

Bibliometric Analysis of Green Library

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ABSTRACT

The concept of green is taking the lead in every aspect of human life. Green indicates sustainable development. United Nations Organization Committee on Climate Change asked its member nations to take action to control global warming to the pre-industrial era. Countries of all United Nations members come up with their action plans to reduce carbon emissions. In these scenarios, new concepts like green economy, green mobility, circular economy, and green library are gaining momentum.

KEYWORDS: Green Library; Sustainable Library.

INTRODUCTION

According to the IFLA ENSULIB Section Green library means A green and sustainable library is a library that takes into account environmental, economic, and social sustainability. Green and sustainable libraries may be of any size, but they should have a clear sustainability agenda. This study mainly focuses on finding out the growth of literature in the field of Green library from 1979 to 2020.

LITERATURE REVIEW

With the advancement and voice for the adaptation of sustainable practice in all fields of study, but literature are very limited and have continued growth in recent times.

(Kulkarni Prafulladatta P.2018) in his article explains the concept, features, and elements of green library. Meher, Puspanjali & Lambodara , Parabhoi, 2017) find out the adoption of green concept structures in Indian libraries. (Sindhu. P.N, Abdul Gaffar & Kishore Kumar, S.) Finds research instances of green library construction and recognition to raise awareness of green libraries for users. The researcher has explored, this paper highlights the role of a librarian, features of the green library, and initiatives of a green library in India

i. ANALYSIS AND INTERPRETATION OF DATA

ii. Chronological Distribution of Article

The dictionary meaning of the term chronological is ‘arranged in the order of the time of happening’. This helps the researcher to identify the gradual increase or decrease of the growth of literature in a particular subject. It also helps the researcher to predict in which year more articles were published on a particular subject.

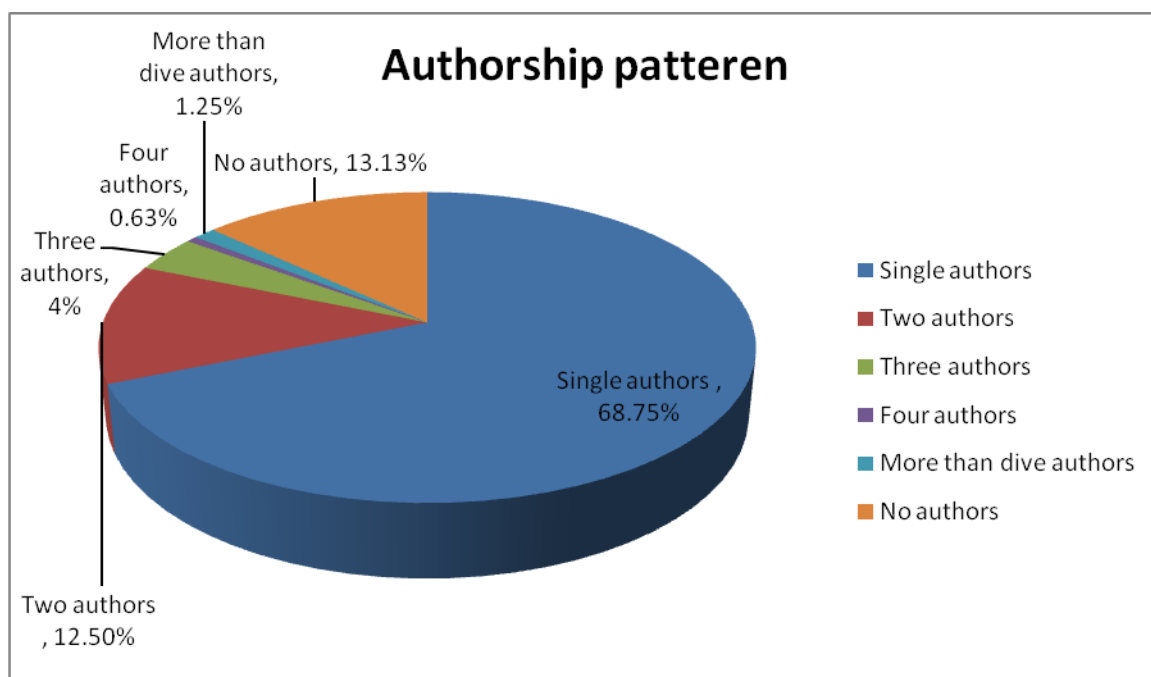
Table 1 shows the average number of articles published for two-year duration. Out of 160 articles, the articles published during the year 2007-2008 were more reaching up to 25 in number, which accounts for 15.625 % of the total. In the year 2013-2014, the articles published were 21, which accounts for 13.125 %. In the year 2015-2016, the articles published were 20, which accounts for 12.5%. And unexpectedly in the years 1983-1990, no one article was published. Thus, from the above table, we can predict that during the years 2003-2018, more contribution was made in the field of green libraries. This might be due to the development of advanced green libraries and advanced and drastic changes that occurred in the field of green libraries.

