Research Productivity of the Faculty of Education, Annamalai University: A study

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Abstract

The paper presents the contribution of Education faculty members of Annamalai University, describes the year wise growth and form wise distribution of the research output. Studies the impact of research under different departments in the education faculty of the Annamalai University and analyses the strong and weak areas of university research, collaborative nature of research in terms of authorship pattern. The results show that there is significant growth of research productivity in the faculty of education during the period of study with less collaboration.

Keywords: Faculty of Education; Paper Publication; Research Output.

Introduction

Bibliometrics is the organization, classification and quantitative evaluation of publication patterns of macro and micro communications along with their authorship. It is a tool by which the state of science and technology can be observed through the traces of communication in science and technology system, most notably the published documents which comprise books, monographs, reports, papers in serials and periodicals and now-a-days also e-books and e-journals as well as in the broadest sense the WEB. Researchers in several disciplines have been interested in publication productivity as a means of assessing scholarly excellence of individual researchers within a field. Publication productivity as measured by the numbers of papers has also been regarded as one of the main indicators of reputation of institutions in general and academic institutions in particular. There is a growing awareness that the advantages of basing research and subsequent political choices, on criteria that lend themselves for more quantitative evaluation. The researchers of Library and Information Science extensively use the

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bibliometrics as a tool to identify the pattern of publication, authorship and secondary journal coverage with the objective of getting an insight into the dynamics growth of knowledge in the areas under consideration. This consequently leads to the better organization of information resources which is essential for its most effective and efficient use.

The Annamalai University is one of the largest residential universities in the country founded by Dr. Rajah Sir Annamali Chettiar. It was first started as the Meenakshi College in 1920 became University in 1929 and presently it has 48 department of study. It has strength of about 40000 students pursuing different regular programs of study. The university has 5 departments (table 1) under the faculty of education.

Objectives of the study

The main objectives of the present study are:

- a. To analyze the year-wise distribution of the research output of the faculties of education of Annamalai University during 2007 to 2011.
- b. To study the department-wise output of the faculties of education and to identify strong and weak disciplines of faculties of education with reference to the research output.
- c. To analyze the form-wise distribution of research output.
- d. To analyze the authorship pattern of the research output.
- e. To study the collaborative efforts by the academics of Annamalai University.

Departments in Education Faculty	Year of Establishm	
Department of Education	1953	
Department of Psychology	1961	
Department of Physical Education & Sports Science	1974	
Department of Life Long Learning	1986	

Table 1:	Departments	in Education	faculty
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Methodology

The present study uses 5 years publication output data from 2007-2011 to understand the broad characteristics of the research output of the education faculties of the university. The data for the study was taken from the Annual report of the university from 2007-2011 which were then tabulated and analyzed.

Data Analysis

Year-wise Growth of research output

Table 2 shows that year-wise growth rate of research output by the education faculty of Annamalai University. It could be noted that during the five years of study, its publication out- put shows a steady rise, from 83 papers (16.84%) in 2007 to 95 papers (19.27%) in 2011. The highest being 162 papers in 2010.

Table 2: Year-wise Growth of research output

Year	Number of Research Output	Percentage	Cumulative total number of research output	Cumulative percentage	
2007	83	16.84	83	16.84	
2008	75	15.21	158	32.05	
2009	78	15.82	236	47.87	
2010	162	32.86	398	80.73	
2011	95	19.27	493	100	
Total	493	100			

Department-wise distribution of Research Output

There are 4 departments under the Education Faculty of the University. The publication output of the departments is given in table-3. The department of physical education top with 214 publication which is 43.41 percent of the total contribution. The second rank is to department of education with 199(40.37%) publications. The less number of publications are brought out by the department of psychology, i.e., 29(5.88%) publications. The reason is the faculty members in the topped departments is more in number than the other departments.

Table 3: Department-wise distribution of Research Output

S. No	Department	Number of Research Output	Percentage	Cumulative total number of research output	Cumulative Percentage
1.	Dept. of Education	199	40.37	199	40.37
2.	Dept. of Psychology	29	5.88	228	46.25
3.	Dept. of physical education & Sports science	214	43.41	442	89.66
4.	Dept. of Life Long Learning Total	51 493	10.34 100	493	100

Form-wise distribution of research output

Table 4 presents the form-wise distribution of research output. The results of the study points out 163(33.06%) of the publication are journal articles, 107(21.70%) are articles in conference proceedings, 223(45.24%) are articles in seminar volumes.

Authorship patterns

Table 5 shows the authorship patterns of the research productivity. It could be noted that out of 493 total publication 430(87.22%) are single authored, with two authors contributing 51(10.34%), papers, 10 (2.03%) are three authors, and more than three authors contributing 2 papers (0.41%).

Table 4:	Form-wise	distribution	of	research	output
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S. No	Forms	Number of research output	Percentage	Cumulative total number of research output	Cumulative percentage
1.	Journal articles	163	33.06	163	33.06q
2.	Conference proceedings	107	21.70	270	54.76
3.	Seminar volume	223	45.24	493	100
	Total	493	100		

Table 5: Authorship patterns

S.No	Author	Number of research output	Percentage	Cumulative total number of research output	Cumulative percentage
1.	One	430	87.22	430	87.22
2.	Two	51	10.34	481	97.56
3.	Three	10	2.03	491	99.59
4.	Above three	2	0.41	493	100
	Total	493	100		

Collaboration of the Research

As per the authorship pattern, there are 430 papers which are single authored and only 63 papers which are multiple authored (table 6) which points out that there is least collaboration in the research activities in the Education faculty of the Annamalai University. Extend of collaboration can be measured with the help of multi-authored papers. To measure the coefficient is the ratio of the number of collaboration research papers during a certain period of time. As per the formula given by K.Subramanyan (1983), for determining the degree of collaboration in a discipline, the value of collaboration will be between 0 and 1.

Table 6: Collaboration of the Research

To determine the degree of collaboration of publications, the number of single authored and multi-authored publications is calculated and is applied to the formula C = Nm/Nm+Ns

C = Degree of collaboration

Nm = Number of multi-authored works

Ns = Number of single-authored works

Here, C = 63/493

= 0.127

Hence, the Degree of Collaboration of Publications of the Education faculty of the Annamalai University is 0.127.

Findings and Suggestions

S.No	Authorship Patterns	Number of research output	Percentage	Cumulative total number of research output	Cumulative percentage
1.	Single Author	430	87.22	430	87.22
2.	Multiple Author	63	12.78	493	100
	Total	493	100		

The research output shows a steady growth during the period of study which shows that the departments under the faculty of education are successful in carrying out research activities. Those departments which show a decrease in the output needs to be further encouraged. Most of the papers are published as seminar volume. There is also paper published in the journal articles and conference proceedings which indicates that faculties are getting enough opportunities to present their papers. The authorship pattern shows that there is more singleauthored papers than multi-authored and also there is a decline in the degree of collaboration of research activities. To increase collaboration in research output, the participatory research activities need to be encouraged which will improve the quality of research.

More incentives, rewards and encouragement should be given to the faculty members for publishing in high impact journals. In addition, faculty should be encouraged to conduct participatory research projects with other university departments so that their interaction with the outside world can be increased. Also, the existing library and information facilities in the university should be strengthened and access to electronic resources should be provided.

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