

Bibliometric Analysis of Ph.D. Theses in political Science Submitted to select Universities in Andhra Pradesh

K. Lakshmi Narayana Reddy

Research Scholar
Dept. of Library and Information Science
S.K. University, Anaparthi-515 003, A.P. India.

Dr. K. Surendra Babu

Asst. Professor & Librarian i/c
S.V. University Library
S.V. University
Tirupati- 517502, A.P. India

Abstract - *Bibliometric analysis of Ph.D. theses in Political Science submitted to select universities in Andhra Pradesh, for the period of 1980-2015 has been carried out. The study is based on the 34,986 citations cited in 217 Ph.D. theses of Political Science. The Study presents analysis of several parameters like bibliographic form, year-wise distribution of theses, authorship pattern, ranking of core journals and country-wise distribution of cited documents. The Study finds that books are the most preferred sources of information used by the researchers in the field of Political Science accounting for 51% and most of the citations (98.67%) are contributed by single author. India (62.3%) is the largest producer of literature in the field of Political Science compared to other countries and most dominant language was English (88.08%).*

Keyword: Bibliometric Study, Citation Analysis, Ph.D. Theses, Political Science.

1. INTRODUCTION

Bibliometrics is the study and measurement of the publication patterns of all forms of written communication and their authors by applying mathematical and statistical methods. The structure of the literature is analyzed using various tools like counting, rank-frequency distributions and citation analysis. Bibliometrics studies have a range of applications to such areas like book and journal acquisitions, study of communication patterns, library use analysis, obsolescence of literature, identification of specialties, and identification of influential authors and papers. A number of studies have been conducted based on the citations in journals, monographs and thesis in different disciplines. The present study is undertaken to investigate the characteristics of the literature of Political Science used by the researchers by analyzing the citations in doctoral dissertation theses.

2. REVIEW OF LITERATURE

Zafrunisha and Pulla Reddy (2012) were examined 141 theses in Psychology, accepted between 1963-2005 by Sri Venkateswara University, Tirupati, Osmania University, Hyderabad, and Andhra University, Visakhapattanam. The result revealed that ninety one percent of citations were published in English language. Country-wise distribution of citations in Biological sciences showed that the researchers in Biological sciences were heavily citing the literature published from USA, UK, India. These three countries contributed (80%) of total citations. Multi-authored papers contributed 73.33% of total citations.

Krishna Dass and Jayaraman (2013) were analyzed the 7892 citations in the Ph.D. in Management dissertations submitted in the year 2013 at various universities in India. The study found that journals (56.81%) are most dominated from, followed by books (21.88%), e-resources (13.16%), reports (5.66%), theses (1.57%), conferences (0.64%) and newsletters (0.25%).

Veerabasavaiah and Padmavathi (2014) analyzed 6688 citations appended to 42 Ph.D. theses in Education accepted by the Bangalore University, Bangalore during 2003 to 2012. The study revealed that journals appeared to be the most preferred sources of information contributing the highest number of citations (39.43%) and remaining citations were from books (37.93%), and theses (9.20%). The geographical distributions shows that the researchers in Education have heavily cited the literature published from USA (63.94%), India (24.70%) and UK (11.36%). The Journal of Applied Psychology was ranked first with 137 (5.20%) citations, followed by the Indian Educational Review with 97 (3.68%) and the Journal of Educational Research with 75 (2.58%) citations.

Padmaja and Surendra Babu (2014) analyzed citations appended to 123 Ph.D. theses in Economics accepted by Sri Venkateswara University, Tirupati, during 1970 to 2010. The study revealed that books appeared to be the most preferred sources of information contributing the highest number of citations (49.57%) and remaining citations were from journals (38.85%), reports (2.40%) and monographs (1.85%). The country-wise distribution of citations showed that USA occupied first position accounting for 36.73 percent of the total citations, followed by India (28.08%) and UK (16.43%). Single author contributions contributed 65.14% citations, two author contribution 20.48% and three authored contributions 12.44%.

Subba Rayudu and Surendra Babu (2014) conducted a study on citation analysis of Ph.D. thesis in Philosophy submitted to Sri Venkateswara University during the year 1967-2010. The study revealed that books appeared to be the most preferred sources of information contributing the highest number of citations (88.87%), followed by journals (6.7%), Government publications (3.7%), and Seminar/Conference proceedings (0.3%). The authorship pattern of citations shows that 80.74% of citations are contributed by single authors, followed by two authors 1.72% and three authors 0.02%.

