

## SCIENTOMETRIC ANALYSIS OF LIBRARY AND INFORMATION STUDIES FROM 2013 TO 2021

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**Abstract:** A Scientometrics analysis is an effective method to increase the scope of library and information studies. The research articles presented have been revised to highlight the research done in the library and information studies area and to enable readers to read more information. In this research, a total of 9 volumes, 36 issues, 1066 articles, and 13119 citations, etc, published in the Journal of Education for Library and Information Science from 2013 to 2021 were referred for Scientometrics analysis. It shows the annual growth of published articles, authors' distributions, geographical distribution, citations distribution, Degree of Collaboration, Etc. In a changing age, this study will certainly be useful to track the research literature available to expand the scope of library and information studies and to make transparent research.

**KEYWORDS:** Scientometric Analysis, Distribution, Contribution, Article, Issues, Nolume, Journal, Citation, Collaboration.

### **I.Introduction**

Information science is affecting the whole world so everyone is a consumer of information. In today's age information is being created in different forms or in different methods. Similarly, this type of Scientometrics also developed. The Scientometrics originated in Russian literature, and its scope increased in 1977 when T. Branin first published the journal "Scientometrics". Scientometrics is used in every discipline which is effective in analyzing problems and explaining meaningful facts. This effectively studies various aspects or systems in the field of social, cultural, science and technology studies.

### **Definitions of Scientometrics:**

'Nalimov & Mulchenko' (1969) or USSR defined Scientometrics as the quantitative method which deals with the analysis of science viewed as an information process. Beck (1978) defined Scientometrics as a study of the quantitative evaluation and inter-comparison of scientific activity, productivity and progress. Bookstein (1995) defined Scientometrics as "the science of measuring science".

### **International Journal of Library and Information Studies**

This article includes articles published in the Journal of Education for Library and Information Science (ISSN: 2328-2968) (Open Access) in India for Scientometrics analysis. Founded in 2013 by the founders, this journal is published four times a year. This journal aims to expand the scope

of library and information science studies, to enhance the knowledge of scholars, researchers, professors. The International Journal of Library and Information Studies has published a total of 9 volumes, 36 issues, 1066 articles and 13119 citations between 2013 and 2021.

### **Review of Literature**

(Thompson et al., 2020) Access to published research is becoming increasingly vital for demonstrating the impact of research. This article presents a bibliometric analysis of publications in the Web of Science (WOS) database from 2007 to 2016. The statistics show that the majority of articles are published by researchers with US institutional connections.

MC Sab, M Kappi, KKM Ahmed evaluated the Scientometric analysis of pharmacognosy magazine with the help of Scientometric analysis (Sab & Mallikarjun, 2021). Within study, Scientometric analysis of articles of pharmacognosy magazine from the year 2011-2020 has been carried out. The journal has published 1494 article during the period of study and majority of publication are published article from with 1477.

### **Objectives of the Study**

The main objective of the present studies issue follows –

1. To Find Distribution of Contributions (Nolume-wise).
2. To Find Authorship Pattern of Contributions.
3. To Find Authorship Pattern of Contributions (Issue- wise).
4. To Find Contribution (Institution –wise).
5. To Find Geographical distribution of state-level contributions in India.
6. To Find Average Citation per contribution in each volume.
7. To Find Average Page (per volume and per contribution) contribution.

### **Research Methodology**

Prior research has been thoroughly analyzed for this article and collected and evaluated online information likes books, articles, journals, websites, blogs, etc. The research is based on articles published in the Journal of Education for Library and Information Science from 2013 to 2021.

### **Scope & Limitations of the present study**

The present study is concerned with the Scientometrics analysis of the Journal of Education for Library and Information Science from 2013 to 2021 in the field of Library & Information Science. The data collected from 9 volumes, 36 issues, 1066 articles, and 13119 citations are utilized for the present investigation.

**Data Analysis**

International journal of library & information studies: a Scientometrics analysis is a branch of bibliometric. It is an important research tool for understanding the subject it aims at measuring the utility of documents and the relationship between documents and fields.

The research is based on articles published in the International Journal of Library & Information Studies (ISSN: 2328-2968) from 2013 to 2021.

