# **International Journal of Science Academic Research**

Vol. 02, Issue 10, pp. 3131-3133, October, 2021 Available online at http://www.scienceijsar.com



# **Research Article**

# SCIENTOMETRIC ANALYSIS OF PUBLIC LIBRARY RESEARCH OUTPUT ON 2017 TO 2020 – A GLOBAL PERSPECTIVE

<sup>1,\*</sup>Dr. M. Veeramani, <sup>2</sup>Dr. L.N. Umadevi and <sup>3</sup>Dr. K. Thirumal

<sup>1</sup>Head of Library Services, Dasman Diabetes Institute, Kuwait <sup>2</sup>Librarian and Assistant Professor, Raja Muthaiah Medical College- Annamalai University, Chidambaram, India <sup>3</sup>Librarian, Jawaharlal Nehru college for Women, Ulundurpet, India

Received 16th August 2021; Accepted 20th September 2021; Published online 30th October 2021

#### Abstract

This paper discusses or analyses trends in public library research during from 2017-2020 the data have been collected from web of science database. Aim of the study to analyze source wise research output, year wise publications, authorship pattern, and country wise research. The study finds that articles occupies first place among various forms of sources, during the study period in the year 2020 published highest research output, majority research papers published themes of Public library field.

Keywords: Public Library, Academic Library, Industrial Library.

## INTRODUCTION

Libraries existed in the United States before the founding of ALA. The first public library in the United States is being discussed, but there are three generally accepted answers. The first is the Library Company of Philadelphia, founded in November 1731 by Benjamin Franklin. It was a library supported by members and members. The first modern free public library opened in 1833. The Peterborough City Libraries (N.H.) were the first city-funded institution for the express purpose of establishing a free library open to all classes in the community. The first library card catalog was created at Harvard in 1840. The same year that Harvard developed the card catalog, 1840, the University of South Carolina opened the first independent academic library. University libraries already existed, but they were located in multipurpose buildings. The University of South Carolina Library is the oldest continuously operating library building in the country. The first public library in the United States is being discussed, but there are three generally accepted answers. The latest contender for this title is the Boston Public Library. It was the first free municipal library in a large community and was founded in 1848, almost thirty years before the ALA.

## **Objectives**

To major objectives are formulated the present study as mentioned below:

- 1. To examine the Public library output during the study period.
- 2. To study the country wise research output of Public library research.
- 3. To identify the authorship pattern.
- 4. To study the language wise and institution wise T Public library research publications studies.
- 5. To identify the source wise Public library research publications studies.

## **METHODOLOGY**

This study aims to analyze the trend in the development of Public library research in scientometrics. It is also focused to trace the past trends in the area of Public library research publications in scientometrics based on the sample data. The study evaluates the contribute on countries to the growth pattern and development of research productivity in this discipline during the last few years.

#### **Data collection**

The publication of research output on Public library research in scientometrics is obtained from various sources, such as Journals articles, Conference papers. Review, short survey, note, editorial press release, and letter. The research data required for the present study are downloaded from the web of science database. All the publications retrieved from the web of science database on Public library and scientometric cover the period from 2017-2020. Further, the researcher has downloaded the data in the form of notepad files; then the bibliographical details are converted to the form of MS-EXCEL format using the PHP (Hypertext Preprocessor) scripting language text unique data are rearranged in MS-EXCEL format to eliminate duplication from the download data. Overall data retrieved by the researcher are 2069 records for analyzing the present study.

# Limitations

The findings of this study apply only to Public library studies in to the fields related to the public library, academic library, and special library. This study covers Liver Disease with respect to the medical field, brought under the purview of the study and no other themes. This study makes a special attention only on the performance of research output in Public library research. This study covers the years from 2017 to 2020 only.

#### ANALYSIS AND INTERPRETATION

Table 1. Year wise publication public library research

S.NO	<b>Publication Year</b>	Recs	Percent
1	2017	1	0.0
2	2018	579	27.6
3	2019	611	29.1
4	2020	878	43.3
	Total	2069	100.00

Note: TLCS: Total Local Citation Score, TGLS: Total Global Citation Score

The year wise productivity of publications in public library research during from year 2017 to 2020 is presented in table-1. It shows that the publication of output is gradually increased and decreased trend. In the 2020 occupied first position that the output is increased (43.3%) compared to 2017 and 2020. It is clearly stated that in future the research productivity in public library research is increasing trend.

