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Abstract

A bibliometric analysis of the research papers explores different aspects of the contribution from an individual author to the country as a whole. The growth of publications, authorship patterns, paper lengths, referencing trends, prolific contribution of authors, etc. about a particular journal are includes in bibliometric studies. Keeping in mind the Indian contribution to a peer review e-journal namely Library Philosophy and Practice (e-Journal) this study began. Meanwhile, it is observed that already work has done on several related aspect. Further, it is also found that the same study has already conducted by Anwar, (2018), exploring the Pakistani contribution to the same journals from 2008-2017. Finally, the present study has designed to explore and compare the contribution of Indian and Pakistani authors to Library Philosophy and Practice (LPP) for a period of ten years from 2008-17. The India and Pakistan are two significant countries in South-East Asia those shares historical, political, and economic background together.

This study is based on the bibliometric analysis on LPP covered a period from 2008-2017 in which 432 articles (86 articles from Pakistani & 346 articles from Indian authors) were published during the marked period. Study examines the various bibliometric parameters such as authorship pattern, geographical distribution, major authors, and length of articles. Study finds that 41.8% (181) articles were contributed by two authors. Further, the study found that 11-15 pages of articles published in majority by the authors in both countries.

Keywords: Bibliometric, Authorship Pattern, Foreign-Collaboration, LPP-Journal, Scimago Journal Ranking, Contribution-India, Contribution- Pakistani.
1. Introduction

The subject Library and Information Science is more than a century old which begun in 1911 in India and well-known in roots of Indian education system. However, slowly and gradually, the Library Science in Indian subcontinental has emerged as an important subject which is growing rapidly. There are more than 400 LIS journals available worldwide indexed in reputed sources. The Library Philosophy and Practice (LPP) is an international journal and a collaboration accounts for the articles that have been produced by researchers from several countries that began in 1998. In the brief history of just 20 years of this journal, the journal has recognized as a reputed journal in the field.

The present study has started with an intention to know India's contribution to the prestigious journal LPP from last decade. Later on, the authors come to know that already the work has done on this similar aspect but in a limited period coverage and scope. However, the study combines the results of the bibliometric analysis of both Indian and Pakistani author’s contribution together has not conducted. Before, conducting this study, duly permission for using the partial data from Anwar, (2018) and Sa & Barik, (2016) have obtained. However, the data for the years 2016 and 2017 were collected separately to supplement the data for Indian author’s contribution LPP an e-journal for a decade. Keeping in mind the significant output of the study, the data was restructured and presented in new form and packaging. Both India and Pakistan are significant countries in South East Asia, it is hoped that the study will be fruitful for the reader and researchers of both countries.

i. **Bibliometrics**

Paul Otlet was the first who used the ‘Bibliometrie’ in 1934 that understood as "the measurement of all aspects related to the publication and reading of books and documents." However, Alan Pichard coined the original bibliometrics in 1969 which is understood as "the application of mathematics and statistical methods to books and other media of communication" (Wikipedia, 2018). According to the Verma and Shukla, (2018) the word ‘Bibliometrics’ combines the ‘biblio’
derived from the Greek word ‘biblion’ which understood as a book and other word ‘metrics’ is originated from ‘metrikos’ means as the measurement. In the present context, the term Bibliometric is defined as "the application of mathematical and statistical methods to measure quantitative and qualitative changes in different media.” In brief, bibliometrics is an application of quantitative statistics measurements to study and analysis of books, periodicals and other communication media and used in the related literature to describe and monitor its growth and changes. Bansal, (2014) examines the bibliometric that it is associated with the quantification of different types of texts and media. Further, Bornmann (2014) revealed that the bibliometrics analysis and its tools used for the calculation of the Impact Factor of publications and citation analysis for trace the growth and research trends of a particular journal.

Bibliometrics is an emerging field in information science, and its increasing importance provides opportunities for librarians to develop and provide innovative services and thus aid their customers in an academic environment more effectively. In brief, bibliometrics is a statistical tool used to assess the growth of publications, highly cited articles in the field, active countries, and institutions, as well as research collaboration on any particular topic.

ii.  