Ranveer and Vaishali (2016) conducted a study on citation analysis of Ph.D. theses in Statistics submitted to Dr. B.R. Ambedkar Marathwada University during the year 1967-2012. The study

revealed that journals appeared to be the most preferred sources of information contributing the highest number of citations (60.20%), followed by books (23.79%), reviews (1.61%), and reports (1.47%). The authorship pattern of citations shows that 57.17% of citations are contributed by single authors, followed by two authors 30.19% and three authors 10.16%.

3. Objectives of the present study

The objectives of the study are:

1. To find out the various sources of literature used by researchers in Political Science;
2. To find out the distribution of citations according to language and the country of origin;
3. To study the nature of authorship pattern in the literature of Political Science;
4. To identify the core journals as indicated by the citation frequencies;
5. To determine the ranking of books preferred by researchers of Political Science; and
6. To trace the core publishers in the field of Political Science; and

4. Hypotheses

The following hypotheses have been formulated, based on the objectives of the present study:

- Books would be most cited sources of information by the researchers in the field of
- Political Science;
- The literature of Political Science would be published predominantly in the English language;
- Single authorship would be high by compared to multiple authorship in the period of study;

5. Methodology

The present study is concerned with the analysis of citations appended to the doctoral theses accepted in the field of Political Science for the award of doctoral degrees by Sri Venkateswara University, Tirupati, Andhra University, Visakhapattanam, Sri Krishnadevaraya University, Anantapur and Acharya Nagarjuna University, Guntur. The data collected from 34,986 citations which are appended to 217 theses, is utilized for the present investigation.

The analysis with respect to the different characteristics of literature is carried out on the total citations appended to the theses in Political Science.

The citations in Ph.D. theses of Political Science are given as foot notes or at the end of each chapter or at the end of theses have been noted down on slips. Further “Ulrich International Periodical Directory” and other bibliographies were consulted to know the other particulars of citations cited in the theses.

The data is fed into the computer using MS-Excel software package and processed using the Statistical Package for Social Sciences (SPSS).

6. Scope and limitations of the present study

The present study is concerned with the analysis of citations cited in doctoral theses which were accepted during 1980 to 2015 in the field of Political Science for the award of doctoral degree by Sri Sri Venkateswara University, Tirupati, Andhra University, Visakhapattanam, Sri Krishnadevaraya University, Anantapur and Acharya Nagarjuna University, Guntur. The data collected from 34,986 citations which are appended to 217 theses, is utilized for the present investigation

7. Findings of the study

7.1. Bibliographic form-wise distribution of citations

The distribution of citations of different bibliographic forms in Political Science is shown in Table 7.1.

Table 7.1
Bibliographic form-wise distribution of citations in Political Science

S. No	Bibliographic form	No. of citations	Percentage	Cumulative No. of citations	Cumulative Percentage
1	Books	17,842	51	17,842	51
2	Journals	6,997	19.99	24,839	70.99
3	Government Publications	3,495	9.98	28,334	80.97
4	Reports	2,102	6.01	30,436	86.98
5	Magazines/Newspapers	1,408	4.03	31,844	91.01
6	Encyclopedias/ Yearbooks	712	2.03	32,556	93.04
7	Seminar/Conference Proceedings	691	1.98	33,247	95.02
8	Web Resources	530	1.51	33,777	96.53
9	Dissertations/Theses	524	1.50	34,301	98.04
10	Un-identified	685	1.96	34,986	100
	Total	34,986	100	34,986	100

It is observed from Table 7.1 that books appears to be the most preferred sources of information used by the researchers in the field of Political Science accounting for 51%. Journals are the second most cited source accounting for 19.99% of total citations. The third highest number of citations is Government publications accounting for 9.98%. It is followed by reports (6.01%), magazines/newspapers (4.03%), Encyclopedias/yearbooks (2.03%), seminar/conference proceedings (1.98%) web resources (1.51%) and dissertations/theses (1.50%). It shows that the research scholars in the field of Political Science are mainly use books for collecting the information.

7.2. Language-wise distribution of citations

The distribution of citations according to language in Political Science is shown in Table

Table 7.2
Language-wise distribution of citations in Political Science

S. No	Language	No. of Citations	Percentage	Cumulative No. of Citations	Cumulative Percentage
1	English	30,815	88.08	30,815	88.08
2	Telugu	2,843	8.13	33,658	96.21
3	Hindi	305	0.87	33,963	97.08
4	French	42	0.12	34,005	97.20
5	Japanese	17	0.04	34,002	97.25
6	Italian	12	0.03	34,014	97.28
7	Un-identified	952	2.72	34,986	100
	Total	34,986	100	34,986	100

It is evident from the Table 7.2 that English language occupies the first place with 88.08%. This is followed by Telugu (8.13%), Hindi (0.87%), French (0.12%), Japanese (0.04%) and Italian (0.03%).

