

COLLECTION BUILDING: A SCIENTOMETRIC STUDY

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ABSTRACT:-

Scientometrics analysis of 110 articles published in the international journal The Collection Building during the year 2005 – 2009 are taken to observe the distribution of contributions , authorship pattern , geographical distribution of contributions and the number of pages used in each volume. Result indicate that highest numbers of papers have been written by single authors.

KEYWORDS:- Collection building, scientometrics , bibliometrics, international journal

INTRODUCTION :-

Scientometrics is the science of measuring and analyzing science. In practice , scientometrics is often done using bibliometrics which is a measurement the impact of (scientific) publications. Methods of research include qualitative and computational approaches, one significant finding in the field is a 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 effort and resources. it provides a key opportunity to the researcher to publish their articles with new strategies , innovation ,new methods and new ideas. The Collection Building is published by Emerald early cite in the year 1978. The purpose of this journal is to provide well researched and authoritative information on collection development for librarians in academic, company and special libraries. It publishes papers which have been accepted after blind review by two

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reviewers. As information professionals there is constant pressure to bank management decisions regarding which information resources you should purchasing in order to build the best collection possible and provide to users, with the most relevant information selection. collection covers the most up to date news, views and trends in library collection to help you make these decisions.

REVIEW OF LITERATURE:-

Balasubramanyam V, 1972 ; Shanmghan G , 1974 ; Chaudhari Maitrei , 1980 ; Gupta Anita , 1981 ; Manavalar R , 1982 ; Patnaik Hari Bhaskar, 1982 ; Vijayan B 1983 ; Suseela M 1983 ; kandalhan U S 1983 ; Mahindre , 1984 ; Mahindre Prakash Wamanrao, 1985 ; Kuchhdiya Devji Bhura 1986 ; Om Prakash 1995 ; B Urli , 1999 ; Christian Schloegl , 2004 ; Davarpanah,(2007) ; KH V, Borah Basantha Kumar 2009 : James K MN 2009 Nattar S 2009, Mohammad A , (2010) ; Gupta B M , (2010) ; Alexander , 2010 ; Karin V , (2011) ; B M Gupta , (2011) ; R Balasubramani, 2011; B Gunasekaran , 2012.

Bibliometrics encompasses a number of empirical methods, such as bibliographic coupling and co-citation analysis (Kessler and Small , 1995); scientometric is the science of method scientific output similar to bibliometric used by librarians and information scientist (Agrawal , 1982) ; K.P Vijaykumar in his article applications of bibliometric in library and information says that much of the latter bibliometric studies were made either to substantiate modified extend linked or challenged their three empirical laws. The end result of such studies was the emergence of some major empirical laws and many theoretical models (O'conner and Voos, 1981) More number of publications, more number of collaborators, more numbers of years of active research of scientist and the factors far the increase in the number of authorship. If scientist is renowned personality in his field than the specialization will naturally attract more number attract more number of collaborators(Kidman and etal ;2005) the assembling and interpretation of statics relating to historical movements to demonstrate historical movements to determine national and universal movements to determine national and universal research ,use of books and journals and to ascertain in many local situation the general use of books and journals(Hulme, 1962); Scientometric is 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 expenditure of efforts and resources, journals are that authors retain copyrights and they must self achieved content in an independent repository (David Wilson,2001).

E – JOURNAL:-

E – journals are serial publication available in digital format. (Harrassonity , 2002,p.23)

An electronic journals is one created for electronic medium and available only in this medium. (Jalal , 2000, p.32)

THE COLLECTION BUILDING:-

The international journal the collection building is published by Emerald Early Cite in the 1978.the purpose of this journal to provide well researched and authoritative information on collection development for librarians in academic , company and special libraries. It publishes papers which have been accepted after blind review by two reviewers.

SOURCE JOURNAL:-

The international journal the Collection building has been selected as the source journal for the present study. The collection building is published by the Emerald Early Cite in the year 1978.

