

Information Needs and Information Seeking Behaviour of Research Scholars in Bangalore University, : A Survey

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Abstract - This paper examines that the information needs and information seeking behaviour of research scholars in Bangalore University, Bangalore: A Survey. A survey method was used for collecting of the data. 150 copies of questionnaires were distributed. Among them 130 were returned. Majority of the respondents (32.3%) use Internet for reading purpose. Majority of the respondents (98.5%) prefer to use internet services for E-Mail, Majority of the respondents (91.5%) frequently used google search engine, Most of the respondents (90.8%) have awareness on electronic information sources. Majority of the respondents (32.3%) are learned electronic resources by self by trial and error method. Majority of the respondents (26.9%) have information on journals articles as a type of required information needs. Majority of the respondents (36.2%) replied that they are purpose of seeking information for writing papers. Majority of the respondents (35.4%) have periodicals as a type of seeking materials in the library. Majority of the respondents (61.5%) can't say of the inadequacy of requirement information in their library. Majority of the respondents (26.9%) replied that some of information materials are old in using the library problem faced by them.

Keywords: Information Need, Information Seeking Behaviour, Research Scholars, Sri Venkateswara University.

1. Introduction

The user community of university library consists of mainly post-graduate students, research scholars, and faculty members. Among them, research scholars' use of the library is crucial to their research work, and the university library is intended to be a place where students consult to acquire more knowledge. Generally the student and research scholar community is largest in size than other user communities in university setup.

Libraries and information centres play a major role in information transfer cycle. The role of the University Libraries is not only limited to the preservation of reading materials but also to ensure that the information needs of the users are met by its own traditional as well as electronic resources and services.

1.1. Information

According to Oxford English dictionary, “Information is facts or knowledge provided or learned”¹. Shah pointed that “Information is power and it is a life saver for any venture”². Reitz defined “Information as all the facts, conclusions, ideas, and creative works of the human intellect and imagination that have been communicated, formally or informally, in any form”³.

Information is an important and key resource and an essential input for all types of organizations. Libraries have limited resources with which they have to satisfy the information needs of the users. Therefore, libraries have to build their collections and facilities to meet the requirements of the users.

The present era is an era of information. Good learning is based upon adequate information. Libraries provide information through their resources and services. Hence, academic libraries are playing a vital role in shaping a future generation of students and research scholars by providing required information to them.

Information is the primary agent of action and change. It reduces entropy by increasing certainty and decreases the number of choices before us for better judgement. A person seeks information to make sense of the world, getting across a barrier, solve a problem and to fill the gap in the knowledge. Information has to be integrated with knowledge to be used and applied appropriately. It means that information needs knowledge and experience to solve problems.

1.2. Information needs of research scholars

Information is crucial for nation’s development. The development of any nation is not possible until and unless the information is made available at the door steps of those who need, preferably free of cost. People like policy makers, planners, economists, farmers, teachers and research scholars, doctors, engineers, librarians’ etc. require information for their occupational and day to day activities. No matter whether they are in office, or at home, in college, in the rural areas, they all need information either directly or indirectly. Students as the largest chunk of library users need information in their daily life. Post-graduate students in universities need information and course materials for their all-round development which is obtained from the resources of the library.

1.3. Information seeking behaviour of research scholars

Information seeking behaviour is an area of active interest among the information scientists, academicians, scientists, sociologists, researchers and psychologists. Information seeking habits result from the recognition of some need, perceived by the user, whom as a consequence makes demand upon formal systems such as libraries, information centres, online services or persons to meet their information needs. Information systems exist to enhance the flow and utilization of information and augment the information processing function of man in reaching rational decisions in day-to-day life. The research scholars may seek the required information by referring books, browsing periodicals, consulting abstracting and indexing periodicals, consulting colleagues and friends. They also seek information from teachers, senior research scholars, post doctoral fellows and information centres. They also seek information through seminars, conferences, workshops, symposiums, etc. The majority of the information is sought by the research scholars from the sources and services of the library in which they are the users.

