

Growth and visibility of LIS journals: an analytical study

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The journal literature in the field of library and information science has grown exponentially. A few countries publish a good number of library and information science journals and India is also in the race. The study researches the growth and development of library and information science journals globally with special reference to India. It has been found that publication of LIS journals gained momentum from third quarter of 20th century. Compared to global scenario, the visibility status of Indian LIS journals is not promising.

Keywords: Journals, Scholarly communication; Library and information science; Library and information science journals; India

Introduction

The journals, *Journal de Scavans* and *The Philosophical Transactions of the Royal Society* that appeared in 1665 were the first journals. Since then, the journal has remained the vehicle of scholarly communication in all disciplines across the world. With technological developments, print journals are evolving to online journals. And the online journals have brought with it many advantages. However, the escalating costs of the journals remain a serious problem.

Inclusion of journals in various indexing and abstracting databases help the journals in getting visibility and enhancing its use. The current study is based on the LIS journals indexed in some of the well-known databases.

Review of literature

Numerous studies have been conducted to trace the growth and development of library and information science literature from various dimensions. The growth patterns of library and information science journals have been researched from a range of dimensions. The characteristics of library and information science literature were investigated by sampling issues of *LISA*, *ISA*, *RZI*, *BS* and *CCA*. The

study identifies an exponential growth in the literature coverage¹. The content and scope of library and information science have also been an important area of study. The study portrays and discusses about the conceptions of structure and scope of library and information science journals². A comparison of perceptual and citation-based measures of the journals in library and information science has also been carried out. The factors associated with the subjective rankings of a journal's value in promotions and tenure decisions have been researched³. Research has also been done over the ranking of journals in library and information science through research and teaching relatedness. Journals in library and information science were ranked by the number of mentions they received in 131 course reading lists at the Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign, and by the number of times cited in doctoral dissertations and in faculty publications. The journals were also ranked by scores that take into account both research and teaching-relatedness. Notable differences exist between the research-related and the teaching-related rankings⁴. Impact factor-based ranking of library and information science journals in the *Social Sciences Citation Index (Journal Citation Reports, 1980–1992)* has also been researched⁵. Research has also been done to trace the growth and development of library

and information science literature using variables. Development of library and information science literature is mapped on the literary outputs available through *Library, Information Science & Technology Abstracts (LISTA)*. The findings vividly indicate that the growth of literature in library and information science is on the increase⁶. A study has also been carried on the development of Arabic library and information science. The study is based on the Whitley's theory of the intellectual and social organization of sciences⁷. Open access journals in the field of library and information science have also remained an element of study. The study explores the status of open access titles in the field of library and information science. Various characteristics highlighting open access titles in the field of LIS are featured in the study. The results clearly reveal a significant growth of open access titles in the field of library and information science⁸. Core journals in the field of library and information science have also been a topic of study. The study begins with a literature review that identifies a short list of top level journals followed by the methodology that uses expert opinion surveys, acceptance and circulation rates, impact factors, h-indexes, and journals with local faculty articles⁹. Another important study looks at well-established specialist library and information titles that are currently available online.

The study compares the nature and content of these electronic journals with those of major library and information journals available in printed form with a query whether current differences between printed and electronic journals in terms of content and approach are likely to continue in the future¹⁰.

Objective of the study

- To explore the growth and development of LIS journals.

Methodology

The online database of *Ulrich Periodicals Directory* (ulrichweb.com) was consulted to obtain data on scholarly journals available in the field of library and information science. Through its advanced search facility, the search was limited to field – ‘*Subject (exact)*’ and we made use of two inbuilt index terms: “*Library and Information Sciences*” and “*Library and Information Sciences - Computer Applications*”. Besides the search was limited to academic/ scholarly

journals that are / were published in print or online mode. With this exercise, we got a total of 610 unique titles.

It could be argued that ‘*Library and Information Science Abstract*’ (*LISA*) and ‘*Library, Information Science & Technology Abstract*’ (*LISTA*) – two authoritative abstracting databases in the field of library and information science could have been better choice as a data source for the study. However, while browsing these databases, it was found that they index not only scholarly journals but also trade journals, magazines, newsletters, reports, etc. and there is no mechanism available there to differentiate amongst these sources of information. Besides, titles that have been merged or absorbed are separately listed there without any indicative information. Inclusion of such titles would have portrayed a wrong picture. So, it was decided to do the study based on Ulrich.