**Distribution of Contributions Nolume-wise**

Table No.1 Distribution of Contributions (Nolume-wise)

| Year         | Nol. No. | No. of Issue | No. of Contribution | Percentage  |
|--------------|----------|--------------|---------------------|-------------|
| 2013         | 1        | 4            | 49                  | 4.6         |
| 2014         | 2        | 4            | 52                  | 4.88        |
| 2015         | 3        | 4            | 75                  | 7.04        |
| 2016         | 4        | 4            | 90                  | 8.44        |
| 2017         | 5        | 4            | 103                 | 9.66        |
| 2018         | 6        | 4            | 117                 | 10.98       |
| 2019         | 7        | 4            | 195                 | 18.29       |
| 2020         | 8        | 4            | 184                 | 17.26       |
| 2021         | 9        | 4            | 201                 | 18.86       |
| <b>Total</b> |          | <b>36</b>    | <b>1066</b>         | <b>100%</b> |

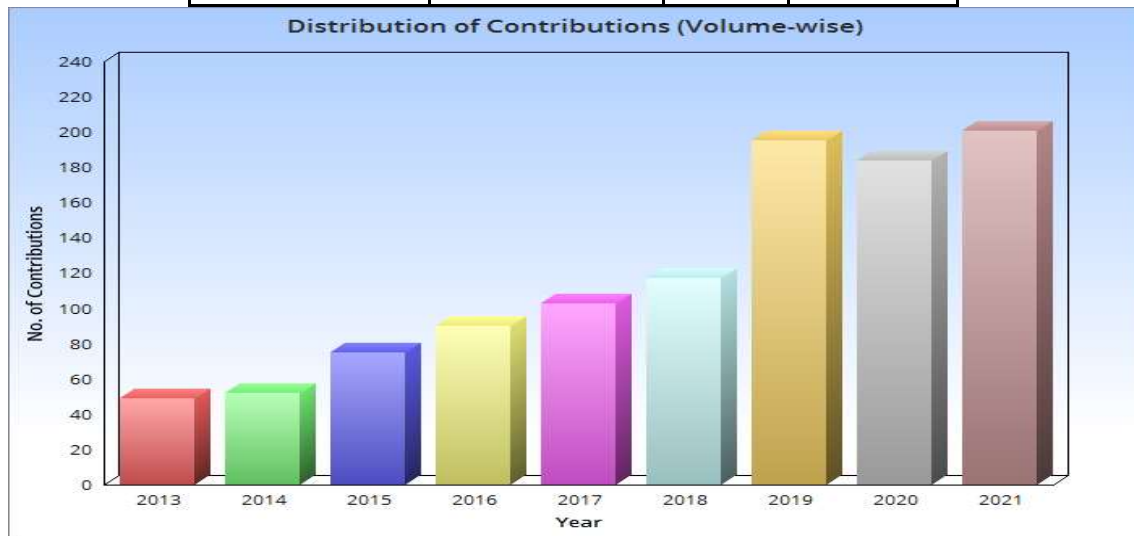


Fig.1 Distribution of Contributions (Nolume-wise)