2. Review of Literature

Nirupma Chohda. and Neeru Gupta. (2017) made a study on the Use Pattern and Seeking Behaviour of Students in National Institute of Technology, Jalandhar, **India**. Determining use patterns and information seeking behaviour of users is consequential to enhance library collections, facilities, and services. This paper tends to investigate information seeking behaviour and use pattern of students on quality of procured information in National Institute of Technology, Jalandhar, India. Survey research method is adopted for the study. Analysis of data is done through percentage count. It is found that 70 per cent are aware about the e-journals and databases. The result indicated that both print and electronic e-journals are highly preferred by students but access them in other places then departmental library and 32.22 per cent respondents spent time more than hours for internet access. The study will be useful for the academic librarians in improving the shortcomings of their institutes and will procure the required e-journals for their Institutes.

Ali Amour El-Maamiry. (2017) investigated on the information seeking behaviour, is considered as a human behaviour to search for information in purposeful way to find the gap. This behaviour sometimes is very undefinable. The study investigated use of electronic resources by students of the College of Business Administration (CBA) and College of Information Technology (CIT). That is, it examined possible factors and problems in their searching habits, information seeking, use and retrieval in satisfying their needs. Therefore, the study focused on information seeking behaviour of students and barriers to utilizing online resources to execute academic tasks. Students of University of Dubai ultimately, due to cultural effects adopts different searching processes, use different phrases and mostly spend more time to search for information to satisfy their needs. It is assumed that poor information skills are preventing them from searching information effectively.

Hemantha Kumar G.H. (2017) studied the information pertaining to the research methodology, population, sample, data collection and analysis. A comprehensive review of literature covering the period 2016-2004. Survey method will be employed to study of Information Seeking Behaviour of Faculty Members of Agricultural Universities in Karnataka. Questionnaire will be framed to collect the feedback from faculty members to meet the objectives of this study. Data collected will be subjected for statistical analysis to prove objectives and hypothesis. This article reviews the literature on the information seeking behaviour. The literature includes journal articles, reports, monographs etc., published inside and outside India, discussing about Information Seeking Behaviour, Agricultural University Libraries, Agricultural Scientists, Crops Research Scientists, Farmers in India, Public Libraries in Karnataka, ICT Environment and the problems faced by the users.

Ajay Kaushik. (2016) carried out a study on Information Seeking Behavior of Faculty of YMCA University. Information has become the most important aspect of today's social development, as social development depends on the standard of living of that particular society. The vital factor that affects research is information. The amount and type of information received would directly have its impact on the social development. The present study attempts to understand Information Needs and Information Seeking Behavior of faculty YMCA Faridabad (India). The study shows that teachers are least concerned with Government documents, dissertation/thesis and proceeding of conferences as source of information. Maximum Teachers (97.4%) are aware about the back volume of the journals. It is also found in the study that maximum teachers were satisfied with the Library collections. Maximum users used circulation service, reference service, computerized service and photo

coping service. The present era is called the "Information era." Information has become the most important element for progress in society. To thrive in this modern era, one needs a variety of information, no matter how well versed one is in a field or profession. Psacharopoulous (1982) discusses the necessity of information in the present age. We can reorganize the educational system and redefine scientific research only with the help of information.

3. Objectives of the Study

The following are specific objectives of the study:

1. To know the frequency of library visit of research scholars;
2. To know the purpose of library visit of research scholars;
3. To identify the information needs of the research scholars;
4. To know the information seeking approach and types of information seeking from their library;
5. To know the problems faced by the research scholars in using the library sources and services.

4. Scope of the Study

The study is undertaken to explore the information needs and information seeking behaviour of research scholars and their perception on information needs and seeking behaviour in the surveyed Bangalore University to find the ways and means to promote the existing system.

5. Methodology

The survey method was used in this study. Question tool was used to collect data from the research scholars. 150 questionnaires were distributed to the research scholars following accidental sampling method. The researcher received 130 questionnaires out of 150. After collecting data required for the study, the data was analysed and interpreted in the form of tables.

6. Analysis of the Data

6.1.1. Library visit

A question has been asked to the respondents to know their frequency of library visit. The replies given by them are shown in Table 6.1.

