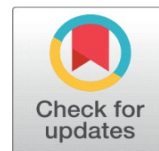# CONTRIBUTIONS TO THE INDIAN JOURNAL OF VETERINARY AND ANIMAL SCIENCES RESEARCH (IJVASR): A SCIENTOMETRIC ANALYSIS

L. Rajendran [1] ✉

[1] Assistant Librarian, Department of Library Science, Madras Veterinary College, Tamil Nadu Veterinary and Animal Sciences University, Chennai, Tamil Nadu, India.

ABSTRACT

The Indian Journal of Veterinary and Animal Sciences Research published 235 research articles, which were subjected to a scientometric analysis (IJVASR). Six volumes of the journal, including 30 issues from 2016 to 2020, were evaluated for this study. Contribution levels, authorship patterns, author productivity, average article length, and average keyword density were all investigated. Only 20 of the 235 contributions were single-authored, with the remainder being multi-authored and including an average degree of collaboration of 0.91 and a week of collaboration between the authors. The increasing tendency of co-authored publications was highlighted by the pattern of co-authorship. According to the research, author productivity is 0.26.

Keywords: Scientometrics, Indian Journal, Veterinary and Animal Sciences Research

1. INTRODUCTION

A research journal has been published by the Tamil Nadu Veterinary and Animal Sciences University (TANUVAS) in Chennai since 1972. TANUVAS is an Educational, Research, and Development Institution founded in 1989 with its headquarters in Chennai. Cheiron was the name of the journal in its early years. The research journal's current title is "Indian Publication of Veterinary and Animal Sciences Research" (IJVASR). Every year, the Tamil Nadu Veterinary and Animal Sciences University in Chennai publishes this journal bimonthly.

2. OBJECTIVES OF THE STUDY

The primary goal of this study is to examine the findings of the Indian Journal of Veterinary and Animal Sciences Research, which will be published bimonthly between 2016 and 2020. The research concentrates on the following goals in great detail:

- To map the year wise distribution of papers
- To examine the authorship pattern and author productivity
- To determine the degree of collaboration
- To find the average length of papers
- To find the average keywords

3. METHODOLOGY

The data for the five years (2016-2020) was acquired by searching the Indian Journal of Veterinary and Animal Sciences Research database for the term "Veterinary and Animal Sciences Research" in the title field. The online database contains information from 2015 to 2020.

4. RESULT AND DISCUSSION

The data was reviewed and presented using a variety of statistical methodologies, including tables, from the Indian published database on Veterinary and Animal Sciences Research.

4.1. YEAR WISE DISTRIBUTION OF PAPERS

The distribution of research articles published in the Indian Journal of Veterinary and Animal Sciences Research from 2016 to 2020 is shown in Table 1. With an average of 47 articles per year, a total of 235 research articles were published. The most research papers (8.33 per issue) were published in the year 2020, followed by the year 2016 with 47 articles, while the least amount of articles (46 articles) were published in the years 2017, 2018, and 2019. (7.67 per issue). During the study period, the average number of papers published per year was 47, and S. Senthil Kumar authored 11 articles in the Indian Journal of Veterinary and Animal Sciences Research with a similar result.

Table 1 Year wise distribution of Papers					
Year	Vol.No.	Number of Issues	Total Papers	Research Papers	Percentage of Research Papers
2016	45	6	50	47	94.00
2017	46	6	48	46	95.83
2018	47	6	48	46	95.83
2019	48	6	54	46	85.18
2020	49	6	52	50	96.15
Total		30	252	235	93.25

4.2. AUTHORSHIP PATTERN

Multi-author papers accounted up nearly 90% of the total number of papers, as seen in Table 2. Double-authored papers account for the most papers (27), accounting for 11.49 percent of the total, followed by three-authored articles (44, accounting for 18.72 percent of the total). Four authors published 21.28 percent of the papers. Five authors were responsible for 19.15 of the articles that were published. The remaining 20.85% of papers were co-authored by more than five people. However, the author pattern in the publication indicates that the team size was two to four people.

Table 2 Authorship Pattern		
Authors	Number of Papers	Percentage
Single	20	8.51
Two	27	11.49

Three	44	18.72
Four	50	21.28
Five	45	19.15
Six	36	15.32
Seven	8	3.40
Eight	5	2.13
Total	235	100

4.3. AUTHORSHIP PATTERN YEAR WISE

Table 3 shows the data on authorship patterns year by year. In terms of single-authored contributions, 2018 had the most with six, and 2016 had the least with one. With eight double-authored contributions, 2016 is the year with the most. The years 2017, 2018, and 2020 have the most three, four, and five written contributions, with 11 each. With thirteen submissions from more than five authors, the year 2020 has the most.