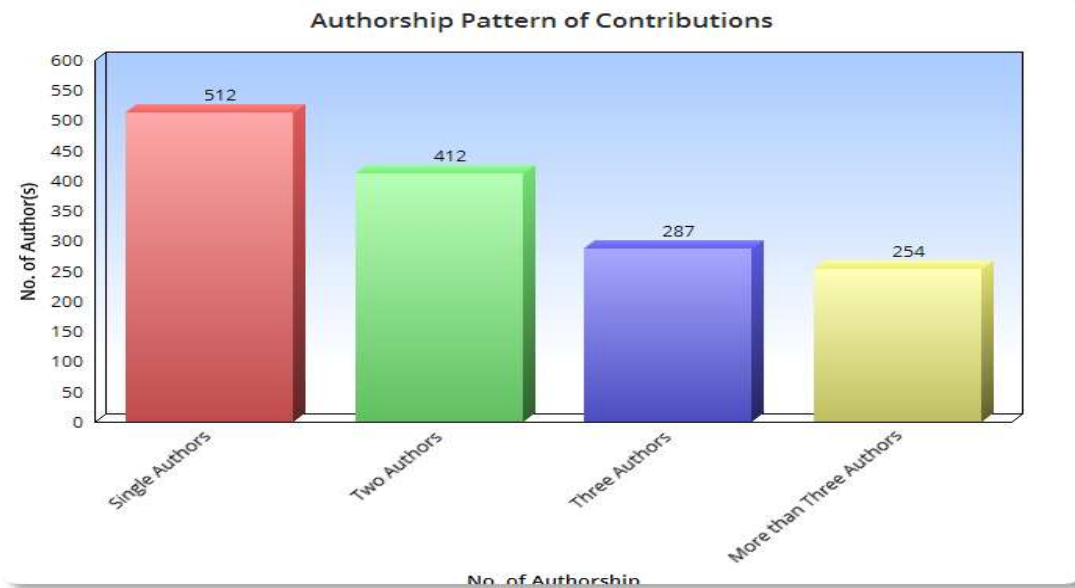
Table No. 1 & Figure No. 1, depicts the details regarding the number of Articles published during 2013- 2021 which was 1066 and the year-wise analysis of the contribution shows that Nol. No.9

highest number of contributions is 18.86% in the year 2021 & No.1 lowest contribution of 4.60% in the year 2013.

**Authorship Pattern of Contributions**

**Table No.2 Authorship Pattern of Contributions**

| No. of Author(s)        | No. of Contribution | Total No. of Authorship | Percentage    |
|-------------------------|---------------------|-------------------------|---------------|
| Single Authors          | 576                 | 512                     | 34.95%        |
| Two Authors             | 284                 | 412                     | 28.12%        |
| Three Authors           | 121                 | 287                     | 19.59%        |
| More than Three Authors | 85                  | 254                     | <b>17.32%</b> |
| <b>Total</b>            | 1066                | <b>1465</b>             | <b>100%</b>   |



**Fig.2 Authorship Pattern of Contributions**

Table No. 2 & Figure No. 2, indicates that the details about the authorship pattern. 34.95% have been contributed by Single author who is followed by two authors contributed 2812%, three authors contributed 19.59% & more than three authors contributed 17.32%. Where “The majority of the contributions are contributed by Single Authors”.

**Authorship Pattern of Contributions Issue-wise**

Table No. 3 Authorship Pattern of Contributions (Issue-wise).

| No. No. | Single Author | Two Author | Three Author | More than Three Authors | Total No. of Contribution |
|---------|---------------|------------|--------------|-------------------------|---------------------------|
| 1       | 16            | 18         | 23           | 12                      | 69                        |
| 2       | 14            | 24         | 15           | 10                      | 63                        |
| 3       | 32            | 35         | 12           | 11                      | 90                        |
| 4       | 38            | 38         | 17           | 14                      | 107                       |
| 5       | 41            | 45         | 18           | 12                      | 116                       |
| 6       | 56            | 54         | 14           | 17                      | 141                       |
| 7       | 88            | 42         | 35           | 19                      | 184                       |
| 8       | 103           | 58         | 38           | 13                      | 212                       |
| 9       | 31            | 34         | 14           | 5                       | 84                        |
| Total   | 419           | 348        | 186          | 113                     | 1066                      |

