

Research Paper

Library & Information Science

Bibliometric Measurement of Productivity and Pattern of Publication in Information Studies

Rakhi Singh

Department of Library and Information Science, Banaras Hindu University, Varanasi-221005 India

ABSTRACT

Information Studies is a reputed journal in the field of library and information science. This bibliometric study is an attempt to measure the productivity and publication pattern from 2004 to 2012. The result shows that the journal has maximum contribution in 2005, maximum publications were with single author (48.39%) and the contribution of Karnataka is highest (54.00%). Among institutions, academic institutions have maximum contribution (37.42%), maximum articles (32.26%) have found in range of 6-10 page length and male authors have contributed three time more (74.84%) than the females. The analysis of this

KEYWORDS : Bibliometric Study, academic institutions, productivity and publication pattern

INTRODUCTION:

Information Studies is a well known journal in the field of Library and Information Science published in India. Its publication started in 1995 and published by Ranganathan Center for Information Studies, Chennai. It is a quarterly publication which has been publishing original articles in all areas of Library and Information Science, Informatics & Telemetrics, covering the technical, economics, social, policy & professional aspects.

journal revealed a constant and continuous publication pattern and productivity.

Documentations in research are the written form of the intellectual thought which are expressed in published literature, by which new ideas or information are arose to any field of knowledge that help to develop a discipline (Jena et al, 2012). Bibliometric measurement is one of the important tools for research in the field of Library and Information Science which helps to evaluate the productivity and utility of published literature. It utilizes quantitative analysis and statistics to describe the pattern of publication within a given field of discipline. Bibliometrics is now used in quantitative research assessment exercises of academic output which is starting to threaten practice based research (Zhenzhong, 2005). It is used as a tool in the collection development policy by providing the exact and most useful information to the librarian to take the right decision in right time for selection or rejection of documents from existing collections of their libraries (HEFCE, 2015). This study is an attempt to analyze data using bibliometric measurement for evaluation of productivity as well as publication pattern.

REVIEW OF LITERATURE:

Thanuskodi S. (2010) had studied 249 articles of Journal Library, Philosophy & Practice from 2005 to 2009 and found that year 2009 had maximum contribution i.e., 82 articles while least contribution were for the year 2005 with 10 articles only. Library and Internet was at the top with 54 (21.69%) articles. In authorship pattern, the two authorship pattern was at top with 94 (37.75%) articles. Universities had highest contribution of 149 (59.83%) articles in which 129 (51.80%) articles were of 4-6 page length and journals were having maximum 1026 (53.03%) citations. Pemdam et al (2011) had studied 57 articles of LIS Literature in University News from 2000 to 2010 and found that contribution in year 2010 was highest with 10 (17.54%) articles. Subject wise publications had shown the highest contribution from computer and information technology with 12 (21.05%) articles while single authored articles were highest with 33 (57.89%) articles of the total. Articles with 4-6 pages were found to be maximum 33 (61.42%). The geographical contribution had shown the maximum publication from Delhi i.e., 12 (21.05%) articles. Mukharjee B. (2011) had studied 1345 publications of JASIST in which, articles, book reviews, editorial materials, letters, reviews and biographical items were included from 2000 to 2007. His study included 975 articles in which the contribution of single author had been found to be maximum 347 (33.59%). The collaboration pattern had shown that the contribution by authors of same department in the same country was maximum 267 (42.96%). The contribution of institutions had shown that the academic institution have contributed maximum with 791 articles (81.13%) of the total articles, while the geographical contribution had shown that USA had contributed maximum with 503 articles and found that the maximum 7386 (21.08%) references were recorded in year 2007 and the citation analysis had shown that maximum 431 (44.21%) references were of 1-5 citation range.

NEED OF THE STUDY

The periodicals are the markers of literature growth in any field of knowledge. They emerge as the main source for knowledge transmission. Due to the rising cost of the periodicals and lack of adequate funds for library collection development, the selection of particular journal for a library should be done more carefully. Therefore, the library authorities are forced to cut the number of journal subscriptions. Bibliometric analysis facilitates the librarian to indentify the most useful subject specific core journals. These studies will be helpful for librarians to plan a better collection development.

OBJECTIVES OF THE STUDY:

- Year wise distribution of articles •••
- ٠ Authorship pattern
- ••• State wise distribution of contribution
- ٠ Institution wise distribution of contribution
- ٠ Length of articles
- ٠ Gender wise Contribution
- ••• Geographical Distribution of Articles

METHODOLOGY:

Nine volumes (Vol.10 to 18) containing 34 issues of Information Studies published during the year 2004 to 2012 have been taken up for evaluation and analysis of this study. The details with regard to published article such as number of articles in each issue of the journal, number of authors, place of authors, name of states, number of pages, etc., were recorded and analyzed for making observations. The data were collected, organized and analyzed using MS-Excel sheets. The tables and graphs were generated in accordance with the objectives of the study. The collected data after due analysis, were tabulated and processed for further analysis and subsequent explanation.