**Library Philosophy and Practice: An Introduction**

The Library Philosophy and Practice (LPP) is journal of repute and preferred among the research scholars. It publishes original research articles intended to explore new philosophy, theories and practice in Library and Information Science on peer review basis which may prove to significant and innovative. Based on the Scimago Journal and Country Index Rank the LPP has 14 H index among journals. The journal published from 1998 onwards by the University of Nebraska, Lincoln, United States (http://digitalcommons.unl.edu/libphilprac/). The value and quality of the journal can be understood by the following figures which are adopted from the SCImago Journal & Country Rank.

The SCImago Journal & Country Rank is a public domain portal that uses SCOPUS indicators to assess and analyze scientific domains. It compares and provides journals and country ranking. The journals are grouped in 27 thematic areas. 313 specific subjects’ categories.
The data has sourced from the over 34,100 titles from more than 5,000 publishers worldwide and performance metrics from 239 countries.

**Figure 1.1: The Scimago Journal Ranking of LPP**

As the website of SCImago, (n. d.) defined:

“**Scimago Journal Ranking (SJR) is a size-independent prestige indicator that ranks journals by their 'average prestige per article'. It is based on the idea that 'all citations are not created equal'. SJR is a measure of the scientific influence of journals that accounts for both the number of citations received by a journal and the importance or prestige of the journals where such citations come from. It measures the scientific influence of the average article in a journal and expresses how an average article of the journal is central to the global scientific discussion.”**

The analysis in figure 1.1 shows that the journal prestige and value reached its top. However, afterward, it declining, yet it maintains a decent level among the contemporary journals published worldwide.

The core value of any journals recognizes by its capabilities to be cited by the authors. The citations received from its paper for its papers (self-citation) and the citation received for others research papers as a whole. The LPP has an excellent track record of citation receiving and showing the path to the research communities across the world.

The self-citation may be understood as the particular citation received in a publication published in the same journal, while the total number of citation is an addition to self-citation by the other citations published in other journals. In other words, a total citation received as whole including self-citations in a particular year. The development of the total number of citations and journal's self-citations received by a journal's published documents during the three previous years. SCImago, (n. d.) has defined the Journal Self-citation as the number of citation from a journal citing the article to articles published by the same journal.

Figure 1.2 presents a comparison of self-citations and total cite value of the journal. It is visible that after 2008, the journal receiving more and more citations for the papers, however, the graph of self-citation is relatively not as higher as a total value of the journals worldwide.

The journals from its inception, getting the number of citation that shows its significance and value for the researchers. Based on the Scimago Journal Ranking, the year-wise details of the citations received by the Library Philosophy and Practice (LPP) is in figure 3 given as below:
The total number of citation received by the document is count by the indicator from a journal and divide by the total numbers of documents published in that journal. The figure 1.3 show that the average number of times document published in journal. It may be for past two years, three or four years. Here, one thing can noted that for the two years line is equal to the journal’s impact factor metrics. Figure 1.3 reveals the two and four year’s citation metrics for the journals LPP. The indicators show that both two and four year's citation have more or less similar patterns having a slight difference.

iii. **Features of LPP**

a. The journal publishes scholarly articles, reviews, and research papers through a peer review process that indexes in reputed Indexing and abstracting sources. The output is widely cited by the research scholars worldwide. In short, it publishes high-quality papers.

b. Journals coverage is worldwide that contains adequate international collaborations with foreign authors and institutions.

c. The Library Philosophy and Practice have normalized impact and leadership outputs that are based on the various research methodologies.

d. In the form of excellent papers, the journal also committed for the innovative knowledge and patents to publish for the research communities that consist societal impact.
2. The scope of the Study

The study mainly focused on publication pattern of the research articles contributed by the Indian and Pakistani authors to the Library Philosophy and Practice (LPP) journals for a period of ten years from 2008-2017. An attempt to understand the deep roots of LPP and its feature is also made in this study through the bibliometrics analysis from the available literature.

3. Statement of the Problem

The study is important in terms of its isolation because several studies those present bibliometric analysis of LPP have published, but a single study that compared research outputs of two countries together have not visible in the literature of bibliometric literature. The study throws light on the growth of publication by the Indian and Pakistani authors during a period of 2008 to 2017 in the library and information science. How the publication pattern in terms of papers length, the frequency of publications and top five regions and profiles of the top authors in India and Pakistan. The may significant for the students, LIS professionals and the research scholars of bibliometric.

