

# BIBLIOMETRIC ANALYSIS OF RESEARCH PRODUCTIVITY OF SOCIAL SCIENTISTS IN ALAGAPPA UNIVERSITY, TAMILNADU

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**Abstract:** The paper presents the contribution of Faculty members of Social Sciences in Alagappa University, Tamil Nadu. Describes the year wise growth, form wise distribution of research output, authorship pattern, degree of collaboration and international and institutional collaboration. Studies the impact of research under different existing Social Science Department of the university and analyses the strong and weak areas of university research, collaborative nature of research in terms of the authorship pattern.

**Keywords -** Bibliometrics, Social Sciences and Alagappa University.

## 1. Introduction

Research productivity is an important element in the equation for excellence. Research productivity in academic institutions is reflected in the number and quality of articles published by the affiliated faculty. Productive faculty integrate their findings with those of other observations in order to further knowledge in their chosen field as well as bring current theory and practice into the classroom. In addition, through their research publications in the major journals, faculty members disseminate their research findings around the world. Such scholarly activity brings visibility and prestige to the authors and their affiliated institutions. The crucial importance of published research is universally recognized in the leading academic institutions and this is evident in promotion and tenure decisions and salary determination. With emergence of the prestigious academic institutions in the social science education sector there is wide scope for the study which analyses their productivity in the research field.

## 2. Objectives of the Study

The major objectives of the present study are:

1. To find out growth of publication in social sciences in Alagappa University.
2. To analyse the form wise distribution of research output.
3. To study the authorship pattern and degree of collaboration of the research output.
4. To study the institutional and international collaboration 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 Alagappa University. 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**

**Year wise Distribution of research output**

Year	Frequency of Research Output	Percentage	Growth Rate
2001	0	0.00	
2002	0	0.00	
2003	0	0.00	
2004	0	0.00	
2005	1	0.85	
2006	0	0.00	-1.00
2007	0	0.00	
2008	0	0.00	
2009	2	1.71	
2010	3	2.56	0.50
2011	2	1.71	-0.33
2012	4	3.42	1.00
2013	13	11.11	2.25
2014	3	2.56	-0.77
2015	15	12.82	4.00
2016	5	4.27	-0.67
2017	10	8.55	1.00
2018	16	13.68	0.60
2019	43	36.75	1.69
Total	117	100.00	0.75

Table 1 shows the year wise distribution of research output. It can be seen from the table that the Alagappa University has started publishing from 2005, the research had gained momentum from 2009 onwards. Here too there is no uniformity in growth or decline. It is interesting to note that a maximum number of 43 (36.75%) publications published in the year 2019 and nearly 70 per cent of the total publications of the year 2018 are in the field of Library and Information Science and especially in the Journal "Library Philosophy and Practice".

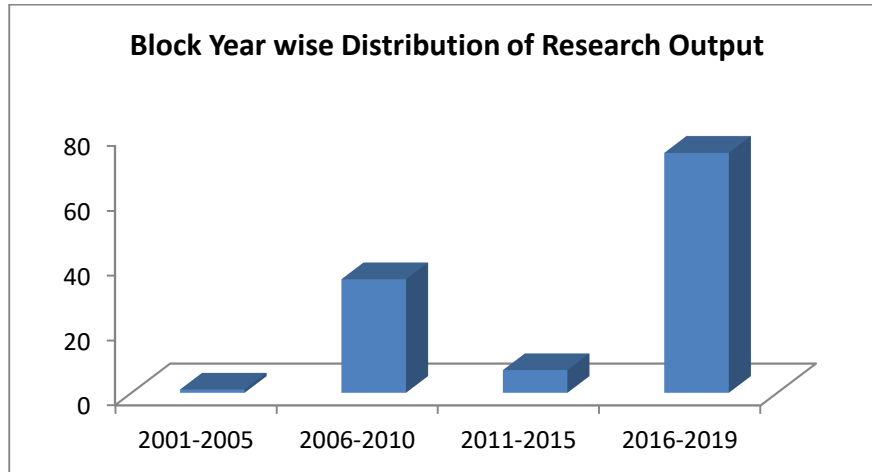
**Table 2**

**Block Year wise Distribution of Research Output**

S.No.	Block Year	No. of Publications	Percentage	Cumulative Percentage
1	2001-2005	1	0.85	0.85

2	2006-2010	35	29.91	30.76
3	2011-2015	7	5.98	36.74
4	2016-2019	74	63.25	100.00
	Total	117	100.00	

