



Information Searching Habits Of Engineers: A Users' Study Of Engineering Colleges Under The Haryana Universities

Rajeev Kumar Gaba¹ and Krishan Gopal²

¹Research Scholar(Ph.D), Singhania University, Pacheri Bari, Jhunjhunu (Raj.), India
E-mail: reach4rajiv@gmail.com

²Research Guide, (Librarian) National Institute of Technology (NIT)
Kurukshetra- 136119
Email: librariannitkkr@rediffmail.com

ABSTRACT:

The function of library is an integrated component in higher study. A modern library is not a collection of printed books and printed journals. It is much than this. Today the library involves the fast changing e-environment of publishing. So the professional and academic librarians are facing a lot of problem due to static budget and exponential price hike of library collection and need of user for information is also increased. Online catalogs, electronic databases, and the internet have evolved as the predominant tools used in information seeking today.

The present paper highlights the investigate Information searching habits of engineers working in the engineering colleges under the Haryana universities. The data of survey was collected through a structured questionnaire. The questionnaires were distributed to 250 respondents randomly to the faculties and research-scholar. 162 filled in questionnaires were returned by the engineers with the response being 64.8%.

KEYWORDS USED:

Behavior, Engineers, Information, Seeking, User.

1.INTRODUCTION

The study of information seeking behavior can be dated back to the late 1940's. Since that time a large number of studies have been carried out on the various aspects of information seeking behavior of individuals in different fields of specialization. Behavior of users towards seeking information depends upon the type of problem they undertake for research, availability of time, teaching requirements, information need and availability of sources of information.

Librarians ceaselessly effort to meet the information needs of their users. This requires an understanding of their users' information needs and information-searching behaviors. This study has been confined to examine the information searching habits of faculty members in ten technical institutions under the universities of Haryana. In order to better understand how engineering faculty are responding to changing information environment, how frequently engineers seek or access information to complete

Please cite this Article as : Rajeev Kumar Gaba¹ and Krishan Gopal², Information Searching Habits Of Engineers: A Users' Study Of Engineering Colleges Under The Haryana Universities : Golden Research Thoughts (Sept ; 2012)



specific tasks, how engineers keep-up with current developments, how they discover less recent journal articles in their field, how often they visit the library in-person, and how important library resources and services cater their information needs. Understanding the nature of the user community and the information searching habits and practices of the users are common themes in library literature. With improved understanding of the information-seeking behavior of engineers in academic environments, librarians can better develop information services and resources, implement policies that help engineering faculties to access quality information, and improve collection development practices.

In the field of Information technology, it is noticeable that revolutions are more than evolution. The revolution comes after evolution. The idea of increasing the effectiveness of information exchange by sharing the work nationally and internationally is fully recognized by the information professionals, seekers and information producers.

There has been a big change in the way information is accessed due to telecommunication network. This phenomenon has resulted in the formation of networks at local, regional, national and international levels.

Internet has a vital role to play in today's information communication system. Internet has come in a big way for retrieval of vast output of information combining the concept of time, space and precision. It has become very easy to store information in the electronic form and provide it through World Wide Web technology to the users who can access the information as when required by them.

“Information is stimuli that have meaning in some context for its receiver. When information is entered into and stored in a computer, it is generally referred to as [data](#). After processing (such as formatting and printing), output data can again be perceived as information”.

When information is packaged or used for understanding or doing something, it is known as [knowledge](#).

According to Wilson “Information behavior may be defined as the more common field of investigation, particularly concerned with the variety of methods people employ to discover”. However, different scholars give different philosophies regarding that concept but our research gives us an idea that the most important one is the education system, which has great effect, and captures almost 70% of the mental ability to absorb the things that leads towards student's behavior”.

Information Searching Behavior is the 'micro-level' of behavior employed by the searcher in interacting with information systems of all kinds. It consists of all the interactions with the system, whether at the level of human computer interaction (for example, use of the mouse and clicks on links) or at the intellectual level (for example, adopting a Boolean search strategy or determining the criteria for deciding which of two books selected from adjacent places on a library shelf is most useful), which will also involve mental acts, such as judging the relevance of data or information retrieved.

