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Evaluating the publications output of Pakistan Journal of Information Management and Libraries based on the Scopus Database

Ikram Ul Haq

College of Dentistry, King Saud bin Abdulaziz University for Health Sciences, Ministry of National Guard - Health Affairs Riyadh Saudi Arabia, ikram34439@yahoo.com

Rabiya Ali Faridi

Notre-Dame Institute of Education, Karachi Pakistan, rabiyaafaridi@gmail.com

Muhammad Tanveer

Prince Sultan University, Riyadh Saudi Arabia, mtanveer@psu.edu.sa

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Evaluating the publications output of *Pakistan Journal of Information Management and Libraries* based on the Scopus Database

Ikram Ul Haq ¹, Rabiya Ali Faridi ², Muhammad Tanveer ³,

1. College of Dentistry, King Saud bin Abdulaziz University for Health Sciences, Ministry of National Guard – Health Affairs, Riyadh Saudi Arabia.
2. Notre-Dame Institute of Education, Karachi Pakistan
3. Prince Sultan University, Riyadh Saudi Arabia.

ABSTRACT

Aim: This study is aimed to evaluate the bibliometric parameters of the literature published in the *Pakistan Journal of Information Management and Libraries (PJIM&L)* for the period of 2010 to 2019 and indexed in the Scopus database.

Methods: The retrospective method has been applied to the dataset that was downloaded from the Scopus-Elsevier database on 5th January 2021. Two source titles *PJIM&L*, and its earlier version “Pakistan Journal of Library and Information Science”, were selected and all the available bibliographic records of publications were downloaded in Comma Separated Value (CSV) file for analysis. The data was examined by chronological order, by the pattern of authorship and enlist the productive authors, further distribution of documents by affiliated country, keywords occurrence and most cited papers were presented. Statistical Package for Social Sciences (SPSS) was used to calculate the Mean and Standard Error of Means and the VOSviewer software was applied to visualize the keywords occurrence and author’s productivity.

Results: A total of 96 papers were identified by the Scopus database published in *PJIM&L* between 2010 to 2019 with an average of 9.6 papers per year with an average annual growth rate of 44.89. These papers were written by 127 authors and most of the papers (n=37; 40.21%) were written by a two-author pattern. Kanwal Ameen has emerged as a most productive author and most of the papers were contributed by the authors who belonged from Lahore and University of the Punjab found a productive institution. The research contributions from 15 foreign countries showed that international authors have trust in the credibility of the journal. Top-cited papers with their number of citations in Scopus and Google Scholar have been identified.

Conclusion: *PJIM&L* is a reputed and internationally recognized LIS journal. The citation analysis showed that its papers are being cited regularly worldwide. There is a need to change the frequency of publications from annual to biannual to attract more researchers.

Keywords: Pakistan Journal of Information Management & Libraries, Bibliometrics, Citation Impact, Library and Information Science, Pakistan

INTRODUCTION

Library and Information Science (LIS) is a service-oriented profession. Primarily, the LIS professionals have been obtaining and organizing the information and learning sources in print, digital and other formats, according to the specific requirements of clientele and the mission of their organization (Haq et al, 2020; Shafique, 2007). The role of LIS professionals in the provision of information to their users has been expanded as most of the current and sophisticated knowledge has been transferred and preserved in electronic format (Arif, & Mahmood, 2012;

Rafiq, & Ameen, 2016). It is a compulsory and imperative chunk of the job description of contemporary professionals to learn and teach information literacy skills and provide hands-on training on various research-related tools to the users (Bhatti, 2012; Khan, Masrek, & Nadzar, 2015).

LIS professionals must have a basic knowledge of research methodology to guide their users effectively (Ameen, 2006). The growth of knowledge and the advancement of learning depends on the process of continuous research (Anwar, & Warraich, 2013). The sharing of the research findings through publications has been considered the backbone for the development of the profession (Haq & Al-Fouzan 2019). Librarians have also been carrying out innovative research, recording their experiments and assisting peers. The quality of diversified services in an ever-changing information-based society demands inventive research and its proper dissemination (Khurshid 2013). Shaikh, Malik and Mahmood (2020) assessed the attitude of LIS professionals in Pakistan towards research and concluded that a small majority of them were involved in the research. Everybody aspired to participate in the research cycle but due to lack of time, low research expertise and training, as well as an inadequate support from parent organization, were major hurdles.