Table 3 Authorship Pattern Year Wise

Year	Authors					
	1	2	3	4	5	More than 5
2016	2	8	10	9	9	9
2017	4	7	4	11	10	10
2018	6	1	9	11	10	9
2019	3	6	10	10	9	8
2020	5	5	11	9	7	13
Total	20	27	44	50	45	49

4.4. AUTHOR PRODUCTIVITY

The output of authors is seen in Table 4. As indicated in the table, the average number of authors per publication for the 235 papers is 4.18. The average number of authors per article in 2016 and 2018 is nearly comparable when compared to the total average number of writers per post. The average productivity per author was 0.24 between 2016 and 2020. The years 2016 and 2018 had roughly comparable productivity per author when compared to the average productivity. Productivity was calculated using the formula below.

Average Authors per paper = Number of Authors / Number of Papers

Productivity per Author = Number of Papers / Number of Authors

Table 4 Author Productivity

Year	Total Number of Papers	Total Number of Authors	AAPP	Productivity Per Author
2016	47	200	4.25	0.24
2017	46	197	4.28	0.23
2018	46	191	4.15	0.24
2019	46	181	3.93	0.25
2020	50	214	4.28	0.23

| Total | 235 | 983 | 4.18 | 0.24 |

4.5. DEGREE OF COLLABORATION

To determine the strength of collaboration, Subramanyam K devised the following formula (DC).

$$DC = \frac{Nm}{Nm+Ne}$$

Where DC = Degree of collaboration

N_m= Number of Multiple authored papers

N_2= Number of Single authored papers

The degree of collaboration between writers is shown in Table 5 by year. The percentage of people that collaborate fluctuates between 0.87 and 0.95. The average degree of collaboration in the journal from 2016 to 2020 was 0.91, showing that there is a higher level of collaboration in the journal.

Table 5 Degree of Collaboration

Year	Single	Multiple	Degree of Collaboration
2016	2	45	0.95
2017	4	42	0.91
2018	6	40	0.87
2019	3	43	0.93
2020	5	45	0.90
Total	20	215	0.91

4.6. DISTRIBUTION OF PAGES

Table 6 shows that 235 publications with a total page count of 1629 (average 6.93 pages per article) were published between 2016 and 2020. The articles were 6.02 pages on average, with a minimum of 6.02 pages. The year 2020 has the greatest average page per paper at 7.36 pages per paper, while the year 2016 has the lowest average page per paper at 6.02.

Table 6 Distribution of Pages

Year	Number of Articles	Total Pages	Average Pages Per Article
2016	47	283	6.02
2017	46	315	6.84
2018	46	336	7.30
2019	46	327	7.10
2020	50	368	7.36
Total	235	1629	6.93

4.7. AVERAGE KEYWORDS PER ARTICLE

Table 7 shows that 802 keywords have been appended to 235 papers. The average keyword for the publication changed between 2.02 and 4.58 between 2016 and 2020. The year 2020 has the highest average keyword per paper, at 4.58, while the year 2017 has the lowest average keyword per paper, at 2.02. The average number of keywords per article is 3.41.

Table 7 Average Keywords per Article

Year	Number of Articles	Total Keywords	Average Keywords Per Paper
2016	47	201	4.27
2017	46	93	2.02
2018	46	118	2.56
2019	46	161	3.50
2020	50	229	4.58
Total	235	802	3.41

5. FINDINGS

The research's findings are listed below.

- The maximum number of papers will be published in 2020, while the fewest will be published in 2016.
- During the study period, the number of research publications provided by many authors was the highest.
- The percentage of people that worked together was 0.91.
- Author productivity is 0.24, while the average number of authors per manuscript is 4.18.
- The average length of a paper is 6.93 pages.
- 3.41 keywords per paper is the average.

6. CONCLUSION

According to the research, the majority of publications are written by many writers. 6.93 is the average page length, which is excellent for research papers. The degree of collaboration indicates that there is a high level of collaboration. The average co-authorship index for all authors reflects the journal's global average and the improving trend of co-authored papers. According to the findings, S. Senthil Kumar produced 11 papers, the most of any author, and some writers have written articles in the journal (5,6,7,10).

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About the Author

Dr.L.Rajendran is an Assistant Librarian at the Madras Veterinary College's Department of Library Science in TANUVAS, Chennai. He graduated from M.K.University with a Master's degree in 1993, Alagappa University with an M.Phil in 2003, and M.S.University with a Ph.D in 2008. He has 23 years of experience in the field of library and information science. In the subject of library and information science, he has produced 114 research papers in various journals, conference and seminar proceedings, and 5 books. He has organised a variety of library and information science training courses, seminars, and conferences. He belongs to a number of international and national organisations as a life member. He completed a World Bank-funded research project under NARS (e-Granth) called "Strengthening of Digital Library and Information Management," and another project under NAHEP called "National Knowledge Management Centre for Agriculture Education and Research." Information Communication Technology (ICT), Digital Libraries, User Studies, Library Management, Scientometrics, and Bibliometrics are some of his research interests.