The purpose of this journal to provide well researched and authoritative information on collection development for librarians in academic , company and special libraries. It publishes papers which have been accepted after blind review by two reviewers. As information professionals there is constant pressure to make management decisions regarding which information resources you should purchasing in order to build the best collection possible and provide to users, with the most relevant information selection. Collection covers the most up to date news, views and trends in library collection to help you make these decisions.

OBJECTIVES OF THIS STUDY:-

The main objectives of the present study is

- 1) To examine the distribution of the contribution volume – wise
- 2) To find out authorship pattern of contributions.
- 3) To find out authorship pattern of contributions volume - wise
- 4) To find out degree of collaboration year wise
- 5) To find out the contributions institution wise
- 6) To find out the geographical distribution of contribution
- 7) To find out the types of publication cited volume wise
- 8) To find out the average citation per contributions in each volume.
- 9) To find out the average pages per volume and per contribution.

METHODOLOGY:-

In the social sciences, quantitative research refers to the systematic empirical investigation of social phenomena via statistical or mathematical or computational techniques. The objectives of quantitative research is to develop and employ mathematical models, theories and hypotheses pertaining to phenomena. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships. Quantitative data is any data that is in numerical form such as statistics, percentages, etc. In Layman's terms, this means that the quantitative researcher asks a specific, narrow question and collects numerical

data from participants to answer the question. The researcher analyzes the data with the help of statistics. Quantitative research, on the other hand asks broad questions and collects word data from participants.

The authorship pattern has been analyzed by using K. Subramaniam's degree of collaboration in quantitative terms. All the data were subsequently examined, observed, analyzed and tabulated for making observations.

DATA ANALYSIS:

Table No. No.01 Distribution of contribution (volume wise)

Year	Vol.No	No. of issues	No. of contributions	%
2005	24	4	20	18.18
2006	25	4	20	18.18
2007	26	4	21	19.09
2008	27	4	24	21.81
2009	28	4	25	22.72
		20	110	100

The volume wise distribution of contributions is shown in Table No. No.1 distribution of contributions (volume wise) is shown in Table No. no 1 out of the total 110 contributions majority of the contributions are 25 contributions were contributed in 2009 and were as minimum contributions 20 contributions were contributed in 2005 and 2006.

Table No. No.2 Authorship pattern of contributions

Author	No. of Contributions	Total No .of Authorship	%
Single author	76	76	69.09
Two author	29	58	52.72
Three author	4	12	10.90
Four author	1	04	3.63
	110	150	100

Table No. no. 2 shows the authorship pattern of contributions .single authorship is predominant then multi authors .Table No. no.2 indicates the majority of the contributions are contributed by single author

Table No. no.3 Authorship pattern of contributions (volume wise)

Vol.no	Single author	Two author	Three author	Four author
24	14	5	1	0
25	13	6	0	1
26	16	5	0	0
27	14	7	3	0
28	19	6	0	0
	76	29	4	1

Table No. no .3 shows the authorship pattern of contribution (volume wise) .distribution if contribution by a single author in volume bo.28 indicates that the maximum percentage is if single authors. Two author contributions in volume no. 27 shows the highest percentage. Table No. no. 3 indicates the majority of the contributions are contributed by single author.

Degree of collaboration in the international journal of "COLLECTION BUILDING"

The formula given by K. Subramanyam is useful for determining the degree of collaboration in quantitative terms. The study followed the same formula which is mathematically put as :

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

Where,

C= degree of collaboration

Nm= number of multi authored papers

Ns = number of single author papers

In the present study

Nm =76

Ns = 34

$$\frac{34}{34+76} = \frac{34}{110} = 0.3090$$

Thus the degree of collaboration in the international journal of " The Collection Building " is 0.3090 which clearly indicates its dominance upon individual contribution

Table No. No.4 year wise degree of collaboration

Year	Total article	Total author	single	article	Multi author article	% article	Degree of collaboration
2005	20	20	14	12.72	6	5.45	0.7
2006	20	20	13	11.81	7	6.36	0.65
2007	21	21	16	14.54	5	4.55	0.77
2008	24	24	14	12.72	10	9.9	0.58
2009	25	25	19	17.27	6	5.45	0.76
Total	110	110	76	69.06	34	31.71	0.65

Table No. no. 4 shown that in the 5 years period , the single authorship articles are higher and predominant than multi author. The multi authored articles are almost same in all years. The single authored articles are 19 (17.27) which are highest in the year 2009. It is seen that the single authorship trend is increasing.

