

Publication In The Field Of Science By The Faculty Members: A Scientrometric Study Of Chaudhary Charan Singh University Meerut

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Abstract: The present study deals with scientometric analysis of the research contribution by the faculty members of CCS University, Meerut during the period 1980 to 2024. The study analysis the authorship pattern, geographical distribution of articles, year wise distribution, subject wise distribution and gender wise distribution of publications. It also identifies the average number of references cited per publication.

Keywords: Citation analysis, authorship pattern, geographical distribution, cited authors

Introduction

Chaudhary Charan Singh University (formerly, Meerut University) was established in 1965, to cater to the needs of higher education in western Uttar Pradesh. The teaching department belonging to different faculties, are housed in spacious buildings and have well-equipped laboratories and advanced facilities. The research activities in the various departments of the university are supported by grants in the form of research projects sanctioned by UGC, DBT, DST, ICAR, AICTE, UPSTC, CSIR and other funding agencies of the central and state governments. Faculty of Science is comprising of many subjects like physics, chemistry, zoology, botany, genetics and plant breeding, mathematics, statistics, microbiology, biotechnology, toxicology and horticulture. Teaching faculty members in science faculty has always been very active in publishing research papers and other publications.

The present study is an effort to find out the status of contribution in terms of publication of research papers by the faculty members in the field of Science.

Literature Review

Ratha, Bhupendra. Gawdw, Manisha and Naidu, Bhupendra. An international electronic journal: A bibliometric Study (2007-2012) International Journal of digital library Services, vol.2. No. 1 (2012)

At present bibliometric study is an interacting research topic in the field of library and information science. Library and information science professionals are doing bibliometric study in various fields for the collection development of different subject in their libraries. This paper examines that the Bibliometric Analysis of the Information Research: an International Electronic Journal (IRIEJ). Which is included the study of form of documents, authorship pattern, ranking of authors, year wise distribution of references and articles, ranking of cited journals, cited publishers and research contributors of IRIEJ.

Siddique, JA and others (2016). "Bibliometric Study Of "The British Journal pf Psychology (2012-2016)" Indian Journal of Library and information studies Vol.11, Number. 3, September- December 2017

This study is based on the bibliometric analysis of 189 research papers published in five volumes of 30 issues of the British Journal of Psychology published during 2012 to 2016. the paper discusses the authorship pattern of the contributors, number of articles published in each issue. Geographical distribution of authors and length of each paper in five volumes has also been discussed. The study also covers the number of articles published in each issue during the period 2012 to 2016.

Vaimala, B. Journal of Information Science and Technology: A Bibliometric Study (2011-2012) Asian Journal of Information Science and Technology, Volume. 8 Number 3 2018

This paper analyses publication pattern in the journal titled "Asian Journal of Information Science and Technology for the period between 2011 to 2017. The analyses cover mainly the number of articles, authorship pattern, year wise distribution of journals etc. The result showed that out of 151 articles single author contributed 34 (22.5%) articles 117 (77.5%) articles were contributed by joint authors.

Khparde, Vaishali and Pawar, Shubhangi. Authorship pattern and degree of collaboration Technology: A scientometric Study (2000-2009) Journal of computer science & information technology, Volume. 10 Number .110 2010

The study presents the trends in authorship pattern and author's collaborative research in Information Technology with a sample of 17917 articles collect from LISA during 2000-2009. The average number of authors per article is 1.80. In the study the degree of collaboration (C) during the overall 10 years (2000-2009) is 0.71 but the year wise degree of collaboration is almost same in all the years of mean value 0.49. In the 10 years of period, the multi- authorship articles are higher and predominant on single authorship. The study found that the researches in Information Technology are keep toward team research or group research rather than solo research.

