



e-Library Science Research Journal



INTERNATIONAL JOURNAL OF DIGITAL LIBRARY SERVICES: A SCIENTOMETRIC STUDY 2011-2015



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ABSTRACT

The study is based on the Scientometric analysis of 165 research article published on International Journal of Digital Library Services. During the periods of 2011-2015. This Study will review length of the title, numbers of pages, type of document, chronological distribution of article, no. of references print as well as web references, authorship pattern, author productivity and further it reveals Majorities 121 articles are published by INDIA contributors followed by AFRICA and alternative contributors. The findings must reveal various aspects of the characteristics and patterns of contributions of the study.

KEYWORDS :Scientometrics ,Digital Library.

1.0. INTRODUCTION

1.1 Scientometrics:

Scientometrics is the science of measuring and analyzing science. In practice, Scientometrics is often done using Bibliometrics which is a measurement of the impact of (scientific) publications.

Scientometrics is the science of method scientific output similar to Bibliometrics used by librarians and information scientist. (Agrawal, aruna, 1982); related fields are the history of science and technology philosophy of science and sociology of scientific knowledge. (Eugene Garfield, 1995) ; application of mathematical and statistical methods of scientific literature (Derek de solla, 2000) ; to identify national an international network and to map the development of new fields of science and

technology as well as to know the inner logic of science development (yadavJaisi Ram, 1984) ; this enables to evaluate the size of scientific production on the assumption that the essence of scientific activity is the assumption the production of knowledge (Eugene Garfield, 2002); open access has emerged in the last few years as serious alternative to additional commercial publishing models taking the benefits offered by technology one step further (Wasudevan KT 1995); one significant finding in the field is principle of cost escalation to the effect that achieving further findings at a given level of importance grow exponentially more costly in the expenditure of efforts and resources (Manavalan R 1982) ; other characteristics of open access journals are that author relation copyrights and they must self achieved content in an independent repository (David Wilson, 2001); modern Scientometrics is mostly based on latter founded the institute for scientific information which is heavily used for Scientometric analysis (Derek, J. 1995); currently prepares and international methodological manual that will contain guidelines for creating applying and interpreting the indices based on Bibliometric data (Eva Rodenas, 2001).

1.2 Definition Analysis:

1.2.1 Scientometrics:

According to bankapur, M.B. and Kumabar, (1993) “Scientometrics is a more general than Bibliometrics. It is interesting to know, that both disciplines have a large overlap. It is surprised to learn certain comments stating that both disciplines have a large overlap. It is surprised to learn certain comments stating that Scientometrics, using Bibliometrics techniques is a part of Bibliometrics”.

1.2.2 Scientometric Analysis:

According to (2006), wouters, a certain tension has always existed between academic Scientometrics and political /practical, Scientometrics, the latter of which has been described as a hybrid of social science and bibliometric expertise (2006).

1.3 Journal of Digital Library

International Journal of Digital Library Services (IJODLS) is an Academic Journals provides free access to research information to the international community without financial, legal or technical barriers. It is an open access journal the aim of IJODLS is to enable the dissemination of research articles to global community without restriction usually through the internet.

Thus, all articles published under open access can be accessed by anyone with internet connection. Academic Journals strongly supports the Open Access initiative. Abstracts and full texts (usually in PDF format) of all articles published by Academic Journals are freely accessible to everyone immediately after publication.

1.4 Review of Literature

Scientometric / Bibliometric / Citation studies have been done earlier by different authors on the different individual journal publications and literature on specific subject areas. The following studies related to the objectives of this study have been reviewed.

Srimurugan A & Nattar S [6] analyzed the D-LIB magazine published during 2000 –2007 which revealed that highest number of papers was published in 2005 and the lowest in 2007.

Vijay K R & Raghavan I [7] analyzed the Journal of Food Science & Technology published during 2000 –2004 and found that above 93% of contributions were by multiple authors.

A Scientometric Analysis on Indian Journal of Physics was made by Nattar S [8] during 2004 – 2008 which

revealed that the year 2004 records the highest % of contributions regarding single, two and three authored.

Kannappanavar B U, Swamy C & Vijay Kumar M [9] analyzed the publishing trends of Indian Chemical Scientists during 1996 – 2000, which revealed average number of authors per paper has increased from 7.52 to 8.39.

An attempt was made by Tilak Hazarika, Kusuma Goswami & Pritimoni Das [10] to analyze the contributions of Indian Forester which found Degree of Collaboration was 0.64 among the authors.