RESULT AND DISCUSSION:

Year wise contribution of articles

Total number of publications had been found to be 155, out of which the highest number of issues and articles had been found in 2005 which represented 22 articles (14.19%) in 4 issues, followed by 2006 & 2008 same as with 20 articles (12.90%) in 4 issues, 2009 & 2010 same as with 19 articles (12.26%) in 4 issues, 2007 & 2012 same as with 16 articles (10.32%) in 4 issues, 2011 with 15 articles (9.68%) in 4 issues, 2004 with 8 articles (5.16%) in 2 issues. It can be summarized in table 1.

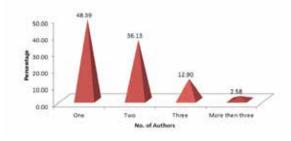
| Table 1: Year wise contribution of articles | | | | | | | | |
|---|------------|--------------|------------------------|------------|--|--|--|--|
| Year | Volume No. | No. of Issue | No. of Contribution | percentage | | | | |
| 2004 | 10 | 2 | 8 | 5.16 | | | | |
| 2005 | 11 | 4 | 22 | 14.19 | | | | |
| 2006 | 12 | 4 | 20 | 12.90 | | | | |

Volume-4, Issue-12, Dec-2015 • ISSN No 2277 - 8160

| 2007 | 13 | 4 | 16 | 10.32 |
|-------|--------|----|-----|--------|
| 2008 | 14 | 4 | 20 | 12.90 |
| 2009 | 15 | 4 | 19 | 12.26 |
| 2010 | 16 | 4 | 19 | 12.26 |
| 2011 | 17 | 4 | 15 | 9.68 |
| 2012 | 18 | 4 | 16 | 10.32 |
| Total | 9 Vol. | 34 | 155 | 100.00 |

Authorship Pattern

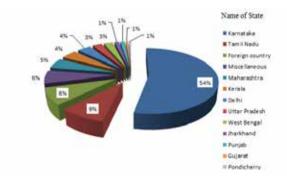
The articles with single author were 48.39%, articles with two authors were 36.13%, articles with three authors were 12.90 and articles with more than three authors were 2.58% in its total publications of 155 articles



Graph 1: Authorship pattern.

State wise contribution of Authors

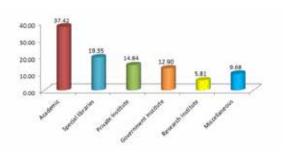
In this study, *Karnataka* had shown maximum contribution with 53.55% publications out of 155 publications, which is because of the level of LIS education is high in this region and facilities are well established, then it was followed by *Tamil Nadu* with 9.03% publications, *Maharashtra* with 5.16% publications, *Kerala* with 4.52% publications, *Delhi* with 3.87% publications, *Uttar Pradesh & West Bengal* same as with 2.58% publications, *Jharkhand & Punjab same as* with 1.29% publications, *Pondicherry* with 0.65% publications, *Foreign country* with 8.39% publications, and miscellaneous with 6.45% publications.



Graph 2: State wise contribution of Indian Authors.

Institution wise contribution of Authors

This study had shown the names of authors and their affiliation with different kind of institutions. The institutes associated with first authors of the publications were categorized as academic, research institution, government, private, Institutions special libraries and miscellaneous. It was tabulated for the analysis of research output of different institutions. It was clear that authors from Academic Institutions had contributed maximum in publication of 37.42% articles because research is part of academic institutions, where research work is carried out at different levels like PhD, M.Phil, etc then it was followed by Special Libraries which had contribution of 19.35% articles, Private Institutions had contributed 14.84% articles, Government Institutions had contributed 5.81% articles and there was a miscellaneous group where authors did not mention their affiliation with institutions, had contributed 9.68% articles.



Graph 3: Institution wise contribution of Authors.

Length of articles

The publications had been classified into 7 categories to study the length of articles with an interval of 5, articles with page length 1 to 5 pages, 6 to 10 pages, 11 to 15 pages, 16 to 20 pages, 21 to 25 pages, 26 to 30 pages and more than 30 pages. The maximum number of articles had 6-10 pages length (32.26%), followed by the page length of 11-15 (29.03%), 16-20 pages (20.00%), 21-25 pages (7.10%), 1-5 pages (5.81%), 26-30 pages (3.87%) and more than 30 pages (1.94%).

