

## Research in Library and Information Science: Historical Development and Current Trends

Prakash B. Jadhav\* Santosh P. Khajindar\*\*

### \* Librarian

Yashwantrao Chavan Law  
College, Pune, Maharashtra,  
India

### \*\* Librarian

The PGK Mandal's Haribhai  
V. Desai College, Pune,  
Maharashtra, India

### QR Code



**Abstract:** - *One can define research as a scientific and systematic search for pertinent information on a specific topic. Research leads to progress in a profession. This paper is based on a survey of Ph.D. research in Library and Information Science in India. The study also deals with historical and developmental changes in the field of library and information science. It also focuses on the recent research trends due to emergence and use of Information and Communication Technology in the library as well as allied fields. The present study shows the scope for new research in various fields in LIS.*

**Keywords:** Research in LIS, University, Library Research, Current Trends in LIS

### Introduction

Library and Information Science has developed over more than 100 years. Library science education is professional education. The training for library and information professionals is essential for effective functioning of the libraries and information centres in a country. Library education is professional education. Its purpose is to develop manpower for running library institutions at different levels. In recent years the scope of research in librarianship has undergone changes with the applicability of information technology. The introduction of computers and automation in library has introduced new elements in library housekeeping operations in

acquisition, processing and circulations, in this changed context, library science has wide scope of research in Library and Information Science education.

Research is an important activity of human life. It is necessary for the growth of knowledge. Development of the society takes place due to research. Research means to search and again. It is a continuous process. Research is the movement from known to unknown. Research comprises defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organizing and evaluating data; making deductions and reaching conclusions; and

last carefully testing the conclusions to determine whether they fit the formulating hypothesis.

Research is governed by the rule of objectivity and not of subjectivity. A research may aim at the following objectives:

- a) To find new generation with old data;
- b) To know old conclusions with new data;
- c) To attempt to reach more conclusions from the same set of data;
- d) To put forward an entirely original idea or theory.
- e) To find or to resolve contradictions existing in the area of study;
- f) To continuously develop a discipline or field of study, with the use of scientific and rational methods.

### Definitions

The Advanced Learner's Dictionary of Current English lays down the meaning of research as "a careful investigation or inquiry especially through search for new facts in any branch of knowledge."

Redman and Mory define research as "systematized effort to gain new knowledge"

D Slesinger and M. Stephenson in the Encyclopedia of Social Sciences define research as "the manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art."

Hillway defines research as "a method of study by which through the careful and exhaustive investigation of all the ascertainable evidence bearing upon the definable problem, we reach a solution to the problem"

According to Charles H. Busha and Stephen Harter Research is a "systematic quest for knowledge" that is characterised by disciplined enquiry. Efficient and effective approach to expand knowledge is to conduct of special planned and structured investigations, a process known as research.

According to Dr. S. R. Ranganathan "the term research represents a critical and exhaustive investigation to discover new facts to interpret them in the light of known ideas, theories in the light of the newly discovered facts to apply the conclusion to practical purpose"

The above definitions have focused on the nature, method, aim, purpose result and use of research in society. Research is not merely an inquiry; it is actually a scientific inquiry. It is carried out scientifically or critically. It represents studious, exhaustive and diligent investigation. Research aims at seeking knowledge. It endeavours to discover new facts or principles.

Thus, research comprises of defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organizing and evaluating data; making deductions and reaching

conclusions; and last carefully testing the conclusions to determine whether they fit the formulating hypothesis.

### **Need for Research in LIS**

The research in science and technology domain has been properly settled. Earlier there was no need of research in LIS. After establishment of Depts. of LIS in universities and changes occurring in social circumstances, there was need of research in LIS domain. For this, research was undertaken on large scale at university level. Many problems were created due to publication of new documents on large scale and growth in education and research. Librarians, Documentation or Information Officers undertake research to find out solutions to these problems.

Computer networks were created on national and international level for proper and effective use of information. For this, there is need of specialists and researchers who use information and communication technology. There is need of more research for growth of LIS. If we are undertaking research on large scale that will help to develop new methods, techniques, sources and new research methodologies.

Information overload and changing facets of information, increased prices of reading material, payment of library staff, lack of resources etc. are current problems in LIS. Library professionals undertake research to find out solutions to these

problems and then the library works very well. Research helps to provide better services to users.

### **Research in LIS on National and International level: Historical Development**

Research in librarianship does not have a long history. It was started in 1930. The need was felt for careful study of various philosophies related to libraries. Due to this, Chicago University Library School started Ph. D. Programme in 1928. First 50 Ph. D.s were awarded by Chicago University in LIS. In America, 129 Ph. D. dissertations were submitted between 1930 and 1959. Among them only 80 researchers were awarded Ph. D. degree by Chicago University.

Dr. S. R. Ranganathan published Five Laws of Library Science in 1931, and in 1933 he published 1<sup>st</sup> edition of Colon Classification and a book named Prolegomena to Library Classification. Library survey method was used on large scale in between 1930 to 1950. In 1948, Bradford presented Law of Subject Scatter. This law became base for bibliometrics study. Shanon Clauds and Warren published article “The Mathematical Theory of Communication” in 1949.

