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## **A Bibliometric Analysis of Research Productivity of Social Scientists in University of Madras**

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**Abstract:** The paper analysis publication productivity of Faculty members of Social Science Departments of University of Madras during 2001-2019. It covers 291 publications during the period of study. The data was collected from SCOPUS database. Result showed that two author contribution ranked first in order. Degree of Collaboration is 0.73.

**Keywords** - Bibliometrics, Social Sciences Department and University of Madras.

### **1. Introduction**

Bibliometrics is a type of research method used in Library and Information Science. It is a quantitative study of various aspects of literature on a topic and is used to identify the pattern of publications, authorship and secondary journal coverage with the objective of getting an insight into the dynamics of growth of knowledge in the areas under consideration. This consequently leads to the better organization of information resources that is essential for its most effective and efficient use. Bibliometrics today has attained sophistication and complexity having national, international and interdisciplinary character. The present study focuses attention on the bibliometric analysis of Social Science literature.

### **2. Objectives of the Study**

The study is mainly aimed at the following objectives:

1. To find out year wise distribution of publication from 2001 to 2019.
2. To find out authorship pattern and degree of collaboration.

3. To identify collaborated countries.
4. To find out source wise distribution of research output.

### **3. Methodology of the Study**

The present study uses 19 years publication output data from 2001 to 2019 to understand the broad characteristics of the research output of the Faculty members of Social Science Departments in the universities of Tamil Nadu. The data of the study was taken from the SCOPUS Database from 2001-2019 which were then tabulated and analysed.

### **4. Analysis and Interpretation**

**Table 1 Trend of Social science research in University of Madras**

<b>Year</b>	<b>Publications</b>	<b>Percent</b>	<b>Growth Rate</b>
2001	2	0.85	
2002	4	1.69	1.00
2003	4	1.69	0.00
2004	2	0.85	-0.50
2005	1	0.42	-0.50
2006	7	2.97	6.00
2007	5	2.12	-0.29
2008	5	2.12	0.00
2009	15	6.36	2.00
2010	8	3.39	-0.47
2011	18	7.63	1.25
2012	22	9.32	0.22
2013	14	5.93	-0.36
2014	18	7.63	0.29
2015	21	8.90	0.17
2016	18	7.63	-0.14
2017	22	9.32	0.22
2018	24	10.17	0.09
2019	26	11.02	0.08
Total	236	100.00	0.50

<b>Year</b>	<b>Number of Publications</b>	<b>Percent</b>
1950-2000	55	18.90
2001-2019	236	81.10
Total	291	100

Table 1 shows the trend of Social Science research by University of Madras. From the table it can be found that the growth trend has gained momentum from the year 2011 onwards. There is continuous growth after the year 2016. Unlike the Anna University, the University of Madras marks some publications throughout the study period without null value. It could be noted from the table that out of 236 total publications, a maximum number of 28 (11.02%) publications published in the year 2019.

**Table 2 Authorship pattern in Social Science Research**

<b>No of authors</b>	<b>No of publications</b>	<b>Percent</b>
1	80	27.49
2	101	34.71
3	65	22.34
4	25	8.59
5	6	2.06
6	5	1.72
7	3	1.03
8	1	0.34
9	4	1.37
More than 10 authors	1	0.34
	291	100.00

