Pakistan Journal of Library and Information Science: A bibliometric analysis

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Abstract

Pakistan Journal of Library and Information Science (PJLIS) is an HEC recognized journal published by the Department of Library and Information Science, University of the Punjab, Lahore. A total of 111 publications from 11 issues of PJLIS were published during 1995 to 2010. It has outstanding contribution in the dissemination of LIS research on national and international level as it publishes both in print and electronic format. A bibliometric analysis of contributions published in the PJLIS from 1995 to 2010 has been presented in this paper. Attempt has been made to study all 11 issues of this journal on the basis of different parameters, viz., author productivity, extent of authors' collaboration, authors' institutional affiliation, authors' geographic affiliation, type of publication, language of papers, number of citations used per article, length of papers, and year-wise distribution of papers.

Keywords: Pakistan Journal of Library and Information Science; Bibliometric analysis

Introduction

Pakistan Journal of Library and Information Science (PJLIS) is a popular journal of library and information science (LIS) in the country. PJLIS, which was known as Pakistani Librarian till 1999, was started in 1995 as an annual journal by the Department of Library and Information Science, University of the Punjab, Lahore. With a gap of five years, eleven issues were published up to 2010. Initially it was bilingual, but since volume 2006 it has been published in English language only.

The use of bibliometrics has become a norm in library and information science (LIS) research internationally for evaluation and analysis purposes (Naseer & Mahmood, 2009b). Similarly bibliometrics is an emerging thrust area of research in the field of LIS in Pakistan and has practical applications in measuring the coverage of journals. Bibliometric studies are used to identify the pattern of publication, authorship, citations and journal coverage with the hope that such studies can give an insight into the dynamics of the field under consideration (Vijayakumar & Naqvi, 2002). Bibliometrics is the application of statistical and mathematical methods to bibliographical studies and all forms of written communications (Hazarika, Goswami & Das, 2003).

Journals are important channels for dissemination of research outputs. These are indispensable for academics and practitioners, who are active in research. This study is an attempt to analyze the PJLIS which was essential to understand the research trends in LIS. To this end the analysis has covered the authorship patterns, type of publications and their language, the number of citations used per article, and length of papers.

Review of literature

Single journals have been the focus of many bibliometric and scientometric studies. A number of contributors have conducted bibliometric analysis of library and information science literature in different countries around the globe. According to an estimate 21 single journal studies in LIS are reported (Anyi, Zainab & Anuar, 2009). Some important studies are mentioned as under:

Authorship, gender and institutional affiliation were studied by Pierre and Herubel (1992) in the literature published in Libraries and Culture. The focus of the study was to examine gender of authorship and institutional affiliation. Twenty three years of Libraries and Culture were chosen as target volumes. The findings revealed that men published more than women in library history.

Tiew, Abdullah and Kaur (2002) analyzed the Malaysian Journal of Library & Information Science. A total of five year period from 1996 to 2000 was covered. The authors came up with the findings that the average number of references per article was 22.5 and the average length was 41.2 pages which was dubious. The most popular subject was scientific and professional publishing. Most of the contributions were from Malaysian academics and single-authored articles were found dominant. The same journal was studied by Bakri and Willet (2008), covering period from 2001 to 2006 and compared the results with the previous study. The comparison showed that the number of publications increased, statistically significant changes occurred in types of articles, number of references per article and length of the articles also increased. Two-authored articles were greater in number and the major contribution was from Malaysian authors.

In Malaysia, Tiew (2006) bibliometrically studied the LIS journal Sekitar Perpustakaan. The period covered was from 1994 to 2003. Middle-level professionals had major contribution of papers in the journal and like the study of Tiew, Abdullah & Kaur (2002), single-authored contribution were found dominant by contributing 79% articles.

Liberatore, Solana and Guimareas (2007) conducted a bibliometric analysis of the journal 'Ciencia da Informacao'. The results showed that there was less authorship collaboration, while most of the authors' affiliation was from Brazilian universities.

The literature published during 1999 to 2005 in the Annals of Library and Information Studies were analyzed by Verma, Tamrakar and Sharma (2007). They noted that maximum numbers of articles (17.56%) were published in year 2005. Single author contribution was the highest with a ratio of 35.88%. Majority of the contributors were Indian academics. Most of the publications (51.15%) had length of 6-10 pages.

Sam (2008) studied the Ghana Library Journal from 2000 to 2006. The majority of items cited were journals with 44.5%, followed by books with 32.5%. Current sources of information were about 62.9% of the journals and 48.8% of the books appeared in the reference lists and were published in 1990 or later. The subject area most researched was academic libraries. Majority of the authors were affiliated with universities and were local.

A citation analysis of the Journal of American Society for Information Science and Technology was conducted by Tsay (2008). The findings revealed that the production rate of JASIST literature doubled and the average number of references per paper increased 2 to 3 times in the period of 25 years, i.e., from its volumes 1985 to 2004. Similarly, Mukherjee (2009) found that single-authored articles were higher in number in the Journal of the American Society for Information Science and Technology. The arithmetic mean of page length of all the articles ranged from 10.58 to 12.12.

