CHAPTER V
FINDINGS, SUGGESTIONS AND CONCLUSIONS

5.1 Findings

Following are the important findings of the study:

Journal-wise Distribution of Research Output (Articles) in Social Science

Among the 3091 citing articles of ten social science journals published during 2002 to 2014 there were DR is maximum no of articles 22.32 percentage. EJCJS is minimum no of articles 3.17 percentage. (Table 4.2)

Percentage Contribution of Articles

In 2002 the output of the ten social science journals are 196 and it has been raised to 306 in 2014. During 2003, the research output was as low as 5.14. From 2003 onwards there is an increasing trend in the publications of ten social science journals. (Table 4.3)

Relative Growth Rate and Doubling Time for Publications Journal wise

It can be noticed that the relative Growth Rate of publications increased from the rate of 1.6 in DSQ to 0.05 in IQ .The mean relative growth rate was 0.36. The corresponding Doubling time for different Journals gradually increased from 0.43 in DSQ to 13.86 in IQ .The mean Doubling time was only 5.79 . (Table 4.4)

Exponential Growth Rate of Social Science Output During 2002-2014

Over the years from 2002 to 2014, the highest growth rate was found to be in the year 2013 with 381 publications at 1.28 exponential growth rates. The least
growth was found to be in the year 2014 with a growth rate of 0.80 with 306 publications. (Table 4.5)

**Logistic Growth fitted to Publication**

The logistic growth as studied from the table is found to have a declining trend over the years of 2002 to 2014. (Table 4.6)

**Journal-wise Distribution of Research Output (Articles)**

They show that journal wise DR has given the highest research output with a total of 690, mean, median and SD of 53.07, 51 and 20.75 respectively. (Table 4.7)

**Year-wise Distribution of Research Output (Articles)**

The researcher analyzed the research output of Ten Social Science Journals during 13 years of study. From the above analysis, it is clear that 2013 which has contributed of the total output of publications and is placed first. 2003 stands least position. (Table 4.8)

**Year-wise Distribution of Annual Research Output (Articles) Vs Pages**

It was observed that there was an increasing trend in the quantum of research output for the period 2005 to 2014. The growth of annual research output was increasing steadily, which was accounted from 171 to 306 during 2002 to 2014. The study revealed that the year 2013 recorded highest output. The year wise analysis over the study period revealed that the average number of pages per contribution for the total output was recorded as 20.43 (Table 4.9)
Journal-wise Distribution of Annual Research Output (Articles) Vs Pages

The study reveals that the journal DR has a greater annual output of 690 whereas the pages also increase correspondingly and it has ranked number 1 out of all the journals. (Table 4.10)

Journal-wise Distribution of Annual Research Pages

This again shows that annually only DR has maximum number pages published and the least number of pages were published by the journal IQ. (Table 4.11)

Year-wise Distribution of Annual Research Pages

In the year wise study from 2002 to 2014 for distribution of annual research citation, the year 2013 has seen the publishing of more citations annually publishing 7841 pages and in the year 2013 the minimum number of pages of 2910 has been published. (Table 4.12)

Length wise Distribution of Pages in Individual Social Science Journals

The length wise distribution of ranges in ten journals social science DR has the highest average length of articles and is 22.32 percentages. JASSS occupies the second place and its average length of article is 16.14 percentages. DSQ and IJQM occupy the third and fourth position since the average percentage of DSQ and IJQM are 16.01 and 11 respectively. Ephemeron has got fifth position of having 10.71 percentages and SS has got 7.67 percentages which is placed in sixth position. IQ has got 4.5 percentages and IJMS has got the eighth position by having 4.4 percentages. CSSR has got ninth position having 4.08 percentages. EJCJS has got tenth and last position having 3.17 percentages. (Table 4.13)
Length wise Distribution of Research Output

The DOAJ research productivity reveals the following facts:

The 16-20 pages rank first in the order with 20.41 percentage. The following 11-15 pages obtain the second order of priority with 19.54 percentage. 36-40 pages comes in the last order with 4.11 percentage. (Table 4.14)

Distribution of Authorship Pattern in Social Science Journals

The data points out that the large number of articles by single author means that there are no well established research groups in the area and the subject is a new emerging one. (Table 4.15)

Distribution of Authorship Pattern in Social Science Journals Pages

The analysis regarding the authorship pattern shows that the number of single authorized papers is the highest with 30271 among all the journals. It also shows that as the number of authors increase the number of pages published decreases. (Table 4.16)