4. Review of Literature

The literature on the bibliometric study provides sufficient numbers of the studies covered specific journals and periods in both types of Indian and international journals. Verma and Shukla, (2018) present a bibliometric analysis of the Journal of Library Herald for the period of 10 years (2008-2017) contained 222 articles. They analyzed the authorship pattern, geographical distribution, prolific author, reference distributions, and authorship pattern of reference. Varma and Shukla, 2018 also found out that 97 (43.68%) articles were contributed by single authors, followed by two authors 87 (39.18%). Dr. K P Singh is a most productive author with a maximum number of articles contributed 11, constituting (31.43%), followed by B K Sen has contributed by 6, constituting (17.14%) in the period of study. Merigo, Pedrycz, Weber, and Sotta (2018) presented a bibliometric study of Information Sciences which is a leading international journal in
computer science started in 1968. In order to celebrate its anniversary, this study presents a bibliometric overview of the leading publication and citation trends occurring in the journal. They aimed to identify the most relevant authors, institutions, countries, and analyze their evolution through time with the help of the Web of Science Core Collection tool in order to search for the bibliographic information. The results underline the significant growth of the journal through time and its international diversity having publications from countries all over the world. A bibliometric study on Malaysian Journal of Library and Information Science for a period of 1996-2000 by Tiew, Abdullah, and Kaur (2002) in which they found the range of published articles per volume was between 14 and 17, 22, and 22.5 was the average number of references per article. Further, they found the Zainab Awang Ngah was the most productive who contributed 12 articles. However, the maximum articles contributed by a single author was 36 constituted a total of 47.4%. The bibliometric study is a common phenomenon, trend, and choice of the research by the Indian scholars.

The DESIDOC Journal of Library and Information Technology (DNLIT) is covered by several bibliometric studies (Kumar & Moorthy, 2011; Thavamani, 2013; Desai, 2014; Verma, Devi and Brahma, 2017; Pandita, 2014; Bansal (2013) that includes a period of 2001 to 2012. The bibliometric study normally conducted for various purposes such as trend and growth, authorship pattern, content average, keywords and subject-wise distribution of publication, etc. Another bibliometric study conducted by Gudodagi, 2014 on Journal of Marketing during 2005 to 2012 where he covered 701 research articles similarly, Mullah and Dhanamjay, 2014 in a bibliometric study on SRELS Journal of Information Management from 2000 to 2009 that covered 412 research papers. It is also observed that the majority of the bibliometric studies have conducted with more or less same objectives with slightly difference of the scope i.e. the name of journals only. Few studies, in which bibliometric laws were considered have visible (Majid, Chang, Ma & Ser, 2015) in the literature. Further, it is also noticed that few authors have used different reference tool like Web of Science and SCOPUS online database for finding the significance of the citation of eminent experts, core journals, and frequency of occurrences.

Patra and Chand, 2006 conducted a study titles ‘LIS research in India: a Bibliometric study’ where they revealed that there was very less contribution by the Indian authors. Similarly, Thanuskoda,
2010 in a bibliometric study of (LPP) covered from 2005-2009 identified 249 articles in which a total of 31.2% of the single authors who contributed to the journals including the references patterns. Another study covered LPP from 2004 to 2009 have conducted by Swain, 2013 for the purpose of ranking of LIS professionals contributing to the LPP by their designation. Swain 2013 identified a significant change from single authorship to multiple authors. The same pattern of authorship has noticed by Verma, Sonkar, Gupta, 2015 in LPP where they covered a period from 2005 to 2014. The authors revealed an average of 117 articles per year published in LPP journal. There were two significant studies on which the present study is based the first Anwar, (2018) in which he studied the contribution of the Pakistani authors from the period of ten years from 2008 to 2017. The second study conducted by Sa and Bakir, (2016) titled “contributions of Indian authors to Library Philosophy and Practice (e-Journal) during 2001 to 2015” in both of the studies, the authors have found out the bibliometric patterns of the publications. The present study with the following purposes has taken into account that compares the contribution by the authors of the two countries India and Pakistan of South East Asia.