However, we used *LISA*, *LISTA*, *Directory of Open Access Journals (DOAJ)*, *Scopus* and *Web of Science* to check the coverage of each of the journal indexed in Ulrich. We also looked at individual journal websites if information provided in Ulrich or the other databases were limited for a particular journal.

Limitation

Each database has its subject headings based classification. Probability is there that the same journal may be treated differently in different databases. Since we have taken data from a single source, as such our study has the inherent limitation of analyzing only those LIS journals as covered by Ulrich. LIS journals that have not been categorized under LIS in Ulrich would have been skipped.

Analysis

As on August 10, 2014, Ulrich indexes 610 scholarly library and information science journals that are published from 69 different countries. It is found that 56 journals have ceased publication, 10 journals are under suspension while the fate of 4 journals remains uncertain. Only 88.52 percent (540) journals are being published in the LIS field. These journals are published from 68 different countries and amongst them, the maximum of 140 journals are published from USA followed respectively by 73 and 32 journals from United Kingdom and China. India with 28 journals occupies the 4th rank. From Table 1, it is

Table 1—Geographical distribution of LIS journals

| Rank | Country | Total no. of journals N = 610 | No. of active journals N = 540 |
|------|--|----------------------------------|-----------------------------------|
| 1 | United States | 174 (28.52) | 140 (25.93) |
| 2 | United Kingdom | 86 (14.10) | 73 (13.52) |
| 3 | China | 32 (5.25) | 32 (5.93) |
| 4 | India | 32 (5.25) | 28 (5.19) |
| 5 | Spain | 20 (3.28) | 20 (3.70) |
| 6 | Canada | 22 (3.61) | 19 (3.52) |
| 7 | Germany | 20 (3.28) | 18 (3.33) |
| 8 | Brazil | 17 (2.79) | 17 (3.15) |
| 9 | Italy | 17 (2.79) | 14 (2.59) |
| 10 | Australia | 15 (2.46) | 13 (2.41) |
| 11 | Japan | 11 (1.80) | 11 (2.04) |
| | 11 countries publish in the range of 4-10 journals | | 74 (13.70) |
| | 10 countries publish three journals each | | 30 (5.56) |
| | 15 countries publish two journals each | | 30 (5.56) |
| | 21 countries publish one journal each | | 21 (3.89) |

evident that 50 percent journals are published from these four countries only. On the other extreme, 15 countries publish two journals each while 21 countries contribute single journal each.

Growth

The year 1876 is regarded as the golden year in the field of library and information science. This is the year in which the first library association, that is the American Library Association (ALA) was established and oldest classification scheme Dewey Decimal Classification (DDC) was devised. However, the oldest active LIS journal that is published under its current title – *Notes and Queries* (ISSN: 0029-3970) is published since 1849. Tracing the growth of LIS journals, it is evident from Table 2 that publication of LIS journals gained momentum from third quarter of 20th century. In the last quarter of 20th century, 39.66 percent journals sprouted while 30.26 percent came into existence in the first 15 years of 21st Century. If assessment is done on yearly average basis, maximum of 10.73 titles came into existence in each year of 21st Century followed respectively by 8.44 titles/year in last quarter of 20th Century.

In Indian context, *Annals of Library and Information Studies* (ISSN: 0972-5432), as per Ulrich, is the oldest

surviving English language scholarly journal that is published since 1954. India began to publish LIS journals in the second quarter of 20th Century, i.e., 1912. Contrary to the general trend, 57.14 percent Indian journals evolved in the 14 years of 21st century.

Format

When it comes to availability of LIS journals, majority of journals (312; 57.78%) are available both in print and online modes, while 121 journals can only be accessed online and 107 journals appear in print mode only. With regard to Indian journals, 64.28 percent are published in both modes, 21.43 percent appear in print only, while 14.29 percent are available on web only.