Guan & Ma [11] examined the China's Semiconductor Literature and found mega authored papers records the higher value for Co-Authorship Index.

Senthamilselvi & Srinivasa Raghavan [12] analyzed the issues of IEEE Trans on Power Electronics published during 2006 – 2008 which revealed that maximum number of papers was published between 6 – 10 pages category.

A bibliometric study has been carried out by Kalyane V L and Sen B K [13] on the Journal of Oilseeds Research published during 1984 – 1992 which revealed that the keyword "Groundnut" tops the list with 53 records.

Sanni S A and Zainab A N [14] examined the contributions published in Medical Journal of Malaysia during 2004 – 2008 and found 4.82% (28) of contributions were published by Malaysian authors with foreign collaboration.

2.0 OBJECTIVES OF THE STUDY:

The primary objective of this study is to understand the growth of International Journal of Digital Library Services and their research output in global during the period 2011 - 2015. More specific objectives are as follows:

1. To study the year-wise distribution of articles
2. To study the frequency of citations
3. To study the mail domain of publications
4. To identify the length of page per article
5. To find out organization wise distribution of publication.
6. To find out country-wise distribution of articles.
7. To find out the authorship pattern in the publication.
8. To find out the reference of the article (Print as well as Web).

3.0 HYPOTHESIS:

The following hypotheses are formulated for the present study.

1. Maximum articles in year 2014 are 64.
2. Majority of the contributions are contributed by Single Authors.
3. INDIA is the high productive country.
4. Majority of the references are print references.

4.0 SCOPE AND LIMITATION OF THE STUDY:

The present study is based on the Scientometrics Profiles of International Journal of Digital Library Services. The present study is based on over all 165 articles during 2011-2015.

5.0 DATA COLLECTION:

Data can be numerically expressed that is quantified quantifiable or objective (Fasibs off and Dely, 1990) the data was collected from journal ofBuddistthics, with the help of spss.total165 articles, during 2011-2015.

6.0 DATA ANALYSIS AND INTERPRETATION:

Scientometrics analysis is a branch of bibliometrics. It is an important research tools for understanding of the subject it aims at measuring the utility of documents and relationship between documents and fields.

The present study is based on the Scientometrics Profiles of International Journal of Digital Library Services during 2011-2015.The present study is based on over all 165 articles during 2011-2015.

Year-Wise Distribution of Contributions

The year wise Distribution of contributions is shown in Table No.1

Table No. 1: Year-Wise Distribution of Contributions

Year	Frequency	Percentage (%)
2011	22	13.33
2012	40	24.24
2013	23	13.93
2014	64	38.78
2015	16	9.69
Total	165	100

It can be observed from the table No. 1 & Figure no. 1 out of the total 165 contributions majority of the contributions i.e. 64 contributions were contributed in 2014 were as minimum contributions i.e. 16 contributions were contributed in 2015. In which hypothesis no.01 is valid.“Majority of the contributions are contributed in 2014” Table no, 01.

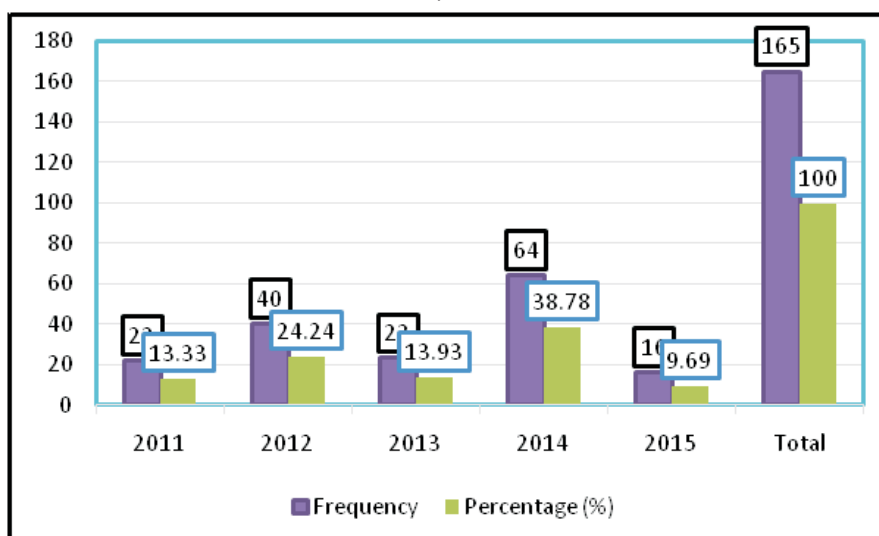


Figure No. 1 Distribution of contributions (year-wise)