Distribution of Authorship Pattern in Social Science Journals Citation

This again reveals that the citation of single author is the highest with 57941 and all the co-authors has a very less citation comparatively. (Table 4.17)

Degree of Collaboration in Social Science Journals

In the study, the degree of collaboration of all years is almost same of the mean value of 0.46. The analysis shows that in the span of 13 years, single authored article are highest articles and highest on multi authorship. (Table 4.18)
Percentage of Authorship Pattern Journal wise

Out of 1643 publications of Single authors the journals DSQ has a high percentage of 23.07. Multi authors DR has high percentage of 31.91. (Table 4.19)

Lotka’s Inverse Square Law vs. productivity of Faculty Members

This Lotka’s Inverse Square Law Vs Productivity of faculty members has determined that there is a constant increase. (Table 4.20,4.21)

Distribution of Citation over Years in Individual Social Science Journals

The citations in CSSR have increased from 422 in 2002 to 237 in 2014 and its percentage is 4.9. DSQ uses 22969 bibliographical forms of citations contributing to 19.2 percentages. There is no constant increase in the citations used throughout the years. Except the years 2004, 2014 there is an increase in the use of citations by authors and the utilization of cited documents increased from 926 to 1943. JASSS uses 14660 citations thus contributing 12.26 percentages. There is an increase in the Citations in EJCJS from 93 in 2002 to 492 in 2014. However there is a decline of citations used in the year 2003 and 2004 contributing to 50 and 69 citations. (Table 4.22)

Distribution of Citation Year wise

Study of Citation year wise from 2002 to 2014 revealed that the journal DR has published a highest citation over the years of 2002 to 2014 and 2013 has seen the publication the highest number of journals. (Table 4.23)
Percentage Contribution of Citations in Individual Journal

Among individual journals DR has contributed the highest citation with 26.26 percentage and the minimum contributions of citations are made by IQ with 1.45 percentage. (Table 4.24)

Percentage Contributions of Citations in Year-wise

2013 has 15016 citations over the study period and it occupies First place having 12.55 percentages of citations. 2008 uses 12230 cited documents amounting to 10.23 percentages. The authors in 2011 use 11858 bibliographical formats thus constituting 9.91 percentages. 2003 has 4515 citations thus has 3.77 percentages of citations. (Table 4.25)

Rate of Citations per Article (C/A) During Different Years

The ten social science journals contain 3091 articles and 119615 citations. The average rate of citation per article (C/A) was 38.69 percentages. But the rate of citation varied from 24.64 percentages to 37.97 percentage. (Table 4.26)

Citations per Article (C/A) in Individual Journals

Among the journals Catholic Social Science Review and Disability studies quarterly contain highest number of citations per article (C/A 46.5). and lowest rate was observed in IASSIST Quarterly (C/A 12.49). (Table 4.27)

Authorship Publication Trends

The single authorship pattern has highest publications, pages and citations with 1643, 30271 and 57941 respectively. The lowest publications, pages and citations are when the authorship pattern is less than nine. (Table 4.28)
Single v/s Multi Authorship Pattern

The comparison of single and multi authorship pattern indicates that though the publications of the single author is more than the multi authors, the pages and the citations of multi authors is higher than single author. (Table 4.29)

Logistic Growth Fitted to Citation

Study of analysis of logistic growth fitted to citation shows that their growth has decreased constantly. (Table 4.30)

Distribution of Bibliographical Formats in Individual Social Science Journals

Here, the journal citation is greater in all the individual social science journals and the next are the books. (Table 4.31)

Distribution of Bibliographical Formats in Individual Years

The distribution of bibliographical formats in individual years which shows that in the last few years from 2011 the publications of journals has increased. Among which the year 2013 has been maximum of journals and books. This as a total concludes that the year 2013 has a high reference.

Percentage-wise Distribution of Bibliographical (Articles) in Social Science Journals

Among all the sources used the journal has a greater output which in turn has greater percentage of 89.11. This shows that journals are used as a source to a greater extent. (Table 4.33)
Regression Value of Journals (x) and Books (y)

As determined earlier more number of journals citations was published in the year 2013 with 13651 and the corresponding books cited was 1265. Therefore the Regression value of journal (x) shows a mean of 8198.85 and the Regression value of books (y) shows a mean of 898.54. (Table 4.34)

Institution -wise Contribution of Research Output (Articles)

Universities contributed 65.01 percentages and Research institutions came in the second place there by contributing 20.52 percentages. Technical institute contributed 9.39 and the Academics contribution contributing 2.94 in the total output. Others occupied 2.14 percentages in the total contribution (Table 4.35).

