

INDIAN STREAMS RESEARCH JOURNAL

BIBLIOMETRIC STUDY OF COLLECTION BUILDING W.E.F. 2006-2013



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Abstract :

It is a Bibliometric Study of Collection Building Journal To provide an over view about the collection building journal. The Research Paper deals with 8 year study of Collection Building Journal with Different aspects such as year wise contribution of articles and citations, types of contribution, types of contribution, length of articles, geographical distribution of contributors, bibliographical distribution of citations. Provide basic Information About Journal.

Keywords: Bibliometric, Collection Building.

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INTRODUCTION:

Bibliometrics is quantitative study of literature. It is the application of statistical techniques for quantification of written communication by analyzing citations. It utilizes quantitative techniques for analyzing and investigating patterns, reference, citations, author, journals, institutions, words, keywords etc. It is a promising area of research in the field of library and information science (LIS) and has realistic applications in measuring the coverage of books, journals, and articles. It helps in formulating need-based collection building policy and provides authentic data to inform managers to take judicious decisions in the process of documents' selection.

The term bibliometrics was first used by Alan Pritchard in his article entitled *Statistical bibliography or bibliometrics* (Pritchard, 1969), to "studies which seek to quantify the Process of written communication"

Fairthorn (1969) defines it as "the quantitative treatment of the properties of recorded discourse and behavior pertaining to it". According to *the British Standard Glossary of Documentation Terms*, Bibliometrics has a broad connotation and is "essentially concerned with the application of mathematical and statistical methods to books and other media of communication" (Simpson, 1988, p.177).

2.OBJECTIVES OF THE STUDY

The Present study aims to evaluate the scholarly publication trends through bibliometric study of popular journal, namely *Collection Building* covering the period from 2006 to 2013 with the application of bibliometric indicators. The key objectives of the study are as follow:

- i. To examine Year wise contribution of articles and citations
- ii. To know the Type of Contribution
- iii. To study Authorship patterns
- iv. To find out average Length of articles
- v. To identify the Geographical distribution of contributors.
- vi. To find out Bibliographical distribution of Citations

3.METHODOLOGY

Polkinghorne defines methodology as "a study of the plans which are used to obtain knowledge" Thus, while the term method refers to specific means of collecting data, methodology refers to the strategies surrounding the use of multiple methods of data collection as required by different types of attempts to achieve higher degrees of reliability and validity. In the bibliometric study of *collection building* journal a total number of 32 issue of *Collection building* journal (2006 to 2013) has been taken for the study Eight volumes of *collection building* journal published during the years 2006 to 2013 collected from emerald managementxtra (EMX) that constituted 32 issue. The study analyzes bibliographic, length of articles, and ranking of journal, number of references, number of pages, were recorded and analyzes for making observation. The data has been calculated and represented in tables. The citations were sequentially transferred into a word file and a copy of this file was printed out. major bibliographical forms include of documents that include books, journals, web resources, proceedings, reports and these. Thirty two issues of 8 volumes from 2006 to 2013 have been selected for the study.

4.INTRODUCTION OF COLLECTION BUILDING

Collection Building is a quarterly journal published by Emerald Group Publishing since 1978. *Collection Building* aims to provide well researched and authoritative information collection development for librarians in academic, public, company and special libraries. It publishes papers which have been accepted after blind review by two reviewers. *Collection Building* covers many types of resources and database like LISA, LISTA, Lexis-Nexis, Scopus, Web of science, Emerald etc.

Key Journal Audience

- i. Consultants
- ii. Library personal
- iii. Library schools
- iv. Senior librarians in academic, public, company, and special libraries

5.DATA ANALYSIS

Analysis is based on *collection building* journal total 166 article were collected for a period of 8 years which

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have been analyzed on the following indicators:

- i. To examine Year wise contribution of articles and citations
- ii. To know the Type of Contribution
- iii. To study Authorship patterns
- iv. To find out average Length of articles
- v. To identify the Geographical distribution of contributors.
- vi. To find out Bibliographical distribution of Citations.

5.1 Year wise contribution of articles and citations

Table I depicts the year wise contribution of articles. It is found that the highest numbers of articles (24) were published in 2008 or 2009. The least number of article (13) were brought out in the year 2010. The articles published in the year 2008 have yielded the highest number of citations (460) whereas the least number of citations (223) were found in the year 2007. The overall citations per article are found to be 17.85. Interestingly, out of the total 166 numbers of articles, 29 articles are absolutely free of citations.

