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# Bibliometric Analysis of the Journal *Library Philosophy and Practice* from 2005-2009

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## Introduction

Bibliometrics is a research method used in library and information science. It is a quantitative study of various aspects of literature on a topic and is used to identify the pattern of publication, authorship, and secondary journal coverage to gain insight into the dynamics of growth of knowledge in the areas under consideration. This can lead to better organization of information resources, which is essential for effective and efficient use. Bibliometrics has attained sophistication and complexity with a national, international, and interdisciplinary character.

The term "bibliometrics" was coined by Pritchard in 1969. A pioneering example of a bibliometric study was statistical analysis of the literature of comparative anatomy from 1543 to 1860, done by counting book and journal titles, and grouping them by countries of origin and periods. In 1923, a study was conducted by Hulme, entitled "Statistical Analysis of the History of Science". His analysis was based on the entries in the *English International Catalogue of Scientific Literature*. A third study was the work of Gross and Gross reported in 1927. They counted and analyzed the citations in articles from the *Journal of the American Chemical Society*, and produced a list of journals deemed important to chemical education. Another prominent work was Bradford's 1934 article on the distribution of literature in lubrication research. It is an important part of the theoretical foundation of bibliometrics, "Bradford's Law of Scattering."

In 1948, the great library scientist, S.R. Ranganathan, coined the term "librametry", which historically appeared first and was intended to streamline the services of librarianship. Bibliometrics is analogous to Ranganathan's librametrics, the Russian concept scientometrics, infometrics, and subdisciplines like econometrics, psychometrics, sociometrics, biometrics, technometrics, chemometrics, and climetrics, where mathematics and statistics are applied to study and solve problems in their respective fields. Scientometrics is now used for the application of quantitative methods to the history of science and overlaps with bibliometrics to a considerable extent.

#### Need for the Study

Periodicals are the indicators of literature growth in any field of knowledge. They emerge as the main channel for transmitting knowledge. Due to the escalating cost of the periodicals and lack of adequate library budgets, the selection of any particular journal for a library should be done carefully. Library authorities are forced to reduce the number of journal subscriptions. Bibliometric analysis has many applications in library and information science in identifying research trends, core journals, etc., and thereby framing subscription policies for tomorrow. These studies will be helpful for librarians in collection development.

#### Library Philosophy and Practice

*Library Philosophy and Practice* (LPP) describes itself as "a peer-reviewed electronic journal that publishes articles exploring the connection between library practice and the philosophy and theory behind it. These include explorations of current, past, and emerging theories of librarianship and library practice, as well as reports of successful, innovative, or experimental library procedures, methods, or projects in all areas of librarianship, set in the context of applied research." (<u>http://unllib.unl.edu/LPP/</u>) It was founded in 1998 and was published twice a year until 2007, when it began to publish a continuous annual volume.

#### **Objectives of the Study**

The present study has been undertaken with the objective of analyzing the following aspects.

#### Analysis of articles

- to make an analysis of articles published in LPP from 2005-2009.
- to identify the number of contributions published during the period of study.
- to determine the year-wise distribution of articles.
- to study the authorship pattern
- to find out the ranking of leading contributors
- to study the subject coverage of articles.
- to study the length of articles.

#### Analysis of Citations

- to discover the number of cited documents and the average number of references per article.
- to identify the number and forms of documents cited.
- to identify the year-wise distribution of cited journals.
- to study the age of cited journals.

#### Methodology

The methodology applied in the present study is bibliometic analysis, which is used to study in detail the bibliographic features of the articles and citation analysis of the references at the end of each article published in LPP from 2005-2009. For this the relevant data are collected and recorded. Then they are tabulated and analysed for making observations.

#### Analysis

The analysis was done in two parts: a) Analysis of articles b) Analysis of citations.

#### Analysis of Articles

All the details such as author(s), title, year of publication, pagination, institutional affiliation, etc., of all articles published from 2005 to 2009 were recorded for the following analysis.

#### Number of Articles

A total number of 249 articles published during the period 2005-2009 has been recorded for the present study.

#### Table-1 Year-wise Distribution of Articles

Year	No. of articles	Percentage
2005	10	4.01
2006	34	13.66
2007	55	22.09
2008	68	27.31
2009	82	32.93
Total	249	100.00

The table shows the maximum number of articles published in 2009 (82) and minimum in 2005 (10) articles. The journal publishes on an average of 50 articles per year.