2. REVIEW OF LITERATURE

The current section is devoted to give the review of related studies already existing in the field. The main objective of this chapter is to base the present research on the knowledge and structure already existing so that the proper balanced could be developed for the study. During the literature survey the investigator came across various types of studies related to status survey in Academic, Special and Public libraries. Almost all the studies included in this chapter are empirical in nature and directly related to the study. These studies were thought to be of great utility to develop knowledge base. All these studies have been discussed in the arranged paragraphs.

With the beginning of information need and seeking behavior research different models were proposed for identifying different steps involved in this process. For example, Kuhlthau (1991) studied as how students searched for information as part of their writing process. She proposed a model that was consisted on seven stages. The stages of Kuhlthau's model are: a) Initiation b) Selection c) Exploration d) Formulation e) Collection f) Presentation. According to Parida (1999) Library Professionals in academic institutions of Orissa need to think of encouraging steps to improve their status and prestige. Cothey (2002) concluded that Web users have become more passive and more diverse as they become more experienced using the Web. It was also discovered that they use less querying techniques; however their Web usage was more sporadic, which might suggest greater selectivity. Shokeen and Kushik (2003) studied information seeking behavior of Psychologists and Sociologists working in the universities located in Haryana and Delhi. They reported Periodicals are the most used and most important source of information. And Browsing is the first preferred method of searching the required information. Choukhande V G and P.S.G.

Kumar (2004) concluded that the purpose of user's visit to library largely depends up on the free time available to them. The university teachers preferred book trade catalogue, bibliographies, indexes, abstracts, addition lists issued by library and periodicals to know current literature in concerned fields. Purnima Th (2005) study reveals that majority of the college faculty members needed information for academic work, whereas university faculty members needed information to update knowledge and for research work. Most of the faculties of colleges and university were unaware of the use of IT, because of lack of infrastructure in libraries. According to George (2007) teachers and students made use of literature available in their parent institutions but majority of them were not satisfied with collection and services of these. On the other hand most of the practitioners do not use libraries regularly and depended mainly on their personal collection of books and periodicals. Library and information field and primary publications were not found so attractive in ayurveda. After that Fatima and Ahmad (2008) carried out a study to examine the information seeking behaviour of college students under name "Information Seeking Behaviour of the Students at Ajmal Khan Tibbiya College, Aligarh Muslim University: A Survey." Data was collected from 60 students using questionnaire. 51.67% users were visiting libraries daily. Newspapers were the most used documents followed by use of books and journals. Carrier development was the most preferred response for seeking information. Ninety percent students agreed that students needed instruction on how to use information source in their subject area for the effective and efficient use of the information sources and services. 48

Singh and Satija, (2008) study revealed that library and information centre were the most preferred sources to meet information requirements of agriculture scientists. Users depended heavily on the computerized information search facility. The working culture of those who need information, facilities available for seeking information and knowledge about them, chances of getting the required information etc. affect the information seeking behavior of the users.

Robinson's (2010) research suggests that when seeking information at work, people rely on both other people and information repositories (e.g., documents and databases), and spend similar amounts of time consulting each (7.8% and 6.4% of work time, respectively; 14.2% in total). However, the distribution of time among the constituent information seeking stages differs depending on the source. When consulting other people, people spend less time locating the information source and information within that source, similar time understanding the information, and more time problem solving and decision making, than when consulting information repositories. Furthermore, the research found that people spend substantially more time receiving information passively (i.e., information that they have not requested) than actively (i.e., information that they have requested), and this pattern is also reflected when they provide others with information.

Among the three groups, library usage for Accounting and Trade experts was found to be the least, while the referring rate of Engineering and Social Science experts to the library was approximately equal. Library usage of engineering experts was found to vary greatly and was related to their occupational activities. In conclusion, three suggestions to fix the gap in information need and information seeking behavior: first, the Training Unit of the company should implement necessary courses for personnel instruction in relevant fields; second, main researchers of each department can cooperatively work with or alongside librarians; third, librarians should provide specific information seeking skill instruction for each department related to their careers and professional activities.