Journals are the popular medium of broadcasting scholarly writings (Baladi, Haq, Hussain & Elahi 2018). *Pakistan Journal of Information Management and Libraries (PJIM&L)* is a Higher Education Commission (HEC) of Pakistan recognized, Scopus indexed, published annually with ISSN Online 2407-7462 and freely accessible online through the following link;

<http://journals.pu.edu.pk/journals/index.php/pjiml/index>

The journal is also indexed in Library and Information Science Abstracts (LISA); Library, Information Science & Technology Abstracts (LISTA); ProQuest; Ulrich's Periodicals Directory; Cabell's Directory of Publishing Opportunities; Directory of Open Access Journals (DOAJ); E-prints in Library and Information Science (E-LIS); International Bibliography of Book Reviews of Scholarly; Literature in the Humanities and Social Sciences; and International Bibliography of Periodical Literature in the Humanities and Social Sciences. PJIM&L started its publication in 1995 as *Pakistan Librarian* by the Department of Information Management (then department of library and Information science), University of the Punjab, Pakistan (Warraich & Ahmad 2011). The founding editor was Afzal Haq Qarshi, and presently, Khalid Mahmood is the chief editor of the journal. The name of the *Pakistan Librarian* has been changed to *Pakistan Journal of Library and Information Science* and finally renamed in 2014 as PJIM&L.

The LIS professionals have been frequently conducting bibliometric studies to evaluate the different parameters and characteristics of publications. This method helps to determine the quantitative aspects of publications, like least and preferred areas of research, prolific authors, authorship and research collaborative patterns (Haq & Al-Fouzan 2017). Now the qualitative aspects of bibliometrics such as citation counting, most cited papers and measuring the impact factor of journals have also got popularity (Haq & Al-Fouzan 2019a). The study was aimed to present a bibliometric profile of *PJIM&L* from 2010 to 2018. The objectives of the study were to analyze the selected bibliometric parameters that included, assessment of the chronological growth of publications with percentage and annual growth rate in *PJIM&L*; examined the occurrence of keywords; scrutinized the productive authors and institutions; observed the international contribution; calculated the citations and find out the most cited papers.

REVIEW OF RELEVANT LITERATURE

The bibliometric studies have been executed in every field of knowledge, not only LIS professionals but the other subject specialists are also involved to evaluate the research output of

their specialty. Meo, Hassan and Usmani (2013) presented the bibliometric profile of medical research in Saudi Arabia. Bajwa and Yladram (2013) worked on biotechnology research in Pakistan. Evren and Kozak (2014) gave a picture of research by Turkish authors on tourism and hospitality. Bibliometric studies also covered the specific region as Middle Eastern Arab Countries (Zyoud, Al-Jabi, Sweileh, & Awang, 2014) and global outlook as gender disparities in Science by Lariviere, et al. (2013).

In Pakistan, especially in the field of LIS, first, the notable study was conducted by Mahmood (1996) on 96 articles related to Pakistani LIS services published in international journals, Anwar and Saeed (1999) further enhanced this area and evaluated 251 LIS documents produced by Pakistani authors during 1969 to 1995 published both in national and international sources. Khurshid (2013) provided a quantitative and qualitative assessment of 516 documents contributed by Pakistani authors in foreign journals from 1957 to 2011. Numbers of bibliometric studies were steered on medical journals published from Pakistan as *The Journal of Ayub Medical College* (Ullah, Butt and Haroon 2008), *Pakistan Journal of Pharmaceutical Sciences* (Baladi, et al. 2018), *Journal of Pakistan Medical Association* (Memon, 2019), and *Journal of College of Physicians and Surgeons Pakistan* (Ullah, Jan, Jan, & Ahmad, et al. 2016).

Warraich and Ahmad (2011) examined the 111 documents published in 11 issues of the *Pakistan Journal of Library and Information Science (PJLIS)* during 1995 to 2010 with an average of 10.09 papers per issue. Khalid Mahmood and Kanwal Ameen both found productive authors with 10 papers each and the majority of the authors (n=72; 85.71%) produced a single paper. The authorship pattern revealed that the 99 publications (89.19%) were written by a single author while 12 papers were the result of collaborative research. Almost half of the contributing authors (n=54; 48.65%) were affiliated with the University of the Punjab Lahore, followed by the University of Karachi (n=8; 7.21%) and University of Kuwait (n=6; 5.40%). The contributors geographically belonged to 12 countries, the host country Pakistan was on the top with 93 authors (72.09%), followed by India (n=9; 6.97%) and Kuwait (n=6; 4.65%).

Haq and Alfouzan (2019) carried out a 10-year bibliometric analysis on the *Pakistan Library and Information Science Journal (PLISJ)* for the period of 2008 to 2017. A total of 369 papers were published in 40 issues of 10 volumes with an average of 36.9 papers per year. Two-third of papers (n=247; 66.93%) were written in the English language while one-third (n=122; 33.07%) were produced in Urdu, the national language of Pakistan. A total of 579 authors including multiple counts contributed 369 papers with an average of 1.56 authors per paper. More than half of the papers (n=214; 57.99%) were written by single authors. The examination of the geographical affiliation of authors revealed that 138 (37.39%) papers were contributed by Karachi, and Dr. Rubina Bhatti, Chairperson of the Department of Library and Information Science, Islamia University of Bahawalpur found a productive author with 31 publications.