7.3. Country-wise distribution of citations

Table 7.3 show the country-wise scattering of citations in Political Science. It is evident from the table that the researchers in Political Science cited the documents originating from 16 countries of the world.

Table 7.3
Country-wise distribution of citations in Political Science

S. No	Country	No. of citations	Percentage	Cumulative No. of citations	Cumulative Percentage
1	India	21,794	62.30	21,794	62.30
2	U.S.A	6,854	19.60	28,648	81.90
3	U.K	4,522	12.93	33,170	94.83
4	Bangladesh	105	0.30	33,275	95.13
5	Srilanka	79	0.22	33,354	95.35
6	Australia	75	0.21	33,429	95.56
7	Pakistan	72	0.20	33,501	95.76
8	Sweden	69	0.19	33,570	95.95
9	China	65	0.18	33,635	96.13
10	Germany	62	0.17	33,697	96.30
11	France	48	0.13	33,745	96.43
12	Newzeland	37	0.10	33,782	96.53

13	Russia	35	0.10	33,817	96.63
14	South Africa	30	0.09	33,847	96.72
15	Italy	28	0.08	33,875	96.80
16	Canada	23	0.06	33,898	96.87
17	Un-identified	1,088	3.12	34,986	100
	Total	34,986	100	34,986	100

It is evident from Table 4.5 that the highest citations are found to be from India (62.30%), followed by U.S.A. (19.60%) and U.K (12.93%). These three countries cover 94.83% of total citations. The remaining 5.17% of citations are scattered from 13 other countries. Among them Bangladesh (0.30%), Srilanka (0.22%), Australia (0.21%), Pakistan (0.20%), Sweden (0.19%), China (0.18%), Germany (0.17%), France (0.13%), Newzeland (0.10%), Russia (0.10%), South Africa (0.09%), Italy (0.08%), and Canada (0.07%). This shows that researchers in Political Science belonging to Sri Venkateswara University, Andhra University, Sri Krishnadevaraya University and Acharya Nagarjuna University are heavily citing the documents originating from India.

7.4. Authorship pattern

The distribution of citations of books and journal articles according to number of authors is shown in 7.4 and 7.5.

7.4.1 Authorship pattern of books in Political Science

The distribution of book citations according to number of authors in the field of Political Science is shown in Table 7.4.

It is evident from Table 7.4 that most of the books (98.67%) are single authored books. Two–authored books account for 0.98%, three authored books account for 0.31% and more than three authored books account for 0.07% of the total cited books. Thus single authored books are predominant in Political Science.

Table 7.4
Authorship pattern of books in Political Science

Year	Single Author Books	Multiple Author Books				Total Citations
		Two	Three	More than Three	Total	
1980-1984	321 (90.68%)	26 (7.35%)	7 (1.97%)	0 (0%)	33(9.32%)	354(100%)
1985-1989	405 (94.63%)	18 (4.21%)	5 (1.16%)	0(0%)	23(5.37%)	428(100%)
1990-1994	1,531 (98.27%)	20 (1.29%)	7 (0.44%)	0(0%)	27(1.73%)	1,558(100%)
1995-1999	3,489 (98.96%)	25 (0.71%)	10 (0.28%)	2(0.05%)	37(0.14%)	3,526(100%)
2000-2004	2,832 (98.96%)	22 (0.77%)	6 (0.21%)	2(0.06%)	30(1.04%)	2,862(100%)
2005-2009	3,990 (99.01%)	29(0.72%)	8 (0.19%)	3(0.07%)	40(0.99%)	4,030(100%)
2010-2015	5,035 (99.04%)	34(0.67%)	11 (0.22%)	4(0.07%)	49(0.96%)	5,084(100%)
Total	17,603 (98.67%)	174(0.98%)	54 (0.31%)	11(0.07%)	239(1.33%)	17,842(100%)

7.4.2. Authorship pattern in journal articles in Political Science

The distribution of journal citations according to number of authors in the field of Political Science is shown in Table 7.5.