Table No. No.5 Contributors (Institution wise)

Vol.No	Year	University	Institution	College	Not mentioned	Total
24	2005	18	2	0	0	20
25	2006	12	4	4	0	20
26	2007	13	4	3	1	21
27	2008	19	2	3	0	24
28	2009	19	1	5	0	25
		81	13	15	1	110

Table No. no. 5 shows distribution of institutions volume wise contributions, university wise at the national level followed by colleges. It was seen that university wise contribution is maximum (81) than institution wise (13). And 15 contributions were contributed by the colleges. Table No. no 5 shows that the highest number of contributions are of university level.

Table No. No .6 Geographical distribution of contributions at international level.

Sr.No.	Name of country	No of contributions	%
1	USA	84	76.36
2	Pakistan	4	3.63
3	India	3	2.72
4	Canada	3	2.72
5	Cuba	2	1.81
6	Trinidad & Tobago	2	1.81
7	Newzealand	1	0.90
8	Malesia	1	0.90
9	Span	1	0.90
10	China	1	0.90
11	Norway	1	0.90
12	Zambia	1	0.90
13	South Korea	1	0.90
14	Switzerland	1	0.90
15	Botswana	1	0.90
16	Qatar	1	0.90
17	United Arab Emirates	1	0.90
18	Not mentioned	1	0.90
	Total	110	100

Geographical distribution of contributions at international level . Table No. no 6 shows that the majority of the contributions where contributed by USA (76.36) were as the minimum contributions were contributed by Pakistan is(3.63) respectively.

Table No. No. 7 Types of publication cited (volume wise)

Vol. No	Books	Journals	Others	Total
24	115	108	63	286
25	75	84	62	221
26	57	129	56	242
27	295	186	65	546
28	47	174	57	278
Total	589	681	303	1573
%	37.44%	43.29%	1.92%	

Table No. no. 7 shows the types of publication cited volume wise, of the total 110 contributions majority (43.29) of the citations are the journal citations and minimum (37.44) are citations book citations.

Table No. no. 8 Average citations per contribution in each volume

Vol.No.	No of contributions	No of citations	Average %
24	20	286	14.3
25	20	221	11.05
26	21	242	11.52
27	24	546	22.75
28	25	278	11.12
Total	110	1573	14.3

Table No. no 8 shows the average citation per contribution in each volume total 110 contributions were contributed. Maximum no of citations were contributed in volume no 27 (22.75) and the minimum (11.05) contributions were contributed by volume no.25

Table No. no. 9 Average pages (per volume and per contributions)

Vol. NO	Total pages	No. of articles	Average%
24	114	20	5.7
25	119	20	6.45
26	108	21	5.14
27	119	24	5.37
28	146	25	5.84

Average pages (per volume and per contributions) Table No. no.9 shows the maximum pages were covered in volume no.28 (5.84) and minimum pages were covered in volume no.26 (5.14)

FINDINGS:-

From the observation made in this study the following points may be inferred. Majority of the contributions in the journals are by a single authors presumably one being a research scholar and the other is his / her guide.

The degree of collaboration in international journal of Collection Building is 0.3090 which clearly indicates its dominance upon individual contribution . volume number 28 (2009) has maximum articles contributed.

Among the contributions the maximum number of contributors is from the universities level. The international contributions are slightly more than the national contributions. All the contributions are with citations. It is observed that the journals are more cited documents.

CONCLUSION:-

Bibliometrics is relatively new subject of information. It help to evaluate information and 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 technique are used to investigate various aspect of written document.

The Collection Building is quarterly published in the year. It was founded Emerald Early Cite in 1978. A scientometrics analysis is the technique of bibliometrics used to measure the impact of individual online journal. Concluding result from the analysis of these online downloaded journals are presented in a manner corresponding to objectives of the study.

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