Table 1: Analysis by Year wise contribution of articles and citations

| S.No | Year | No. of Citation | Articles without Citation | Avg. Article/ issue | Total no. of Citation | Avg. no. of Citation per Article |
|------|--------------|-----------------|---------------------------|---------------------|-----------------------|----------------------------------|
| 1 | 2006 | 20 | 4 | 5 | 244 | 12.2 |
| 2 | 2007 | 22 | 6 | 5.5 | 223 | 10.13 |
| 3 | 2008 | 24 | 7 | 6 | 460 | 19.16 |
| 4 | 2009 | 24 | 4 | 6 | 289 | 12.04 |
| 5 | 2010 | 13 | 3 | 3.35 | 305 | 23.46 |
| 6 | 2011 | 22 | 2 | 5.5 | 224 | 10.18 |
| 7 | 2012 | 21 | 3 | 5.25 | 241 | 11.47 |
| 8 | 2013 | 20 | 0 | 5 | 357 | 11.47 |
| | Total | 166 | 29 | 41.6 | 2343 | 17.85 |

5.2 TYPES OF CONTRIBUTION

Table 2 and 3 for analyzing type of articles published in collection building during (2006-2013) all articles were grouped into 7 category which have been presented in these seven categories of article are namely, research papers, case study, general review, conceptual paper, technical paper, viewpoint, and literature review. Out of these seven category (41.17 Percent) is Research paper, (27.64 Percent) is Case study, (11.17) is General review, (11.17) is Literature review (5.29) is Conceptual paper, (2.68) is technical paper, (1.32) is View point. Therefore from the study, it can be deduced from the study that authors are more interested in writing research papers than any other category.

Table 2: Analysis by Types of Contribution

Table 2: Analysis by Types of Contribution

| S.No | Article Type | No. of Papers | Cumulative Number | Percentage | Cumulative Percentage |
|------|-------------------|---------------|-------------------|------------|-----------------------|
| 1 | Research Paper | 70 | 70 | 41.17 | 41.17 |
| 2 | Case Study | 47 | 117 | 27.64 | 68.82 |
| 3 | General Review | 19 | 136 | 11.17 | 80 |
| 4 | Conceptual Paper | 9 | 145 | 5.29 | 85.29 |
| 5 | Technical Paper | 4 | 149 | 2.68 | 87.64 |
| 6 | View Point | 2 | 151 | 1.32 | 88.82 |
| 7 | Literature Review | 19 | 170 | 11.17 | 100 |

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Table 3: Analysis by Type of contribution (year wise)

| S. No | Year | Research Paper | Case Study | General Review | Conceptual Paper | Technical Paper | View Point | Literature Review | Total |
|-------|-------|----------------|------------|----------------|------------------|-----------------|------------|-------------------|-------|
| 1 | 2006 | 4 | 10 | 1 | 1 | 0 | 0 | 3 | 19 |
| 2 | 2007 | 7 | 3 | 5 | 1 | 0 | 1 | 1 | 18 |
| 3 | 2008 | 9 | 6 | 2 | 3 | 1 | 1 | 2 | 24 |
| 4 | 2009 | 8 | 6 | 3 | 1 | 1 | 0 | 5 | 24 |
| 5 | 2010 | 6 | 9 | 4 | 0 | 1 | 0 | 3 | 23 |
| 6 | 2011 | 12 | 4 | 1 | 3 | 1 | 0 | 1 | 22 |
| 7 | 2012 | 12 | 4 | 1 | 0 | 0 | 1 | 3 | 21 |
| 8 | 2013 | 12 | 5 | 2 | 0 | 0 | 0 | 1 | 20 |
| 9 | Total | 70 | 47 | 19 | 9 | 4 | 3 | 19 | 171 |

5.3AUTHORSHIP PATTERNS

To find the authorship pattern all the 166 articles were analysed and the same is presented below in Table 4 reveals that, single authors (60.84 percent) have made major contribution to *Collection Building* during the stated period, followed by joint authors (33.73 percent) and three authors (4.81 percent). However, the contribution of more than three authors (0.602 percent) is quite minimum and hence negligible. This analysis shows that solo contribution is predominant than the cooperative one.