Table 6.1.1: Frequency of library visit

Frequency	Arts		Science		Total N=130 (%)
	n=85	%	n=85	%	
Daily	26	30.6	18	40	44 (33.8%)
Alternative days	21	24.7	14	31.1	35 (26.9%)
Once in a week	18	21.2	7	15.6	25 (19.2%)
Once in a month	14	16.5	4	8.9	18 (13.8%)
Occasionally	6	7	2	4.4	8 (6.2%)
Total	85	100	45	100	130 (100%)

It is obvious from the Table 6.1.1 that majority of the respondents (33.8%) visit library daily followed by Alternative days (26.9%), Once in a Week (19.2%), Once in a Month (13.8%) and remaining of them (6.2%) are visited library Occasionally.

6.1.2. Time spent

A question has been asked to the respondents to know the amount of time they spent in the library per day. The replies given by them are shown in Table 6.1.2. The Table 6.1.2 depicts that majority of the respondents (31.5%) are spend one to two hours in the library followed by two to three hours (28.5%), less than one hour (20.8%), three to four hours (13.8%) and remaining of them (5.4%) are spend above four hours in the library.

Table 6.1.2: Time spent in the library per day

Time Spent	Discipline				Total N=130 (%)
	Arts		Science		
	n=85	%	n=45	%	
0- 1	17	20	10	22.2	27 (20.8%)
1 - 2	24	28.2	17	37.8	41 (31.5%)
2 - 3	26	30.6	11	24.4	37 (28.5%)
3 - 4	13	15.3	5	11.1	18 (13.8%)
Above 4	5	5.9	2	4.5	7 (5.4%)
Total	85	100	45	100	130 (100%)

6.1.3. Purpose of using Internet

A question has been put to the respondents to know the purpose for which they use Internet. The replies given by them are shown in Table 6.1.3.

Table 6.1.3 : Purpose for which they use Internet

Purpose	Discipline				Total N=130 (%)
	Arts		Science		
	n=85	%	n=45	%	
Reading	27	31.8	15	33.3	42 (32.3%)
Literature search	25	29.4	5	11.1	30 (23.1%)
Database search	5	5.9	12	26.7	17 (13.1%)
E-Mail	9	10.6	3	6.7	12 (9.2%)
Chatting	6	7	1	2.2	7 (5.4%)
Information Seeking	13	15.3	9	20	22 (16.9%)
Total	85	100	45	100	130 (100%)

The Table 6.1.3 reveals that the majority of the respondents (32.3%) use Internet for reading purpose followed by Literature Search (23.1%), Information Seeking (16.9%), Database Search (13.1%), E-Mail (9.2%) and remaining of them (5.4%) are use Internet for Chatting purpose.

6.1.4. Prefer to use of internet services

A question has been put to be respondents to know their preference in using of internet services in the library. The replies given them are shown in Table-6.1.4.

Table 6.1.4: Prefer to use of internet services

Prefer to use	Discipline				Total N=130 (%)
	Arts		Science		
	n=85	%	n=45	%	
E-Mail	83	97.6	45	100	128 (98.5%)
Web Search	68	80.0	30	66.6	98 (75.4%)
Online Databases	33	38.8	24	53.3	57 (43.8%)
E-Journals/E-Books	74	87.1	41	91.1	115 (88.5%)

(Respondents are permitted to tick more than one answer.)

The Table 6.1.4 shows that the majority of the respondents (98.5%) prefer to use internet services for E-Mail followed by them E-journals/E-books (88.5%), Web search (75.4%) and remain of them (43.8%) prefer to use internet services for Online Databases.

6.1.5. Search engines

A question has been put to the respondents to know their frequently used search engines in the library. The replies given by them are shown in Table-6.1.5.

Table 6.1.5: Frequently used the search engines

Search engines	Discipline				Total N=130 (%)
	Arts		Science		
	n=85	%	n=45	%	
Google	77	90.6	42	93.3	119 (91.5%)
Yahoo	55	64.7	33	73.3	88 (67.7%)
MSN	29	34.1	19	42.2	48 (36.9%)
Altavista	17	20.0	11	24.4	28 (21.5%)
Rediff	33	38.8	24	53.3	57 (43.8%)
Bing	17	20.0	15	33.3	32 (24.6%)

(Respondents are permitted to tick more than one answer.)

The Table 6.1.5 clears that the majority of the respondents (91.5%) frequently used google search engine followed by them yahoo search engine (67.7%), Rediff search engine (43.8%), MSN search engine (36.9%), Bing search engine (24.6%) and remaining of them (21.5%) frequently used Altavista search engine.

