



## ORIGINAL RESEARCH PAPER

## Library Science

### INFRASTRUCTURE AND UTILIZATION PATTERN OF LIBRARY RESOURCES BY FACULTY MEMBERS AND RESEARCH SCHOLARS IN MANAGEMENT INSTITUTIONS AFFILIATED TO BHARATHIAR UNIVERSITY, COIMBATORE.

**KEY WORDS:** Infrastructure, Faculty Members, Research Scholars, Utilization.

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#### ABSTRACT

The present study has made an in depth analysis of the various aspects intended in a user study. The status of the library resources and services and their utilization by the faculty and research scholars of 28 Management institutions affiliated to Bharathiar University was explored and has led to interesting results. The influence of the various demographic factors, such as Gender, Age, Educational Qualifications, Designation and experience and mode of study on the, faculty and research scholars on frequency of visit to the library, library collection, and library services were identified and tabulated above to show significant or non-significant. Results of the t-tests also show that in many of the variables there is no significant difference in the opinion of the faculty and research scholars. The study further shows that the faculty and research scholars are keen to adapt to the trend of the digital era by increased use of Internet either in the library or computer laboratories or at home. The responses of the faculty and research scholars to the statement of various problems show their positive attitude in their perception of the problems. Almost all the problems have been considered as 'not problems' by most of the respondents. The priorities suggested for improving the library collection, project the need for improvements in the areas of e-resources, e-journals, e-books and online databases. Overall, the study reveals that the libraries in the 28 Management institutes have drawn a good rating of its availability and use of Physical and ICT infrastructure, collection of library resources and services offered from the faculty and research scholars.

#### Introduction

Any study on any aspect of Libraries and Librarianship must make a mention of Dr. S. R. Ranganathan, the man with a legendary vision and hailed as 'father of Library science in India'. Eugene Garfield has rightly commented, 'Ranganathan is to Library science what Einstein is to Physics'. Ranganathan who spearheaded the movement to professionalize librarianship and to expand the Indian library system. It was he who propelled Indian librarianship into the twentieth century. His 'Five Laws of Library Science' emphasizing the use of library resources have paved the way for research on library use and user studies. The present study on Infrastructure and utilization pattern of the resources by the faculty and research scholars in Management Institutions affiliated to Bharathiar University in Coimbatore, Tamilnadu, draws inspiration from the mammoth contributions of Ranganathan.

#### Role of Libraries in Management Institutes

The nature of management discipline is multidisciplinary; therefore role of the libraries in such institutions is crucial. The management discipline is very fast and complex, unlike other disciplines. Diverse subjects are studied and researched under Management in one context or the other. A management Library acts as an academic as well as a research library. It is an era in which users demand quality information. Presently management institutes are facing challenges in several fronts such as course structure, rapid introduction of revised syllabi and semesterization. It has a direct bearing on libraries in the Institutions. So to cope with these changes, continuous improvement has become necessary for the libraries of these institutions to adapt to the new ways and techniques of management for the overall development of it. It is therefore necessary that the resources, facilities and services of these libraries are to be studied and also the impact of emerging ICT based resources and services on the libraries.

#### Infrastructure Facilities (Library Building and Space requirements)

If the book is the soul of the library, library building is the body in which the soul dwells. Hence it is highly essential to examine all factors before constructing a building for a library. Every college in India should have an attractive, spacious, well equipped and functional reading-room and a library with a balanced collection of books and periodicals. This means that the library should be a place where research, reference, browsing and recreational reading are the chief activities. Every building is constructed for a particular purpose and to suit specific requirements.

#### ICT (Information and Communication Technology) Infrastructure

Information technology (IT) is the result of convergence of computer and Communication technologies. Application of computers and telecommunication technologies in libraries has revolutionized the concept of library resources and services and the entire gamut of library operations. The storage, retrieval and dissemination of information, the variety and complexity of information sources, need to transmit and manipulate the abundant data, often in the context of a business enterprise demand a sound infrastructure consisting of computer hardware, software, electronics, semiconductors, internet, telecom equipment, e-commerce and computer services.