Table 4: Analysis by Authorship Pattern

| S.NO | Author | No. of Articles | Cumulative no. of Articles | Percentage | Cumulative Percentage |
|------|------------|-----------------|----------------------------|------------|-----------------------|
| 1 | 1 Author | 101 | 101 | 60.84 | 60.84 |
| 2 | 2 Author | 56 | 157 | 33.73 | 94.57 |
| 3 | 3 Author | 8 | 165 | 4.81 | 99.39 |
| 4 | > 3 Author | 1 | 166 | 0.602 | 100 |

Table 5: Analysis by Authorship Pattern (year wise)

| S.No | Authors | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|------|------------|------|------|------|------|------|------|------|------|
| 1 | 1 Author | 13 | 17 | 14 | 18 | 7 | 11 | 10 | 11 |
| 2 | 2 Author | 6 | 5 | 8 | 6 | 5 | 8 | 10 | 8 |
| 3 | 3 Author | 1 | | 2 | | 1 | 2 | 1 | 1 |
| 4 | > 3 Author | | | | | | 1 | | |
| 5 | Total | 20 | 22 | 24 | 24 | 13 | 22 | 21 | 20 |

5.4LENGTH OF ARTICLES

Table 6 reveals that the average length of articles published in *Collection Building* is 51.35 pages. It further reflects that the publishing year 2010 accommodated the highest average length of 10.538 pages per article while, the lowest average length of 4.863 pages per article was noticed in the year 2007. Considering the average length of articles published in *Collection Building*, it is deduced that the journal provides the contributors an ample scope for exercising their thought contents comprehensively and exhaustively or may be due to the fact that the contributors are supplementing the text with more facts, figures, and illustrations to justify their research findings.

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Table 6: Analysis by Length of article

| S.NO | Year | No. of Articles | No. of Pages | Average Length of Articles |
|------|-------|-----------------|--------------|----------------------------|
| 1 | 2006 | 20 | 124 | 6.2 |
| 2 | 2007 | 22 | 107 | 4.863 |
| 3 | 2008 | 24 | 144 | 6 |
| 4 | 2009 | 24 | 122 | 5.08 |
| 5 | 2010 | 13 | 137 | 10.538 |
| 6 | 2011 | 22 | 137 | 6.227 |
| 7 | 2012 | 21 | 108 | 5.142 |
| 8 | 2013 | 20 | 146 | 7.3 |
| 9 | Total | 166 | 1025 | 51.35 |

5.5 GEOGRAPHICAL DISTRIBUTION OF CONTRIBUTORS

The geographical distribution finds which country has highest contribution. The geographical distribution of contributors is presented in Table 7. It is found that there are in all 241 authors who have contributed for the sample total of 166 articles, and the authors are geographically scattered over 28 different countries of the world. Out of the total 241 contributors USA, contributed the highest number of 182 articles constituting 74.59 percent of the total contributions. India is found to be the second highest country that contributed 14 (5.73 percent) articles. Canada have third country that contributed 11(4.5). all other country have None contribution. These three country USA, India, Canada have 84.82 contribution and all left 25 contribution have 15.18. The overall analysis indicates that *Collection Building* has set due consideration for the quality of production of articles with respect to the technological trends of both developed and developing countries of various parts of the globe.

Table 7: Analysis by Geographical contribution

| S.No | Country | No. of Contributors | Cumulative Contributors | Percentage | Cumulative Percentage |
|------|---------------------|---------------------|-------------------------|------------|-----------------------|
| 1 | USA | 182 | 182 | 74.59 | 74.59 |
| 2 | India | 14 | 196 | 5.73 | 77.16 |
| 3 | Canada | 11 | 207 | 4.5 | 81.49 |
| 4 | Finland | 5 | 212 | 2.04 | 83.46 |
| 5 | Australia | 4 | 216 | 1.63 | 85.03 |
| 6 | Botswana | 4 | 220 | 1.63 | 86.61 |
| 7 | Nigeria | 4 | 224 | 1.63 | 88.18 |
| 8 | Trinidad and Tobago | 4 | 228 | 1.63 | 89.76 |
| 9 | Pakistan | 3 | 231 | 1.22 | 90.94 |
| 10 | Belgium | 2 | 233 | 0.81 | 91.73 |
| 11 | Cuba | 2 | 235 | 0.81 | 92.51 |
| 12 | Saudi Arabia | 2 | 237 | 0.81 | 93.3 |
| 14 | New Zealand | 2 | 239 | 0.81 | 94.09 |
| 15 | Spain | 2 | 241 | 0.81 | 94.88 |
| 16 | China | 1 | 242 | 0.4 | 95.27 |
| 17 | Switzerland | 1 | 243 | 0.4 | 95.66 |
| 18 | Athens | 1 | 244 | 0.4 | 96.06 |