6.1.6. Awareness on electronic information sources

A question has been posed to the respondents to know their awareness on electronic information sources available in their library. The replies given by them are shown in Table 6.1.6.

Table 6.1.6: Awareness on electronic information sources

Reply	Discipline				Total N=130 (%)
	Arts		Science		
	n=85	%	n=45	%	
Yes	76	89.4	42	93.3	118 (90.8%)
No	9	10.6	3	6.7	12 (9.2%)
Total	85	100	45	100	130 (100%)

The Table 6.1.6 elucidates that majority of the respondents (90.8%) have awareness on electronic information sources and remain of them (9.2%) do not have awareness on electronic information sources.

6.1.7. Sources to know about learning method of electronic resources

A question has been asked to the respondents to know their method in using electronic resources in their library. The replies given by them are shown in Table 6.1..

Table 6.1.7: Learning method of electronic resources

Learn Method	Arts		Science		Total N=130 (%)
	n=85	%	n=45	%	
	Self by Trial and Error method	26	30.6	16	
Online Instruction	8	9.4	6	13.3	14 (10.8%)
Through Friends /Colleagues	11	12.9	8	17.8	19 (14.6%)
Training provided by the library staff/ workshop/ short course	27	31.8	12	26.7	39 (30%)
Someone at Terminal	6	7.1	1	2.2	7 (5.4%)
By Reading books, journal articles etc	7	8.2	2	4.4	9 (6.9%)
Total	85	100	45	100	130 (100%)

The Table 6.1.7 portrays that majority of the respondents (32.3%) are learned electronic resources by self by trial and error method followed by training provided the library staff/workshop/short course (30%), through friends/colleagues (14.6%), online instruction (10.8%), by reading books, journals articles etc. (6.9%), and remain of them (5.4%) are learned electronic resources through someone at terminal.

6.1.8. Types of Information Need

A question has been put to the respondents to know their which type of information do you need. The replies given by them are shown in Table 6.1.8.

Table 6.1.8: Type of information need

Type of Information Need	Arts		Science		Total N=130 (%)
	n=85	%	n=45	%	
	Information on Employment	16	18.8	2	
Information on Course study	11	12.9	4	8.9	15 (11.5%)
Information on Competitive Exams	15	17.7	5	11.1	20 (15.4%)
Information on updating knowledge	5	5.9	9	20	14 (10.8%)
Information on entertainment	3	3.5	0	0.0	3 (2.3%)
Information on Conference Proceedings	14	16.5	11	24.5	25 (19.2%)
Information of Journals Articles	21	24.7	14	31.1	35 (26.9%)
Total	85	100	45	100	130 (100%)

The Table 6.1.8 enumerates that majority of the respondents (26.9%) have information on journals articles as a type of required information needs followed by information on

conference proceedings (19.2%), information on competitive exams (15.4%), information on employment (13.8%), information on course study (11.5%), information on updating knowledge (10.8%), and remain of them (2.3%) have information on entertainment as a type of required information need.

6.1.9. Purpose of seeking information

A question has been put to the respondents to know their purpose of seeking information in the library. The replies given by them are shown in Table 6.1.9.

Table 6.1.9: Purpose of seeking information in the library

Purpose of Seeking Information	Arts		Science		Total N=130 (%)
	n=85	%	n=45	%	
	For preparing examination	5	5.9	1	
For updating knowledge	21	24.7	12	26.7	33 (25.4%)
For writing assignment	8	9.4	2	4.4	10 (7.7%)
For writing papers	27	31.8	20	44.5	47 (36.2%)
Preparing for competitive exams	21	24.7	10	22.2	31 (23.8%)
For entertainment	3	3.5	0	0.0	3 (2.3%)
Total	85	100	45	100	130 (100%)

The Table 6.1.9 shows that majority of the respondents (36.2%) replied that they are purpose of seeking information for writing papers followed by for updating knowledge (25.4%), for preparing for competitive exams (23.8%), for writing assignments (7.7%), for preparing examinations (4.6%) and remain of them (2.3%) replied that they are purpose of seeking information for entertainment.

6.1.10. Type of seeking materials

A question has been put to the respondents to know their which type of materials seeking in the library. The replies given by them are shown in Table 6.1.10.