3.OBJECTIVES

The objective of this study is to identify the following, using a sample of engineers:

- 1.To find out the searching habits of engineers.
- 2.To identify the purpose of searching habits, nature and type of information required by the engineers.
- 3.To identify the problem faced by the engineers.
- 4.What kind of informal methods of acquiring information are used?

Here engineers mean faculty & research scholar of technical institutes under the Haryana universities.

4.SCOPE

The scope of present study was limited to the engineers working in 10 engineering colleges situated in Haryana. The sample included the research scholars and faculty members in the field of

engineering.

5.METHODOLOGY

A questionnaire based survey method was adopted to gather the data on the information searching habits of the engineers. The questionnaires were distributed to 250 respondents (25 in each institute) randomly to the faculties and research- scholar of 10 engineering institute under the Haryana universities. 162 filled in questionnaires were returned by the engineers with the response being 64.8%.

6.ANALYSIS AND RESULTS

6.1 NO. OF X STUDENTS KEEP THEIR SELF UPDATE WITH THE ADVANCES IN THEIR FIELD:-

Table –6.1

Frequency	No.	%
To a great extent	48	29.63
To some extent	89	54.94
To little extent	25	15.43
Not at all	0	0.00
Total No. of respondents	162	100

Table –6.1 reveals that the keep their self updates with the advances in their field 48(29.63%) to a great extent, 89(54.94%) engineers updates to some extent and only 25(15.43%) to little extent.

6.2 USE OF LIBRARY SERVICES

TABLE NO. –6.2

Services	No.	%
Circulation	162	100
Reference services	159	98.15
Online services	153	94.44
Abstracting services	94	58.02
Photocopying services	143	88.27
Reading facilities	150	92.59

Table- 6.2 shown. The Percentage of the use of Library services by the engineers. There is total no. of respondents 162. Out of 162 respondents 162(100%) used circulation service, 159(98.15%) respondents use reference services, 153(94.44%) respondents used online services, 94(58.02%) used Abstracting services, 143(88.27%) photocopying services and 150(92.59%) respondents used reading facility in the Library. The highest category of respondents to use library services i.e. 100% & lowest category of user are 58.02% (Fig.-6.2).

6.3 USEFULNESS OF INFORMATION SERVICE.**TABLE-6.3**

Services	Very great useful	(%)	Great useful	(%)	Some useful	(%)	Little useful	(%)	Not useful	(%)	Total
Circulation	19	11.73	83	51.23	46	28.40	14	8.64	0	0.00	162
Reference service	6	3.70	51	31.48	90	55.56	12	7.41	3	1.85	162
Photocopy	12	7.41	79	48.77	46	28.40	6	3.70	19	11.73	162
Current awareness service(CAS)	15	9.26	48	29.63	26	16.05	46	28.40	27	16.67	162
Digital Library Service(DLS)	27	16.67	86	53.09	32	19.75	3	1.85	14	8.64	162

From the above table it is noted that as 83 (51.23) % respondents are using the services of circulation sections is at great useful and all the respondents avail this service.

In regards to reference services 90 (55.56%) of the users comments i.e. this is section on is in some use. According to 51 (31.48%) it is in great useful and 12 (7.41%) says the little use of the services. As per 6 (3.70%) is very good and 3 (1.85%) do not use it.(InFig.-6.3)

Photocopying services is available in the library 12 (7.41%) said that it is very great useful, 79 (48.77%) great useful, 46 (28.40%) some use and 19(11.73%) user said not avail this service in their Library.

15(9.26%) respondents said CAS is very great useful, 48(29.63%) said great useful, 26(16.05%), 46(28.40%), said that the services of current awareness is some useful and little useful. On the other hand 27(16.67%) respondents said CAS is not useful.

86(53.09%) respondents said Digital Library services are grate useful in their library. Only 3(1.85%) said DLS is little use. In contrast, 14(8.64%) engineers said DLS is not useful in their Library.

6.4 AVILABILITY OF BACK VOLUMES IN THE LIBRARY**TABLE -6.4**

Frequency	No.	%
Most often	24	14.81
Often	60	37.04
Sometimes	67	41.36
Rarely	11	6.79
Never	-	-
Total No. of respondents	162	100

Table: 6.4 show that % of the visit made by users. Out of 162 respondents 24 respondents find back volumes in their library most often, 60 often, 67 sometimes & 11 users rarely. Highest no. of users finds back volumes in their library i.e. (41.36%) of the total respondents & lowest category of the users to find

back volumes in their library rarely i.e. 11 (6.79%).