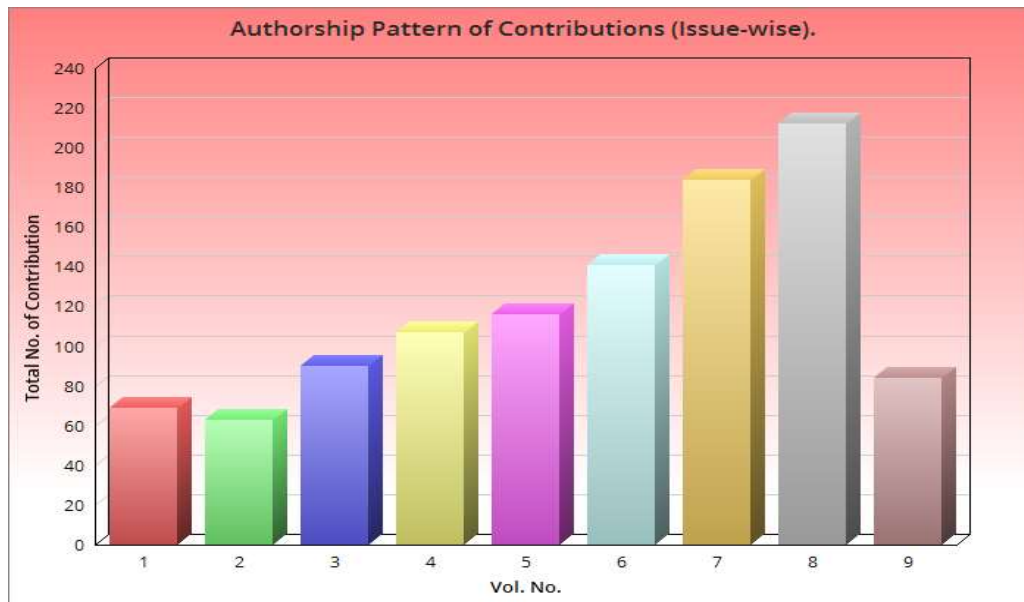


Fig 3. Authorship Pattern of Contributions (Issue-wise).

Table No.3 and Figure No. 3, shows the authorship pattern of contributions volume-wise regarding contributions by a single author records the highest contributions 419, However the two author contributions, 348 shows the three author contributions 186, the more than three author contributions 113 it reflects the lowest percentage.

**Contribution Institution-Wise:****Table No.4 Contribution of Institution-wise**

| No. No | Year | College | University | Other | Total |
|--------|------|---------|------------|-------|-------|
| 1      | 2013 | 21      | 31         | 9     | 61    |
| 2      | 2014 | 32      | 27         | 8     | 67    |
| 3      | 2015 | 39      | 36         | 4     | 79    |
| 4      | 2016 | 22      | 47         | 28    | 97    |
| 5      | 2017 | 46      | 61         | 12    | 119   |
| 6      | 2018 | 33      | 89         | 7     | 129   |
| 7      | 2019 | 121     | 174        | 23    | 318   |
| 8      | 2020 | 137     | 109        | 21    | 267   |
| 9      | 2021 | 23      | 41         | 17    | 81    |
| Total  |      | 474     | 615        | 129   | 1218  |

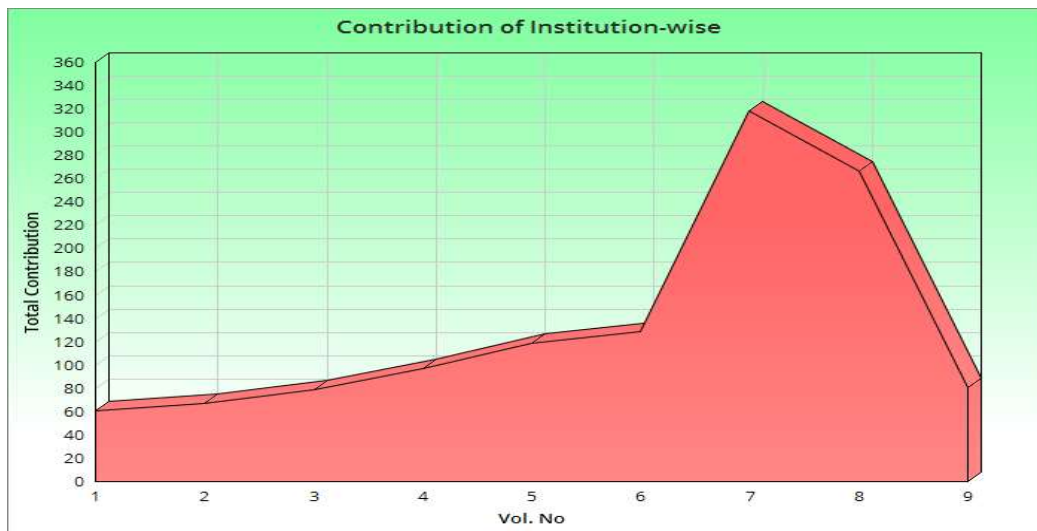
**Fig.4 Contribution of Institution-wise**

Table No. 4 & Figure No. 4 depicts the institution wise distribution of contributions. University wise at the national level followed by institutions & colleges. It is inferred from the above table that university-wise contribution maximum is 615 contributions, College contribution was 474 contributions & lastly others 129 contribution. **“Maximum number of contribution is at University Level”**.

