CHAPTER 5
CONCLUSION

5.0 Introduction

The organization of scientific knowledge has undergone a sea change in the last 15 years. Tremendous information is made available through electronic media. Information communication technology has facilitated the retrieval of knowledge through search engines operating on world wide web. The information so obtained from different sources has to be organized in a systematic way on the basis of research areas, contribution by experts and institutions.

The study relating to the growth of literature, author productivity, collaborative studies, citation counts, and other parameters can be made with the help of data so retrieved. Further, the interconnections will be discovered, the import and export of research among fields can be established, the speed of growth and diversity can be examined. The economic factors affecting the research production and dissemination can be highlighted. Thus the scientific literature can be mapped based on different aspects.

Mapping of social science literature was an attempt to trace the intellectual connections within ever changing knowledge in the field of social science. The purpose of mapping was to display the structural and dynamic aspects of scientific research. It is also the study of correlation links between the past and present research work using citation analysis or it is a useful graphical technique that helps to understand connections and relative relation between things, individuals, materials, lectures, textbooks, data gatherings, surveys, conversations, disagreements, gap analysis, education and synthesis. It aims to track the loss and acquisition of information and knowledge, personal and group competencies and proficiencies. The mapping process involves...
various steps such as data retrieval, preprocessing, network extraction, normalization, mapping, analysis and visualization.

5.1 Summary of the Findings

The significant findings of the present study in the field of social science are summarized below:

Growth of Literature

- The world social science contribution i.e 66528, and the Indian social science contribution is 7751(11.63%) for the period 12 years.

- The mean relative growth rate shows a decreasing trend from 0.35 to 0.15 in the world literature and 0.31 to 0.16 in Indian literature. The doubling time has increased from 2.36 to 4.60 in the world literature and from 2.5 to 4.2 in Indian literature. It is similar with the world literature.

- The study of subjectwise distribution of articles in all the five branches of social science reveals that Psychology has maximum number of articles 25137 in world literature and Political Science with the minimum number 2390. In Indian literature Sociology contributes the maximum 2582 and History with the minimum number 219.

- The exponential growth rate is more in Economics i.e. 0.897 and less in Psychology i.e. 0.279.

- The correlation coefficient between economics and political science is 0.923 at 0.01% significance level and Political Science and Sociology exhibit 0.689 correlation coefficient at 0.05% level of significance. “There is a high positive degree of relationship between sub disciplines of social science.
The polynomial model showed best fits for the publication in Economics, Sociology, Political Science and History in case of both worldwide and Indian growth of literature. The exponential model fits well in Psychology worldwide and Indian literature. Apart from this, the power and logistic model fits well in Indian psychology literature.

Author productivity and Collaboration

The four and more author’s contribution in the year 2000 is only 8.83% whereas in the year 2011 it shows 22.28% of increase which is a clear indication of positive trend towards multi-authorship. Perhaps this may be due to interdisciplinary research and team work.

Collaborative Index, Degree of Collaboration, and Collaborative Coefficient shows that in the year 2000 the CI was 1.74 and it increased to 2.301 in 2011. The Degree of Collaboration in 2000 was 0.455 and increased to 0.6745 in 2011 except a slight decrease in 2004 showing 0.5067, The Collaborative Coefficient value 0.2676 in 2000 has gone upto 0.4231 in 2011. There is a slight fluctuation in 2004 (0.3034) and 2008(0.3190). The overall CI, DC and CC indicate the increasing trend in collaborative publications.

The authorship trends in the block periods 2000-2003, 2004-2007 and 2008-2011 reveals that the number of total authors in psychology is 5361 which is the highest and then it is followed by Economics 5145, and then Sociology 4364, Political Science 501 and History 334.

The contribution of single authors has increased from 29.13 in 2000-2003, and 40.81 in 2008-2011. The contribution of double authors has increased from 23.25 in 2000-2003, to 50.50 in 2008-2011.
The contribution of three authors has increased from 19.75 in 2000-2003, to 54.85 in 2008-2011. The contribution of four and above authors has increased from 17.39 in 2000-2003, to 56.94 in 2008-2011.

In Psychology and Economics the relative frequency is showing an increasing trend and more so in case of four and above authors. In Sociology there is a decreasing trend in the first two block periods in the single, double and three authors and increasing trend in the last block. The four and above authors show a consistent increase in all the block periods.

In Political Science the single and four and above authors contribution is less frequent in the second block whereas double and three authors category the frequency has increased gradually. In History the frequency of single and four and above the frequency has increased considerable from one block to another block period whereas in case of double and three authors in the second block period there is a decrease.

**Ranking of Social Science Journals**

According to the ranking in Psychology the International Journal of Psychology with 554(26.00%) articles of the total coverage ranks the topmost position, followed by Journal Aids care psychological and Sociomedical aspects of Aids HIV with 118 (5.54%) articles and coverage.

The journal entitled ‘Value in Health’ ranked at the top position with 86(3.50%) articles and coverage, then it is followed by ‘African journal of Business management’ with 62(2.52%) articles and coverage the third position is of ‘Ecological Economics’ with 57(2.32%) article and coverage in Economics.
The journals ‘Contributions to Indian Sociology’ ranked at the top position with 492(19.050%) articles and of coverage, then it is followed by ‘Indian Journal of Social Work’ with 360(13.94 %) articles and coverage, third position is of ‘Man in India’ with 314(12.16 %) articles and of coverage in Sociology.