Table 2. Sources wise output in public library research

S. No	Document Type	Recs	Percent	TLCS	TGCS
1	Article	1382	65.8	203	9662
2	Review	570	27.2	21	6068
3	Editorial Material	40	1.9	5	32
4	Article; Proceedings Paper	28	1.3	0	64
5	Article; Early Access	26	1.2	0	26
6	Book Review	26	1.2	0	0
7	Article; Data Paper	6	0.3	0	55
8	News Item	5	0.2	0	8
9	Meeting Abstract	4	0.2	0	0
10	Review; Early Access	4	0.2	0	4

The source wise output in level of public library research is given in table-2. It shows that the Article is occupies first position (65.8%), second is Review (27.2%), Editorial Material (1.9%) Article; Proceedings Paper (1.3%) followed by Article; Early Access, Book review, Article; Data Paper and etc.

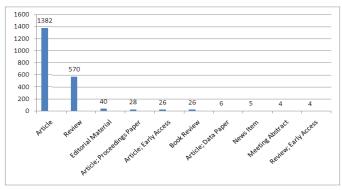


Fig. 1. Sources wise output in public library research

Table 3. Top 10 authors in public library research (total 9103)

S. No	Author	Recs	Percent	TLCS	TGCS
1	Liu J	12	0.6	0	92
2	Zhang Y	12	0.6	1	381
3	Li Y	10	0.5	0	58
4	Behzadifar M	9	0.4	0	47
5	Joo S	8	0.4	16	45
6	Liu Y	8	0.4	3	77
7	Noh Y	8	0.4	0	4
8	Wang X	8	0.4	1	103
9	Lee J	7	0.3	0	39
10	Peet L	7	0.3	0	0

Table 3 shows that top 10 authors of continent level of public library research. It could be noted that the Liu J occupied in first position (0.6%) compared to Zhang Y second position (0.6%) followed by Li Y and others. Peet L occupied in last position (0.3%).

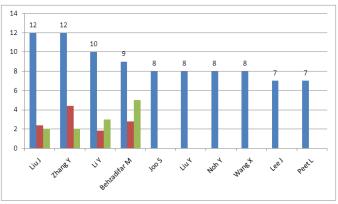


Fig. 2. authors in public library research

Table 4. Top 10 Journals in public library research

S. No	Journal	Recs	Percent	TLCS	TGCS
1	BMJ Open	76	3.6	0	331
2	Journal of Librarianship and Information Science	66	3.1	36	163
3	Medicine	52	2.5	0	63
4	Library Journal	37	1.8	0	0
5	Library Quarterly	36	1.7	37	106
6	Computer Physics Communications	35	1.7	4	979
7	Plos One	27	1.3	0	218
8	Library & Information Science Research	26	1.2	15	114
9	Information Research-An International Electronic Journal	25	1.2	0	16
10	Journal of the Australian Library and Information Association	25	1.2	1	25

The Journal wise output in continent level of public library research is given in table-4. It could be noted that the BMJ Open occupies in first position (3.6%) compared to Journal of Librarianship and Information Science (3.1%); third is Medicine (2.5%) followed by Library Journal, and Library Quarterly, Computer Physics Communications and followed by others.

Table 5. Top ten Country wise of public library research

S. No	Country	Recs	Percent	TLCS	TGCS
1	USA	628	29.9	99	5383
2	China	336	16.0	20	3449
3	UK	226	10.8	22	3509
4	Australia	139	6.6	8	1529
5	Canada	111	5.3	12	1155
6	Spain	103	4.9	2	1008
7	Germany	94	4.5	12	1143
8	Italy	85	4.0	1	1155
9	Brazil	84	4.0	2	797
10	France	66	3.1	0	589

The country wise output in country level of public library research is given in table-5. It could be noted that the USA is occupies in first position (29.9%) compared to China (16.0%); UK (10.8%) followed by Australia and etc.

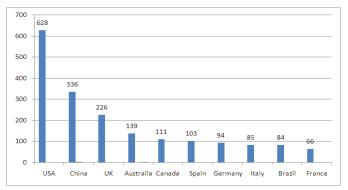


Fig. 3. Countries in public library research

Table 6. Top ten Institutions wise of public library research

S. No	Institution	Recs	Percent	TLCS	TGCS
1	Unknown	55	2.6	5	12
2	Monash Univ	24	1.1	0	216
3	Chengdu Univ Tradit	23	1.1	1	53
	Chinese Med				
4	UCL	20	1.0	4	556
5	Univ Sydney	19	0.9	0	140
6	Univ Washington	19	0.9	4	206
7	Univ Queensland	18	0.9	0	244
8	Univ Tsukuba	18	0.9	12	49
9	Hosp Chengdu Univ	17	0.8	0	19
	Tradit Chinese Med				
10	Univ Cambridge	17	0.8	4	790

The Institution wise output in public library research is given in table-6. It could be noted that the is unknown occupying in first position (2.6%); second Monash Univ (1.1%) followed by Chengdu Univ Tradit Chinese Med. etc.