**Geographical Distribution of State-Level Contributions in India:**

Table No.5 Geographical Distribution of Contribution

| State        | Contributio | Percentag     |
|--------------|-------------|---------------|
| Andhra       | 202         | 18.95         |
| Telangana    | 102         | 9.57          |
| Kerala       | 109         | 10.23         |
| Maharashtra  | 102         | 9.57          |
| Tamilnadu    | 91          | 8.54          |
| Delhi        | 81          | 7.60          |
| Kolkata      | 71          | 6.66          |
| Guiarat      | 51          | 4.78          |
| Uttar        | 52          | 4.88          |
| Madhya       | 45          | 4.22          |
| Puniab       | 35          | 3.28          |
| Harvana      | 24          | 2.25          |
| Bihar        | 24          | 2.25          |
| Odisa        | 21          | 1.97          |
| Raiasthan    | 15          | 1.41          |
| Other        | 41          | 3.85          |
| <b>Total</b> | <b>1066</b> | <b>100.00</b> |

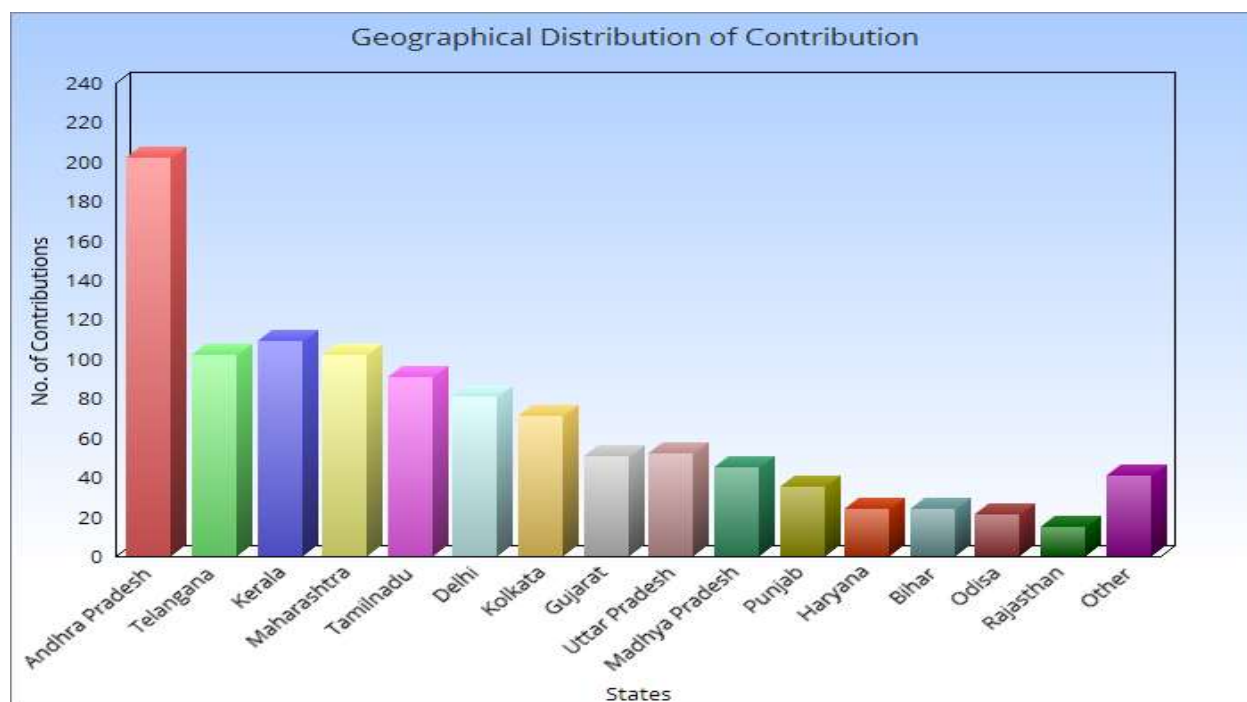


Fig 5. Geographical Distribution of Contribution

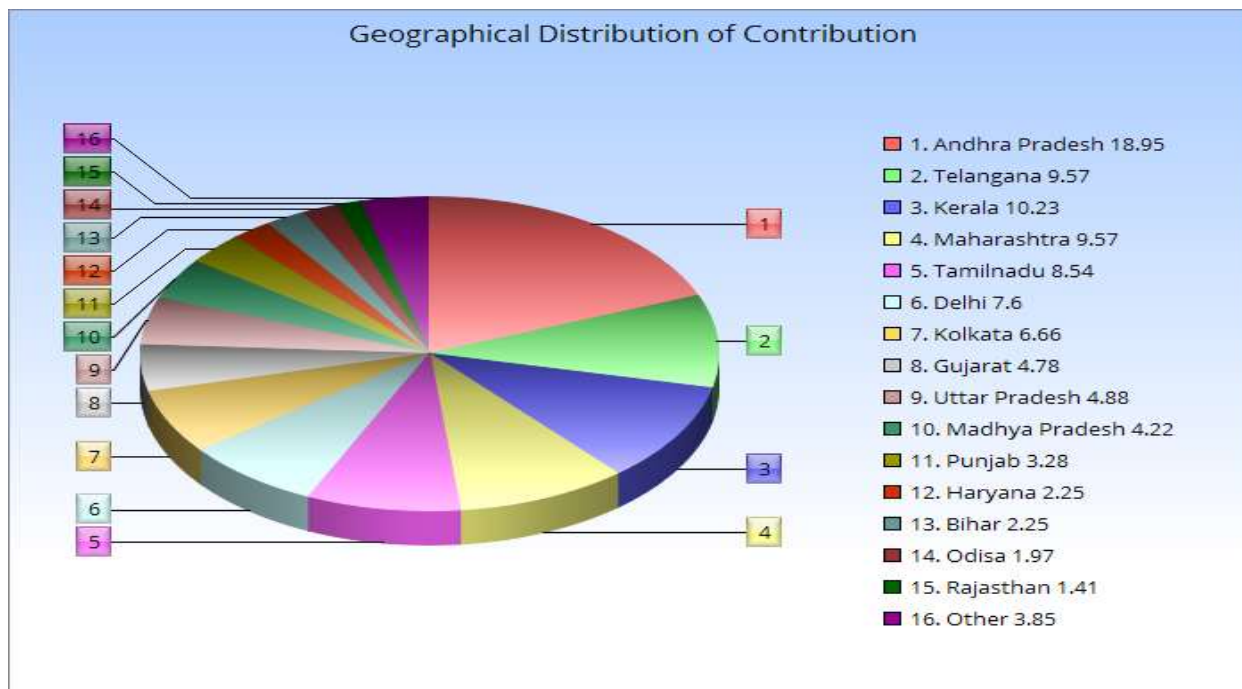


Fig 6. Geographical Distribution of Contribution

Table No. 5 & Figure No. 5 shows the geographical distributions of contributions at Indian state level. Andhra Pradesh is Maximum percentage of 18.95% & minimum percentage of Rajasthan is 1.41% (Others included national & international Contributions).

**Average Citation per contribution in each volume**

Table 6: Average Citation Per Contribution Per Nolume.

| Nol. No.    | No. of Contribution | No. of Citatio | Average     |
|-------------|---------------------|----------------|-------------|
| 1           | 69                  | 381            | 2.90        |
| 2           | 63                  | 542            | 4.13        |
| 3           | 90                  | 867            | 6.61        |
| 4           | 107                 | 998            | 7.61        |
| 5           | 116                 | 1098           | 8.37        |
| 6           | 141                 | 1389           | 10.59       |
| 7           | 184                 | 3587           | 27.34       |
| 8           | 212                 | 3054           | 23.28       |
| 9           | 84                  | 1203           | 9.17        |
| <b>Tota</b> | <b>1066</b>         | <b>13119</b>   | <b>100%</b> |