| Table 2: Length of articles | | | | | | | | | | | |
|-----------------------------|------|------|------|------|------|------|------|------|------|-------|------------|
| No. of pages | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total | percentage |
| 1-5 | 1 | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | 9 | 5.81 |
| 6-10 | 2 | 6 | 11 | 5 | 6 | 10 | 5 | 3 | 2 | 50 | 32.26 |
| 11-15 | 2 | 10 | | 3 | 10 | 4 | 5 | 5 | 6 | 45 | 29.03 |
| 16-20 | | 5 | 5 | 5 | 3 | 2 | 4 | 3 | 4 | 31 | 20.00 |
| 21-25 | 2 | | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 11 | 7.10 |
| 26-30 | | | 1 | 1 | | 1 | 1 | | 2 | 6 | 3.87 |
| More than 30 | 1 | | | | | | | 2 | | 3 | 1.94 |
| Total | 8 | 22 | 20 | 16 | 20 | 19 | 19 | 15 | 16 | 155 | 100.00 |

Gender wise Contribution

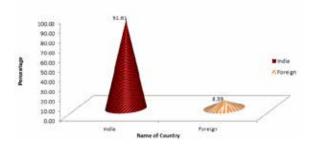
The study had shown the contribution of male authors to be 74.84 % while female authors to be 25.16 % out of total 155 articles. The gender wise contribution of author in individual year had also shown that the contribution of female authors was about one-fourth of the contribution of the male authors. In 2004 the contribution of male author was 4.52 % while female was 0.65% out of total 8 authors, in 2005 the contribution of male author was 7.10 % while female was 7.10% out of total 22 authors, in 2006 the contribution of male author was 10.32 % while female was 2.58% out of total 20 authors, in 2007 the contribution of male author was 8.39 % while female was 1.94% out of total 16 authors, in 2008 the contribution of male author was 9.68 % while female was 3.23% out of total 20 authors, in 2009 the contribution of male author was 9.68% while female was 2.58% out of total 19 authors, in 2010 the contribution of male author was 10.97 % while female was 1.29% out of total 19 authors, in 2011 the contribution of male author was 8.39 % while female was 1.29% out of total 15 authors and in 2012 the contribution of male author was 5.81 % while female was 4.52% out of total 16 authors.

| Table 3 | Table 3: Gender wise Contribution | | | | | | | |
|---------|-----------------------------------|-----------------|-------------------|-----------------|-------|-----------------|--|--|
| Year | Male Authors | Percent- age | Female Authors | Percent- age | Total | Percent- age | | |
| 2004 | 7 | 4.52 | 1 | 0.65 | 8 | 5.16 | | |
| 2005 | 11 | 7.10 | 11 | 7.10 | 22 | 14.19 | | |
| 2006 | 16 | 10.32 | 4 | 2.58 | 20 | 12.90 | | |
| 2007 | 13 | 8.39 | 3 | 1.94 | 16 | 10.32 | | |
| 2008 | 15 | 9.68 | 5 | 3.23 | 20 | 12.90 | | |
| 2009 | 15 | 9.68 | 4 | 2.58 | 19 | 12.26 | | |
| 2010 | 17 | 10.97 | 2 | 1.29 | 19 | 12.26 | | |
| 2011 | 13 | 8.39 | 2 | 1.29 | 15 | 9.68 | | |

| 2012 | 9 | 5.81 | 7 | 4.52 | 16 | 10.32 |
|-------|-----|-------|----|-------|-----|--------|
| Total | 116 | 74.84 | 39 | 25.16 | 155 | 100.00 |

Geographical contribution of Articles

The study had shown that India had contributed in publications of 142 (91.61%) articles and foreign countries had together contributed in publications of 13 (8.39%) articles out of all 155 articles.



Graph 4: Geographical contribution of Articles

CONCLUSION

The study of Information Studies can be concluded that the highest number of issues and articles had been found in 2005 in year wise manner while single author were contributed almost half of the publication and male authors were contributed more than threefold than the females. Among Indian states, Karnataka had shown maximum contribution and academic institutions had contributed maximum among the different categories of institutions. Maximum articles were found to be having 6 to 10 pages.

REFERENCES

Higher Education Funding Council for England, Located at http://www.hefce. ac .uk/ Research/ref/ and http://www.ref.ac.uk/ accessed (2011). Journal of the American Society for Information Science and Technology (2000-2007): A Bibliometric Study. IFLA Journal, 35(4), 341-358. Pendam, G.W., & Tripude, C.R. (2012). LIS literature in university news a bibliometric study. Data Retrieved on 30 June 2014 from http://eiirj1.weebly.com/ uploads/ 1/0 /8/0/10800505 /_7.pdf Thanukodi, S. (2010). Bibliometric analysis of the Journal Library Philosophy and Practice from 2005-2009. Library Philosophy and Practice. Data Retrieved on 10th July 2014 from http://www. webpages.uidaho.edu/~mbolin/thanuskodi-lpp.htm. Zhenzhong, M. (2005). From theoretical essentials to paradigms: The development path of electronic commerce research. International Journal of Electronic Business, 3(5), 491-507.