Naseer and Mahmood (2009a) studied Pakistan Library and Information Science Journal from its volume 1998 to 2007. The findings showed that single author contribution was the highest with a ratio of 88.6%, most of the authors were Pakistani with a ratio of 66.9% followed by North Americans. Male authors were dominant with a proportion of 61%. Majority of the articles were descriptive with 61% and two-third (65.7%) of them were in English language. The popular subject category was "industry, profession and education."

The literature of D-Lib Magazine was studied by Park (2010) covering thirteen years and the data were collected by examining issues from July 1995 to May/June 2008. The findings showed that two and more authors' contribution was the highest with a ratio of 57%; most of the authors had a single contribution; the proportion of the male authors was much higher with a ratio of 74%; authors from the United States contributed 70% of the articles and the average number of references was 15.

The literature review showed that many bibliometric studies on single journal literature in the field of LIS have been conducted but no such study of PJLIS has been conducted. Therefore, there is a need to analyze the literature published in PJLIS.

Objectives of the study

The objectives of the study were to determine the following bibliometric characteristics of PJLIS by identifying the following:

1. The authorship patterns
    a. Author productivity
    b. Extent of authors' collaboration
    c. Authors' institutional affiliation
    d. Authors' geographic affiliation
2. Type of publication and language of papers
3. The number of citations used per article
4. The length of papers
5. Year-wise distribution of papers

Methodology

A total of 111 publications from 11 issues of PJLIS published from 1995 to 2010 were analyzed to achieve the objectives of the study. Each issue of the journal was carefully consulted to record the exact bibliographic details. A computerized database designed in MS-Access (Ahmad, Anwar & Ullah, 2010) was used in this study. The database includes certain columns for necessary bibliographical details. The same database was used for data analysis as it has the provision of generating the desired reports. For calculation of percentages in various reports MS-Excel was used. The last page of the article whether full or not was considered as a full page.

Limitations of the study

The study has the following limitations:

• It was revealed that some author's institutional affiliation was not mentioned.
• It was also revealed that some author's country of origin was not mentioned.

Findings and discussions

The total number of papers in the 11 issues of PJLIS published during 1995 to 2010 is 111, which comprises of research and review papers as well as short communications.

The authorship patterns

Author productivity. Table 1 show that most of the authors, 72 (85.71%), contributed single paper. Five authors (5.95%) contributed two papers. In the 11 issues of this journal, three to nine papers were contributed by five individual authors (5.95%). Only two (2.38%) authors namely Khalid Mahmood and Kanwal Ameen wrote 10 papers each for PJLIS. Total 84 authors contributed 111 papers.

Table 1. Distribution of authors' contribution

Number of contributions	Number of authors	Percent
1	72	85.71
2	5	5.95
3	1	1.19
4	1	1.19
5	1	1.19
6	1	1.19
9	1	1.19
10	2	2.38
Total	84	100

Extent of authors' collaboration. Table 2 shows the authorship pattern of the contributions published. Single-authored papers comprised the highest percentage, i.e., 99 (89.19%). The number of two-authored papers is 8 (7.21%), and three-authored papers are 3 (2.70%). The maximum number of authors, i.e., five is found in only one paper (0.90%). They were affiliated with Foundation University College of Liberal Arts and Sciences, Rawalpindi.

Table 2. Authorship pattern

Authors	Papers	Percent
One	99	89.19
Two	8	7.21
Three	3	2.70
Five	1	0.90
Total	111	100

Authors' institutional affiliation. Table 3 indicates the affiliation of PJLIS authors to various institutions. The maximum papers, 54 (48.65%), were from the University of the Punjab, Lahore. Next highest contribution was from the University of Karachi with eight (7.21%) papers. Authors from the University of Kuwait and the Foundation University College of Liberal Arts and Sciences, Rawalpindi contributed six and five papers respectively. The British Council, Lahore contributed four papers (3.60%). There are three papers (2.70%), which were contributed, by three institutions each (International Islamic University, Malaysia, Guru Nanak Dev University, Amritsar and Islamia University, Bahawalpur). Seventeen papers (15.32%) were from individual institutions.