# **Subject Distribution of Articles**

Table-2 Subject Distribution of Articles

Subject	No. of Articles	Percentage
Library and Information Science	37	14.85
Library Profession	15	6.02
Academic Libraries	9	3.61
Public Libraries	12	4.81
Special Libraries	23	9.23
Library Automation	16	6.42
Computer Application	14	5.63
Library and Internet	54	21.69
Bibliometric studies	19	7.64
User studies	50	20.10
Total	249	100.00

Table 2 above shows that a majority of a contributions appeared under library and Internet 54 (21.69%). The next position is taken by user studies 50 (20.10%). This is followed by library and information science 37 (14.85%) and special libraries 23 (9.23%).

#### **Authorship Pattern**

Table-3 Authorship pattern

Year	1	3	Total		
	1	2	3	4	
2005	8	2			10
2006	17	12	2	3	34
2007	13	21	12	9	55
2008	17	27	20	4	68
2009	23	32	17	10	82
Total	78	94	51	26	249
Percentage	31.32	37.75	20.48	10.44	100

Table 3 reveals the authorship pattern of the articles published during the period of study. The largest number of articles had two authors 94 (37.75%). This is followed by single author 78 (31.32%), three authors T 51 (20.48%) and four authors with 26 (10.44%) of the total articles.

#### Year-wise Authorship Pattern

Table-4 Year-wise Authorship pattern

Authorship	Year					Total	Percentage
	2005	2006	2007	2008	2009	TOLAI	reicentage
Single	8	17	13	17	23	78	31.32
Joint	2	17	42	51	59	171	68.68
Total	10	34	55	68	82	249	100

Out of 249 articles single authors contributed 78 (31.32%) while the rest 171 (68.68%) articles were contributed by joint authors.

#### Institution-wise Contribution

Table-5 Institution-wise Contribution of Articles

Name of Institution	No. of Articles	Percentage
Universities	149	59.83
Colleges	67	26.90
Research Institutions	28	11.24
Others	5	2.03
Total	249	100

A majority of the articles 149 (59.83%) were contributed by Universities. This is followed by colleges with 67 (26.90%) and research institutions 28 (11.24%) articles. The remaining 5 (2.03%) articles were contributed by other institutions.

#### Length of Articles

Table-6 Length of Articles

Pages	Year					Total	Percentage
	2005	2006	2007	2008	2009	Total	reicentage
1-3	7	9	15	22	19	72	28.93
4-6	2	17	29	38	43	129	51.80
7 & more	1	8	11	8	20	48	19.27
Total	10	34	55	68	82	249	100

Most articles--129 (51.80%)--are 4-6 pages long, followed by 72 (28.93%) articles with 1-3 pages, and the remaining 48 (19.27%) articles have the length of 7 and more pages.

### **Citation Analysis**

The references provided by the authors at the end of their articles are the basis of citation analysis. Citation traces a connection between two documents, one which cites and other which is cited. Citation analysis is one of the popular methods applied to derive the following benefits:

#### **Referencing Characteristics**

Articles with and without references are accounted as follows:

Table-7 Articles and references

Category	No. of Contributions	Percentage
With reference	227	91.16
Without reference	22	8.84
Total	249	100

Nearly all contributions have references (91.16 %).

# Forms of Documents Cited

Distribution of various forms of cited documents are given in the following table. They include journals, books, reference books, dissertations, conference proceedings, seminars etc.

Table-8 Forms of documents cited

Forms of document	Total No. of citation	Percentage
Journals	1026	53.03
Books	432	22.32
Reference Books	87	4.49
Seminars / conference	243	12.55
Dissertations	86	4.44
Others	61	3.15
Total	1935	100

A majority of the contributors preferred journals as the source of information which occupied the top position with the highest number of citations 1,026 (53.03%) of the total 1,935 citations. The second highest position is occupied by books with 432 (22.32%) citations. It is followed by seminar /conference proceedings with 243 (12.55%).

#### **Findings and Conclusion**

The journal has a short history of 12 years, of which this study examined five (2005-2009). In this short period the journal has tried to keep up its main aim of acting as a medium for communication of all sorts of information to librarians, scientists, and academicians. The present study reveals that the highest number of articles have appeared in the area of computer application in library and information science.

The journal published 249 articles during the period of study. The maximum number of contributors are single authors with 31.32%. The Study revealed that majority of articles (96.85%) contain references which include journals, books, conference proceedings, dissertations, etc.

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