Authorship pattern of contribution

The Authorship pattern of contributions is shown in Table No.2

Table No.2: Authorship pattern of contributions

Sr.No.	No.of Authors	Frequency	Percentage (%)
1	One	71	43.03
2	Two	66	40
3	Three	26	15.75
4	Four	1	0.6
5	Five	1	0.6
Total		165	100

The distribution of Authorship pattern is given in the Table No.2. The table shows the single author is predominant then muti authors. Table No. 2 & Figure no. 2 indicates the majority of the contributions are contributed by Single author. In which hypothesis no.02 is valid. "Majority of the contributions are contributed by Single authors" Table no, 2.

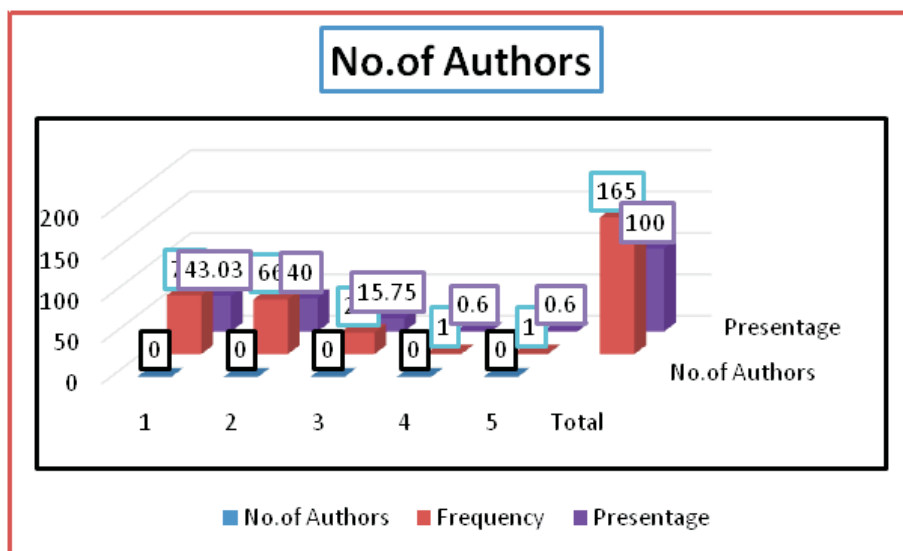


Figure No. 2 Authorship pattern of contributions

Table no. 03 Author wise distribution of article

Author name	frequency	Percentage (%)
A. Isabella Mary	4	2.42
A.Vellaichamy	3	1.81
AbdulwahabOlanrewajulssa, PhD.	2	1.21
Ahmad Parvez	2	1.21
Ajay Babulaiji Khatri	2	1.21
Ajay Kumar Sharma	2	1.21
Ajay. B. Khatri	2	1.21
AmaogeDorathyAgbo	2	1.21
Anjali Gulati	2	1.21
ArchanaSaxena	2	1.21
Ashish Kumar	2	1.21
single time publiation 1*140	140	84.84
Total	165	100

It can be observed from the table no 03 and figure there were 1 authors they had 4 publication name of these 1 author A. Isabella Mary.then 1 author published 3 articles 2 time publication were 18 authors and 140 author had only one publication.