Khan and Samdani (1997) scrutinized the 506 papers published in the *Pakistan Library Bulletin* during the period of 31 years from 1968 to 1997. One-fourth (n=383; 75.69%) of the papers were published in English language, followed by Urdu (n=119; 23.51%) and Bengali (n=4; 0.79%). The domination of male authors (91.10%) was found in the study. Naseer and Mahmood (2009) assessed the 236 articles published in *PLISJ* during the period of 10-year from 1998 to 2007. The maximum and minimum number of articles were published in 2006 (n=48; 20.30%) and in 1998 (n=10; 4.2%) respectively. Most of the articles (n=158; 66.9%) were produced by authors affiliated with Pakistan, followed by United States (n=10; 4.2%) and Saudi Arabia (n=5; 2.1%). Siddique et al., (2020) evaluate the 1,305 LIS publications produced by Pakistani authors from 1957 to 2018 and the highest number of documents (n=90) were published in 2016. The non-resident Pakistani author contributed significantly. *PLISJ* and *PJIM&L* were the most frequently

used sources for publications. Khalid Mahmood and University of the Punjab were found the most productive author and institution.

Hussain and Fatima (2011) measured the bibliometric parameters of 62 articles published in *Chinese Librarianship: An International Electronic Journal (CLIEJ)* during 2006 to 2010. More than half of the articles (n=33; 53.23%) were written by a single author pattern and the majority of articles (n=45; 72.58%) were contributed from United States, followed by India, Nigeria, China and Pakistan. Electronic resources and library professionals were found preferred areas of research with 12 and 10 articles respectively.

The bibliometric analysis of 178 articles published in the *Journal of Library Progress* from 2010 to 2017 was carried out by Shukla and Verma (2018). Authorship patterns revealed that the two-author pattern was dominated (n=95; 53.37%) while the geographical distribution of authors showed that the most (80.65%) of the publications were generated from the host country India, followed by Nigeria, Fiji, Oman and South Korea. A. K. Sharma was the most prolific author with nine articles and 38 (30.40%) articles were produced by the authors geographically belonged to Tamil Nadu. Another bibliometric study was conducted on 1,397 papers published in *Library Philosophy and Practice* during 1998 to 2018 as reflected on the Scopus database (Saberi, Barkhan & Hamzehei, 2019). These papers were cited 2,563 times with an average of 1.83 citations per paper. Rubina Bhatti and Khalid Mahmood were found to be productive authors with 19 and 15 papers respectively. The maximum papers were contributed by the authors affiliated to Nigeria (n=549; 39.26%) followed by India (n=310; 22.19%) and United States (n=210; 15.03%). The highest number of papers (n=78; 5.58%) were contributed by the authors of the University of Ibadan, Nigeria. The occurrence of most frequent keywords was bibliometric, research output and academic libraries.

Haq (2015) surveyed the papers contributed by Pakistani authors in *Library Philosophy and Practice* from 2008 to 2017. A total of 93 papers were identified, a maximum of 21 papers were published in the year 2013 and no paper was found during 2016. Information seeking behavior/information needs was discovered a preferred area of research with 28 papers and almost half of the papers (n=46; 49.46%) were written by two-author pattern. Rubina Bhatti was appeared to be a productive author and her affiliated organization, Islamia University of Bahawalpur was found to be the most productive institution. Hussain, Jan, Ibrahim, Salam et al. (2019) presented the bibliometric output by Sarhad University of Science and Information Technology Peshawar in the field of LIS. The LIS students produced 65 theses from 2014 to 2017, 28 theses were written by MLIS students, followed by 26 MS-LIS theses and one thesis was carried out by BLIS student. Seventy-five percent of theses/dissertations were supervised by Saeed Ullah Jan and maximum theses were written on the subject of Library Resources and Services.

The bibliometric analysis of intuitional research output has also been studied by different authors from the Pakistani perspective. Iqbal, Mahmood and Iqbal (2018) examined the research growth of Pakistan from 1981 to 2015. Quaid-e-Azam University emerged as the most productive institution and chemistry was found a preferred area of research followed by plants and animal sciences. Haq & Faridi (2020) surveyed the research growth of Pakistan from 2000 to 2019. Javed, Ahmad and Khahro (2020) evaluated the research productivity of 17 universities geographically located in the Capital city of Pakistan, Islamabad from 2008-2017. COMSATS University produced the highest number of papers while Quaid-e-Azam University secured the highest citation impact. Ahmad et al., (2020) assessed the publications output of the oldest university of Pakistan, the University of the Punjab from 1974 to 2019. Haq, Ullah and Tanveer (2020) calculated the research growth of Army Medical College, Pakistan from 1977 to 2018.

Latif and Haq (2020) presented the case study of all types of publications produced by the researchers of Shifa Tameer-e-Millat University, Islamabad.

METHODS

The data for this report has been searched on January 5th, 2021, using Elsevier's Scopus (<http://www.scopus.com>, Elsevier) databases. In the display setting "Document Search" was selected, "Pakistan" has been typed in the search box and the following box selected "Source title". The Scopus database provided bibliographic records and other bibliometric indicators of all the documents published in the journals and other source publications published from Pakistan. Further filter command was used to limit our search on the "Pakistan Journal of Information Management and Libraries" and "Pakistan Journal of Library and Information Science". Following query was applied to extract the required data;

(SRCTITLE(Pakistan) AND (LIMIT-TO (EXACTSRCTITLE,"Pakistan Journal Of Information Management And Libraries") OR LIMIT-TO (EXACTSRCTITLE, "Pakistan Journal Of Library And Information Science"))).