Table 3. Institutional affiliation of authors

Rank	Institution	Papers	Percent
1	University of the Punjab	54	48.65
2	University of Karachi	8	7.21
3	University of Kuwait	6	5.40
4	Foundation University College of Liberal Arts and Sciences, Rawalpindi	5	4.50
5	British Council	4	3.60
5	Unknown	4	3.60
6	International Islamic University, Malaysia	3	2.70
6	Guru Nanak Dev University, Amritsar	3 2.70	6
	Islamia University, Bahawalpur	3	2.70
7	Agha Khan University, Karachi	2	1.80
7	Nanyang Technological University, Singapore	2	1.80
8	Other individual institutions	17	15.32
	Total	111	100

Table 4. Authors' geographic affiliation

Geographic affiliation	Authors	Percent
Pakistan	93	72.09
India	9	6.97
Unknown	6	4.65
Kuwait	6	4.65
Malaysia	4	3.10
UK	2	1.55
Singapore	2	1.55
USA	2	1.55
Sri Lanka	1	0.77
New Zealand	1	0.77
Ghana	1	0.77
Germany	1	0.77
Egypt	1	0.77
Total	129	100

Authors' geographic affiliation. Table 4 shows authors' geographic affiliation. Most of the authors, 93 (72.09%), worked in Pakistani institutions. Other may have Pakistani origin but their geographical affiliation is determined by their institutional addresses or affiliations. The remaining thirty-six (27.91%) authors contributed 36 papers from 11 countries. The geographical affiliation of authors in six (4.65%) contributions could not be determined due to insufficient available data about them. Among the foreign

contributors, the highest number is from India, nine (6.97%), followed by Kuwait, six (4.65%), and Malaysia, four (3.10%). One (0.77%) paper each was contributed by the authors from Sri Lanka, New Zealand, Ghana, Germany and Egypt.

Type of publications and their language

Majority of the papers, 59 (53.13%) published in PJLIS came under the category of research articles. The second highest number of papers, 19 (17.12%), were essays followed by biography, nine (8.11%), and reviews, seven (6.31%). Six (5.40%) editorials were published by eminent LIS scholars. Only three (2.70) abstracts of PhD dissertations were published in PJLIS (Table 5).

Table 5. Distribution of articles on type of publication

Publication type	Publications	Percent
Research	59	53.15
Essay	19	17.12
Biography	9	8.11
Review	7	6.31
Editorial	6	5.40
News	5	4.50
Abstract	3	2.70
Bibliography	2	1.80
Address	1	0.90
Total	111	100

Most of the papers, 78 (70.27%), were in English language. In start it was a bilingual journal (one section in English and one in Urdu). But it became an English language peer-reviewed research journal when it changed from Pakistani Librarian to PJLIS in 2006 according to the standard of the Higher Education Commission (HEC) of Pakistan. It is one of the only two HEC recognized journals of LIS in Pakistan. Twenty one (18.92) papers were in Urdu language and only 12 (10.81) were bilingual.

Table 6. Distribution of article on the basis of language

Language	Articles	Percent
Bilingual	12	10.81
English	78	70.27
Urdu	21	18.92
Total	111	100

Table 7. Year wise count of articles

Volume	Year	Articles	Percent
1	1995	13	11.71
2	1996	12	10.81
3	1997	16	14.41
4	1998	10	9.01
5	1999	8	7.21
6	2000	8	7.21
7	2006	10	9.01
8	2007	7	6.31
9	2008	11	9.91
10	2009	8	7.21
11	2010	8	7.21
Total		111	100

Year-wise distribution of papers

Table 7 shows that there were almost 10 papers per year. Maximum number of papers, 16 (14.41%) appeared in 1997 (vol. 3 of PJLIS). Minimum number of papers per year was seven in 2007 (vol. 8).

Number of citations used per article

Almost 40% papers had no citations. The remaining 60% papers had citation ranged from one to 100. Fifty one (45.94%) papers had up to 20 citations (Table 8). Only two papers had more than 50 citations, out of which one had 58 while the other had 100 citations.

Table 8. Number of citations used per article

Citations	Articles	Percent
0	44	39.64
1-5	14	12.61
6-10	15	13.51
11-15	12	10.81
16-20	10	9.01
21-25	6	5.41
26-50	8	7.21
More than 50	2	1.80
Total	111	100

The length of papers

Length of the majority of the papers, 67 (60.35%), ranged from one to 10 pages. Thirty six (32.43%) papers had length from 11 to 20 pages. Only eight (7.21) papers had more than twenty pages. The maximum length of a paper was 35 pages. The average length of papers was 8.84 pages which is the ideal length for research papers.

Table 9. Length of papers

Pages	Articles	Percent
1-5	37	33.33
6-10	30	27.02
11-15	23	20.72
16-20	13	11.71
More than 20	8	7.21
Total	111	100

Conclusion

Authorship pattern shows that most of the papers were single authored and being Pakistani origin journal majority of the authors belonged to Pakistan. Authors from 12 foreign countries also contributed in this journal as found in the study of 11 volumes. It shows that the journal has been internationally circulated. It needs wider circulation and that is the reason that for the last few years its issues have been made available online. Authors from the University of the Punjab contributed maximum papers followed by the University of Karachi. Majority of the papers were research papers and 70 percent were written in English language. Fifty one papers (45.94%) have 1-20 references which seem to be a good trend in research while 44 contributions (39.64%) were without references. In fact those contributions were essays written on different aspects of librarianship. Almost 60% of papers' length ranged from 6-20 pages and average length of papers was 8.84 pages.

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