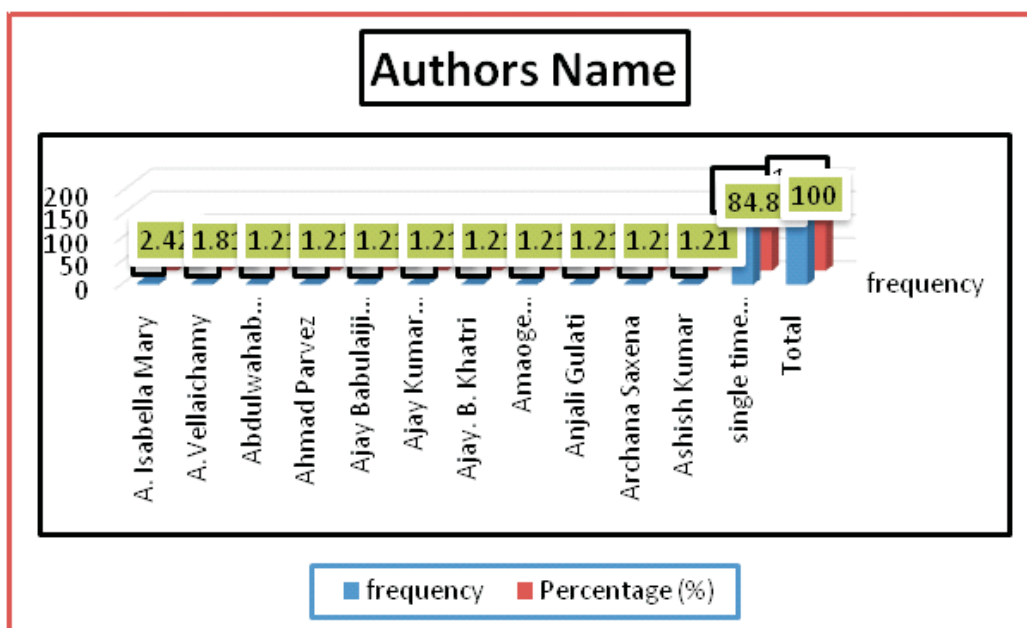


Figure no. 03 Author wise distribution of article

Table No. 04. Institution wise distribution of Article

The distribution of article with sponsoring parental institution where from the collaborators contributed articles was analyzed and interpreted in the table no. 4

Institutions	Frequency	Percentage (%)
Assistant Librarian SDMCET Dharwad	16	9.69
Assistant Librarian, Animal Sciences University, Ludhiana	3	1.81
Dy. Librarian THDC-Institute of Hydrpower Engineering (Uttarakhand)	2	1.21
Lecturer,School of Library And Information Science, DAVV, Indore (M.P.)	2	1.21
Lecturer,Utkal University, Bhubaneswar Orissa	2	1.21
Librarian, Government First Grade College, Ramdurg, Dist-Belgaum, Karnataka	2	1.21
(B.Sc., PGDCA, BLIS, MLIS, MCA(Appear)) CSIBER, University Road, Kolhapur.	2	1.21
(DESIDOC, DRDO)	2	1.21
(HOD Knowledge Centre, DAV Institute of Engineering & Technology, Jalandhar)	2	1.21
(Librarian In charge) Integral University, Lucknow- India	2	1.21
(Library in charge and course coordinator) Integral University, Lucknow- India	2	1.21
A.C. Joshi Library Panjab University Chandigarh	2	1.21
Single time publication institute 1*126	126	76.36
Total	165	100

The distribution of published papers by institution wise the table 4 reveals that, out of 165 contributors, the highest number 16 (9.69%) of contributors are contributed form the Assistant Librarian SDMCET Dharwad. with 3(1.81)of contributors are contributed form the Assistant Librarian, Animal Sciences University, Ludhiana. on Three place with two publication, the 20(1.21%) institution stands on fourth place 126 with one publication.