Institution-wise Contributions in Individual Journal

These statics conclude that the contribution made by the Universities is more than any other organization. And it also reveals that DR has greater contribution. (Table 4.36)

Subject- wise Distribution of Research Output (Articles) in Social Science Journals

Among 3091 publications the highest contributions are in Sociology with 23.42 percentage. The second highest is in Anthropology with 11.71 percentage. Hence Sociology plays a major role in the research category. (Table 4.37)
Growth of Publications in the Social Science Journals

The analysis of the growth of publications shows that “There is no significant growth in the research publications in the Social Science Journals”. (Table 4.38)

Relative Growth Rate and Doubling Time for Publications Year wise

The study reveals that the growth rate of research productivity indicates a decreasing trend during 2003 onwards. The doubling time for publications of articles has increased from 1.17 in 2003 to 6.93 in 2014 and the mean doubling time for publications is 3.9 years. (Table 4.39)

Percentage of Authorship Pattern

The authorship pattern in the DOAJ Social science research productivity reveals single author paper ranks first in the order with 53.15 percentages. The two author paper obtains the second order of priority with 25.01 percentages. The above nine author paper comes in last order of priority with 0.16 percentage. (Table 4.40)

Correlation between the Number of Research Output and Number of Citations Year wise

Among the 3091 citing articles and 119615 of ten social science journals published during 2002 to 2014 there is positive correlation between the number of research output and number of citations. (Table 4.41)
Determination of Correlation Coefficient in finding Research Output Vs Journal Citation

This determination reveals that as the research output increases over the years the number of journal citation also increases correspondingly. (Table 4.42)

Determination of Correlation Coefficient in finding Research Output Vs Book Citation

This determination reveals that as the research output increases over the years the number of journal citation also increases correspondingly. Journals cited and books cited have positive correlation with the number of research output in the selected ten social science Journals. But the correlation between research output and journals cited has much higher value than the books cited. (Table 4.43)

Geographical Distribution of Research Output (Articles)

Geographically United Kingdom has the greater output of 21.35 %. The second is the USA with 20.63. They are followed by Canada, Germany with the percentages of 12.06 and 11.94 respectively. The least output is from Venezuela with 0.17 percentage.(Table 4.44)

5.2 Suggestions:

The following suggestions are recommended based on the findings of the study.

1. The E-journals website should facilitate all users to access the academic and scientific resources as well as to up-to date information and news in both local language, and in English.
2. The web design and the links between pages to be corrected, so that the search engines can easily access and index the latest material uploaded to the website; and the users can easily find their relevant information in the shortest possible time.

3. DOAJ should provide some space for the library science professional to design their own web pages and introduce their professional and scientific product and activities on the DOAJ website.

4. An adequate number of students suggested that necessary arrangement should be made to access the full text of more electronic journals.

5.3 Conclusion

Bibliometric research has developed a body of theoretical knowledge and a group of techniques and applications based on the distribution of contribution data. The wider application of bibliometric technique is leading to the development of a new and more precise technique. Hopefully, the on-going theoretical work will point the way to more innovative techniques. Bibliometric data provide precise and accurate observations. A major challenge to the bibliometrician is to continue to develop the techniques which will be more reliable and useful for evaluation and predication, because bibliometric data mirror the actual published results of the work of researchers.

5.4 Future of the Study

The present study is carried out based on the research output of ten social science Journals:

- The Government and Central Institutes can provide the Central Institutes and colleges with many schemes funded by ICSSR to
encourage the researchers and increase the research productivity in Social Science.

- In future, the researchers can concentrate on other classification / cataloguing, library management, knowledge and information management, librarianship and professional development are to increase the research output in these areas.

**The present study found the following remarkable observations:**

The findings of journal wise distribution of social science research output bring out the facts that of the various sources of publications. In general publications, articles in journals take the predominant representations. It is due to the prevalence of greater level of provocative and dissemination effects of journals throughout the world.

The analysis of the growth of social science literature reveals that the relative growth rates of research output have shown a declining trend. Contrastingly doubling time for publications has increased remarkably.

The pattern of social science literature growth among various institutions reveals the following fact that the universities rank first in order in promoting more number of research output followed by research institutions, technical, academic and other institution.

Findings of degree of collaborative analysis reveal the following facts that the case of multiple author contributed papers are less. It brings out clearly the high level prevalence of single author research in social science.