Siddiqui, JA and others (2016). The bibliometric Study of the Journal Indian Historical review (1999-2016) Indian journal of library and information studies Volume 11 Number 3 September- December 2017

The present study deals with the bibliometric analysis of The Journal Indian Historical Review for the period of 1999-2016. The study demonstrates and elaborates on the various aspects of Indian Historical Reviews such as Authorship pattern, number of articles published per volume, state wise distribution of articles, length of articles and authors contribution per volume. Results indicate that highest number of papers have been written by single author. The major contribution in this journal is from India. The maximum number of articles were published in volume 34 (68) during the year 2007.

Data Analysis and Interpretation

Table 1: Gender Wise Distribution

S. No.	Gender	No. of Contributions	Percentage
1	Female	595	28.33%
2	Male	1505	71.66%
	Total	2100	100%

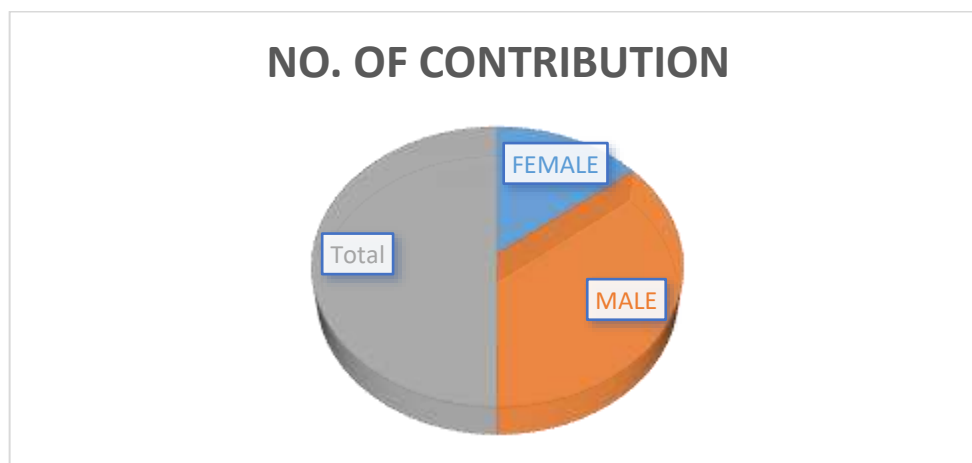


Table 1 represents gender wise distribution of publications of faculty members of Chaudhary Charan Singh University, Meerut. The data shows that 1505 (71.66%) of the publications are Contributed by Male faculty members, whereas only 595 (28.33%) publications are contributed by female faculty members.

Table 2: Subject Wise Distribution

S. No.	Name of Subject	Number of Contribution	Percentage
1	Physics	301	14.33%
2	Chemistry	148	7.04%
3	Botany	167	7.95%
4	Toxicology	141	6.71%
5	Statistics	340	16.19%
6	Biotechnology	178	8.47%
7	Mathematics	287	13.66%
8	Zoology	288	13.71%
9	Microbiology	250	11.90%
	TOTAL	2100	99.99%