Data were downloaded in Comma Separated Value (CSV) files. Statistical Package for Social Sciences (SPSS) has been used to calculate the percentage, mean and standard error of means of publications. The VOSviewer software Version 1.6.10 © 2009-2019 has been used for visualizing the keywords and authors' occurrence in the downloaded bibliographic records. The various bibliometric indicators have been presented in tables and graphical formats to highlight the strong and weak parameters of the data.

LIMITATION

The dataset used in this study was extracted from the Scopus database and there is a chance that might be some publications have been missed to be indexed. The documents published in the Urdu language, news items and the abstracts of the M.Phil. and Ph.D. theses submitted by LIS students to University of the Punjab have not been indexed in the Scopus. The six papers are published in 2019 but only four are indexed till the date of data collection.

RESULTS

Distribution of documents/citations by year

A total of 96 documents of *PJIM&L* are indexed in the Scopus database published for 2010 to 2019 with Mean \pm Standard Error of Mean (SEM) 9.6 ± 2.52 and Standard Deviation 7.98. An average of 9.6 documents published per year as shown a liner in Figure-1, and the average annual growth rate (AAGR) has been recorded as 44.89, the variation was noted in the number of documents published in the targeted period (Table-1). The maximum number of 30 documents and 17 documents were published in the year 2016 and 2011 respectively as two bars are shown in Figure-1. A minimum of four documents published in the year 2019. A total of 12 volumes issued from 2010 to 2019, one volume was published every year except 2016, this year was marked with a centennial celebration of the department of information management. Two regular numbers and one special issue containing the selected articles, presented in International Conference on Information Management & Libraries (ICIML) held on October 10-13, 2015 at the University of the Punjab Lahore, were published this year.

All 96 documents received 217 citations with mean of 2.26 cite/doc, and more than half of the papers ($n=54$; 56.25%) were cited from a minimum one citation to a maximum 29 citations. Fifteen documents gained one citation each while nine documents received two citations each and

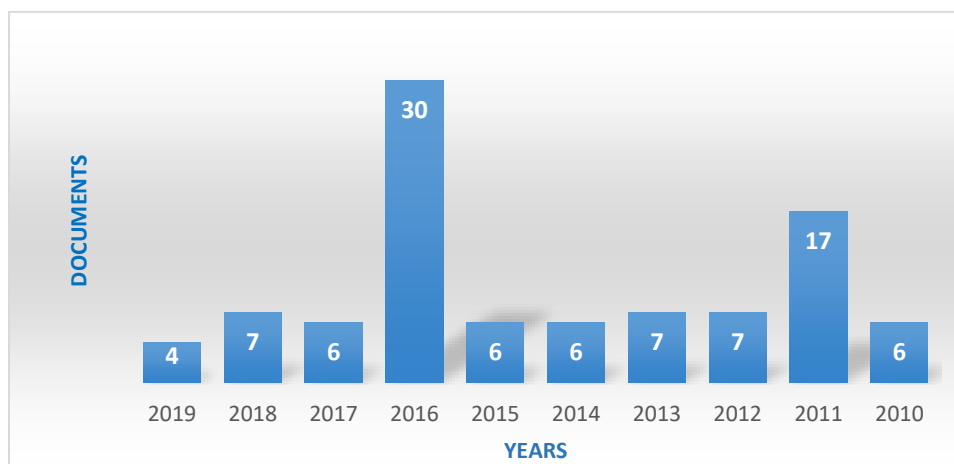
30 documents received three or more than three citations. Seven documents secured *h*-index scale and three document reached on *i10*-index.

The researchers belonged to 41 countries of the world had cited 217 times, the documents of PJIM&L. Pakistani affiliated authors cited *PJIM&L* papers 79 times means that more than one-third of the total citations (36.40%) counted as country's self-citation, followed by India (n=23), United States (n=15) and Saudi Arabia (n=12). The journal self-citation counted 8 (3.68%), while highest number of citations come from Library Philosophy and Practice (n=36; 16.58%). More than half (n=111; 51.15%) of citations were generated during the last three years (2018-2020). Kanwal Ameen cited a maximum time (n=14), followed by Khalid Mahmood and Muhammad Asif Naveed both cited eight times, the documents of PJIM&L.