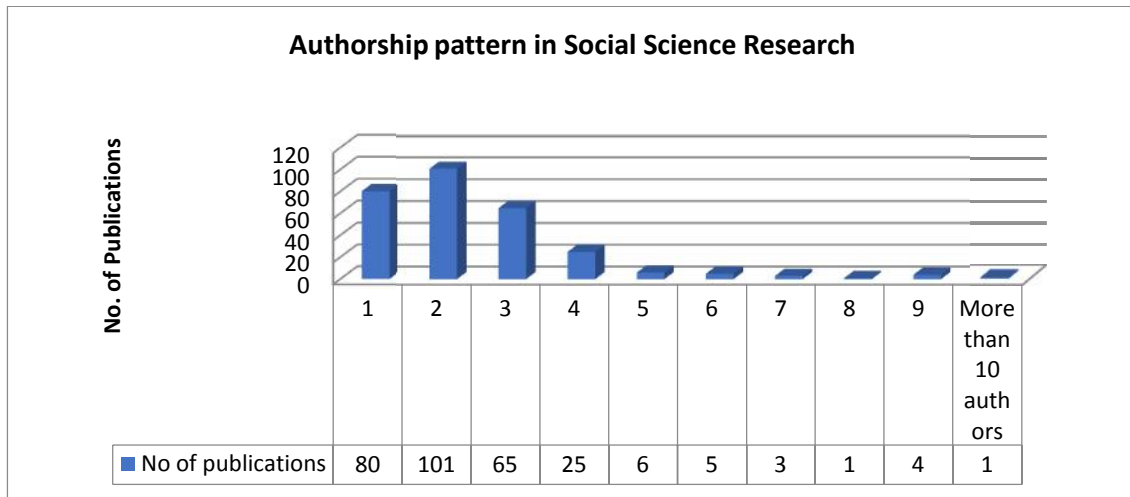


Figure 1: Authorship pattern in Social Science Research

As regards to authorship pattern by Scholars of University of Madras, 34.71 per cent of publications are by two authors and 27.49 per cent are by single authors. Publications by three author is 22.34 per cent. From this it can be inferred that nearly 15 per cent of the publications are by more than three authors and nearly three fourth of the publications are collaborative in nature.

**Table 3 Degree of Collaboration**

Single Author (NS)	Percent	Multiple Authors (NM)	Percent	Total Number of Authors	Degree of collaboration
80	27.49	211	72.51	291	0.73

A study of data from Table 3 indicates the degree of collaboration in research output. The degree of collaboration is 0.73 during the study period. Out of 291 literature published, 80 papers are published by single author which is 27.49 percent of total output and 211 are from multiple authors which is 72.51 percent of total output.

**Table 4 Document wise Distribution of Research Output**

Type of Publications	Publications	Percent
Journal article	174	59.79
Chapters	60	20.62
Conferences	52	17.86
Books	4	1.37
Series	1	0.34

	291	100.00
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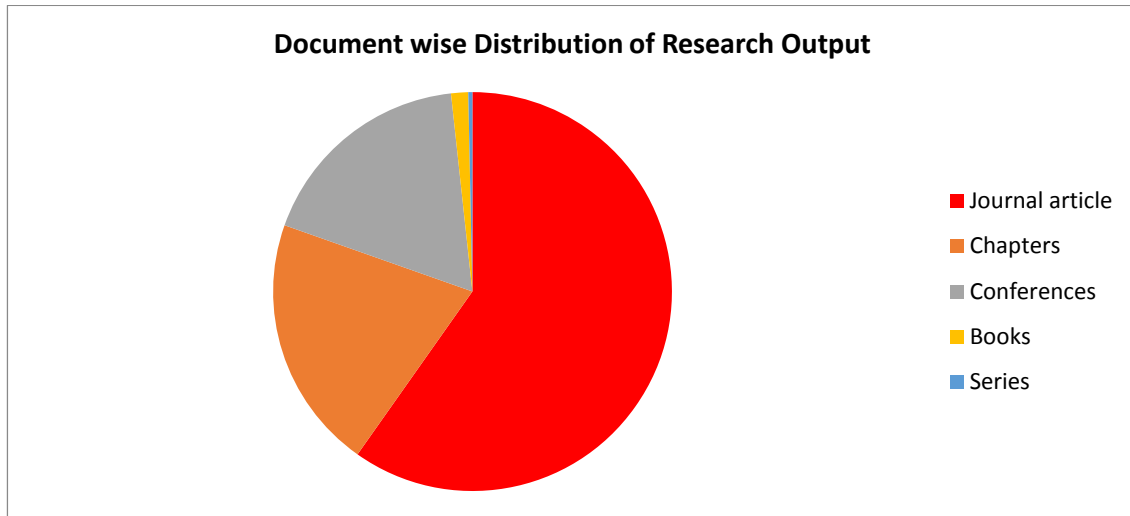


Figure 2: Document wise Distribution of Research Output

The results of research in the field of Social Sciences are published in variety of forms such as journal articles, book chapters, conference proceedings etc. Table 4 shows that journal articles ranks first forming 59.79 percent followed by book chapters having 20.62 percent. Conference papers form 17.86 percent while other formats like books and series are very negligible.