Table 7.5
Authorship pattern in journal articles in Political Science

Year	Single Author Papers	Multiple Author Papers				Total Citations
		Two	Three	More than Three	Total	
1965-1969	166 (99.40%)	1 (0.59%)	0(0%)	0 (0%)	1(0.59%)	167 (100%)
1970-1974	198(100%)	0(0%)	0(0%)	0(0%)	0(0%)	198(100%)
1975-1979	170(96.59%)	4(2.27%)	2(1.13%)	0(0%)	6(3.40%)	176(100%)
1980-1984	205(96.69%)	6(2.83%)	1(0.47%)	0(0%)	7(3.30%)	212(100%)
1985-1989	252(95.45%)	9(3.40%)	3(1.13%)	0(0%)	12(4.54%)	264(100%)
1990-1994	288(93.81%)	12(3.90%)	7(2.28%)	0(0%)	19(6.18%)	307(100%)
1995-1999	238(97.14%)	6(2.44%)	1(0.40%)	0(0%)	7(2.85%)	245(100%)
2000-2004	242(95.65%)	7(2.76%)	4(1.58%)	0(0%)	11(4.34%)	253(100%)
2005-2009	488(91.90%)	32(6.02%)	11(2.07%)	0(0%)	43(8.09%)	531(100%)
2010-2014	396(94.73%)	19(4.54%)	3(0.71%)	0(0%)	22(5.26%)	418(100%)
Total	2,643(95.38%)	96(3.46%)	32(1.15%)	0(0%)	128(4.61%)	2771(100%)

It is evident from Table 7.5. that most of the papers (95.38%) are single authored papers. Two–authored papers contribute 3.46% and three authored papers contribute 1.15% of the total number of papers cited. Thus single authored papers are predominant in Political Science. Further, it is noticed from Table 7.5 that almost more than 95% of the papers are single authored papers during the various periods of time.

7.5 Ranking of Journals

The list of journals as per their rank in the field of Political Science presented in Table 7.6.

Table 7.6
Rank list of Journals in Political Science

S. No.	Rank	Name of the Journal	No. of citations	%	Cumulative	%
1	1	Kuruksheta	238	3.40	238	3.40
2	2	Economic & Political Weekly	224	3.20	462	6.60
3	3	Indian Journal of Political Science	217	3.10	679	9.70
4	4	Indian Journal of Public Administration	210	3.00	889	12.70
5	5	Indian Journal of Political Studies	205	2.92	1094	15.62
6	6	Asian Recorder	198	2.82	1292	18.44
7	7	Political Science Quarterly	190	2.71	1482	21.15
8	8	Indian Political Science Review	186	2.65	1668	23.80
9	9	Yojana	179	2.55	1847	26.35
10	10	India Quarterly	175	2.50	2022	28.85
11	11	Nagarlok Journal	170	2.42	2192	31.27
12	12	Indian Journal of Agricultural	170	2.42	2362	33.69

		Economics				
13	13	Gandhi Marg	168	2.40	2530	36.09
14	14	Journal of Social Science	160	2.28	2690	38.37
15	15	Quarterly Journal of Local Self Government	160	2.28	2850	40.65
16	15	Journal of Royal Institute of Public Administration	156	2.22	3006	42.87
17	16	Journal of Rural Development	150	2.14	3156	45.01
18	16	Economic Affairs	150	2.14	3306	47.15
19	16	Political Scientist	150	2.14	3456	49.29
20	16	Indian Journal of Economics	142	2.02	3598	51.31

It is observed from Table that a total of 160 journals are cited by the researchers in Political Science. Among them ‘Kurkshetra’ occupies first rank for being cited with more number of times with (3.40%) of citations, followed by Economic and Political Weekly (3.20%), Indian Journal of Political Science (3.10%), Indian Journal of Public Administration (3.0%) and Indian Journal of Political Studies (2.92%). It may be concluded that, in the rank list the journal ‘Kurksheta’ Published from India scores the highest citation percentage.

7.6 Rank list of books

The rank list of books in the field of Political Science reveals that the ‘Selected Speeches by Jawaharlal Nehru’ is the most frequently used book (1.82%) and gets first rank for being cited for more number of times. India’s Foreign Policy (1.42%) and Ambedkar Life and Mission (0.82%) get second and third rank respectively. These three books contribute 4.06% of total citations.

7.7 Rank list of publishers

The rank list of publishers in the field of Political Science reveals that ‘Publication Division, Information & Broadcasting, Govt. of India’ secured the first rank for being cited heavily in the publications published by the accounting for 4.37% of total citations, followed by ‘Ministry of Rural Development, Govt. of India’ (3.34%), ‘Dept. of Information & Public Relations, Govt. of A.P.’ (2.27%), ‘Indian Political Science Association’ (1.5%) and Indian Institute of Public Administration (1.34%).

8. Conclusions

1. From the form wise distribution of cited documents books appear to be the most preferred sources of information used by the researchers in the field of Political Science accounting for 51.0%.
2. Language wise distribution analysis shows that English language occupies the first place with 88.08%.

3. From the country wise distribution, it was found that India is the largest producer of literature in the field of Political Science. It accounts for 62.30% of the total literature.
4. From a authorship pattern, it can be concluded that majority of the authors in Political Science are conducted research and publish books and papers individually.

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