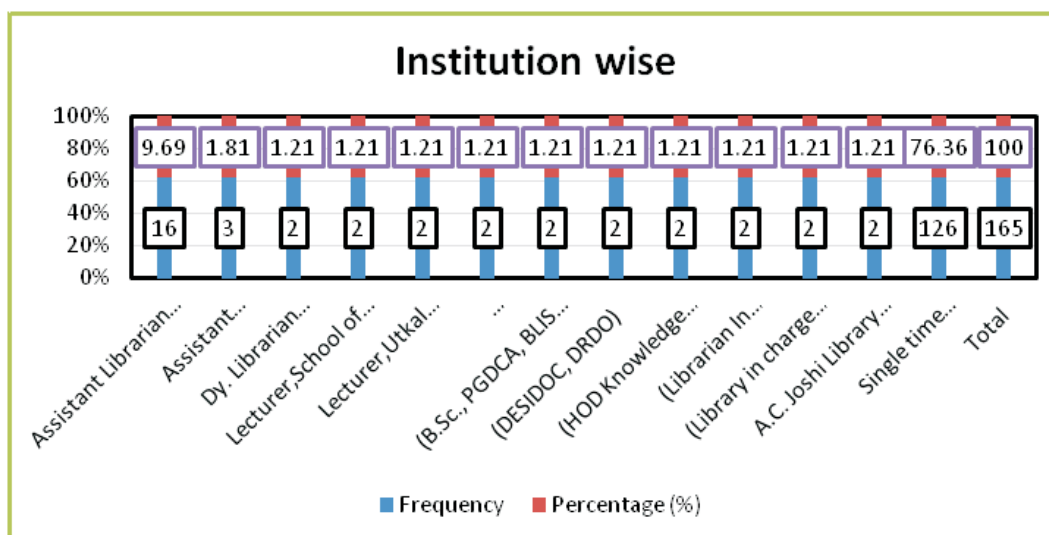


Figure No. 04. Institution wise distribution of Article

Table No. 05. Country wise distribution of the article

Name of country	Frequency	Percentage (%)
India	121	73.3
Africa	2	1.2
Pakistan	2	1.2
Pondicherry	3	1.8
Saudi Arabia	4	2.4
Tamil Nadu	5	3.03
Chandigarh	8	4.8
single time publication 1*20	20	12.12
Total	165	100

It can be observed from Table No. 4 the country wise distribution of contributors, the table 4 reveals that out of the total 165 contributors has contributed during 2011-2015, majority of article 121(73.3 %) have been contributed form India country .02(1.2%) contributors have been contributed form Africa&Pakistan,3(1.8%) contributors have been contributed from Puducherry, 4(2.4%) contributors have been contributed from Saudi Arabia, 5(3.03%) contributors have been contributed from Tamil Nadu, 8(4.8%) contributors have been contributed from Chandigarh, 20 country contributed with one publication.In which hypothesis no.04 is valid.“Majority of the contributions are contributed by India” Table no, 04.

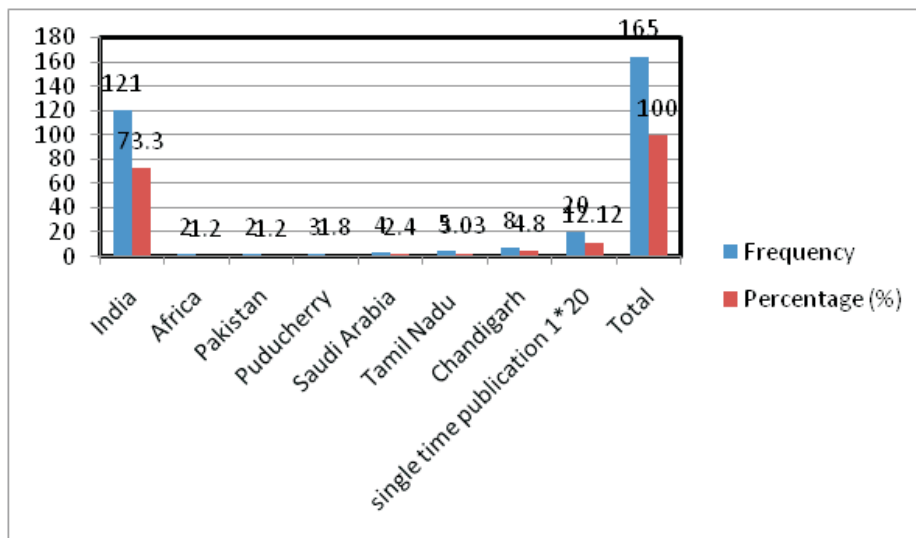


Figure No. 05. Country wise distribution of the article

Table No. 06. Email domain wise distribution of the article

Email domain	Frequency	Percentage (%)
gmail	75	45.45
hotmail	30	18.18
ihbt	4	2.42
ksu	2	1.21
library.iitd	2	1.21
single time publication email 1*11	11	6.66
Not mentioned	41	24.84
Total	165	100

It can be observed from Table no.6 there were as many as 75 (45.45) authors used the gmail. 30 (18.18) authors used the hotmail email domain. 4(2.42) authors used the ihbt email domain and 2 authors used the ksu and library.iitd email domain and one publication of the email domain used 11 and 41authors not mentioned their email domain.