Table-1; Distribution of documents, percentage, total citations (TC) and Annual Growth Rate (AGR) published in PJIM&L by years

Year	Publications	Percentage	TC	AGR
2010	6	6.25	13	
2011	17	17.71	36	183.33
2012	7	7.29	36	-58.82
2013	7	7.29	44	00.00
2014	6	6.25	13	-14.28
2015	6	6.25	8	00.00
2016	30	31.25	58	400.00
2017	6	6.25	8	-80.00
2018	7	7.29	5	16.67
2019	4	4.17	1	-42.86
Average	9.6		2.26	44.89
St Dev	7.98		18.61	
SEM	2.52		5.88	

Figure-1 Graphic presentation of publications by year



Productive authors and authorship pattern

A total of 190 authors including multiple counts produced 96 papers with an average of 1.97 authors per article. More than one-third (n=36; 37.50%) papers were written by a single author while collaborative research produced 60 (62.50%) papers. The majority of papers (n=37; 38.54%) had a two-author pattern, followed by a single author pattern (n=36; 37.5%) and the three-author pattern was counted in 14 (14.58%) papers (Table-2). Collaborative research received the higher citation impact as compared to single author publications and a two-author pattern gained a highest citation impact. The correlation has been calculated between the authorship pattern and citation impact. It is revealed that a positive correlation (0.728801) has been found, multi-author papers gained more citations as compared the papers written in isolation. (Table-2)

Table-2; Authorship pattern

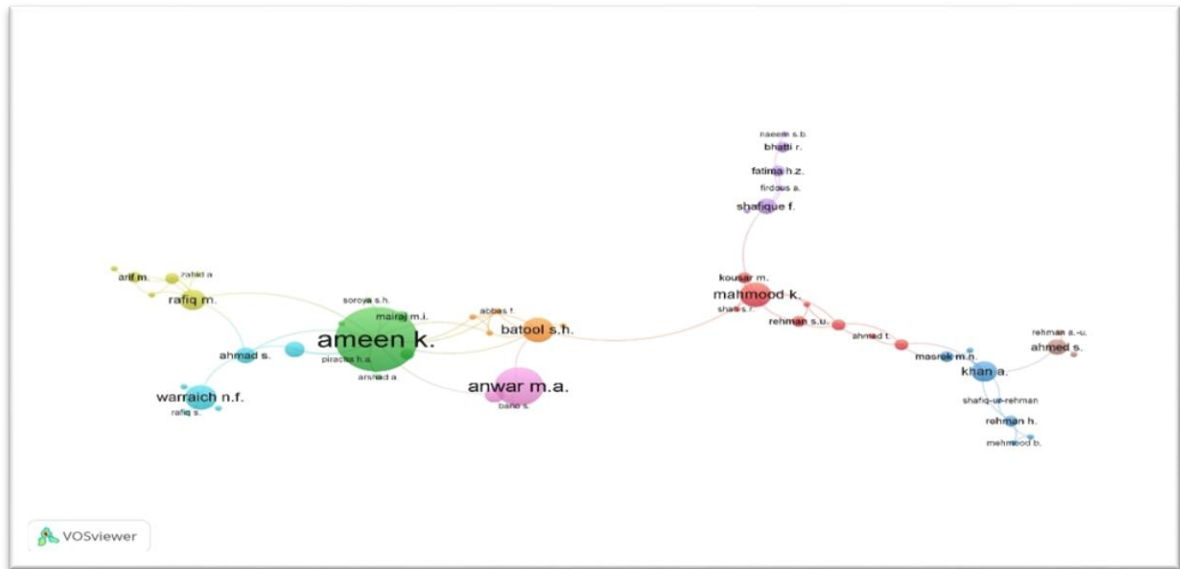
Authorship Pattern	Documents (%)	Citations	Citations Impact
Single-author	36 (37.50%)	30	0.88
Two-author	37 (38.54%)	147	3.97
Three-author	14 (14.58%)	32	2.28
Four-author	7 (7.29%)	4	0.57
Five-author	2 (2.08%)	4	2.0

As far as individual authors are concerned, a total of 127 authors contributed in 96 documents. The majority of authors (n=101; 79.52%) produced one document each while the other 26 (20.47%) contributed more than one article. Kanwal Ameen was found a most productive author with 14 documents followed by Mumtaz Ali Anwar with eight papers. Khalid Mahmood, Nosheen Fatima Warraich and Syeda Hina Batool contributed five papers each, whereas Asad Khan and Muhammad Rafiq stood on 4th rank with four papers each. There were six authors with three papers each and twelve authors with two papers each, details of authors with number of papers are given in Table-3.

Table-3; List of most productive authors

Rank	Authors	Papers
1	Kanwal Ameen	14
2	Mumtaz Ali Anwar	8
3	Khalid Mahmood; Nosheen Fatima Warraich; Syeda Hina Batool	5 Each
4	Asad Khan; Muhammad Rafiq	4
5	Sajjad Ahmed; Shahzad Ahmad; Abdus Sattar Chaudhry; Muhammad Asif Naveed; Farzana Shafique; Midrar Ullah;	3 Each
6	Rubina Bhatti; Sanda Erdelez; Hafiza Zaheer Fatima; Mamoona Kousar; Muhammad Ijaz Mairaj; Mohamad Noorman Masrek; Tahira Muzammil; Muhammad Tariq; Sajjad Ur Rehman; Muhammad Arif; Shafiq ur Rehman; Muhammad Tufail Khan	2 Each