S. No.	Period of Publication	Year	Percentage
1	1979-1980	1	0.625
2	1981-1982	1	0.625
3	1983-1984	0	0
4	1985-1986	0	0
5	1987-1988	0	0
6	1989-1990	0	0
7	1991-1992	1	0.625
8	1993-1994	1	0.625
9	1995-1996	2	1.25
10	1997-1998	1	0.625
11	1999-2000	4	2.5
12	2001-2002	4	2.5
13	2003-2004	7	4.375
14	2005-2006	15	9.375
15	2007-2008	25	15.625
16	2009-2010	20	12.5
17	2011-2012	18	11.25
18	2013-2014	21	13.125
19	2015-2016	20	12.5
20	2017-2018	13	8.125
21	2019-2020	6	3.75
	Total	160	100

iii. AUTHORSHIP PATTERN

For any kind of information resource to take its origin, the author forms the original entity. The intellectual concept of the author is represented in a variety of types of information resources these information resources help not only an author but also others to carry out further study. Sometimes single author produces and publishes his work or he produces with the collaboration of two or more authors. In any research, we can able to see both types of production. Figure: 1 deals with the authorship pattern with many articles contributed by authors in the field of GREEN LIBRARY. The collection consists of 160 articles, the above figure reveals that there is a very strong trend toward single authors contributions accounting for 110(68.75%) articles, two authors contributions accounting for 20(12.5%) articles, three authors' contributions and four authors' contributions accounts for 6(3.75%) and 1(0.625%), five authors and No authors contributions account for 2(1.25%) and no authors contributions accounts for 21(13.125) articles, respectively. Next to single author production, leads production made by no authors, which accounts for 21 (13.125) articles.

Author Frequency	No. of Articles	%
One Author	110	68.75
Two Authors	20	12.5
Three authors	6	3.75
Four authors	1	0.625
More than four Author	2	1.25
No Authors	21	13.125
Total	160	100

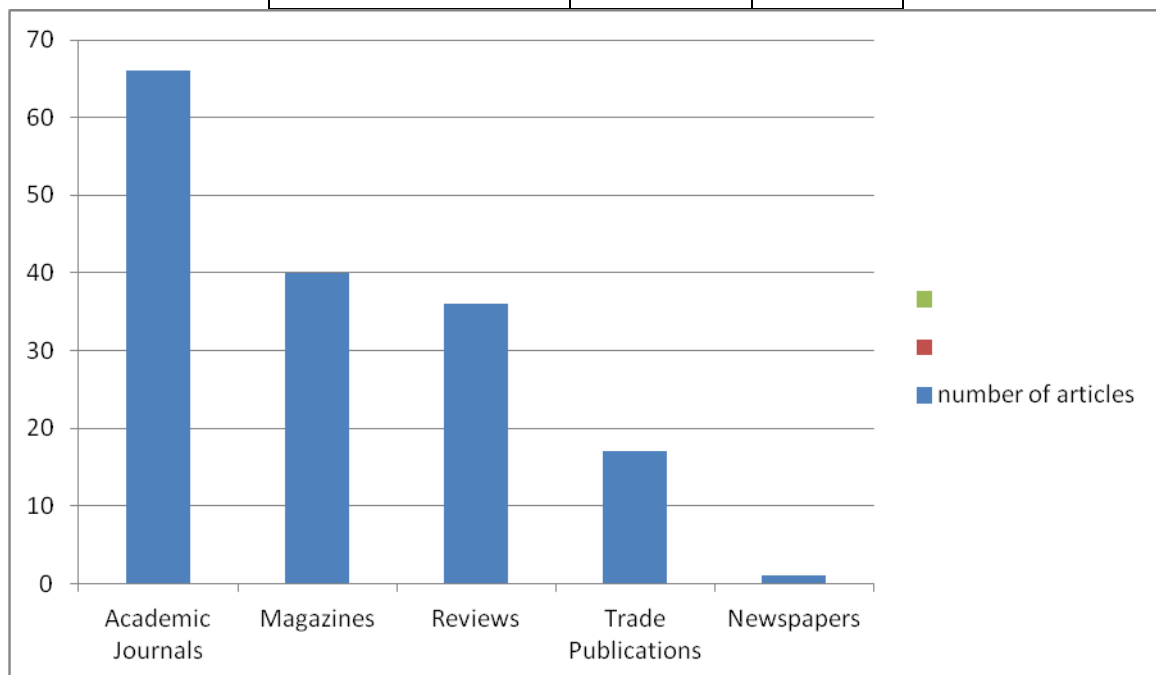


iv. FORMS OF DOCUMENTS FROM WHICH ARTICLES ARE DERIVED

One of the objectives of the study was to find out the different forms of documents from which the published articles are derived in the field of green libraries. Many different formats are used to record information and each form of