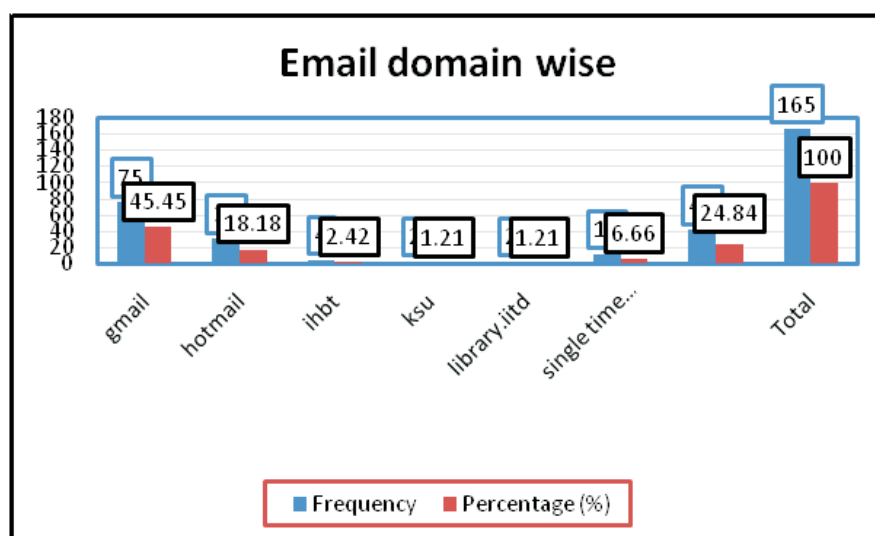


Figure no. 06. Email domain wise distribution of the article

Table no.07. Domain name wise distribution of the articles

Domain name	Frequency	Percentage (%)
ca	104	63.03
ac.in.fi	10	6.06
com	6	3.63
co.in	1	0.6
ac.in	1	0.6
edu.sa	1	0.6
res.in	1	0.6
Not Mentioned	41	24.84
Total	165	100

It can be observed from Table no. 7. There were as many as 104 authors used the ca. Domain name, and 41 authors has not mention their domain name in the papers, 10 authors used the ac.in.fi. Domain name, 6 authors use the com. Domain name, 1 authors used the co.in,ac.in,edu.sa, res.

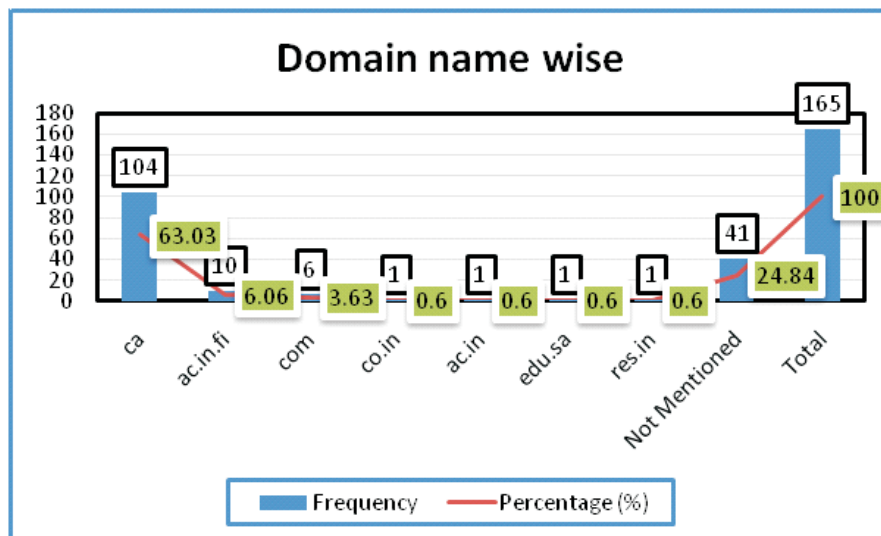


Figure no. 07. Domain name wise distribution of the article

Table no.08. Type of document wise distribution of article

Type of document	Frequency	Percentage (%)
Article	165	100
Total	165	100

It can be observed from Table no. 8 the highest 165(100%) number of publication has been published in research article.