5. Objectives

The study intended the following objectives

1. To trace the year wise growth pattern of publications contributed by the Indian and Pakistani authors and the overall growth of the journal during 2008-2017;
2. To examine the discrete and the cumulative authorship pattern of publications such as number of authors, length of papers, and the foreign collaboration of articles contributed by the Indian and Pakistani authors
3. Mapping the productivity of publications in terms of authors, geographical distribution of the articles contributed by the countries under study.

6. Research Methods Used

The present study has conducted to know the contribution of Indian and Pakistani author's contribution to LPP for the period from 2008 to 2017. The data for this study have gathered from
the Scimago Journal Ranking (SJR), and the two studies i.e. Anwar, (2018) and Sa & Bakir, (2016). However, to supplement the remaining data for the period of 2016 and 2017 for Indian counterparts, the LPP online database search platform and advanced tools were also used to collect data. A total of 87 research papers, published in 2016 & 2017 were downloaded and entered manually to MS-Excel for getting required information. The rest of the data (from 2008 -2015) was collected from table 1 of the study conducted by Sa and Bakir, (2016, p. 3) in which a total of 259 published papers from 2008 to 2015 were added to 87 papers. So, a total of 346 papers from the Indian authors have included in this study.

Singh and Bebi (2014) in their bibliometrics study on “Library Herald’ used the coding of data collected manually into MS-Excel for getting required information. Similarly, for this study the manual data were entered into the MS-Excel to acquire needed information. The data is presented in the logical sequence showing the comparison of the research contribution of both the countries. A total of 86 research papers from the table 1 (Anwar, 2018, p. 6) contributed by the Pakistani authors were included in the study for analysis as Pakistani counterparts. The adequate survey of literature and its intensive review have also done for this study. Scrutiny of the related articles to find out the desired data for the articles have also conducted to get desired information for this study. Therefore, a total of 432 articles (346 from India and 86 from Pakistan contribution) were considered for this study.

7. Data Analysis and Discussion

The Library Philosophy and Practice (LPP) started in 1998 since then it continues publishing research articles. There were total numbers of the 1478 research articles published during the period covered in the study 2008- to 2017 in the LPP with an average of 147 articles per year.
Figure 7.1 shows the overall publication's growth in term of the number of articles published in LPP during 2008 to 2017. However, the period covered in the study in the initial two years i.e. 2008 and 2009 were recorded slow and steady growth. The year 2011 and 2012 were witnessed for the highest number i.e. 197 & 192 of growth of the articles respectively. Though the growth somewhat declines afterward during 2013-2016, then again the year 2017 has recorded the significant growth as much as of 193 articles. This shows that the LPP has gained the noteworthy popularity among LIS research scholars for publishing their research.

The journals have open access for the reader available in the public domain that invites articles from across the world. However, the Indian subcontinent for LIS research is also contributed to this journals.

A total of the 346 research articles were contributed by the Indian authors during the period of 2008-2017 with an average of 35 articles per year. While, there were a total of 86 research articles (Anwar, 2017) were contributed by the Pakistani authors in the same period with an average of 9 articles per year. The ratio of the India and Pakistan contribution of research articles per year distributed as 4:1 which seems reasonable correct in relation to the population of the
countries are concerns. The year wise contribution by the individual country is presented in figure 7.2 as given below:

![Figure 7.2: Discrete Contribution (in %) by Indian and Pakistani Authors to LPP](image)

The Figure 7.2 shows the percentage of research articles contributes to LPP by the countries under study from the period 2008-2017. The overall percentage of the articles contributed is visible that Indian author has more papers than Pakistani authors published in LPP during 2008-2017. The beginning of the data collection has started in 2008, when India has 25% of the total publication of LPP, whereas Pakistani contribution was just only 3% in 2008. The highest contribution i.e. 10.4% by the Pakistani authors was in the year 2012, whereas, in the year 2016 when the Pakistani authors could not contribute. Similarly, India has contributed their highest (28.5%) publications in 2013, whereas, it was the year 2010 when the Indian authors contributed the least percentage i.e. 17.3% of a total of the paper published in LPP.