publication is planned to serve specific purpose or information needs. The literatures are classified under Academic journals, Magazines, Reviews, Trade publications, and Newspapers. This is presented in Presents academic journals were a more important form of publication in the literature of GREEN LIBRARY taken, which accounts for 66 (41.25%). This is followed by Magazines, which account for 36(22.5%). Trade publications account for 17(10.625%). and There is only one newspaper, which accounts for 1(0.625%).

Name	Statistics	%
Academic Journals	66	41.25
Magazines	40	25
Reviews	36	22.5
Trade Publications	17	10.625
Newspapers	1	0.625
Total	160	100



v. COLLABORATIVE RESEARCH IN GREEN LIBRARY

The extent of collaboration in research can be measured with the help of multi-authorship of papers. **Subramanian (1983)** has given a formula for determining the degree of collaboration in a discipline the the formula is as follows:

$$C = \frac{NM}{NM + NS}$$

Where,

C = Degree of collaboration in a discipline:

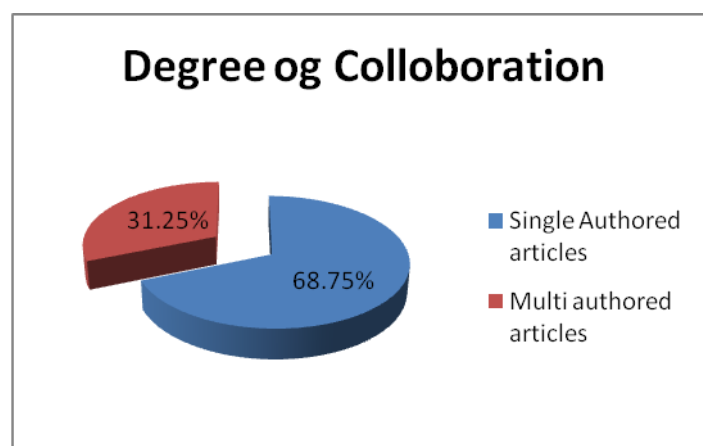
NM= Number of multi-authored papers:

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NS= Number of single-authored papers

Using the formula, the degree of collaboration in the field of GREEN LIBRARY has been determined and given in the.....

In the present case, the value of 'C' is 0.31. Thus the degree of collaboration in the green library is 31%. In all, 68.75% of articles is produced by single authors and 31.25% of articles are written by multi-authors. As a result, found that the degree of collaboration in the green library is 0.31. Which openly indicates its dominance upon single author contribution?



vi. LENGTH OF THE ARTICLES

One of the main objectives of the study was to know the length of each article that is listed on libraryresearch.com. The length of articles can be one page, or two pages or may exceed that. The length of articles depends on the title and subject's coverage that the author perceived. The length of the article determines the scope and coverage of the study. Lengthy articles provide comprehensive study while short articles provide less and highly important information about the study.

The below figure deals with the length of an article in the field of GREEN LIBRARY. The most important part of articles is 95(59.375%), written between 1 or 3 pages, followed by 4 to 6 pages, accounts for 17(10.625), followed by articles of length 7 to 9 pages accounts for 13(8.125%), 10- to 12 pages, accounts for 9(5.625%) of articles, articles written between 13 to 15 pages and 7(4.375%), articles written above 15 pages. And 19(11.875%) articles beat fifteen pages in length.

Page Length	Articles	%
i - iii	95	59.375
iv-vi	17	10.625
vii-ix	13	8.125
x-xii	9	5.625
xiii-xv	7	4.375
Above xv	19	11.875
TOTAL	160	100

vii. RANKING OF JOURNALS

The main objective of the present study is to find out the ranking of the core journal in the literature **green library**, out of 160 articles obtained from 74 journals. The journals were arranged in their rank shows journal Library Journal occupies the first rank with 10 articles, accounting for 6.25%, the second rank is occupied by Slavic & East European Information Resources with 9 articles, accounting for 5.625% and it is followed by third rank Journal of Access Services with 8 articles it's accounting for 5%, of the journal by name Vjesnik Bibliotekara Hrvatske, American Libraries, respectively, by publishing 7, 6, article each accounting for 4.375%, 3.125%, Library Quarterly, SCONUL Focus, Forum Bibliothek Und Information, Public Services Quarterly and were occupies sixth, seventh, eighth, and ninth ranks of the journals were publishing 5 articles each, and tenth rank of the CILIP Update with 4 articles, accounting for 2.5%.

