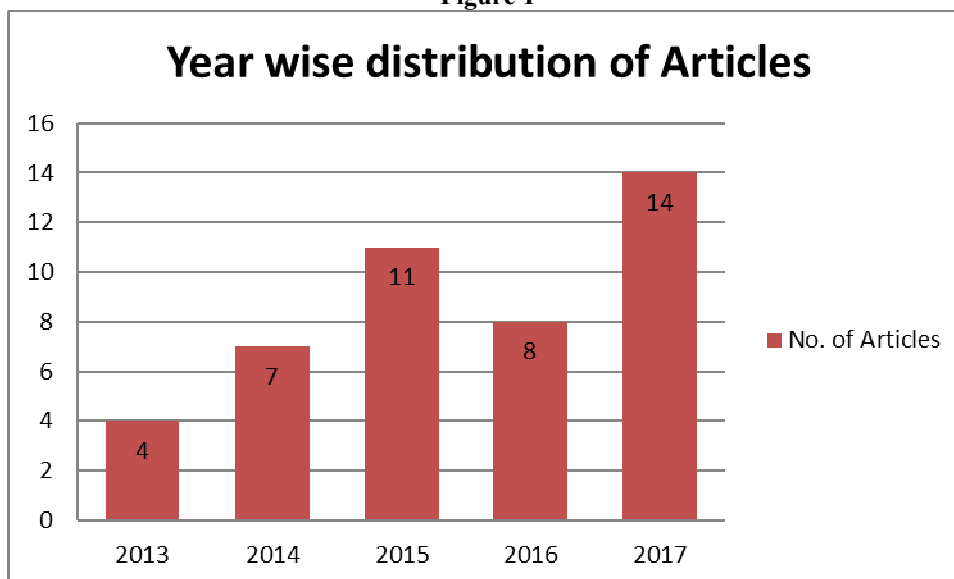
Kamal Lochan Jena, Dillip K. Swain and K. C. Sahoo(2012) performed a **bibliometric study** of periodical 'Annals of **Library** and Information Studies' from 2002 to 2010. The study concentrated on the following topics: - the National Institute of **Science** Communication and Information Resources (NISCAIR), citation patterns and analysis, and analysis of the geographical distribution of authors. It also presented additional information on patterns of authorship, equal credit methodology, and predominance of web resources citations.

9. ANALYSIS AND INTERPRETATIONS:

Table 1: Year wise breakup of LIS articles published in 'University News'

Year	No. of LIS Articles
2013	4
2014	7
2015	11
2016	8
2017	14
Grand Total	44

Figure 1



Total 46 articles are published by Library and Information Science professionals in the ‘University News’ during the last five years i.e. from 2013 to 2017. However, two articles are duplicate publication. The article by Pandey, Rajesh Kumar on ‘Academic Libraries in India: Challenge and Opportunities’ is published in Vol. 54, Issue No. 52, 2016 as well as in Vol. 55, Issue No. 22, 2016. Similarly the article by Ganapathi, Batthini and Saxena, Kavita on ‘Study of Entrepreneurial Research and Doctoral Dissertations in Indian Universities’ is also published twice in Vol. 54, Issue No. 27 and 39, 2016. The duplicate publications are excluded for the purpose of analysis.

Hence total number of articles for analysis is considered as 44. Out of 44 articles, maximum number of articles i.e. 14 is published in the year 2017, followed by 11 articles in the year 2015. The chronological analysis reveals a growth in the number of articles by LIS professionals in the ‘University News’ from 2013 to 2017. However, as regard to total no. of articles of the ‘University News’ during the last five years, the contribution of LIS professionals is very poor.