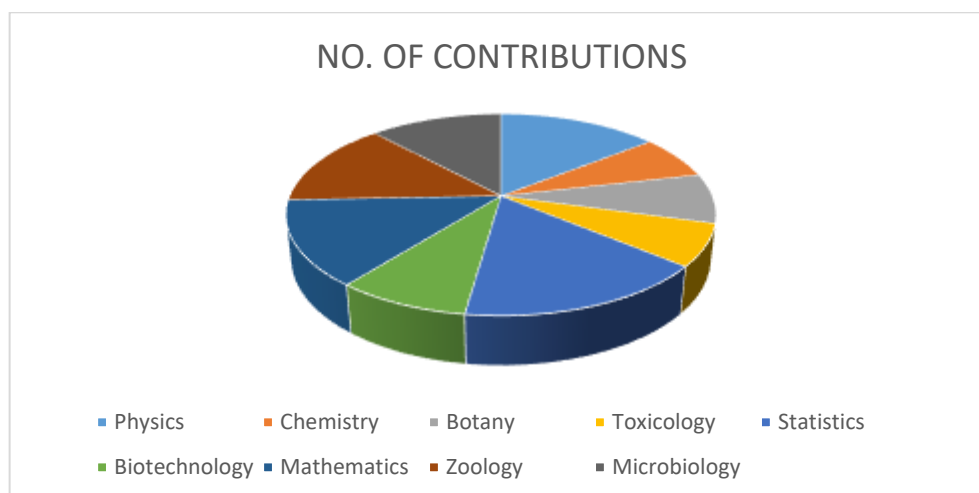


Table 2 represents subject wise distribution. The data shows that 340 (16.19%) of the publications are contributed by Statistics Faculty members, 301 (14.33%) contributed by Physics Faculty members, 288 (13.71%) contributed by Zoology faculty members, 287 (13.66%) contributed by Mathematics faculty members, 250 (11.90%) contributed by Microbiology faculty members, 178 (8.47%) contributed by Biotechnology faculty members, 167 (7.95%) contributed by Botany faculty members, 148 (7.04%) contributed and by Chemistry and 141 (6.71%) publications are contributed by Toxicology faculty members.

Table 3: Authorship Pattern

S. No.	Authorship	Number of Contributions	Percentage
1	Single Author	255	12.14
2	Two Author	525	25
3	Three Author	482	22.95
4	More than 3 Authors	838	39.90
	TOTAL	2100	99.99

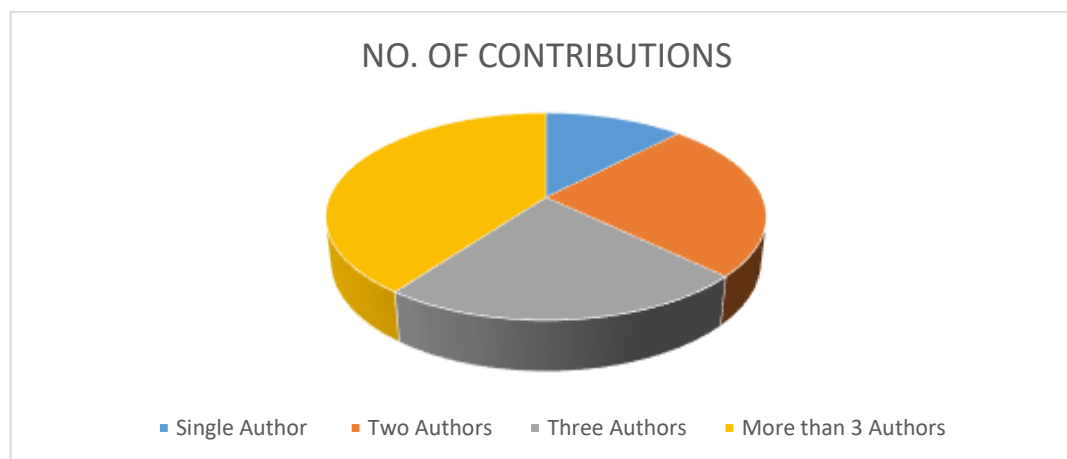


Table 3 Represents Author wise distribution of publications. The data shows that 838 (39.90%) of the publication are contributed by more than three author, 525 (25%) contributed by three author, 482 (22.95%) of the publications are contributed by two author, whereas 255 (12.14%) of the publications contributed by single author.