Table 6.1.10: Type of materials seeking in the library

Type of Seeking Information	Arts		Science		Total N=130 (%)
	n=85	%	n=45	%	
	Textbooks	17	20	5	
Periodicals	29	34.1	17	37.8	46 (35.4%)
Newspapers	12	14.1	4	8.9	16 (12.3%)
Reference books	15	17.6	11	24.4	26 (20%)
General books	2	2.4	1	2.2	3 (2.3%)
Competitive exam books	10	11.8	7	15.6	17 (13.1%)
Total	85	100	45	100	130(100)

The Table 6.1.10 explains that majority of the respondents (35.4%) have periodicals as a type of seeking materials in the library followed by reference books (20%), textbooks (16.9%), competitive books (13.1%), newspapers (12.3%) and remain of them (2.3%) have general books as a type of seeking materials in their library.

6.1.11. Required information

A question has been put to the respondents to know their required information is not available in the library. The replies given by them are shown in Table 6.1.11.

Table 6.1.11: Inadequacy of requirement information in the library

Reply					Total N=130 (%)
	Arts		Science		
	n=85	%	n=45	%	
Dissatisfied	12	14.1	7	15.5	19 (14.6%)
Helpless	9	10.6	14	31.1	23 (17.7%)
Frustrated	5	5.9	3	6.7	8 (6.2%)
Can't say	59	69.4	21	46.7	80 (61.5%)
Total	85	100	45	100	130 (100%)

The Table 6.1.11 enumerates that majority of the respondents (61.5%) can't say of the inadequacy of requirement information in their library followed by (17.7%) helpless, (14.6%) dissatisfied and remain of them (6.2%) frustrated of the inadequacy of requirement information in the library.

6.1.12. Problems while seeking information

A question has been put to the respondents to know whether they have problems while seeking information. The replies given by them are shown in Table 6.1.12.

Table 6.1.12: Problems faced while using library resources and services

Problem					Total N=130 (%)
	Arts		Science		
	n=85	%	n=45	%	
Materials not available	14	16.5	7	15.6	18 (13.8%)
Library staff is unwilling service	6	7.1	0	0.0	15 (11.5%)
Incomplete information service	18	21.2	9	20	20 (15.4%)
Lack of time	7	8.2	2	4.4	14 (10.8%)
Lack of knowledge in using the library	15	17.6	4	8.9	3 (2.3%)
Information scattered in too many sources	12	14.1	10	22.2	25 (19.2%)
Some of information materials are old	13	15.3	13	28.9	35 (26.9%)
Total	85	100	45	100	130 (100%)

The Table 6.1.12 presents that majority of the respondents (26.9%) replied that some of information materials are old in using the library problem faced by them followed by information scattered in too many sources (19.2%), incomplete information service (15.4%), materials are not available (13.8%), library staff unwilling service (11.5%), lack of time (10.8%) and remain of them (2.3%) replied that lack of knowledge in using the library problem faced by them

7. Findings of the Study

The major findings of the study are:

1. Only one third of the respondents (33.8%) visit library daily.

2. Majority of the respondents (31.5%) are spend one to two hours in the library.
3. Majority of the respondents (32.3%) use Internet for reading purpose.
4. Majority of the respondents (98.5%) prefer to use internet services for E-Mail.
5. Majority of the respondents (91.5%) frequently used google search engine.
6. Most of the respondents (90.8%) have awareness on electronic information sources.
7. Majority of the respondents (32.3%) are learned electronic resources by self by trial and error method.
8. Majority of the respondents (26.9%) have information on journals articles as a type of required information needs.
9. Majority of the respondents (36.2%) replied that they are purpose of seeking information for writing papers.
10. Majority of the respondents (35.4%) have periodicals as a type of seeking materials in the library.
11. Majority of the respondents (61.5%) can't say of the inadequacy of requirement information in their library.
12. Majority of the respondents (26.9%) replied that some of information materials are old in using the library problem faced by them.

8. Suggestions

1. The research scholars should visit library regularly to get required information. Visiting library should become as a habit. It will lead to become a knowledge person by visiting library daily.
2. Majority of the respondents not spending their majority of their time in the library. Hence, research scholars should spend at least three to four hours in the library consultation with reference and other reading materials.
3. More than one fourth of the research scholars relied that reading materials are old. Hence, latest editions of the reference books and other materials are the procured.

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