#### Information Needs of Faculty Members and Research Scholars

Information is of utmost importance for teaching, research and development. Moreover, information is growing in ever increasing volume and rate, in every field of human activity. Accordingly the information need of faculty members and research scholars seems to be vast, exhaustive and ever changing. The libraries attached to the academic institutions are expected to have the adequate resources and services to cater to the information needs of the faculty members and research scholars. Poor infrastructure facilities disorganized reading materials and complex rules and practices in the library result in the reduced use of library.

Information needs of college teachers are typically different from other professional groups due to several reasons. College teachers are working in an environment different from other types of professionals. The different components like class room lecture, field work, laboratory, library and other external media must be introduced before the student. Information needs of the faculty members are related to teaching, enhancing subject knowledge, research and guidance to his scholars and the library must satisfy such needs effectively and efficiently by taking recourse to traditional methods and modern day digital technologies.

#### Utilization of Library Resources

The first and the fundamental law of Library Science is "Books are for use" and the first library service is to integrate, resources and readers. The potentialities of resources become dynamic only when they are put to use.

#### Information use Pattern

The use pattern includes concepts like information seeking behaviour of the users, preference to materials, interaction with the information sources and services and library staff etc. The utilization pattern and the information seeking behavior of the faculty and research scholars vary from discipline to discipline.

Knowledge of the utilization pattern of the faculty and research scholars in Management studies will help the libraries to tailor their resources and services to the user needs. Such knowledge will enable the librarians in decision making on the collections, such as, printed and non-book materials, e-books and e-journals and services such as traditional and modern and the quality, quantity, variety and complexity of the hybrid collection.

### Need for the study

Today, users of the libraries of management institutes are aware of the variety of information resources which are available in the market. The study will help in identifying the user demands in present era as well as status of infrastructure and utilization in the libraries of management institutes affiliated to Bharathiar University, Coimbatore and will guide in meeting the future demands of library services.

### Objectives of the study

The major objective of the study is to make an assessment of the infrastructure and collection of resources in the management institutions under study. Further the utilization of the resources, satisfaction of the faculty members and research scholars' regarding the resources and services offered, infrastructure and the problems encountered by the faculty members and research scholars in accessing information are also studied.

1. To collect data regarding respondents' demographic characteristics.
2. To analyse the usage pattern of the respondents regarding libraries' resources by the respondents by indicators of use, such as frequency of visit, time spent in the library and purpose of library visit.
3. To find out the opinion of the respondents on infrastructure-physical and Information and Communication Technology (ICT) and their use.
4. To determine the respondents opinion on the library collection and services.
5. To identify the respondents perception and the problems in accessing information.
6. To elicit the opinion of the respondents regarding their priority on improving the library collections

### Hypotheses of the study

The following Null hypotheses were formulated by the researcher:

1. There is no significant association between (a) the frequency of respondents' visit to the library and their demographic characteristics and (b) time spent in the library and the demographic characteristics (in the case faculty members Gender, Age, educational qualification, designation and teaching experience; In the case of Research Scholars, Gender, Age, Educational qualification and mode of study (part-time/ Full time).
2. There is no significant association between the opinion of the respondents on
  - (a) purpose of library visit and their demographic characteristics
  - (b) availability and use of library collection and their demographic characteristics
  - (c) library services and their demographic characteristics
  - (d) problems faced in accessing information and their demographic characteristics.
3. To find out the opinion of respondents on the availability and use of infrastructure facilities
4. There is no significant difference between the faculty and research scholars opinion on purpose of visit; collection; services and the problems perceived

### Research Design and Methods

The method followed for the study is Survey method based on Questionnaire. The survey method has its own merits over other methods. Survey method was used to collect primary data. Questionnaires are useful tools in gathering descriptive data for answering the research questions and testing the hypotheses.