**Table 5 Correlation between the total publications and publications in the field of Social Sciences - University of Madras**

Year	Publications	Percent	Year	Publications	Percent
2001	210	2.59	2001	2	0.85
2002	206	2.54	2002	4	1.69
2003	321	3.96	2003	4	1.69
2004	292	3.60	2004	2	0.85
2005	360	4.44	2005	1	0.42
2006	459	5.67	2006	7	2.97
2007	413	5.10	2007	5	2.12
2008	403	4.97	2008	5	2.12
2009	445	5.49	2009	15	6.36
2010	351	4.33	2010	8	3.39
2011	485	5.99	2011	18	7.63

2012	512	6.32	2012	22	9.32
2013	523	6.46	2013	14	5.93
2014	558	6.89	2014	18	7.63
2015	535	6.60	2015	21	8.90
2016	465	5.74	2016	18	7.63
2017	500	6.17	2017	22	9.32
2018	506	6.25	2018	24	10.17
2019	557	6.88	2019	26	11.02
	8101	100.00	Total	236	100.00

Table 5 shows the overall total publications of University of Madras in all the fields and the publications in Social Sciences for the period from 2001 to 2019. There is no uniformity in growth or decline in all subjects taken together as well as Social Sciences alone from 2001 to 2019. The year 2014 marks the peak of the publication in all the subjects while the year 2019 marks the peak in case of Social science publications. The trend of research over the years for all the subjects and the specific subject social sciences varies. But the correlation coefficient of total publication count and the publication count in the field of Social Sciences is 0.84 which is positive and very strong. This shows that, as the total publications by scholars of University of Madras increases, the publications in Social Sciences also increases.

**Table 6 International collaboration of Social Science Scholars of University of Madras**

<b>Country/Territory</b>	<b>Documents</b>	<b>Percent</b>
United States	13	39.39
Canada	4	12.12
Malaysia	2	6.06
Nigeria	2	6.06
United Arab Emirates	2	6.06
Australia	1	3.03
Brazil	1	3.03
Italy	1	3.03
Japan	1	3.03
New Zealand	1	3.03

Oman	1	3.03
Papua New Guinea	1	3.03
Portugal	1	3.03
Thailand	1	3.03
United Kingdom	1	3.03
	33	100.00

The scholars of University of Madras have contributed 291 publications in the field of Social Sciences of which less than one tenth (33) are of international collaboration. Table 6 shows the international collaboration of scholars from University of Madras. International collaboration with USA is the maximum forming 39.39 per cent of total international collaborative publications followed by Canada forming 12.12 per cent. The other major international collaborators are Malaysia, Nigeria and United Arab Emirates.

### **5. Findings of the Study**

The year wise distribution of publications shows that the highest number of 26 publications have appeared in year 2019. Majority of the papers are contributed by two authorship 101(34.71%). Degree of collaboration is 0.73. Out of 291 papers, 33 papers are published along with international authors.

### **6. Conclusion**

The present study is related to bibliometric analysis of research articles published by the Faculty Members of University of Madras. This study has analysed various aspects such as year wise publications, Authorship patterns and international collaboration. So, this study definitely will help universities to motivate the Faculty Members to improve their research activities.

### **References**

- [1] **Rahman, M., Haque, T.L., & Fukui, T. (2005).** Research articles published in clinical radiology journals: Trend of contribution from different countries, *Academic Radiology*, 12(7) pp825-829
- [2] **Krishnamoorthy G., Ramakrishnan, J., & Devi.(2009).** Bibliometric analysis of literature on diabetes (1995-2004), *Annals of Library and Information Studies*, 56(2) pp150-155.
- [3] **Nagarajan M (2016)** Scientometric Analysis of Research output in Science in Tamilnadu Universities. *Journal of Advances in Library and Information Science*, 5(4) pp348-352
- [4] **Nagarajan M (2019)** Research Productivity of the Faculty Members o Social Science Departments in Annamalai University: A Bibliometric Analysis, *Journal of Emerging Technologies and Innovative Research*, 6(2) pp699-702