Visibility

Indexing and abstracting sources act as one of the important parameters to assess the influence of journals in their respective fields. Out of 540 journals (28 Indian), *Scopus* and *Web of Science* includes 24.26 and 8.15 percent journals respectively. When it comes to subject specific databases, 39.26 percent LIS journals are listed in LISTA, while 33.89 percent are found in LISA. Compared to global scenario, status of Indian journals is not promising. *Web of Science* does

Table 2—Growth of LIS Journals

| Time period | Global scenario | | Indian scenario | |
|--------------------------------------|-----------------|----------------|-----------------|----------------|
| | No. of titles*† | Journal / Year | No. of titles* | Journal / Year |
| 19th century (from 1849 onwards) | 4 (0.75) | 0.08 | 0 (0) | 0 |
| 1900 – 1924 | 9 (1.69) | 0.36 | 0 (0) | 0 |
| 1925 – 1949 | 31 (5.83) | 1.24 | 0 (0) | 0 |
| 1950 – 1974 | 116 (21.80) | 4.64 | 7 (25.00) | 0.28 |
| 1975 – 1999 | 211 (39.66) | 8.44 | 5 (17.86) | 0.20 |
| 21 st century (till 2014) | 161 (30.26) | 10.73 | 16 (57.14) | 1.07 |
| Total | 532 | | 28 | |

* Figures in parentheses indicate percentage

† Year of publication for 8 titles could not be ascertained as such excluded

Table 3—Format of LIS journals

| Format | Global scenario | | Indian scenario | |
|-----------------|-----------------|------------|-----------------|------------|
| | No. of journals | Percentage | No. of journals | Percentage |
| Print only | 107 | 19.81 | 6 | 21.43 |
| Electronic only | 121 | 22.41 | 4 | 14.29 |
| Both | 312 | 57.78 | 18 | 64.28 |
| Total | 540 | 100 | 28 | 100 |

Table 4—Visibility in different indexing and abstracting sources

| Abstracting and indexing source | Total no. of journals (N=540*) | Indian journals N=28 |
|---|-----------------------------------|-------------------------|
| SciVerse Scopus | 131 (24.26) | 2 (7.14) |
| Web of Science | 44 (8.15) | 0 (00) |
| Library and Information Science Abstract (LISA) | 183 (33.89) | 5 (17.86) |
| Library, Information Science & Technology Abstracts (LISTA) | 212 (39.26) | 6 (21.43) |

*Figures in parentheses indicate percentages

not list any LIS journals from India while *Scopus* indexes only two journals. In subject specific databases LISTA includes 21.43 percent Indian journals and LISA indexes only 17.86 percent.

Open access status

Among the 540 journals, a total of 123 journals are freely available in the open access domain. Though 68 countries are actively engaged in the publication of LIS journals, only journals of 37 countries are currently available in the open access (OA) domain. When it comes to the four leading countries that publish nearly 50 percent of LIS literature, only three are found to offer their content in open access mode and their OA contribution amounts to only 33.34 percent.

From Table 5, it appears that United States contributes a maximum of 24.39 percent of total OA journals but when it comes to proportion of OA journals compared to total number of LIS titles from a particular country, Brazil ranks at the top with 70.59 percent followed by Spain with 50 percent of LIS titles. United States and India both occupy the third rank with 21.43 percent of their OA titles.

With regard to the status of six Indian journals that offer their content in Open Access mode, three are published by academic universities (Aligarh Muslim University, Maharishi Markandeshwar University, and University of Kashmir), two by national research centres Defence Scientific Information & Documentation Centre (DESIDOC) of Defence Research & Development Organisation, and National

Institute of Science Communication & Information Resources (NISCAIR) and one by self-proclaimed research group, i.e. ISC Research Group, Assam.

Involvement in OA movement

Open Access movement, an initiative to break the access barrier for scholarly and peer-reviewed content, arose from a meeting convened in Budapest by the Open Society Foundations¹¹ on December 1-2, 2001. Since then it witnessed multi-dimensional growth and global acceptance on the part of academic/research institutions, individual/funded-researchers, societies and even the commercial publishers. To monitor its growth and to offer access to OA scholarly content, Directory of Open Access Journals (DOAJ) began to index OA journals since 2002. From Table 6, it is evident that LIS professionals embraced the movement in the initial stages as 12 LIS journals were first indexed in 2003. Since then, the number has gone on increasing and in 2013 a majority of 23 titles were included. When it comes to LIS journals from India, it took 7 years to make their appearance via DOAJ when about 43 percent of LIS journals were already available there.