Figure-2; Occurrence of authors in PJIM&L



Distribution of documents by institutions and countries

The contributors of *PJIM&L* are affiliated with 62 institutions of 16 countries. The Pakistani authors affiliated with 31 institutions have contributed 70 papers. The majority of documents (n=58; 60.41%) were produced by the authors associated with eight institutions of the Lahore. The researchers of four institutions were geographically located in the capital city of Pakistan, Islamabad produced eight papers, two institutions of Bahawalpur and Peshawar produced seven articles each. Three papers were contributed by the authors affiliated to Sargodha, one paper each was produced by the authors of Multan, Pindi Bhattian and Rawalpindi. Only one paper was found from the Sindh (Karachi) and no paper were contributed by the authors of Balochistan and Azad Kashmir in present study. Overall, the University of the Punjab, Lahore was found as the most productive institution with 47 papers, followed by Islamia University of Bahawalpur and Peshawar University with 7 and 6 papers respectively. Three institutions, International Islamic University Islamabad, National University for Sciences and Technology, Islamabad and the Imam Abdulrahman Bin Faisal University of Saudi Arabia secured 4th rank with four papers each. There were five institutions with three publications each, included University Teknologi MARA, and University of Malaya of Malaysia, University of Kuwait, University of Sargodha Pakistan and Government College University, Lahore Pakistan. The authors of 15 international countries participated in 34 papers. The authors from three institutions of the United States contributed in six papers, followed by two institutions each from Malaysia and Saudi Arabia contributed five papers respectively (Figure-2).

Keywords Occurrence

A total of 295 keywords has been used in 96 papers, the refined results of the Scopus identified the top 160 keywords, whereas the VOSviewer software has used all 295 keywords to visualize the occurrence of keywords, the keyword of Pakistan has been used 26 times followed by information literacy six times, academic libraries and university libraries five times each and the keywords of research productivity and students were found four times. The occurrence and mapping of keywords have been presented in Figure-4.

Figure-3; Distribution of documents by country

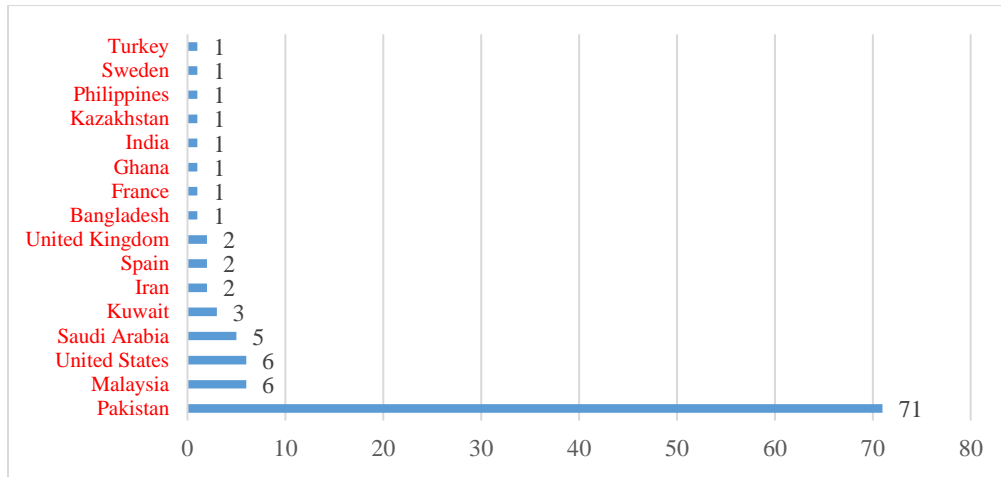
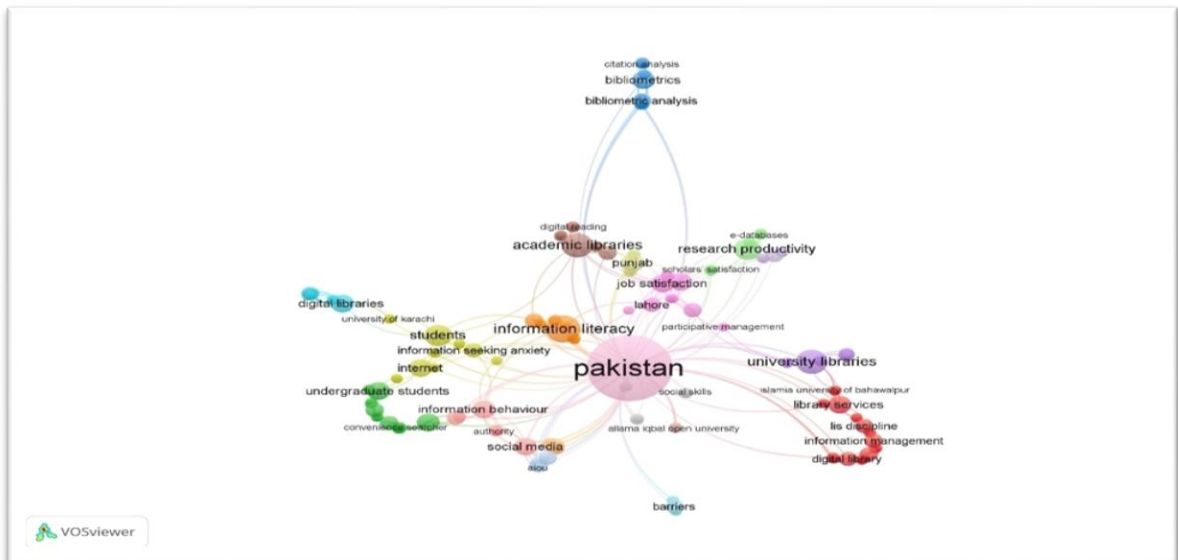