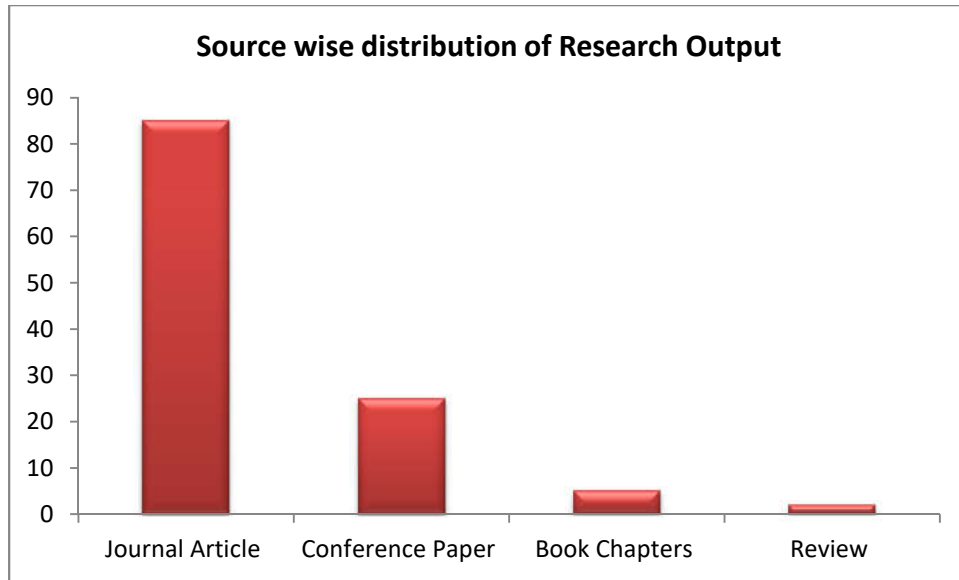
Table 2 shows the block year wise distribution of research output. It is noticed that out of 117 total publications only one (0.85%) publications can be seen during the block year 2001-2005 and 74(63.25%) publications can be seen during the last block year 2016-2019.



**Table 3**  
**Source wise distribution of Research Output**

S.No.	Sources	No. of Publications	Percentage
1	Journal Article	85	72.65
2	Conference Paper	25	21.37
3	Book Chapters	5	4.27
4	Review	2	1.71
	Total	117	100.00

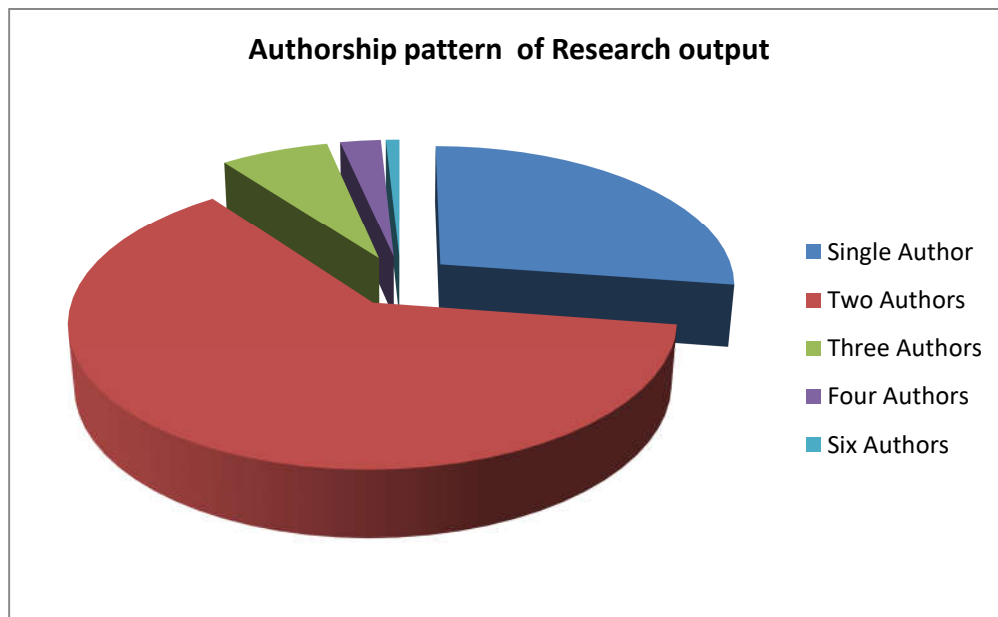
Table 3 shows the source wise distribution of research output. Out of various sources of publications, articles that appeared in the journals have shown a predominant contribution (72.65%) followed by conference papers (21.35%), book chapters (4.27%) and review (1.71%). Hence the majority of the social scientists intend to publish their research papers in journals in general and reputed journals in particular.