Table 2: Subject wise Productivity

Sr. No.	Subject	No. of Articles	%
1	Research/Plagiarism	9	20
2	ICT	5	11
3	Education	4	9
4	Library Management	4	9
5	Library Services	4	9
6	Academic Libraries	3	7
7	Bibliometrics	3	7
8	Digital Libraries	3	7
9	Libraries-General	3	7
10	Information Literacy	2	5
11	E-Learning/E-Resources	2	5
12	Others	2	5
	Total	44	100

Table indicates that highest number of articles (9) is written on research related topic. This is followed by 5 articles related to computer and Information and Communication Technology (ICT). This shows that like other branches of knowledge, Library and Information Science professionals have selected the latest topic for their study.

Table 3: Length wise distribution of Articles

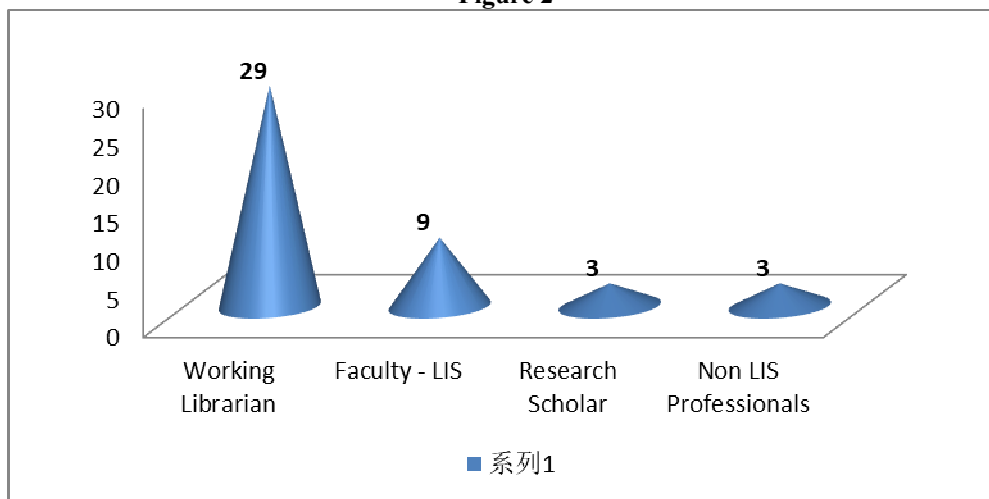
Sr. No.	No. of Pages	No. of Articles	%
1	1-3	9	20.45
2	4-6	20	45.45
3	7-9	11	25.00
4	10-12	4	9.09
	Total	44	100

The study shows that maximum articles 45.45% are having the length of 4 to 6 pages. 25% of the articles are of 7 to 9 pages while 20.45% articles range between 7 and 9 pages. Articles above 10 pages are very less.

Table 4: Designation wise Productivity of Authors

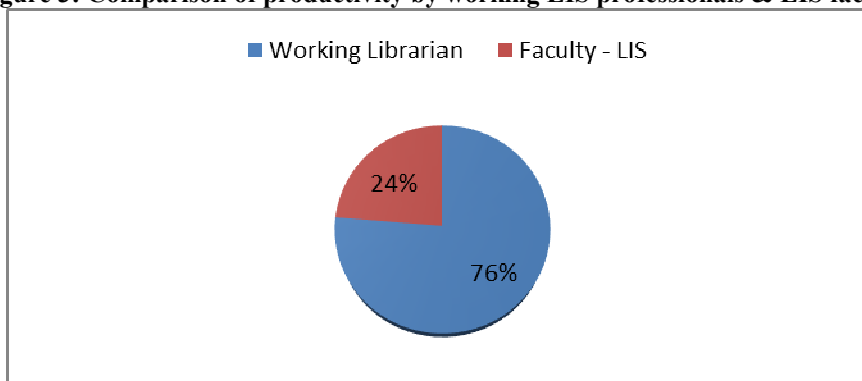
Designation	No. of Authors	% wrt Total
Working Librarian	29	65.9
Faculty - LIS	9	20.5
Research Scholar	3	6.8
Non LIS Professionals	3	6.8
Total	44	100

Figure 2



The analysis depicts that majority of the articles 29 i.e. 65.9% are written by working Librarians. LIS faculty has contributed 9 articles (20.5%), Research scholars have contributed 3 articles and 3 articles are contributed by non-LIS professionals.