In 1957, Cranfield Institute of Aeronautics undertook a project named Cranfield – 1 on experimental basis. In this project, the efficiency of indexing system was to be tested. The recall and precision formula were used for the first time in this experiment. In 1963, ‘Cranfield – 2’

project was undertaken by the same institute. In 1959, Hungarian Centre started for LIS. In 1962, Documentation Research and Training Centre (DRTC) was started at Bangalore (India) because of Dr. S. R. Ranganathan's efforts.

During the same period, British Library Research and Development Department (BLRDD) did important work on many research projects. In 1976, Wagor and his team started online services on large scale. AACR – II was published in 1978. International edition of UDC in English language was published in 1985. California University developed various Prototype Expert Systems in 1987.

In America, digital library project was undertaken in 1990's decade. Library of Congress, Washington D. C. undertook National Digital Library Project.

### **Research in LIS in India**

Research in LIS in India is not deep rooted. It was Ranganathan, who lifted librarianship to the level of a science with the formulation of Five Laws of Library Science. He even graded them as Normative Principles, Fundamental Laws, Canons, Principles and Postulates.

Starting of more library schools in 1970s and 1980s resulted in the training of the students in carrying out research studies in part fulfilment of the degree of Master of Library and Information Science. Sen Committee recommendation to

UGC, made doctorate compulsory for senior academic positions in universities, and made librarians and teachers of library science to go in for research in LIS in a big way. 1980s and 1990s produced a number of doctorates in LIS in India.

Apart from doctoral studies, post-doctoral research, field studies, major research projects are of significant value to research in LIS. But unfortunately not much work has been done on these lines. There is only one D. Lit in LIS in India. Funded research projects (by UGC, ICSSR, DST, etc.) are limited.

### **Reasons for slow growth in research in LIS in India**

1. Traditional methods of teaching, and lack of research orientation
2. Lack of research experience by the faculty and librarians
3. Absence of knowledge about research methodology
4. Inadequate strength of the faculty, which is overburdened with doing classroom teaching
5. Non-availability of many qualified research supervisors
6. Earlier intake of inefficient, indifferent, and disinterested persons by the library profession
7. Inadequate financial support
8. Lack of good library facilities and services
9. Absence of essential data
10. Entry of majority students to research in LIS from an academic background which does not prepare them for this specialised activity

- 11. Lack of incentives for doctorates and
- 12. Absence of identification of research areas.

**University-wise Analysis**

Research facilities in LIS are available in many universities in India. Following table is the list of a few universities and number of awards – university wise which are engaged in research in LIS.

**Table 1: Number of Awards – University Wise**

Sr. No.	Name of the University	No. of Doctorates Awarded
1	Jiwaji University, Gwalior	97
2	Aligarh Muslim University	90
3	Karnataka University, Dharwad	88
4	Annamalai University	88
5	Nagpur University	77
6	University of Pune	76
7	University of Madras	63
8	Andhra University	61
9	University of Delhi	58

**Subject-wise Analysis**

The following table gives the subject wise analysis of LIS research in decreasing sequence.

**Table 2: Subject Wise Analysis of LIS Research**

Sr. No.	Topic	No.
1	Bibliometric/ Scientometric/ Webometric Studies	171
2	Library Personnel	114
3	Information Seeking Behaviour	94
4	Information Services	73
5	Information Needs	69
6	Technical Processing, tools and techniques	65

7	Library Studies	53
8	E-resources	52
9	IT application in libraries	52
10	Library Services	51
11	Library Administration and Management	50
12	Networks and Consortia	49

Public libraries and Library classification was on the major areas of research a decade ago. But during the last decade, information related subjects like Library / Information Management, Information Services / User Study and Bibliometric Studies gained more importance.

**New Trends in LIS Research**

There are many issues which require research in the developing countries like India. These include Web 2.0, Web 3.0, Library 2.0, Library 3.0, Social Media, Blogs, Social Networking, Really Simple Syndication (RSS)/ Mashup; Change Management; Reengineering of Library and Information Works and Services; Expert System; Information Retrieval System and ICT Era; Metadata Harvesting Techniques in Digital Repository; Metadata Harvesting/Z 39.50in Library Software; Semantic Web; Library Technology e. g. Barcode, RFID, Smart Card etc.; Information Literacy; RTI; E-Governance; Search Engine; Intellectual Property Rights/Copyright Issues in Digital Era; Open Source Software Use and Management; Data Mining; Information needs Assessment/Information Seeking Behaviour Assessment/Community Information Service; Bibliometric/Webometric Analysis; Data Warehouse; Library Consortia for e-Resources

Management; User Education in IT Dominated World; Human Resource Management in Colleges, University, Research and Public Libraries; Total Quality Management in College, University, Research and Public Libraries; Resource Sharing among College, University, Research and Public Libraries; User's Needs/Reading Habits of Print and Non-Print Documents; Library Services to Distance Learners; Knowledge Management in Libraries; Digital Library and Virtual Library System; Institutional Repositories; Manuscript Preservation and Conservation; Digital Preservation.

### Conclusion

Research is a continuous activity. Research in LIS should be based upon the demands of the profession. Due to information explosion and evolution of Information and Communication Technology various new developments occur in the field of Library and Information Science, such as, Digital Library, Virtual Library, E-Library, E-databases, E-Journals etc. This evolution is continuously going on. It opens the door for the variety of research activities in LIS. The concept and techniques are developed through research. Similarly in LIS research is being carried out and various concepts and ideas are being developed in LIS with the help of new trends in information and communication technology (ICT). As a result the scope for research has increased in LIS.

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