### Questionnaire Construction

The questionnaire for the study was constructed by the researcher. The questionnaires used in the earlier and related studies and whose validity and reliability were already established were thoroughly examined and their salient features were incorporated with modifications to suit the context and objectives of the present study.

### Validity and Reliability of the Survey Instrument

The validity and reliability of the survey instrument were established by means of a pilot test conducted on restricted number of the sample. Validity is the extent to which a measure or set of measures accurately represents the concept of the study, or the degree to which it is free from any systematic error.

### Data Collection

After the pre-test and necessary modifications were incorporated the survey instrument was finalized for administering to the selected librarians and the faculty and research scholars in the 28 Management Institutions taken up for study. Overall 325 questionnaires for faculty and 285 questionnaires to the research scholars were distributed and 260 duly filled in questionnaires from the faculty and 257 from research scholars were obtained. After deleting defective and incomplete responses the researcher decided to include for study 250 responses from each category of the respondents.

### Statistical Tools and Techniques used

The collected data were processed; classified, coded, edited, and tabulated using Excel The final cleaned and coded information was put into the SPSS data file for analysis. Both descriptive and inferential Statistics were applied. Cronbach's Alpha was calculated to establish reliability of the survey instrument. Tabulations, charts and graphs were made use of in projecting the salient features. Using SPSS the following statistical applications were made. Frequency analysis, Weighted Average scores, Cross tabulation, ANOVA, Chi square statistic, t-tests, Garrett Ranking Technique.

### Limitations of the study

The study was confined to faculty members and research scholars in various management institutions affiliated to Bharathiar University. Only 28 management institutions affiliated to Bharathiar University have been taken up for study.

### Analysis and interpretations

The purpose of the study was to identify the collection of resources, variety of services offered, infrastructure, both physical and ICT and utilization pattern of library resources by faculty members and research scholars in Management Institutions affiliated to Bharathiar University, Coimbatore. This chapter presents the detailed analysis of their responses under different heads, such as, demographic factors, utilization of Library, library infrastructure, library collection, library services, difficulties faced to access information, views on Quality improving factors etc.

### Demographic characteristics

**Gender:** Among the Faculty members 59.2% are Men and 40.8% are women. Among the research scholars 38.8% are Men while 61.2% are women. **Age:** Overall, regarding Faculty members the sample is a blend of youth and experience as 76.8% are below 40 years and 23.2% above 40 years of Age. Regarding Research Scholars an overwhelming majority-94%- are below 40years of age. **Educational Qualifications:** Out of 250 faculty members, 70.4% have acquired Research Degrees with 31.2% having secured PhD and 39.2% having M.Phil qualifications. Among the 250 research scholars 60.8% research scholars are having the basic qualification of MBA while 39.2% possess M.Phil. **Designation:** 41.6% respondents are Assistant Professors, 14 % Associate professors, 28.4% are professors, and 16% are Director/ Principal. **Experience:** Majority of the faculty members (59.6%) have experience in the range of 3-10 years while 32.4% have experience.>10 years. **Mode of study of Research Scholars:** Out of 250 research scholars 223 (89.2%) are carrying out their Ph.D. research as part time scholars and only 27(10.8%) are full time scholars.

### Utilization of Library

**Frequency of Visit to library:** Frequency of visit to the library and time spent in the library are direct indicators of use of library and its resources and services. Majority of 250 faculty members visit the library daily and a lesser percentage visit thrice a week or twice a week or once in a week. In the case of research scholars there is significant difference in the frequency of their visit. . Most of the Research scholars are carrying out part- time research and working or residing in far off places and may have leave problems. However, majority of them (68.8%) visit the library at least once or twice a week.