The countries have a significant difference in term of the population and status of LIS education, so the difference is natural in the literature covered under Library Philosophy & Practice from 2008 to 2017.
After a separate analysis of India and Pakistan to LPP in Library & Information Science, it was important to know, what is the overall contribution by these countries? The data retrieved covers this aspect are presented in figure 7.3 given below.

![Combined Contribution (in %) by Indian and Pakistani Authors to LPP](image)

**Figure 7.3:** Combined Contribution (in %) by Indian and Pakistani Authors to LPP

The analysis in figure 7.3 shows that since the beginning of publication of LPP, both countries are contributing to LPP. The data shows that in 2008 both the countries have contributed a total of 28.7% of the total articles published in 2008 whereas both the countries have contributed 25.9% of total publications in 2017. In the year 2013, both the countries have contributed at their highest i.e. 37.7% of the total publication, whereas, in 2015, they contributed the least percentage i.e. 23.2% of the total publications of the journal.

An important aspect of bibliometric studies to throw lights on the authorship patterns that includes the reference patterns and length of the article. An attempt was made to know the length of the research paper contributed by India and Pakistan.
The analysis in figure 7.4 shows that the highest i.e. 101 papers contributed by India were ranges from 11-15 pages, similarly there were 39 papers, highest those contains 11-15 pages by the Pakistani authors. The analysis also shows that there were 91 papers contains 16-20 pages by Indian authors and 14 papers by the Pakistani authors those have 16-20 pages. As far as the least numbers of papers are concerns the articles have 1-5 pages, the Indian authors contributed 8 paper whereas Pakistani authors contributed just the only single article. The data also reveals that there were significant numbers of articles those contain 6-10 pages and 21-25 pages by Indian authors, whereas the paper having the same length were 26 and 5 papers only contributed by the Pakistani authors.

The length of papers largely depends upon the research questions and the nature of the problem addressed in the respective study. The average length of paper contributed by both countries can be combined as paper 1- 5 pages 4.5, 6-10 pages 45 papers, 11-15 pages 70 papers, 16-20 pages 52.5 and the papers having 21-25 pages have an average of 42 papers. So, it is clear the majority of the papers published in 11-15 pages are preferred by the authors of both of the countries. It is also considered an Ideal length of paper readable by the research community and for publications by the peers of the journal.

Figure 7.4: Length of Articles Contributed by Indian and Pakistani Authors
After analysis, the length of the paper, another bibliometric aspect i.e. authorship pattern of the paper contributed by the Indian and Pakistani authors was an attempt to know. The data retrieved given in figure 7.5 below.

![Authorship Pattern of Articles](image)

**Figure 7.5: Authorship Pattern of Articles**

The analysis in figure 7.5 shows that the majority of the articles written by the two authors were maximum in India and Pakistani authors followed by the single authorship by 109 & 26 papers respectively. However, significant pattern of three authors has noted that figured as 70 and 13 paper by the India and Pakistani authors respectively. The pattern more than 5 authors was only one in India while Pakistan was not contributed by the five authors. The Indian and Pakistani authorship pattern are similar up to some extent.

In the continuation, an attempt to know the cumulative authorship pattern of Indian & Pakistani authors, the data were presented in figure 7.6 as given below.
The analysis of figure 7.6 reveals the joint authorship pattern of the articles published by both the countries in LPP. There were 181 research papers, written by the two authors followed by the one authors as 135 papers contributed by the single author. A significance trend also noticed where 83 and 19 papers were written by the three and four authors respectively. The journal is reputed in term of quality content of papers published, therefore, it does not affect how many writers have written the papers.

Figure 7.7: Top Five Indian & Pakistani Cities/Regions
The analysis in figure 7.7 reveals the top five cities or regions where the most research articles were contributed from the Indian and Pakistani authors. New Delhi, the capital of India where the most institutions created and contributed maximum (24%) papers to LPP from 2008-2017 for Indian contribution followed by 2% each from the Mumbai and Bengaluru. However, the Chennai (19) and Kolkata (15) articles contributed respectively. In regard to the cities or region of Pakistan from where the highest number of articles were contributed. The figure 7.7 also reveals that Bahawalpur (46.5%) and Lahore (45.3%) were the Pakistani regions where most of the papers contributed to Library Philosophy and Practice. The Islamabad, the capital of Pakistan contributed 10.4% of the total of Pakistani papers whereas, Sargodha and Karachi contributed 4.6% each. So, it is clear that the two regions of Pakistan i.e. Bahawalpur and Lahore are the cities where the majority of the papers originated and contributed to the LPP during last 10 years. The papers are created in the educational institutions by the faculties and the teacher's communities at large.