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| | | | | | |
|----|-------------|---|-----|-----|-------|
| 19 | Iran | 1 | 245 | 0.4 | 96.45 |
| 20 | Kenya | 1 | 246 | 0.4 | 96.85 |
| 21 | Norway | 1 | 247 | 0.4 | 97.24 |
| 22 | Poland | 1 | 248 | 0.4 | 97.63 |
| 23 | Zambia | 1 | 249 | 0.4 | 98.03 |
| 24 | Qatar | 1 | 250 | 0.4 | 98.42 |
| 25 | Botswana | 1 | 251 | 0.4 | 98.81 |
| 26 | Malaysia | 1 | 252 | 0.4 | 99.21 |
| 27 | South korea | 1 | 253 | 0.4 | 99.6 |
| 28 | Uganda | 1 | 254 | 0.4 | 100 |

5.6 BIBLIOGRAPHICAL DISTRIBUTION OF CITATIONS

One of the vital aspects of bibliometrics analysis is the evaluation of bibliographical distribution of citations. In this study, the major bibliographical forms like, journals, books, web, proceedings, reports, theses have been taken into consideration. Tables VII and depict the bibliographical aggregate distribution of citations and the year wise distribution of citations respectively. It is evident from the analysis that a majority of citations are taken from journals (49.95 percent) followed by, books (22.45 percent), web resources (17.84percent), theses (0.76 percent), reports (0.72 percent), encyclopedia (0.68 percent), proceedings (8.895 percent), dictionary (0.34 percent), gazetteers (0.29 percent). Concurrently, other forms which include personal communications, newsletters, white papers, pamphlets, guidelines, standards, etc. contributed 6.4 percent. Therefore, it is crystal clear that journal citations have played a major role in production of scholarly articles in *Collection Building*.

Table 8: Analysis by Bibliographic Distribution of citation

| S.No | Rank | Bibliographical Forms | No. of Citation | Cumulative Citation | Percentage | Cumulative Percentage |
|------|------|-----------------------|-----------------|---------------------|------------|-----------------------|
| 1 | 1 | Journals | 1170 | 1170 | 49.95 | 49.95 |
| 2 | 2 | Web | 418 | 1588 | 17.84 | 67.8 |
| 3 | 3 | Books | 526 | 2114 | 22.45 | 90.26 |
| 4 | 4 | Proceedings | 12 | 2126 | 0.51 | 90.77 |
| 5 | 5 | Report | 17 | 2143 | 0.72 | 91.5 |
| 6 | 6 | Theses | 18 | 2161 | 0.76 | 92.27 |
| 7 | 7 | Encyclopedia | 16 | 2177 | 0.68 | 92.95 |
| 8 | 8 | Gazetteers | 7 | 2184 | 0.29 | 93.25 |
| 9 | 9 | Dictionary | 8 | 2192 | 0.34 | 95.59 |
| 10 | 10 | Others | 150 | 2342 | 6.4 | 100 |

Table 9: Analysis by Bibliographic distribution of citation Table 7 (year wise)

| S.NO | year wise Analysis | Journals | Web | Books | Proceedings | Report | Thesis | Encyclopedia | Gazetteers | Dictionary | Others |
|------|--------------------|----------|-----|-------|-------------|--------|--------|--------------|------------|------------|--------|
| 1 | 2006 | 76 | 84 | 66 | 2 | 3 | | 2 | | 1 | 11 |
| 2 | 2007 | 116 | 42 | 32 | 1 | 2 | 4 | 4 | | 1 | 11 |
| 3 | 2008 | 172 | 52 | 202 | 1 | 4 | 11 | 1 | | | 7 |
| 4 | 2009 | 153 | 61 | 42 | 4 | 6 | 3 | | | 1 | 18 |
| 5 | 2010 | 173 | 49 | 36 | | 2 | | 1 | 3 | | 47 |
| 6 | 2011 | 128 | 40 | 13 | | | | 3 | | | 27 |
| 7 | 2012 | 148 | 58 | 35 | | | | | | | 20 |
| 8 | 2013 | 204 | 32 | 100 | 4 | | | 5 | 4 | 5 | 9 |