**Table 4**  
**Authorship pattern of Research output**

S.No.	Number of Authors	Frequency Research Output	Percentage	Cumulative Percentage
1	Single Author	32	27.35	27.35
2	Two Authors	73	62.39	89.74
3	Three Authors	8	6.84	96.58
4	Four Authors	3	2.56	99.14
5	Six Authors	1	0.85	100.00
	Total	117	100.00	

Table 4 indicates the authorship pattern of research output. The authorship pattern by Scholars of Alagappa University shows that 62.39 per cent of publications are by two authors and 27.35 per cent are by single authors. Publications by three authors is 6.84 per cent. From this it can be inferred that 3.41 per cent of the publications are by more than three authors and nearly three fourth of the publications are collaborative in nature.



**Table 5 Degree of Collaboration**

Single Author (NS)	Percent	Multiple Authors (NM)	Percent	Total Number of Authors	Degree of collaboration
32	27.35	85	72.65	117	0.73

A study of data from Table 5 indicates the degree of collaboration in research output. The degree of collaboration is 0.73 during the study period. Out of 117 literature published, 32 papers are published by single author which is 27.35 percent of total output and 85 are from multiple authors which is 72.65 percent of total output.

**Table 6**  
**Correlation between the total publications and publications in the field of Social Sciences**

Year	Publications	Percentage	Year	Publications	Percentage
2001	48	1.32	2001	0	0.00
2002	49	1.35	2002	0	0.00
2003	55	1.51	2003	0	0.00
2004	72	1.98	2004	0	0.00
2005	65	1.79	2005	1	0.85
2006	107	2.94	2006	0	0.00
2007	104	2.86	2007	0	0.00
2008	83	2.28	2008	0	0.00
2009	95	2.61	2009	2	1.71
2010	134	3.68	2010	3	2.56
2011	223	6.13	2011	2	1.71
2012	232	6.38	2012	4	3.42
2013	260	7.14	2013	13	11.11
2014	244	6.71	2014	3	2.56
2015	275	7.56	2015	15	12.82
2016	269	7.39	2016	5	4.27
2017	264	7.25	2017	10	8.55
2018	351	9.65	2018	16	13.68
2019	709	19.48	2019	43	36.75
	3639	100.00	Total	117	100.00

Table 6 shows the overall total publications of Alagappa University 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 2019 marks the peak of the publication in all the subjects and 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 0.94 which is positive and very strong. This shows that, as the total publications by scholars of Alagappa University increases the publications in Social Sciences also increases.

**Table 7**

**International collaboration of Social Sciences research**

<b>Country/Territory</b>	<b>Publications</b>	<b>Percentage</b>
Viet Nam	15	40.54
Indonesia	11	29.73
Russian Federation	8	21.62
Australia	2	5.41
Thailand	1	2.70
Total	37	100.00

Table 7 shows the international collaboration of scholars from Alagappa University. The scholars of Alagappa University have contributed 117 publications in the field of Social Sciences of which nearly one fourth (37) are of international collaboration. International collaboration with Vietnam is the maximum forming 40.54 per cent of total international collaborative publications followed by Indonesia forming 29.63 per cent. The other international collaborators are Russia followed by Australia and Thailand.

Table 8

**Institutional collaboration of Social Sciences research**

<b>Institution</b>	<b>Documents</b>
Ho Chi Minh City Open University	15
Vignan Institute of Information Technology	10
Ton-Duc-Thang University	4
Institute for Resource Analysis and Policy IRAP	4
Kuban State Agrarian University	3
Vellore Institute of Technology, Vellore	3
Togliatti State University	3
Academy of Maritime Education and Training	3
SSN School of Management and Computer Applications	2
Govt. First Grade College	2
Government Law College	2
Madras Institute of Development Studies	2
Financial University under the Government of the Russian Federation	2
Sekolah Tinggi Ilmu Manajemen Sukma	2

The scholars of Alagappa University in the field of Social Sciences have a total of 57 papers of inter- institutional collaborations of which the highest collaboration is with Akshaya Ho Chi Minh City Open University with 15 papers and Vignan Institute of Information Technology with 10 papers. The other collaborating institutions are Ton-Duc-Thang University, Institute for Resource Analysis and Policy IRAP, Kuban State Agrarian University, Vellore Institute of Technology, Vellore, Togliatti State University, Academy of Maritime Education and Training, etc.

### 5. Findings of the Study

The year wise distribution of publications shows that the highest number of 43 publications have appeared in year 2019. Majority of the papers are contributed by two authorship 73(62.39%). Degree of collaboration is 73. Out of 117papers, 37 papers are published along with international authors. Articles that appeared in the journals have shown a predominant contribution (72.65%).



## 6.Conclusion

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

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