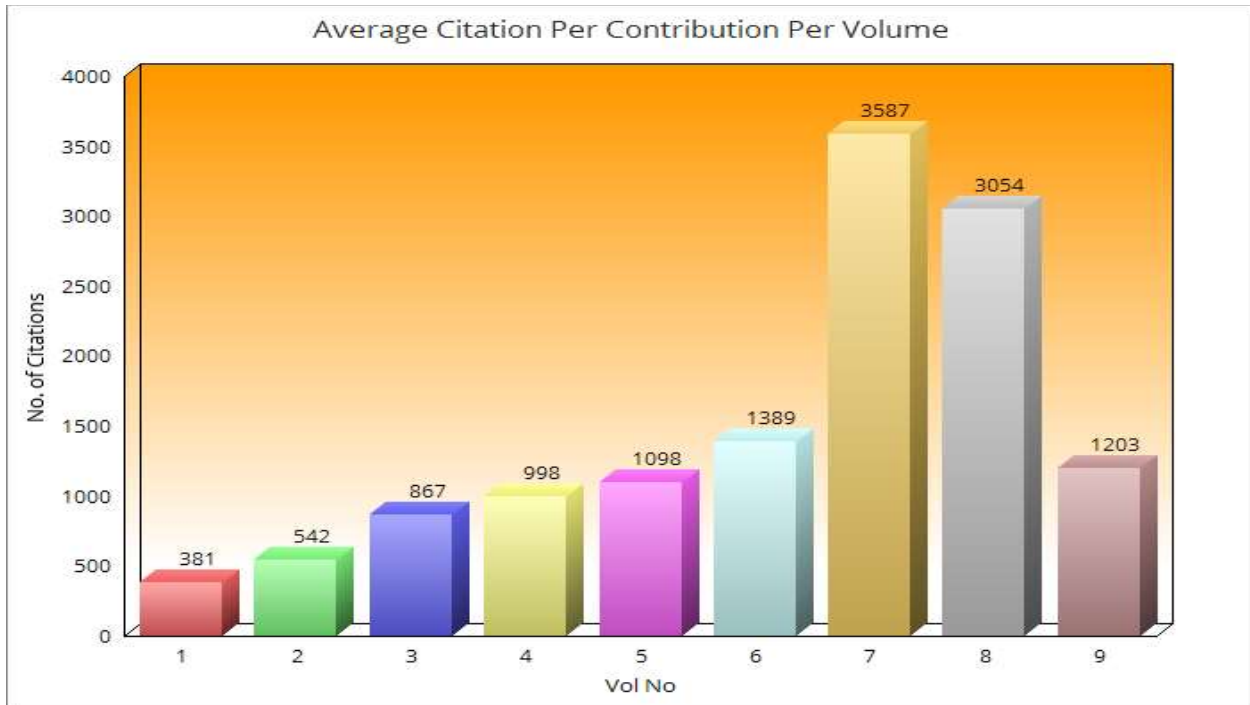


Fig 7. Average Citation Per Contribution Per Nolume

Table No. 6 & Figure No.6, it can be observed for average citation per contribution in each volume. Average citation contribution is Nol. no. (7)27.34% contributed 3587 citation. Highest numbers of citation appeared in Nol. no. (8) 23.28% contributed 3054 citations & which minimum number of citation appeared in Nol. no. (1) 2.90% contributed 381 citations. Where “**The majority of the citation are Nol. no. 7**”.

**Average Page Contribution (Per Nolume and Per Contribution)**

Table 7: Average Page per Nolume & Contribution

| Nol. No.     | No. of Contribution | No. of Pages | Average     |
|--------------|---------------------|--------------|-------------|
| 1            | 69                  | 417          | 4.77        |
| 2            | 63                  | 465          | 5.32        |
| 3            | 90                  | 736          | 8.42        |
| 4            | 107                 | 877          | 10.03       |
| 5            | 116                 | 949          | 10.85       |
| 6            | 141                 | 1250         | 14.30       |
| 7            | 184                 | 1679         | 19.20       |
| 8            | 212                 | 1555         | 17.78       |
| 9            | 84                  | 816          | 9.33        |
| <b>Total</b> | <b>1066</b>         | <b>8744</b>  | <b>100%</b> |

Table No. 7 & Figure No.7 it can be observed for average pages per contribution in each volume. Nol. no. (6) 14.30% contributed 1 2 5 0 pages.