Figure-4; Occurrence of keywords



Most-cited papers

The Scopus database provides the number of citations received by the documents published in PJIM&L. A total of 217 citations were received by 96 documents with an average of 2.26 citations per document. There are 55 (57.29%) citable documents with citations ranging from 1 to 29 times. A list of most cited articles in the Scopus and their comparison with Google Scholar has been presented in Table-5. The article entitled, “Pakistan Journal of Library and Information Science: a Bibliometric Analysis” was published in 2011, was found to be the most cited paper in both, the Scopus and Google Scholar databases. Amongst the 13 highly cited papers, eight were published during the year 2016, 11 papers were written by a multi-author pattern and Nosheen Fatima Warraich emerged the topmost author with three publications in the category of most cited papers.

Table-5 List of most-cited documents in *PJIM&L*, comparison of citations in Scopus and Google Scholar

Rank	Description of Article	Scopus Citations	Google Scholar Citations
1.	Warraich, N. F., & Ahmad, S. (2011). Pakistan journal of library and information science: a bibliometric analysis.	29	74
2.	Khan, A., Rehman, H., & Rehman, S. U. (2016). An empirical analysis of correlation between technostress and job satisfaction: A case of KPK, Pakistan.	13	43
3.	Batool, S. H., & Mahmood, K. (2016). Teachers' conceptions about information literacy skills of school children.	12	28
4.	Iqbal, M., & Warraich, N. F. (2016). Usability evaluation of an academic library website: A case of the University of the Punjab.	9	30
5	Awais, S., & Ameen, K. (2013). The reading preferences of primary school children in Lahore.	8	20
6.	Warriach, N. F., & Tahira, M. (2014). Impact of information and communication technologies on research and development: A case of university of the Punjab-Pakistan.	7	10
7.	Hyder, M., & Batool, S. H. (2013). Job satisfaction among public and private university/degree awarding institution librarians of Lahore: A comparative study.	7	20
8.	Shafique, F., & Mahmood, K. (2016). Variable affecting the information needs and seeking behavior of educational administrators: A review.	7	12
9.	Rehman, S. U. (2016). Measuring service quality in public and private sector university libraries of Pakistan.	7	33
10.	Arif, M., & Kanwal, S. (2016). Adoption of social media technologies and their impact on students' academic performance: The only way for future survival of distance education students in Pakistan.	6	25
11.	Ahmed, S., & Rehman, A. U. (2016). Perceptions and level of ICT competencies: a survey of librarians at public sector universities in Khyber Pakhtunkhwa, Pakistan.	6	16
12.	Naveed, M. A. (2016). Measuring levels of students' anxiety in information seeking tasks.	6	12
13.	Kousar, M., & Mahmood, K. (2010). Dr. Syed Jalaludin Haider: A bio-bibliometric study.	6	9

DISCUSSION

Over the two decades' journey, *PJIM&L* has not only improved the quality of papers and successfully switched from print to online but also got international recognition. Out of 227 LIS journals indexed in the Scopus database, *PJIM&L* stands on 134 positions with 0.7 CiteScore. The statistics of Scimago Journal and Country Rank (SJR-2021) described that 43 document of *PJIM&L* have been indexed in last 3 years (2017 to 2019), 15 citations received, the average citations per documents are counted 2.86, and 6 documents secured the *h*-Index scale. The journal is fall in the category of Quartile factor-3 with SJR Score 0.184.

This paper examined the bibliographic data of 96 documents published during 2010 to 2019 in *PJIM&L* with an average of 9.6 documents per year. The previous study revealed that 111 papers were published in 11 issues from 1995 to 2010 with an average of 10.09 papers per issue and in the interval of 16 years, an average of 6.93 papers per year (Warraich & Ahmad, 2011). The bibliometric analysis on *PLISJ* for the period of 2008 to 2017 displayed that 369 papers were published in 10 years with an average of 36.9 papers per year (Haq & Alfouzan, 2019). The analysis of authorship pattern exposed that the two-author pattern (n=37; 38.54%) was high in the present study but in the previous study (Warriach & Ahmad, 2011) the single author pattern was most frequent (n=99; 89.19). Another study on the contribution of Pakistani authors in Library Philosophy and Practice revealed that almost half of the targeted papers (n=46; 49.46%) followed the two-author pattern (Haq, 2015). Warraich and Ahmed (2011) found that Kanwal Ameen had shared the credit of most prolific researchers with Khalid Mahmood, both produced 10 papers each during 1995 to 2010. This study showed that Kanwal Ameen emerged as a productive author with 14 publications. The foreign contributors affiliated to 15 countries identified the global acceptability of the journal.