Table 7. Word wise of public library research

S. No	Word	Recs	Percent	TLCS	<b>TGCS</b>
1	Review	493	23.5	18	5202
2	Public	415	19.8	125	1300
3	Systematic	407	19.4	11	4610
4	Analysis	355	16.9	24	3260
5	Library	337	16.1	72	1249
6	Meta	244	11.6	7	2589
7	Libraries	239	11.4	114	753
8	Health	138	6.6	5	1189
9	Protocol	125	6.0	1	237
10	Based	109	5.2	12	712

The word wise output in public library research is given in table-7. It could be noted that the is occupies in first position Review (23.5%) compared to Public (19.8%), Systematic (19.4%) followed by Analysis and etc.

Table 8. Languages wise of public library research output

S. No	Language	Recs	Percent	TLCS	TGCS
1	English	1983	94.5	227	15843
2	Spanish	43	2.0	0	51
3	Portuguese	23	1.1	1	20
4	French	13	0.6	0	1
5	German	7	0.3	0	9
6	Italian	6	0.3	0	0
7	Japanese	6	0.3	0	6
8	Russian	4	0.2	0	0
9	Turkish	3	0.1	0	0
10	Afrikaans	2	0.1	1	1
11	Catalan	2	0.1	0	2
12	Croatian	2	0.1	0	0
13	Chinese	1	0.0	0	1
14	Dutch	1	0.0	0	0
15	Estonian	1	0.0	0	0
16	Hungarian	1	0.0	0	0
17	Polish	1	0.0	0	0

The language wise output in continent level of public library research is given in table-8. It could be noted that the English is occupies in first position (94.5%) compared to Spanish (2.0%); Portuguese (1.1%) followed by French, German and etc.

#### Conclusion

It is due to the pivotal place of journal as a medium of scientific communication than any other form of publication; majority of the research output published in article in general. It could be deduced from the discussion that, during the study period the research paper publication trend is increasing. Highest percent of publication published in 2020. Very lowest percent of research paper published in the year 2017. Conclude from the study, multi authored contributions is high compare to single authorship pattern.

#### REFERENCES

Fayyad, U., Piatetsky-Shapiro, G. & Smyth, P. 1996. From data mining to knowledge discovery: An Overview. In *Advances in Knowledge Discovery and Data Mining*, U.Fayyad, G. Piatetsky-Shapiro, P. Smyth, and R. Uthurusamy, eds., MIT Press, Cambridge, Mass., 1-36.

Feldman, R. & Dagan, I. 1995. Knowledge discovery in textual databases (KDT). In proceedings of the First International Conference on Knowledge Discovery and Data Mining (KDD-95), Montreal, Canada, August 20-21, AAAI Press, 112-117.

Frame, J.D. 1977. Mainstream Research in Latin America and the Caribbean, *Intersciencia*, 2:143-148.

Hearst, M. A. 1997. Text data mining: Issues, techniques, and the relationship to information access. Presentation notes for UW/MS workshop on data mining, July 1997.

Karki, M.M.S., Garg, K.C. and Sharma, Praveen, 2000. Activity and Growth of Organic Chemistry Research in India Using 1971-1989, Scientometrics, 49 (2): P. 279-288.

Mahapatra, M. 1985. On the Validity of the Theory of Exponential Growth of Scientific Literature, *Proceedings* of the 15th IASLIC Conference, Bangalore, P.61-70.

Potter W.G. Lotka's Law Revised. *Library Trends*, 30 (1) 1981, pp. 21-39.

Potter, William Gray, 1988. "Of Making Many Books There is No End': Bibliometrics and Libraries." *The Journal of Academic Librarianship* 14 (September 1988), 238a-238c.

Schubert, A. and Braun, T. 1986. Relative Indicators and Relational Charts for Comparative Assessment of Publication Output and Citation Impact, *Scientometrics*, 4(2): 142-153.

Subramanyam, K. 1983. Bibliometric Studies of Research Collaboration. A Review, *Journal of Information Science*, 6: 33-38.

www.oced.org/data oced/5/43/pdf

\*\*\*\*\*