The journal entitled ‘Political Studies Review’ ranked at the top position with 42(11.57%) articles and of coverage, then it is followed by ‘Millenium Journal of International studies’ with 23(6.33 %) articles and coverage, third position is of ‘Internationale Politik’ with 16(4.40 %) articles and of coverage in Political Science.

The journal entitled ‘Agriculture And Human Values’ ranked at the top position with 16(7.30%) articles of coverage, then it is followed by ‘Interventions International Journal of Postcolonial Studies’ with 15(6.84 %) articles of coverage, and the third position is of ‘International Review of Social History’ with 14(6.39 %) articles of coverage in History. The overall study of the ranking of journals covering the five branches of present study reveals that there is more number of journals in Economics with high productivity followed by Psychology, then Sociology, Political Science and finally History.

The graphs plotted in all the five subjects show the hyperbolic curve which shows the law of scattering formulated by Bradford. Bradford’s Law of Scattering positively fitted with social science Literature.
Obsolescence of Literature

- The obsolescence study of social science literature has shown the following findings:

- The citation frequency distribution of social science journals shows a negative exponential pattern which is again confirmed by applying K-S Test. The use of periodicals has decreased over a period of time as the age increases.

- The AAF of the literature is 0.9262;
- The average half-life of literature is 9.04;
- The mean life is 13.048;
- The utility factor is 13.5544 and
- Corrected obsolescence factor is 0.9482

Productivity of Social Science Institutions

- The established social science research institutes of India under them the Centre for Development Studies (CDS), Trivandrum ranks the topmost position of all the institutions publishing 254 (27.55%) articles. This is followed by Institute of Economic Growth (IEG) New Delhi publishing 148 (16.05%) articles of total publications. The third position is of School of Social Science JNU New Delhi. It has published 108 (11.71%) articles of total publication.

- Delhi School of Economics, University of Delhi is just nearer with 106 (11.50%) articles, and the Centre for Studies in Social Science (CSSS), Kolkata is at the fifth position by publishing 86 (9.33%) articles of total publications.
Further the sixth position is shared by two institutions one Madras Institute of Development Studies (MIDS), Chennai and the other Centre for Womens Development Studies (CWDS), New Delhi publishing 47(5.10 %) articles each. The remaining eight institutions have published less than 5.2% of the total publications.

The emerging social science research institutes in India. Out of nine institutes listed for study, Department of Social Science, Indian Statistical Institute (ISI), Kolkata/ Delhi have published 279(39.91%) articles with total publications and ranks first. This is being followed by Tata Institute of Social Science (TISS), Mumbai by publishing 200(27.89%) articles of total publication. The third position is of National Institute of Science and Technology and developing Studies (NISTADS)New Delhi which has published 92(12.83%) articles of total publications.

The most productivity authors in Psychology are Srinivasan N with 23,(10%) articles and Telles S with 20(8.7%)articles. The most productivity authors in Economics are Marjit,S 38(10.9%)articles ,and Rajendran,C with 28(7.4%). The most productivity authors in Sociology are Ghosh, A with 31(11.1%),articles and Sarkar R.M. with 31(11.1%) articles Similarly the most productivity authors in Political Science are Mohan S with 9(10.0%)articles and Mehta P.B with 8(9.9%) articles and in History Mallick S with 4(7.6%)and Roy T with 4(7.6%)articles.

5.2 Suggestions

Social scientists, shoulder the greater responsibility in framing the policy, which has socio-economic implications in the development of a country. Their research has to be qualitative, having sufficient statistical data to support their views on the status and conditions of economic issues or problem. In order to conduct research, to support their conclusions and to make their
reports, articles, papers etc, interesting and fact-oriented, they need information. To ensure such a qualitative research, the role of library and information centers attached to various social science institutions assumes greater importance. For that the following suggestions can be made:

1. The knowledge and use of Social Science Citation Index (SSCI) in all forms is minimal among social scientists due to such factors as non-availability, lack of awareness and willingness to learn and use. The institution and libraries must make efforts in providing an SSCI or get citation services from agency and to create awareness among social scientists regarding the importance of citation, how citation index help in knowing published literature and citations to their papers, and help to the growth of Indian social science literature;

2. Importance of Impact Factor (IF) of the journals and H-Index made known to the social scientists to improve the quality of the papers;

3. National Social Science Documentation Center (NASSDOC) make aware of its collection and services to social scientists to boost the Indian Social Science Literature;

4. Social science institutes should identify the highly productive authors and may adopt a policy of performance based promotion;

5. Libraries attached to institutes must make efforts to develop a national level network in order to have effective and efficient resource sharing in the form of books, photocopies of articles, database, and the resources to enhance their library services to meet the various needs of social scientists.

5.3 Areas of Further Research

In the present study some of the aspects of social science literature have not been covered or explored. Therefore it is felt necessary to take-up the research in the following aspects.

- Priority Index analysis in five major branches of social science with respect to world;
- Journal impact factor analysis using SSCI database in social science and;
- Application of different mapping softwares in order to draw the maps showing the various dimensions with regard to social science literature.

5.4 Conclusion

The study conducted on mapping of social science literature has provided valuable results which are very much useful in understanding the relative position of different subfields of social science as enumerated in different systems of classification. The comparative study of the Indian social science output with that of world social science output shows that Indian contribution is less. The reasons for the inadequate research output may be due to insufficient funds allocated by GOI, UGC, ICSSR etc for social science research; India should develop a research culture of a specific nature and promote high quality research in social science. There is a need for collaborative research at individual, institutional level. The work carried out by social scientists in India has to be published in international journals since most of the journals in India are not included in international Citation Database. Findings of the study are useful to the policy makers, social scientists and social science institutes.