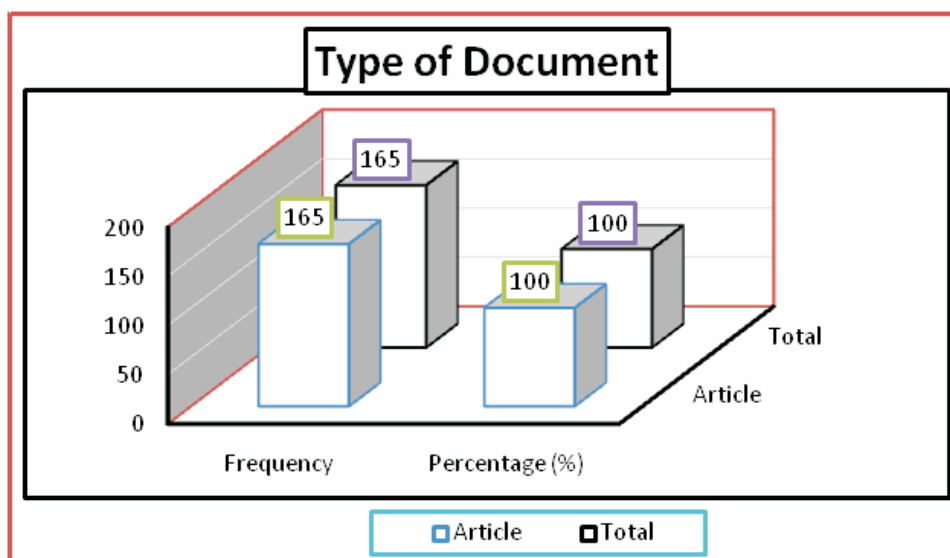


Figure no.08. Type of document wise distribution of article

Table no.09 No. of References wise distribution of article

year	Print References	Web References	Total No. of References	Percentage
2011	222	99	321	14.71
2012	329	153	482	22.08
2013	225	103	328	15.03
2014	596	241	837	38.35
2015	150	64	214	9.8
Total	1522	660	2182	100

It can be observed from the table no 09 and figure also maxim articles are print references the majority print references in the year of 2014 were 595.and then the minimum references are from web references total 64 web references in the duration of 2011 to 2015 and majority web references in the year of 2014 is total241 web references are given there. In which hypothesis no.04 is valid.“Majority of the contributions are print references” Table no, 09.

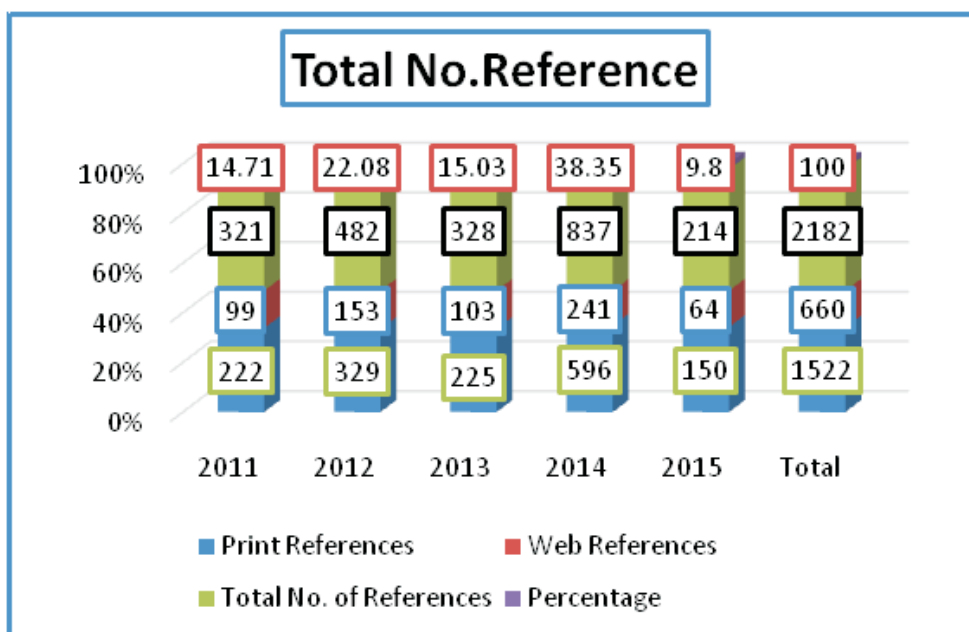


Figure no.09. No. of References wise distribution of article

Table no.10Length of Pages distribution of article

Length of Pages	Frequency	Percentage (%)
1 to 05	87	52.72
06 to 10	51	30.9
11 to 15	19	11.51
16 to22	8	4.84
Total	165	100

It can be observed from the table no 10 and figure no 10 the majority articles length of pages 87 articles publication from 1 to 05 pages. Then 51 articles were published from 06 to 10.then 19 articles published from 11 to 15 and remaining four articles were from 16 to more than pages.