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5.7 RANKING OF JOURNALS

Table 11 provides the ranking list of journals that were cited in *Collection Building* in their decreasing order of citations. The journals listed in this table may be considered the preferred media for reporting of new knowledge in the field of library and information science with the specific domain of applications and implications of new technology, automation, the internet, user interfaces, and networks in all types of libraries, information centers and museums throughout the world as well as the development of software and hardware for such applications. This list can be regarded as free of any national or regional bias as it has been prepared on the basis of citations in *Collection Building* which has a high journal impact factor during many years and is regarded as a reputed international referred journal in the field of library and information science. It is expected that the present ranking list would help the researchers, the librarians, the information manager and the documentalists of research centers, library and educational institutions to formulate their acquisition policy for serial publication suiting to the academic and research needs of LIS scholars, students and teachers. Out of 1197 citations, the journal *Collection Building* which is taken as source journal for the present study, gets first position scoring the highest citations of 84 having 7.01 percent of total citations. The reason for this journal occupying the first position may be its comprehensive coverage, higher journal impact factor among the journals whose scope and coverage of publication are more or less similar to that of *Collection Building*. *College and Research library* is second in the rank being cited 46 (3.84 percent) times, and *Collection Management* occupies third rank with 44 citations (3.67 percent). The fourth rank is shared by three journals namely, *Library Collections, Acquisition & Technical services*, *Library journal*, and *The journal of academic librarianship* with 23 citations (1.92 percent) each. *Against the Grain* with 22 citations (1.83 percent) ranked fifth. The first ten journals account for 26.81 percent having total citations 321. From this table, it is also observed that the 23 journals accounted for nearly 50 percent and the remaining journals accounted for rest 50 percent of total citations.

Table 10: Analysis by Ranking journal

| S.No | Rank | Journal Cited | No.of Citations | Cumulative Citations | Percentage | Cumulative Percentage |
|------|------|-----------------------------------------------------------------------|-----------------|----------------------|------------|-----------------------|
| 1 | 1 | Collection Building | 84 | 84 | 7.01 | 7.01 |
| 2 | 2 | College and Research Library | 46 | 130 | 3.84 | 10.86 |
| 3 | 3 | Collection Management | 44 | 174 | 3.67 | 14.53 |
| 4 | 4 | Library Collections, Acquisition & Technical services | 23 | 197 | 1.92 | 16.45 |
| 5 | 4 | Library journal | 23 | 220 | 1.92 | 18.37 |
| 6 | 4 | The journal of Academic Librarianship | 23 | 243 | 1.92 | 20.3 |
| 7 | 5 | Against the Grain | 22 | 265 | 1.83 | 22.13 |
| 8 | 6 | Journal of Academic Librarianship | 20 | 285 | 1.67 | 23.8 |
| 9 | 6 | Library Hi Tech | 20 | 305 | 1.67 | 25.48 |
| 10 | 7 | Library Resources & Technical Services | 16 | 321 | 1.33 | 26.81 |
| 11 | 8 | Library Management | 13 | 334 | 1.08 | 27.06 |
| 12 | 9 | D-Lib Magazine | 12 | 346 | 1 | 28.9 |
| 13 | 9 | Journal of Library Administration | 12 | 358 | 1 | 29.9 |
| 14 | 9 | Publisher's Weekly | 12 | 370 | 1 | 30.91 |
| 15 | 10 | Interlending and Document Supply | 10 | 380 | 0.83 | 31.74 |
| 16 | 10 | Journal of Inter Library Loan, Document Delivery & Electronic Reserve | 10 | 390 | 0.83 | 32.58 |
| 17 | 10 | Library Trends | 10 | 400 | 0.83 | 33.41 |
| 18 | 10 | New Library World | 10 | 410 | 0.83 | 34.25 |
| 19 | 10 | Serials Review | 10 | 420 | 0.83 | 35.08 |
| 20 | 10 | The Electronic Library | 10 | 430 | 0.83 | 35.92 |
| 21 | 11 | 10 Journal (9 Each) | 90 | 520 | 7.51 | 43.44 |
| 22 | 12 | 3 Journal (8 Each) | 24 | 544 | 2 | 45.44 |
| 23 | 13 | 6 Journal (Each 7) | 42 | 586 | 3.5 | 48.95 |
| 24 | 14 | 8 Journal (6 Each) | 48 | 634 | 4.01 | 52.96 |
| 25 | 15 | 12 Journal (5 Each) | 60 | 694 | 5.01 | 57.97 |
| 26 | 16 | 18 Journal (4 Each) | 72 | 766 | 6.01 | 63.99 |
| 27 | 17 | 26 Journal (3 Each) | 78 | 844 | 6.51 | 70.5 |
| 28 | 18 | 45 Journal (2 Each) | 90 | 934 | 7.51 | 78.02 |
| 29 | 19 | 263 Journal (1 Each) | 263 | 1197 | 21.97 | 100 |