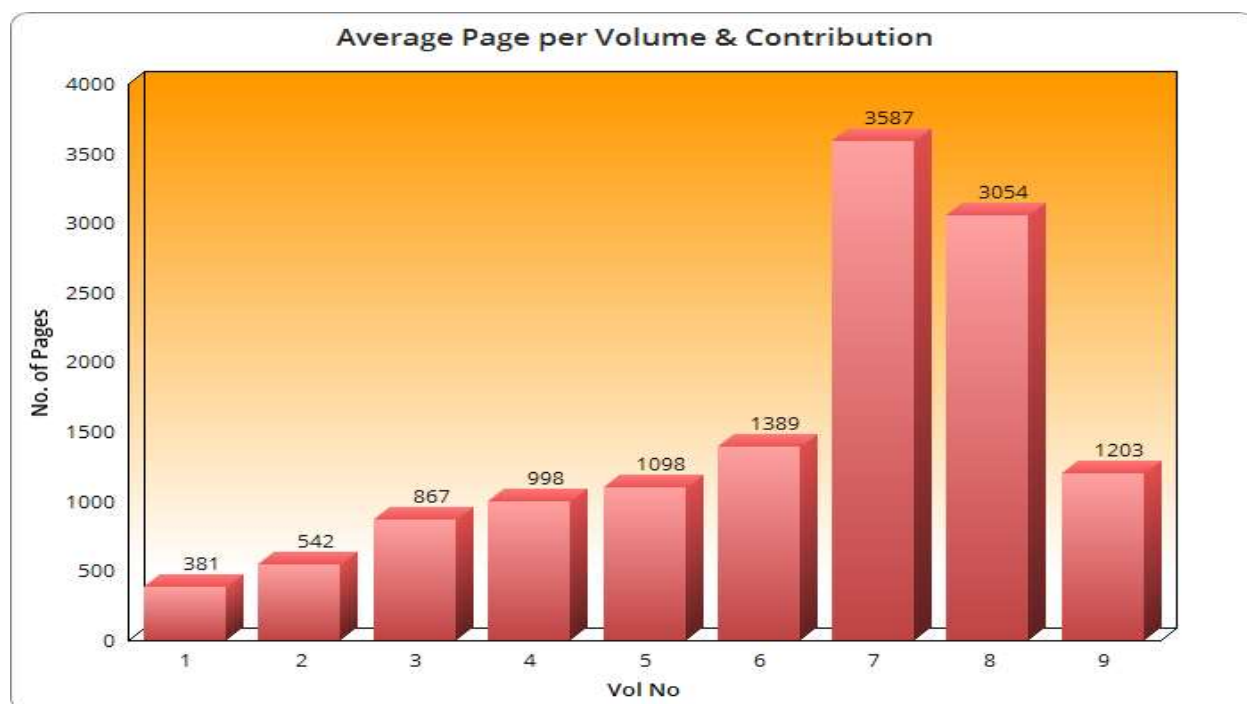


Fig.9 Average Page per Nolume & Contribution

Contributions of which highest numbers of pages appeared in Nol. no. (7) 19.20% contributed 1679 pages & contribution of which minimum number of citation appeared in Nol. no.1 (4.77%) contributed 417 pages.

### Findings

1. Highest Contributions of vol. no.9 is 18.29%.
2. The highest Contribution of Single authors is 39.31%.
3. A single author records the highest contribution is 419 articles.
4. The maximum number of contributions is at the university level is 615.
5. The maximum percentage of authors belongs to Andhra Pradesh is 18.95%.
6. The majority of the citations are Nol. no. 7 is 27.34% contributed 3587 citations.
7. The highest numbers of pages appeared in Nol. no.7 19.20% contributed 1679 pages.

### Conclusion

This analysis method is very useful and effective as we can verify any research through Scientometrics analysis. This article also examines the research data using this method. In the international journal of library & information studies, a large number of research works have been done from 2016 to 2020. The number of single authors is high and according to the geographical statistics, the number of authors from the state of Andhra Pradesh in India is large.

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