Conclusion

Journals have remained an important medium of scholarly communication and very less work has been done to trace their growth and development especially in the field of library and information science. As a result there is very less statistical evidence available in this regard. When it comes to publication of LIS journals or participation in Open Access Movement, India never stood in a lead, though Indian library movement initiated in the early years of 20th century and first Indian LIS journal appeared in 1912. In India there are around 105 UGC (India) affiliated universities where professional skills amongst students of library and information science are being imparted¹². Majority of these universities also facilitate research programmes, but the major concern is that a very few universities have taken active role in publishing scholarly LIS literature.

So far India has been able to sustain publication of only 28 LIS journals[#]. However, when it comes to their visibility, there is large void at the global level. Only a handful of titles have been able to get registered at leading indexing and abstracting services irrespective of their general or subject specific nature.

Table 5—Top 13 countries (LIS Journals \geq 10) and their OA status

| S.No. | Country | Total no. of journals $N_1 = 540$ | DOAJ indexed journals $N_2 = 123$ | Proportion of OA titles $N=N_2/N_1*100$ |
|-------|----------------|--------------------------------------|--------------------------------------|--|
| 1 | United States | 140 (25.93) | 30 (24.39) | 21.43% |
| 2 | United Kingdom | 73 (13.52) | 5 (4.07) | 6.85% |
| 3 | China | 32 (5.93) | 0 (00) | 0.00% |
| 4 | India | 28 (5.19) | 6 (4.88) | 21.43% |
| 5 | Spain | 20 (3.70) | 10 (8.13) | 50.00% |
| 6 | Canada | 19 (3.52) | 3 (2.44) | 15.79% |
| 7 | Germany | 18 (3.33) | 6 (4.88) | 33.33% |
| 8 | Brazil | 17 (3.15) | 12 (9.76) | 70.59% |
| 9 | Italy | 14 (2.59) | 4 (3.25) | 28.57% |
| 10 | Australia | 13 (2.41) | 1 (0.81) | 7.69% |
| 11 | Japan | 11 (2.04) | 0 (00) | 0.00% |
| 12 | Netherlands | 10 (1.85) | 3 (2.44) | 30.00% |
| 13 | Czech Republic | 10 (1.85) | 1 (0.81) | 10.00% |

* Figures in parentheses indicate percentage

[#]In 2014 India is sustaining around 100 LIS journals. - Editor

Table 6—Inclusion of LIS journals in DOAJ

| Year of inclusion | Total LIS journal | Cumulative percentage | Indian LIS journals |
|-------------------|-------------------|-----------------------|---------------------|
| 2003 | 12 | 9.76 | 0 |
| 2004 | 4 | 13.01 | 0 |
| 2005 | 10 | 21.14 | 0 |
| 2006 | 13 | 31.71 | 0 |
| 2007 | 8 | 38.21 | 0 |
| 2008 | 6 | 43.09 | 0 |
| 2009 | 7 | 48.78 | 1 |
| 2010 | 16 | 61.79 | 0 |
| 2011 | 10 | 69.92 | 1 |
| 2012 | 13 | 80.49 | 2 |
| 2013 | 23 | 99.19 | 2 |
| 2014 | 1 | 100.00 | 0 |

Jeffrey Beall¹³, a pioneer and a highly reputable watchdog of OA movement, expressed his concern regarding the malpractices of one of the toll-based Indian publishers. We have witnessed that the same publisher maintains five journals in LIS field. It may seem that India stands amongst the leading contributors of scholarly LIS literature but so far we are far behind to uphold the legacy of Dr. S R Ranganathan, a prominent figure of Indian library movement. LIS schools in India specially need to evolve research platforms in order to increase the quantity and quality of LIS literature which can be recognized at a global level.

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