Table 4: Year Wise Distribution

S. No.	Year	Contribution	Percentage
1	1980	3	0.14
2	1981	2	0.095
3	1982	7	0.333
4	1983	4	0.19
5	1984	6	0.28
6	1985	12	0.57



7	1986	13	0.619
8	1987	5	0.238
9	1988	8	0.380
10	1989	15	0.714
11	1990	30	1.428
12	1991	17	0.809
13	1992	20	0.952
14	1993	16	0.761
15	1994	19	0.904
16	1995	20	0.952
17	1996	14	0.666
18	1997	11	0.523
19	1998	4	0.190
20	1999	8	0.380
21	2000	39	1.857
22	2001	8	0.380
23	2002	41	1.952
24	2003	33	1.57
25	2004	22	1.047
26	2005	27	1.285
27	2006	38	1.809
28	2007	41	1.952
29	2008	48	2.285
30	2009	32	1.523
31	2010	66	3.14
32	2011	57	2.714
33	2012	76	3.619
34	2013	128	6.095
35	2014	117	5.571
36	2015	92	4.380
37	2016	109	5.190
38	2017	136	6.476
39	2018	133	6.333
40	2019	127	6.047
41	2020	201	9.571
42	2021	183	8.714
43	2022	84	4
44	2023	10	0.476
45	2024	18	0.857
		2100	99.98%

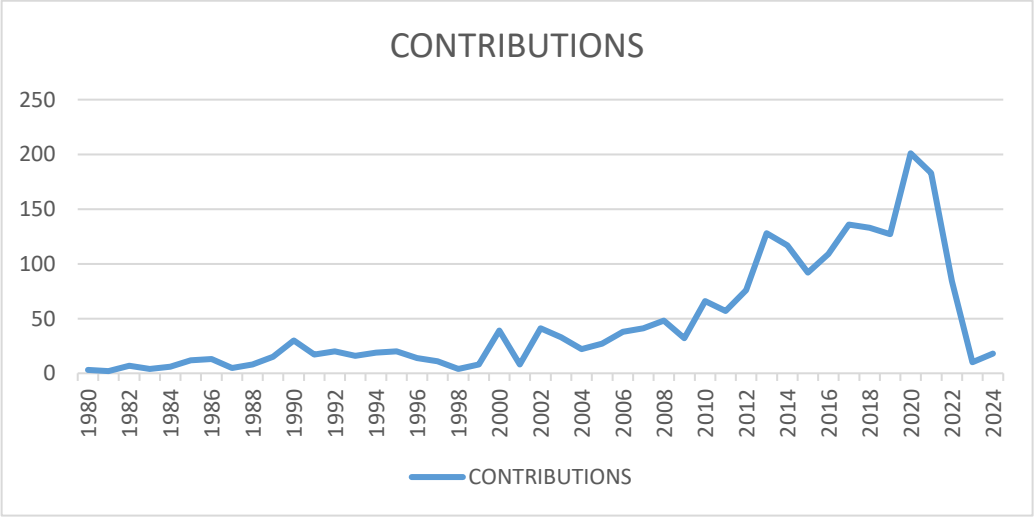


Table 4: Depicts the year wise distribution of publications. It has been noticed that the maximum number of publications by the faculty members were recorded in 201(9.57%) year 2020, followed by the year in 183 (8.71%) in 2021. 136 (6.47%) were published during 2017 and 2018 produced 133 (6.33%) of total publications. The least number of publications is recorded in the year 1981 which is only 2 (0.095%). I should not hesitate in conveying the fact that the highest number of publications, which are recorded in the year 2020 and 2021 due to the fact of having much time at the time of cond-19 pandemic.

Major Findings

1. The maximum number of research papers were published in 2020 which is recorded 201(9.571%).
2. The Maximum number of research papers i.e. 838 (39.90%) written by more than three authors followed by 525 (25%) were contributed by two authors, 482 (22.95%) contributed by three authors and 255(12.14%) contributed by single author.
3. 1505 (71.66%) contributions contributed by male researcher, whereas 595(28.33%) by female researchers.
4. As for as Citations are concerned, maximum citations i.e. 1100 (27.76%) were found in volume 68 which was published in 2021, whereas 866 (21.85%) citations were recorded in volume 69 and 830(22.48%) in volume 69 published in 2021.
5. The maximum contributions i.e. 72(51.42%) were recorded in 2021-2022 and the minimum contribution i.e. 51(51.8%) published in 2018-2019

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