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Growth of Research Publications in Social Sciences and Humanities in Odisha as Reflected in SCOPUS Database (1996-2015)

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Abstract

This paper attempts to analyze the growth of research work in the field of social sciences and humanities in Odisha during the period 1996 to 2015. The analysis has been done taking into account the publication output of Odisha as reflected in Scopus database. The present study analyzes the year wise growth of publications, most productive authors, major subject areas of research, types of publications preferred by the researchers, preferred journals and the major productive institutions in the field of social science and humanities.

Keywords: Bibliometrics, Humanities, Odisha, Research Output, Scopus, Social Sciences

1. Introduction

To measure the impact and contribution of any State, Institution or Researcher, citation studies are very much useful in finding the relevant data. Research productivity is the backbone for any researchers who primarily publish their results in the form of articles, conference papers, and reviews etc. This study aims to make an assessment of the research work carried out in Social Sciences and Humanities disciplines in the state of Odisha from the period 1996 to 2015 as reflected in the Scopus database.

2. Review of Literature

Mahapatra & Jena (2006)[9] evaluated the growth of scientific research output of Orissa published in Orissan Studies (1985-2004), a bibliographical compendium of published research output of the state. The study, which includes 875 research papers in 40 journals, analyzed the data for authorship pattern, category of journals, place of origin, length of papers and productivity of journals and found that there is a positive growth of research papers published from 1995 to 2004 and majority of the researchers prefer to publish their works in collaboration with others.

Majhi & Maharana (2012)[10] evaluated research performance of different science departments of Sambalapur University. Das, Rout & Parida, (2013)[4] analyzed the publication pattern based on data collected from Web of Science (WoS) for the period 1967-2011; they found that from 1972, the publications grew steadily up to 1982 but after that the growth is irregular, then again rapid growth noticed from 2006 onwards. Authors of the state have collaborated with most of the developed countries of the world. It also shows that the publications of new institutes are increasing but output of old colleges has decreased. Some priority areas of importance to the State such as clinical sciences, geology, environmental sciences, marine sciences, and computer sciences are being neglected.

Swain & others (2013)[14] examined the research productivity of KIIT University based on 361 papers indexed in Scopus between 2000 and February 2013. The study found that majority of the papers is of multiple authorship.

Chaurasia & Chavan (2014)[3] studied output of IIT, Delhi. It was found that out of total 6109 publications, 5731 (93.81%) were journal articles followed by 'conference proceedings' (461 documents). USA has high collaborative link with IIT Delhi and the research output of faculty members shows substantial growth both quantitatively and qualitatively with the development of the institution.

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Hadagali (2014)[6] examined the contribution of scientists and researchers from Karnataka state (India) as per WoS during 1999-2011 and found that the Activity Index of Engineering, Materials Science, Biochemistry and Molecular Biology, Crystallography, Food Science and Technology and Computer Science are higher than that of India's average.

Balasubramani & Parameswaran (2014)[2] analyzed the growth and contribution of research carried out by the scientists of BHU. The Institute of Technology leads in publications productivity with 1482 (21.3%) articles.

Goutam and Mishra (2015)[5] while studying the research trends of BHU found that research productivity is increasing at an average rate of 104.1 publications per year. Co-authored papers were growing and the University had collaboration with 18 countries and 28 Indian states.

Satpathy & Sa (2015)[12] analyzed the research output of state universities of Odisha. It was found that Utkal University is the most productive institution with 37.76% of total publications.

Singh (2015)[13] made a scientometric analysis of research publications of IITB published during 2009 to 2014 and indexed in WoS and found that the number of papers with more than three authors has been increasing over the years suggesting increasing collaborative research.

3. Objectives of the Study

The objectives of the present study are as follows:

- To find out year-wise growth of research in social science and humanities in the state of Odisha.
- To identify the most productive researchers and institutions of Odisha.
- To find out main subject areas of research in social sciences and humanities in the state.

4. Methodology and Data Source

The study is based on the Scopus database for the period 1996-2015. The records required for the study have been downloaded using the following search strategy: "(AFFIL (Orissa) OR AFFIL (Odisha)) AND SUBJAREA (mult OR arts OR busi OR deci OR econ OR psyc OR soci) AND PUBYEAR > 1995 AND PUBYEAR < 2016". The search yielded a total of 869 documents and the records were imported into MS-Excel and PoP (Publish or Perish) for statistical and citation analysis.

5. Data Analysis

Table 1 shows the year-wise growth of publications in Social Science and Humanities. It is observed that out of total 869 publications, maximum 151(17.37%) numbers of publications were published in 2014.

Table 1. Year-wise growth of publications in Social Science and Humanities

Sl. No.	Year	No of document (N=869)	Percentage %
1	2015	140	16.11
2	2014	151	17.37
3	2013	107	12.31
4	2012	96	11.04
5	2011	65	07.47
6	2010	65	07.47
7	2009	48	05.52
8	2008	31	03.56
9	2007	27	03.10
10	2006	17	01.95
11	2005	16	01.84
12	2004	16	01.84
13	2003	14	01.61
14	2002	8	0.920
15	2001	9	01.03
16	2000	10	01.15
17	1999	16	01.84
18	1998	15	01.72
19	1997	5	0.57
20	1996	13	1.49

Table 2 lists the 15 most productive authors with regard to number of document contributions. To find out top 15 productive authors, total count method was used and equal weightage was given to each author. The analysis of Table 2 reveals that out of 169 numbers of publications, S. S.Mahapatra is the most productive author with the highest number of publications.