The analysis of citations or citation counting is one of the important quality indicator of the publications and part of bibliometric measurement. A high quality paper with innovative idea and original finding has been inspiring the scholars to cite it, in their research (Haq & Al Fouzan, 2019a). The targeted documents of the *PJIM&L* gained 217 citations with an average of 2.26 cites/doc. More than half of the documents were cited and one-third of the citations generated by the authors affiliated to the Pakistan. Tanveer et. al, 2020 assessed the citation impact of 7,483 documents published in Saudi Medical Journal from 1979 to 2018, these documents received 37,988 citations with the mean of 5.07 cites/doc.

At present, there are four more LIS journals being published from Pakistan in addition to *PJIM&L*. Pakistan Library Association (PLA) Journal has been the oldest journal (Samdani & Mahmood 1999) but due to the constant change of PLA headquarter and leadership after every two years, the journal could not get regularity. A governing body or permanent editorial board should be constituted for PLA Journal. Reputed LIS researchers from all the branches of PLA can be selected as a member and they ensured the quality and timely publication of this national journal. The survival and dignity of PLA depend on many things, regular publication of the journal is one of the main. The last three issues of PLA journals were published online, so digital publishing is cheap and fast. There is a dire need for committed and permanent editorial members for this case.

PLISJ has been publishing regularly since 1966 from Library Promotion Bureau (LBP), Karachi, owing to the enthusiasm of the LBP team, especially Ghaniul Akram Sabzwari and Nasim Fatima. This journal is HEC recognized and indexed in Library Literature & Information Science Index, Readers Guide to Periodical Literature; EBSCO host library, Information Science & Technology, and Library & Information Science Abstracts (LISA). This journal has no web-version, but the contents and their abstracts are available through LISTA, EBSCO (Haq & Alfouzan 2019).

Other three LIS journals started their online publication quite recently, first one, *International Journal of Librarianship and Information Science (IJoLIS)* published by the Department of LIS, Allama Iqbal Open University, Islamabad under the editorship of Pervaiz Ahmad (<http://ijolis.aiou.edu.pk/>). Secondly, the *International Journal of Information Management Sciences (IJIMS)* is being published by Pakistan Librarians Welfare Organization (PLWO) under the editorship of Muhammad Tariq (https://www.plwo.org.pk/publications_cat/current-publications/). Lastly, *The Journal of Information Management and Library Studies (JIMLS)*,

started its online publications from Khushal Khan Khattak University, Karak in 2019 under the editorship of Saeed Ullah Jan (<https://jimls.kkkuk.edu.pk/>)

A good number of students are studying in the M.Phil. and the Ph.D. courses from DoIM, University of the Punjab, and other universities of Pakistan (Sheikh & Jan 2017). They should be encouraged to submit their thesis-based publications on PJIM&L. Some students have already published their research papers, but the ratio of an average number of *PJIM&L*'s publications per year is not very inspiring. Now the journey of *PJIM&L* has crossed two decades, it is time to enhance its publication frequency from annual to at least biannual. The researchers usually prefer to submit their papers to monthly or quarterly journal as compared to annually, because they knew that the article processing time is faster in the monthly or quarterly journal. *PJIM&L* is a peer-reviewed journal and the review process takes time, the sincere efforts of the editorial team can reduce the processing time of publication from submission to acceptance. Chen (2019) examined the frequency of articles published in journals and stated that there was an average of 82.89 articles per year published in the selected 170 Social Science Citation Indexed (SSCI) journals during the period of 2018-2019. A total of 3,391 journals were listed in SSCI and most of the journals (n=1,539; 45.38%) published quarterly.

The LIS departments and library associations have been conducting workshops and seminars on writing research papers but not very often. There is a need to enhance and spread these activities to all big cities of Pakistan. After the activity, the organizers and resource persons should provide continuous necessary assistance to young authors in designing research and manuscript writing. Mostly, senior researchers and LIS teachers are only collaborating with their postgraduate students, they should come forward to assist the seasoned and junior practitioners in the art of research writing.

CONCLUSION

PJIM&L is a reputed LIS journal of Pakistan. A total of 96 papers are indexed in Scopus published from 2010 to 2019 with an average of 9.6 papers per year. These papers received 217 citations and the article written by Warraich and Ahmad (2011) was found to be the most-cited paper. International authors affiliated to 15 countries contributed their credible scholarly publications showed the worldwide acceptance of the journal. There are suggestions to increase the publication frequency from annual to biannual and reduce the processing time of publication.

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