Figure 3: Comparison of productivity by working LIS professionals & LIS faculty



From the figure 3 it is clear that working LIS professionals' contribution is more than LIS Faculty members. Comparison shows that 66% authors are working LIS Professionals and only 34% are teaching faculty in LIS. This may be due to less no. of LIS departments and strength of students in LIS subject. Whereas, librarian is appointed even in schools, colleges, universities, corporate, research centres and Government organizations. As the number of working librarians is more than the teaching faculty in Library and Information Sciences, the contribution of working LIS professionals bound to be more than the teaching faculty in LIS.

Table 5: Institution wise Productivity

Type of Institution	No. of Authors	%
University	40	58.82
College	16	23.53
Management Institute	10	14.71
National Library	1	1.47
Research Centre	1	1.47
Total	68	100

In order to ascertain the contributions from the different types of organisations and institutions, the

institutional affiliation of the authors was examined and analysed. Out of total 68 authors 58.82% authors are affiliated to University and 23.53% are affiliated to college. Hence we can say that majority of LIS professionals who have contributed articles in University news belong to University and Colleges.

Table 6: Geographical area wise Productivity

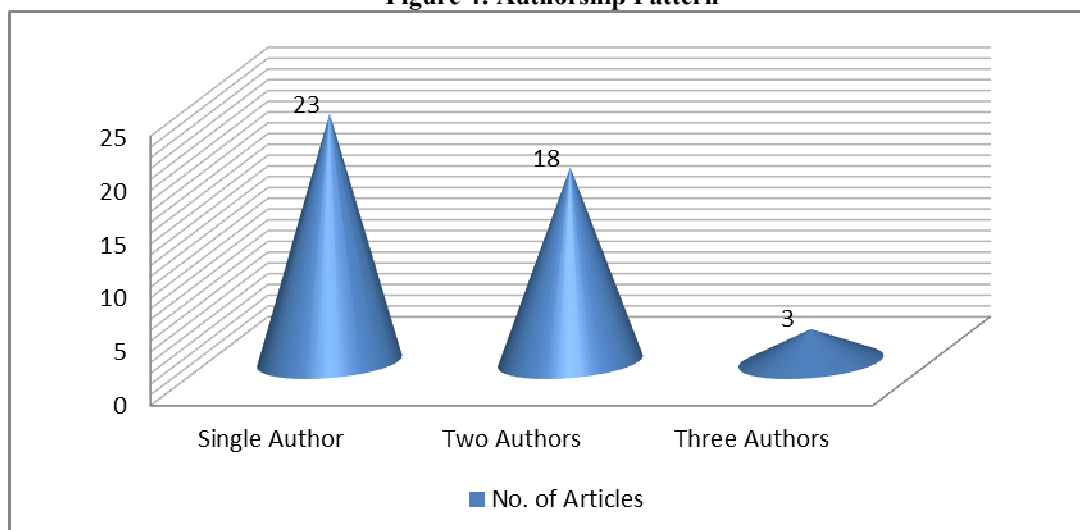
Sr. No.	State	No. of Authors
1	Uttar Pradesh	10
2	Haryana	9
3	Maharashtra	8
4	Jammu & Kashmir	7
5	Gujarat	6
6	Karnataka	6
7	Tamil Nadu	5
8	Kerala	3
9	Madhya Pradesh	3
10	West Bengal	3
11	Assam	2
12	Orissa	2
13	Bihar	1
14	Mizoram	1
15	Punjab	1
Foreign Country	Nigeria	1
Total		68

Out of total 68 authors, one author is from foreign country i.e. Nigeria. Table 6 exhibits fifteen states of the 67 Indian authors. The highest number i.e. 10 Indian authors is from Uttar Pradesh, 9 authors are from Haryana, 8 authors are from Maharashtra and 7 authors are from Jammu & Kashmir. Hence we can say that maximum contribution in ‘University News’ are by the authors from Uttar Pradesh, Haryana, Maharashtra and Jammu & Kashmir.