Rank	Name of the journal	No. of Article	Percentage
1	Library Journal	10	6.25
2	Slavic & East European Information Resources	9	5.625
3	Journal of Access Services	8	5
4	Vjesnik Bibliotekara Hrvatske	7	4.375
5	American Libraries	6	3.75
6	Library Quarterly,	5	3.125
7	SCONUL Focus	5	3.125
8	Forum Bibliothek Und Information	5	3.125
9	Public Services Quarterly	5	3.125
10	CILIP Update	4	2.5

viii. RANKING OF AUTHORS

A ranking list of authors helps professionals in many ways, example for deciding popularity, to select reading materials deciding acquisition policy, and so on. The author's rank list has prepared in the present case, brief details of which are shown in Table below

It can be observed from the table that the author Zale Ski, Wojciech got first rank with 6 (3.75%)papers, Fernandez, Beatriz F. Moore, Tom, Rundstedt, Karen, Marvin, Stephen, Moore, and Tom got second rank with an Equal number of articles 4(2.5%) each, third rank shared by two authors Cain, Amanda, Fialkoff, and Francine with an equal number of articles 3(10875%), fourth rank shared by again two authors McCawley, Christina Wolcott, Hasty, Douglas F with an equal number of papers 2(1.25%)each,

S. No.	Name of the Author	F	Rank	percentage
1	Zalewski, Wojciech	6	1	3.75
2	Fernandez, Beatriz F	4	2	2.5

3	Moore, Tom	4	2	2.5
4	Rondestvedt, Karen	4	2	2.5
5	Marvin, Stephen	4	2	2.5
6	Moore, Tom	4	2	2.5
7	Cain, Amanda	3	3	1.875
8	Fialkoff, Francine	3	3	1.875
9	McCawley, Christina Wolcott	2	4	1.25
10	Hasty, Douglas F	2	4	1.25

ix. PUBLISHER-WISE DISTRIBUTION OF ARTICLES

The articles by various authors have been grouped on the base of the publisher's contribution to the publication of articles. The publisher's name and the number of articles against each of the publishers are presented in descending order of their production. It observed from the above table aylor & francis ltd, scores first rank by publishing 36(22.5%) article, second rank is scored by the American Library Association with 13(8.125)%, third rank is scored by media source, inc with 11(6.875%)articles, fourth rank is scored by the Croatian Library Association with the 7(4.375%) article, fifth rank scored by chartered institute of Library & Information Professionals, Emerald Publishing two publishers with 6(3.75%) equal number of articles each, sixth rank scored by Bock & herchen verlag, sconul two publishers with the same number of articles 5(3.125) each, the seventh rank got Australian Library & information association, de Gruyter for two publishers with the same numbers of 4 (2.5%) articles.

S. No	Publishers	Statistics	Rank	%
1	aylor & francis ltd	36	1	22.5%
2	American library association	13	2	8.125%
3	media source, inc.	11	3	6.875%
4	croatian library association	7	4	4.375%
5	chartered institute of library & information professionals	6	5	3.75%
6	emerald publishing	6	5	3.75%
7	bock & herchen verlag	5	6	3.125%
8	sconul	5	6	3.125%
9	Australian library & information association	4	7	2.5%

10	de gruyter	4	7	2.5%
Total		97		

FINDINGS OF THE STUDY

The present study leads to the following findings

1. A total of 160 articles produced during the year 1979 – 2020
2. The number of articles published is more in the year 2007-2008.
3. Academic journals 60(41.25%) are the most important forms of publication in the field of green library
4. An Authorship trend shows that the maximum number of papers are contributed single authors (110; 68.75%) and 50; 31.25%. Papers were contributed by the collaboration of multiple authors. There is a very strong trend towards single authors
5. The degree of collaboration in a green library is 0.31. This brings out the prevalence of single research in this field.
6. Ranking list of authors : Shows that Zalewski, Wojciech got first rank with 6 articles (3.75%),
7. In the length of articles, a major portion of articles was written between 1 to 3 pages with 95(59.375%) articles, followed by articles of length 7-9 pages, it account for 17 (10.625%) and 19 (11.875%) articles exceed 15 pages in length.
8. In the rank list journals, *Library Journal* got the first rank with 10 articles, accounting for 6.25%, the second rank is occupied by Slavic & East European Information Resources with 9 articles, accounting for 5.625% and it is followed by the third rank Journal of Access Services with 8 articles accounting for 5%.
9. In the rank list publisher, 'aylor & francis ltd, scores first rank by publishing 36(22.5%) an article, the second rank is scored by American library association with 13(8.125)%, third rank is scored by media source, inc with 11(6.875%)articles'.

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