Table 2. Number of contributions by 15 Aauthors

Rank	Author	No. of Documents (N=169)	Percentage %
1	Mahapatra, S.S.	21	12.42
2	Behera, H.S.	19	11.24
2	Tripathy, S.C.	19	11.24
3	Mishra, S.P.	18	10.65
4	Datta, S.	12	07.10
5	Mohanty, S.	10	05.91
6	Nayak, J.	9	05.32
6	Panda, K.C.	9	05.32
7	Kamilla, S.K.	8	04.73
7	Mishra, P.K.	8	04.73
7	Mohapatra, D.P.	8	04.73
8	Choudhary, R.N.P.	7	04.14
8	Mohanty, M.K.	7	04.14
8	Naik, B.	7	04.14
8	Subudhi, B.	7	04.14

5.1 Most Productive Institutions of Odisha

Table 3 shows the research productivity of top 20 contributing Institutions of Odisha. The total number of publications of these Institutions exceeds 869 because authors of two or more institutions publish many publications jointly. It is observed that technology institutes contributed more in social sciences and humanities as evident from the Table 3. Out of twenty institutes, 10 are Technical colleges and this is surprising as social science and humanities are not core subjects in Technology institutions. Six Universities have contributed substantially.

Surprisingly two medical colleges have made contributions to social sciences and humanities, even though the subjects are fringe areas for medical colleges. Only one management institute and one Research Centre have contributed to this area even though they are specialized institutes, it is found that National Institute of Technology, Rourkela is in top position contributing highest number with 106 (12.19%) publications out of total 869 publications. This figure shows that these engineering and management institutions have also social science and humanities disciplines in their respective institutions.

5.2 Source Wise Distribution of Publications from (1996-2015)

Table-4 depicts the distribution of research publications published in different types of sources; 663 publications (76.29%) are papers in Journals followed by Conference Papers (125; 14.84%).

Table 3. Institution-wise publication output

S.N.	Rank	Institute's Affiliation	Documents	%age
		Institutes of Technology		
1	1	National Institute of Technology, Rourkela	106	12.9
2	3	Kalinga Institute of Industrial Technology (KIIT),	82	09.43
3	5	Veer Surendra Sai University of Technology, Burla	55	06.32
4	7	Indian Institute of Technology, Bhubaneswar	21	02.41
5	8	Institute of Textile Technology	17	01.95
6	9	Orissa University of Agriculture and Technology	16	01.84
7	11	Institute of Minerals and Materials Technology	13	01.49
8	12	Ghanashyam Hemalata Inst. of Technology Mangmt	12	01.38
9	13	Centurion University of Technology and Management	9	01.03
10	14	College of Engineering, Bhubaneswar	8	01.03
		Universities		
11	2	Siksha O Anusandhan University, Bhubaneswar	82	09.43
12	4	Utkal University, Bhubaneswar	49	05.64
13	6	Sambalpur University, Burla	39	04.48
14	6	Berhampur University, Berhampur	39	04.48
15	9	Ravenshaw University	16	01.84
16	12	North Orissa University, Baripada	12	01.38
		Medical College		
17	12	M.K.C.G. Medical College, Berhampur	12	01.38
18	13	Regional Medical Research Centre, Bhubaneswar	9	01.03
		Research Institute		
19	13	Central Rice Research Institute, Cuttack	9	01.03
		Management Institutes		
20	10	Xavier Institute of Management, Bhubaneshwar	14	01.61
		Others		
21		Total 159 Universities and Institutions (their contributions is 32.89%) (not under Top 21 Institutes.	139	32.89

Table 4. Types of publications for used for communication

Document Type	No. of Documents	Percentage %
Article	663	76.29
Conference Paper	125	14.84
Review	36	04.14
Book Chapter	19	02.18
Letter	12	01.38
Article in Press	7	00.80
Book	3	00.34
Editorial	2	00.23
Note	2	00.23
Total	**869**	**100**

5.3 Research Output in Major areas of Social Sciences and Humanities

Table 5 depicts the major areas of research (as reflected in Scopus) in the Social Science and Humanities disciplines. Due to the interdisciplinary nature of research, the total number of records in each subject is more and is not matching with total figure. Social science is the major subject areas of contribution followed by Business, Management & Accounting.

Table 5. Major output of sources for research publications

Sl. No.	Subject Area	No. of Contributions	Percentage (%)
1.	Social Sciences	377	43.40
2.	Business, Management and Accounting	217	25.00
3.	Economics, Econometrics and Finance	97	11.20
4.	Multidisciplinary	90	10.40
5.	Arts and Humanities	80	09.20
6.	Psychology	28	03.22
	Total	**889**	**100**

5.4 Authorship Pattern

It is seen that even in social sciences and humanities multiple author publications are more compared to single author papers.

Sl. No.	Author	No of Publication
1	Single Author	181
2	2 Author	286
3	3 Author	236
4	> 3 Author	158

6. Major Findings

- National Institute of Technology, Rourkela is found to be the most productive Institution in Odisha with 12.19% of publications.
- Journals are the most preferred channels for publication.
- Social science research is increasingly becoming collaborative in nature.
- Social Science is the major focus accounting for 43.4% of all publications followed by Business, management and accounting (25%).

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