![Bar graph showing top five prolific authors](image)

**Figure 7.8: Top Five Indian & Pakistani Prolific Authors**

Figure 7.8 shows the top five authors who contributed their research papers. The analysis reveals that Dr. Rubina Bhatti has the highest (27) papers followed by Dr. Khalid Mehmood (19) papers who are the teachers by profession and rank the first and second respectively in Pakistan. Ms.
Farzana Shafique also contributed 19 papers to LPP that ranked the third. The Figure 8 also shows that none of the Indian authors has contributed such numbers of papers single-handedly as the Pakistani authors have contributed. Dr. Thanuskodi, S. has the highest number i.e. 10 research papers while Mahajan, P has contributed 7 papers to LPP during the last 10 years. However, Dhanvandhan, S. has contributed 5 papers with ranked the third, whereas other two authors have contributed 4 papers each. It is observed that the majority of the contributors belong to the teaching profession. Pakistani authors have contributed at large as per the single contribution is concerned.

![Bar Chart]

**Figure 7.9:** Foreign Collaboration by Indian & Pakistani Authors

The analysis in figure 7.9 reveals the status of the foreign collaboration by both the countries. As regard to Pakistani foreign collaboration, Saudi Arabia leads with 3 research papers followed by the Malaysian authors (2) papers. The figure throw lights that France and Sweden have 1 paper each. Other hands, the Indian foreign collaboration is concerned, here also Saudi Arabia has 2 research papers followed by China, and Antigua & Barbuda those contributed 1 paper each. A total of only three countries have collaborated with Indian authors. The Pakistani authors have better exposer with foreign collaborators during the period covered under study.
8. Major Findings

i. The growth of the research articles published in Library Philosophy and Practice (LPP) has risen up to three times since 2008 to 2017. It increased with an average of 147 articles per year worldwide (Ref. Figure 7.1).

ii. The Indian contribution to the LPP comprises 36 articles per year while the Pakistani authors contributed with an average of 9 articles per year. However, both countries jointly contributed an average of 21.6 articles per year overall 29.2% of the total publications of LPP of both countries during last ten years (Ref. Figure 7.2 & 7.3).

iii. The popular length of research papers published in LPP from both the countries was ranges from 11-15 pages. It can be considered as moderate and ideal to the research publications contained condensate and precise contents (Ref. Figure 7.4).

iv. Authorship pattern of LPP from last ten years consist with the highest numbers i.e. 181 (41.8%) of papers by the two authors from both the countries (Ref. Figure 7.5 & 7.6).

v. In India, Thanuskodi, S. a teacher is the most active author from Tamil Nadu who contributed the largest research papers while In Pakistan Dr. Rubina Bhatti, also a teacher is the highest contributor to the LPP journal (Ref. Figure 7.8).

vi. The top region or cities where the most of the publications were contributed were the New Delhi and the Bahawalpur in India and Pakistan respectively during the period of study (Ref. Figure 7.7).

vii. The Saudi Arabia is the most favored country for foreign author collaboration among the author of both the countries (Ref. Figure 7.9).
9. Conclusion

The journal namely Library Philosophy and Practice is a renown among the research communities in India and Pakistan. The journals is preferred by the authors in both countries to publish their studies as the analysis of data shows that the contribution of the countries is continuously increasing towards the journal. The growth pattern of publication however, slow and steady yet it is visible as increasing from point of view of the both the countries. The core values of the LPP is recognized by its citations received during last years by the self-citation and records of citation received from outside the journal. The papers citation record of the journal is excellent and it has increased over the years and received a fair ranking among LIS journals published worldwide.

The contribution of India and Pakistan to the LPP from last ten years is noticeable, recognized and accepted by the world research community. The same authorship patterns in publication by the authors of each country has found in the study, therefore, it is suggested to that the authors from both the countries should mutually collaborate and come together for publication in LIS, so that the expertise of the countries can be shared among research communities.

References