Table 7: Authorship Pattern

No. of Article	No. of Articles	% of Articles	No. of Authors	% of Authors
Single Author	23	52.27	23	33.82
Two Authors	18	40.91	36	52.94
Three Authors	3	6.82	9	13.24
Total	44	100.00	68	100.00

Figure 4: Authorship Pattern



Out of total 44 articles, 23 articles are written by single author and 21 articles are multi authored. Out of 21 multi authored articles, 18 articles are written by two authors and 3 articles are written by three authors. Total 68 authors have contributed 44 articles.

Degree of Collaboration

In order to determine the strength of collaboration (DC), the following formula suggested by K. Subramanian (1983) has been employed.

$$DC = Nm / (Nm + Ns)$$

Where, DC = Degree of Collaboration

Nm = Number of Multiple Authored Papers

Ns = Number of Single Authored Papers

Table 7.1: Degree of Collaboration

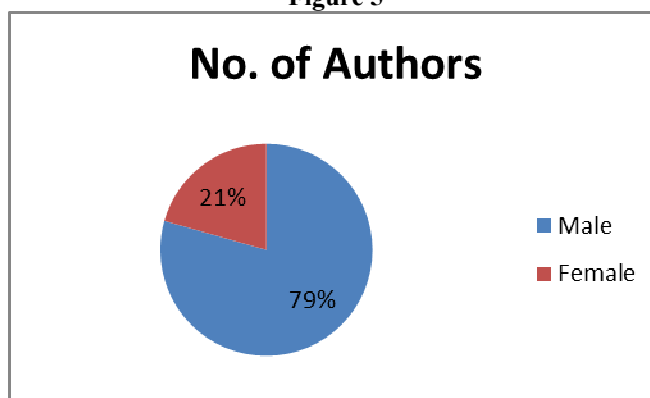
Authorship	No. of Articles	%	Degree of Collaboration = Nm/ (Nm + Ns) C
Single	23	52.27	
Multiple	21	47.73	
Grand Total	44	100	0.48

In the present study, Nm = 21; Ns = 23. Therefore DC has been calculated as 0.48 which shows that like science disciplines, trend of authorship in the ‘University News’ is not towards collaborative research. In percentage we can say that 52.27% articles are single-authored. This indicates that ‘**Authorship of research articles is single-author based and collaborative authorship among LIS professionals is not so popular (Hypothesis No. 1)**’ is valid.