**Time spent :** On an average, 42% faculty members spend one hour per day, 36.8% less than one hour, 12% two hours, 4% three hours and 5.2% of the respondents spend four plus hours in the utilization of the library. It is also observed that 28% of the research scholars spend less than one hour followed by 35.6% one hour, 20.4% two hours, 5.6% three hours and 10.4% of the respondents spend four plus hours in the library.

**Library Timings:** An overwhelming majority, 96 % of the faculty members and 92.8% of the research scholars are of the opinion that library timings are suitable for their utilization. All the libraries work from 8 a.m to 5 p.m. to help the students and scholars to use the library before and after the institutions working hours.

**Seeking help from library staff:** Majority of the faculty members always seeks help and support from the library staff. Similar trend is also observed in the case of research scholars also in seeking support of library staff.

**Visit to other libraries:** 52.8% of the faculty and 72.8% of research scholars visit other libraries also.

**Use of OPAC:** 50.4% of the faculty members and 46% of the research scholars utilize the OPAC facility. Among the OPAC users 96.3% of the faculty members and 90.43% of the research scholars find it easy to utilize the library OPAC.

**Publications:** 61.2% of the faculty members and 74% of the research scholars have published research papers in various journals. Books are published only by a small percentage of the respondents. Majority of the faculty members (88.4%) and the research scholars (96.8%) have attended conferences, seminars and workshops for their academic work. 65.2% of the faculty are members of professional Associations while only 20.4% of the research scholars have opted to be a member of any professional body.

### Respondents' Purpose of Library Visit

**Cronbach's Alpha** test regarding the survey instrument showed high level of reliability, 0.728 for faculty and 0.825 for research scholars Opinion of the faculty on priority of various purposes showed that to read news papers is their top priority. The other purposes in the order of the mean values are: For teaching purpose, to borrow and return books, to read National journals, to read National magazine, for Research work, to read foreign Journal, to read foreign Magazine, Photocopy of reference materials, and Publication work ,Using internet and e-resources. In the case of **Research scholars:** For research work, reading news paper, to borrow and return the books, to read Indian magazine, publication work to read Indian Journals, to read foreign magazine, Internet access, and access e-resources,

Though the degrees of importance vary, all the purposes are important for the faculty and research scholars as found from mean values. The Friedman's Rank table reflects and confirms the conclusions from weighted average analysis. The null hypothesis framed for Friedman Rank is rejected. At least one of the variables differs from the others.

### Library infrastructure-Physical and ICT

**Cronbach's Alpha:** All constructs applied to faculty members and research scholars obtained a good coefficient alpha value of 0.849

and 0.793 respectively indicating an acceptable reliability of this part of the questionnaire.

### Library Collection

**Cronbach's alpha value** of 0.899 and 0.839 in the case of faculty members and research scholars respectively indicates high reliability of the instrument.

The faculty members' opinion based on the availability and use reveal that Books- general books, text books, and reference books- have the highest rating as all the mean values. The Research scholars also follow the same pattern as Faculty. The overall rating of the library collection grouped as, Books, Periodicals, Reference Materials, Non-book materials and ICT based collection are generally good and the trend of rating is same for faculty and research scholars.

### Library Services

**Cronbach's Alpha** coefficient values are 0.877 and 0.824 for faculty and research scholars respectively indicating good internal consistency of the items in the scale.

**Faculty members:** The top ratings regarding library services are given to Books issue/return mean (4.66), Book reservation (4.12) Display of new arrivals (3.98), References services (3.92) News paper clippings (3.71) and Internet search (3.69). All the services except index/ bibliographic services have also been rated high with Mean vales in the range of 3.14- 3.59. The index/ bibliographic services have been rated low with mean of 2.81. **Research scholars:** The ratings of the services by the research scholars also follow the same pattern as that of the faculty.

### Respondents' Opinion on Problems in accessing information

**Cronbach's Alpha** was computed as faculty and for research scholars which indicate high level of internal consistency of the scales used.

The general observation is that most of the faculty does not consider most of the problems as problems. The mean values of the opinion for all the statements on problems range between 2- 82- 2.48 for both faculty and research scholars showing more of disagreement with the problems listed.