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6.FINDINGS AND CONCLSION

Findings are the most important part of any study. Findings of bibliometrics study of the *collection building* journal during (2006-2013) are given in some points as:

- i. The average number of citations per article published in is 14 (14.56125) which shows the content of the journal is authoritative.
- ii. In the *collection building* journal different category of article published like research paper, conceptual paper, literature review, case study etc. The (41.17) is research paper published in *collection building* journal during (2006-2013), (27.64) percent paper is case study, (11.17) paper is general review, (11.17) percent paper is literature review, (5.29) percent paper is conceptual paper, (2.68) percent paper is technical paper (1.32) percent paper is view paper which indicates that authors are more interested in contributing research papers than any other category.
- iii. In the authorship pattern the single authored articles are highest (60.84). Joint authored articles (33.73). Three authors (4.81) and more than three author (0.602).
- iv. The study finds that the average length of articles is (6.41875) pages. Perhaps it is due to the fact that the contributors are giving more facts, figures, and illustrations to justify their research findings.
- v. The study of geographical contributors finds (74.59) articles are contributed by USA. India has second number in contributors (5.73). Canada has third number (4.5) and other countries have minor role in geographical contribution.
- vi. The study of bibliographical form of documents finds (49.95) are journal cited, (22.45) is book cited, (17.84) are web resource cited and other form document have very low percentage.
- vii. In the ranking of journal *collection building* journal has one ranking (7.01) *college and research library* has second rank (3.84) and *collection development* has third rank (3.67).
- viii. And other journal have minor role in citation.

7.CONCLUSION

In the conclusion we can say *collection building* is the reputed international referred journal in the field of library and information science. *Collection Building* covers many types of resources and database like LISA, LISTA, Lexis-Nexis, Scopus, Web of science, Emerald etc. The journal covers the latest development in the field of library and information science like Library automation, bibliometrics study, RFID, collection development, collection building, bibliography, librarianship, e-journals etc. But more focus of the journal is collection development and collection building.

BIBLIOGRAPHY

1. Devarajan, G. "*Bibliometric Studies*". New Delhi : EssEss Publications, 1997. Print
2. Fairthorne, R. "Empirical hyperbolic distributions" *Journal of Documentation*, 25.4 (1969), 319-43.
3. Goel, Kamlesh. "Bibliometric Study of Social Science Research in India" *Journal of Library and Information Science*, 33.1&2 (2008): 29-37.
4. Jena, Kamal Lochan; Swain, Dillip K; Sahu, Sada Bihari. "Scholarly communication of *The Electronic Library* from 2003-2009: a bibliometric study." *The Electronic library* 30.1 (2012): 103-119.
5. Krishan Kumar, "*Research Methods in Library and Information Science*" New Delhi : Vikas Publication House. 1992
6. Pritchard, Alan, "Statistical Bibliography or bibliometrics", *Journal of Documentation*, 25.1, (1969): 348-49.
7. Ravichandra Rao, I.K. "*Quantitative Methods for Library and Information Science*". New Delhi : New Age International Publisher, 2009. Print
8. Simpson, I.S, *Basic statistics for librarians*, 3rd edition, London, Library Association, 1988.
9. Thelen, Matthew. "*A Bibliometric Study of the 'Journal of Humanistic Psychology'*." Order No. 3466603 The University of the Rockies, 2011. Ann Arbor: ProQuest. Web. 29 Jan. 2014.