Table 8: Gender wise productivity

Gender	No. of Authors
Male	54
Female	14
Grand Total	68

Figure 5

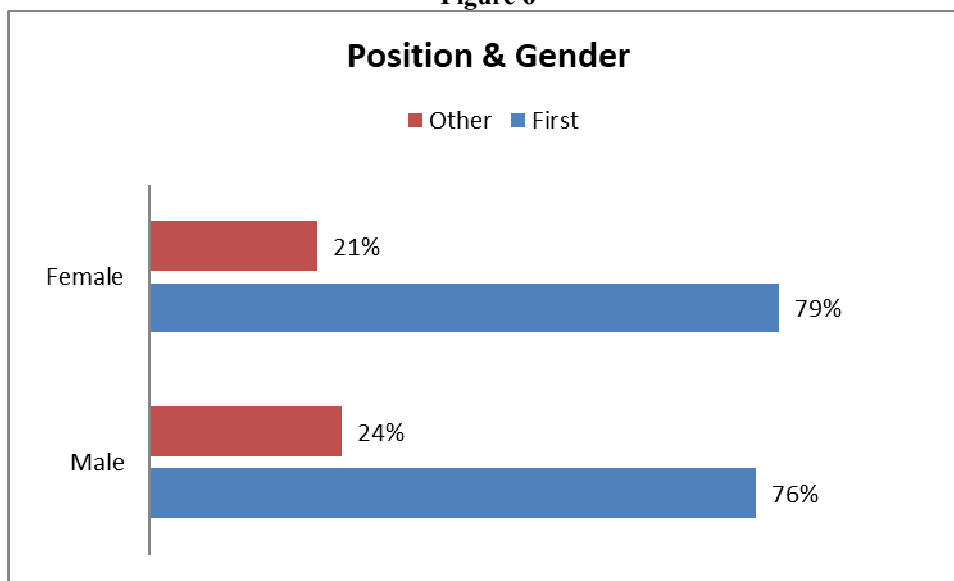


The analysis reveals that out of total 68 authors, 54 authors (79%) are male and only 14 (21%) are female. This indicates that ‘**Research productivity of male LIS professionals is more than female (Hypothesis No. 2)**’ is valid.

Table 9: Position & Gender wise Productivity

Position of Authors	Male	% of Male	Female	% of Female
First	16	76	19	79
Other	5	24	5	21
Grand Total	21	100	24	100

Figure 6



The attempt was made to find out whether there is gender discrimination in the position of the authors. Table 9 shows the position of the male and female authors in the articles published in the journal. Figure 6 depicts that gender has no influence on the position of the authorship. There is a marginal difference of 3 % only in the first position of female authors and that of male authors.

Chi Square Test

First Position	Other Position	Marginal Row Totals	
Male	16 (16.33) [0.01]	5 (4.67) [0.02]	21
Female	19 (18.67) [0.01]	5 (5.33) [0.02]	24
Marginal Column Totals	35	10	45 (Grand Total)

The chi-square statistic is 0.0574. The *p*-value is .810657. This result is *not* significant at *p* < .05.

Now we can have Level of Significance - Alpha as 5%. The Degrees of Freedom is 1.

The tabulated value of Chi Square at 5% level of significance with degrees of freedom as 1 is 3.84. As our calculated value of Chi-squared (8.8) is less than table value (3.84), we may accept the null hypothesis i.e. there is no relationship between gender and position of the author in the article.

This indicates that **‘Gender has impact on the position of the author in the article (Hypothesis No. 3) is invalid.**

Table 10: Prolific Authors

Sr. No.	Author	No. of contribution	State
1	Pandita, Ramesh	3	Jammu & Kashmir
2	Swain, Nirmal Kumar	3	Haryana
3	Alasandi, Bharat B	2	Karnataka
4	Hooda, D S	2	Haryana
5	Nanjundaswamy, L	2	Karnataka
6	Ramesesh, C P	2	Karnataka
7	Sharma, Jitendra	2	Uttar Pradesh
8	Singh, Anil	2	Uttar Pradesh
9	Kattimani, L S	2	Karnataka
		20	
Single Contribution	No. of Authors	48	
	Total No. of Authors	68	

Table 10 shows that out of total 68 authors 9 authors have contributed more than one paper while 48 authors have contributed only one paper. Hence though there are 68 authors, actually 57 authors have contributed 44 articles. Pandita, Ramesh and Swain, Nirmal Kumar have contributed 3 articles each. These two are the prolific LIS authors in ‘University News’. Seven authors have contributed two articles each. Though the authors from Uttar Pradesh are highest in number, out of 9 authors contributing more than one article, maximum number of authors (4) is from Karnataka, where as two authors are from Uttar Pradesh, two authors are from Haryana and one author is from Jammu and Kashmir.

10. SUGGESTIONS:

1. More number of LIS professionals should contribute articles in 'University News'.
2. The journal should take care of avoiding duplicate publication.
3. The authors should also not send the same articles twice.
4. Collaborative research among the LIS professionals must be encouraged.

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