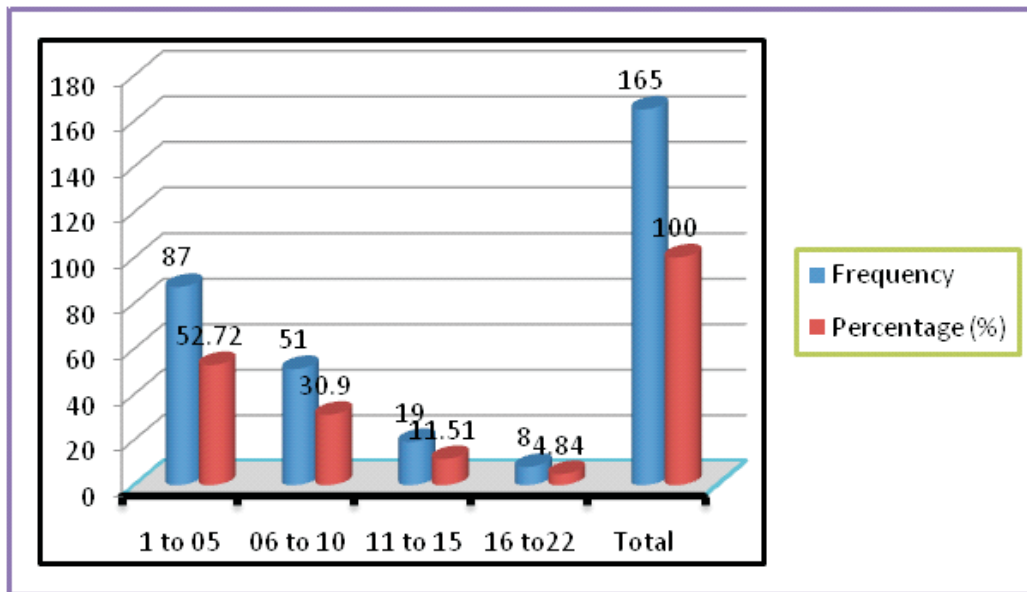


Table no.11 Length of Title wise distribution of article

Length of Title	Frequency	Percentage (%)
01 to 05	95	57.57
06 to 10	53	32.12
11 to 15	12	7.27
16 to 20	5	3.03
Total	165	100

It can be observed from the table no 11 and figure no 11 the majority articles length of Title 95 articles publication from 1 to 05 Title. Then 53 articles were published from 06 to 10.then 12articles publishedfrom 11 to 15 and remaining four articles were from 16 to more than Title.

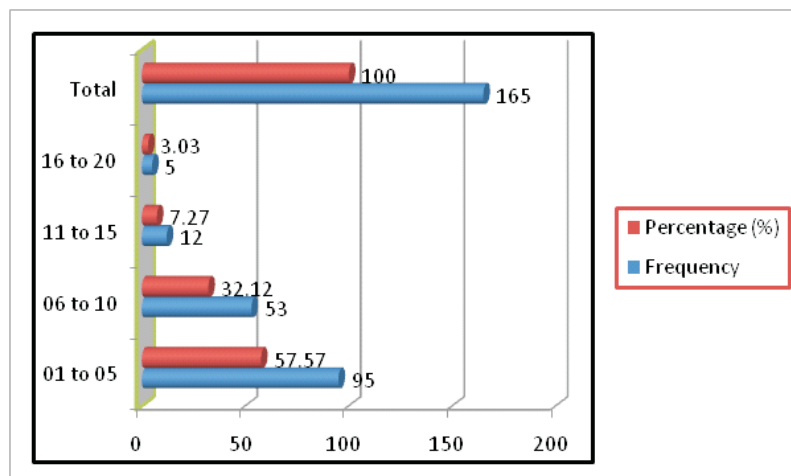


Figure no. 11Length of Title wise distribution of article

7.0 FINDINGS:

1. The highest numbers 64 (38.78%) of papers were published in 2014 contributing.
2. More than two-thirds 71 (43.03%) of papers were contributed by single authors.
3. Most productive authors are A. Isabella Mary contributed 4 Papers.
4. Only University Assistant Librarian SDMCET Dharwad contributed 16 times, while the other institution each contributed once, two and three times.
5. 27 countries carrying out research and produced 165 articles. INDIA is the top producing country with 121 publications of the total output.
6. Majority references are from print references.
7. Majority of web references are available in year 2014.

CONCLUSION:

Scientometrics is a relatively new subject of information. It helps to evaluate information & to handle the information in libraries and information centers by the quantitative analyzed information. It deals with the mathematical and statistical analysis. This is an umbrella term used for many studies where quantitative method or techniques are used to investigate various aspects of written documents.

We concluded that the present study is based on Digital Library studies during the period of last five years on the "Journal of Digital Library. This study is completed with the help of SPSS. This study is helpful for researches as well as Digital Library. It is good and informative for the researcher.

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