**Testing of Hypotheses :** Results of t-test for significant difference between faculty and research scholars' opinion about problems enumerated in accessing information reveal that opinion on five of the 11 problems have significant difference and hence Null hypothesis is rejected in these 5 variables. Hence there is significant difference between faculty and research scholars' opinions in the case of the following variables:

### Respondents' priority to improve quality of resources

The responses received from the respondents for priority areas to improve quality of collection were analyzed using Garret Ranking Technique Faculty members' priority areas to be improved to ensure quality of library collection ranked as per Garret ranking: e-journals and e-books; Online databases; Printed journals; Printed books and Theses and Dissertations, Research Scholars priorities: Printed books; Printed journal; e-journals and e-Books; Theses and Dissertations and Online Databases.

### t-test result summarized

	Total Variables	Significant	Non Significant
Purpose	11	4	7
Infrastructure	14	10	4
Collection	21	9	12
Services	11	4	7
Problems	11	6	5
	68	33	35

### Suggestions for further research

The present study is restricted to 28 Institutions affiliated to Bharathiar University only. Further studies may be taken up by

widening the scope and coverage, studies by including Observation and interview to complement the questionnaire survey, to use benchmarking concept and set up norms and standards, to include more parameters and attempt comparative studies on MBA institutions in State and Deemed universities.

### Conclusion

Academic libraries share certain common features and characteristics though they differ much in the value and context from one another. The libraries of Management Institutions make unique contributions to management education. This contribution becomes more significant as the Management Education system demands more from the students and the curriculum is such that the students and scholars need to look beyond the class rooms for developing creative thinking and leadership qualities. The nature of management discipline is multidisciplinary; therefore role of the libraries in such institutions is crucial. Presently Management institutes are facing challenges in several fronts such as course structure, rapid introduction of revised syllabi and semesterization. It has a direct bearing on libraries in the Institutions and an imperative need to develop collections, to provide bibliographic access to all library materials and interpreting these materials for all users. Specific services include access to on-line resources and creation of new tools to enhance access to information available locally, regionally, nationally, or internationally.

So to cope with these changes, continuous improvement has become necessary for the libraries of these institutions to adapt to the new ways and techniques of management for the overall development of it. It is therefore necessary that the resources, facilities and services of these libraries and also the impact of emerging ICT based resources and services on the libraries are to be studied periodically.

### References

1. Anil Singh, 2013. Libraries without librarians, University News, 51 (30): 21-24.
2. Ayyanar, K. and M.Kanakaraj, 2012. A Study on library infrastructure and information services in the constituent colleges of Vinayakamissions University in Tamilnadu, India. Library progress (international), 32(2): 213-232.
3. Jesudas Manalan, B.S Swaroop Rani, 2001. The use pattern of Government Documents. University news, 39(7): 5-9.
4. Kothari, C. 2008. Research Methodology, Methods and techniques. New Age International Publishers, New Delhi.
5. Majeed Abdul and M. Bavakutty M, 2007. Quality Assessment of college and University library services., 45(2): 6.
6. Pandian, R., 2011. Information needs and use pattern of users in Anna university library: an analytical study. Ph.D., Thesis, Anna University.
7. Sangita Behera and Sunil Kumar Satpathy., 2014. Factors Affecting Information Needs of Faculty Members of Teachers Training Institutions of Odisha. DESIDOC Journal of Library & Information Technology., 34(5): 407-411.
8. Sevukan,R., and V.Gomathy, 2015. Digital Literacy of Postgraduate Students in Management Institutions of Puducherry: A Survey. Pearl -A Journal of Library and Information Science., 9(1): 66-74
9. Walmiki, R.H. and K.C, Ramakrishnegowda, 2009. ICT infrastructure in university libraries of Karnataka. Annals of Library and Information Studies., 56: 236-241.