6.5 LIBRARY OPENING HOURS ARE?

TABLE NO. 6.5

Particulars	Users	Percentage (%)
Very Convenient	19	11.73
Fairly Convenient	10	6.17
Convenient	123	75.93
Inconvenient	7	4.32
Very Inconvenient	3	1.85

Table No. 6.5 reveals that library opening hours are convenient according to 123 uses out of 162 engineers which is 75.93% , 10 users feels it fairly convenient , 19(11.73%) Very convenient, 7(4.32%) inconvenient and 3(1.85%) very Inconvenient. In fig.-6.5, 75.93% users are very much satisfy with opening hours of the library on the other hands very few users are (1.85%) are very inconvenient which is very low.

6.6 HOW HELPFUL ARE THE LIBRARIAN AND STAFF IN FINDING ANSWER TO YOUR QUARRIES?

TABLE NO. 6.6

Particulars	Users	Percentage (%)
Always	124	76.54
Often	19	11.73
Sometime	14	8.64
Rarely	5	3.09
Never	0	0

Table No. 6.6 reveals that librarian and library staff is very helpful to users ; 124(76.54%) users always satisfy with the librarian and staff of the library, 19(11.73%) users often satisfy, only 14(8.64%) engineers sometime satisfy, 5(3.09%) users rarely satisfy with the librarian and library staff. Fig.-6.6 shows that library staff is very cooperative and helpful.

6.7 DO YOU FEEL THAT YOUR LIBRARY SHOULD PROVIDE TRAINING PROGRAMMED TO USERS FOR EFFECTIVE USE OF LIBRARY?

TABLE NO. 6.7

Particulars	Users	Percentage (%)
Very great extent	28	17.28
Great extent	41	25.31
Some extent	83	51.23
Little extent	8	4.94
Not at all	2	1.24

Table no.-6.7 shows that 83(51.23%) users point out that library provide training programmed to users for effective use of library at some extent , Fig.-6.7 shows only 28(17.28%) users point out very great extent, 41(25.31%) great extent, 8(4.94%) Little extent & 2(1.24%) users are not satisfied with this view.

7.CONCLUSIONS:

After the deep study wrapping up show that engineers are most used of their library services, i.e. circulation, reference, online, Abstracting, photocopying, current awareness services (CAS), and reading facility in the Library premise. Digital Library services are grate useful in their library. Utmost users find back volumes in their library. Study shows that librarian and library staff is very helpful and cooperative to users. Most of users wants to point out that library provide training programmes to users for effective use of library

APPENDICES

Fig.6.1 KEEP THEIR SELF UPDATE WITH THE ADVANCES IN THEIR FIELD

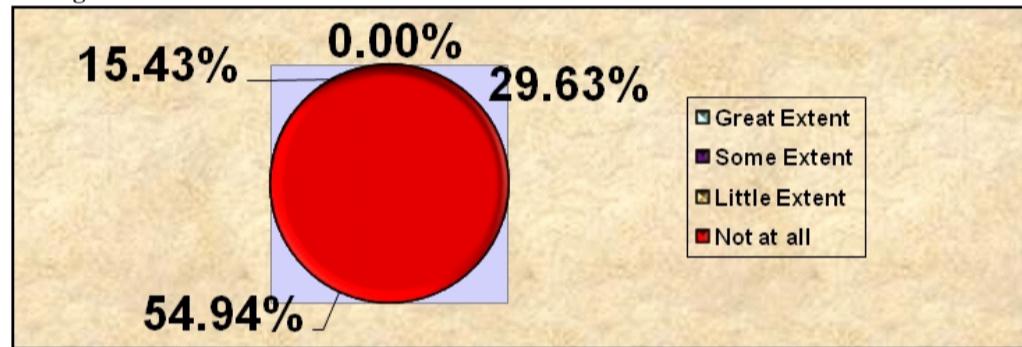


FIG.- 6.2 LIBRARY SERVICES OFTEN GETTING BY ENGINEERS

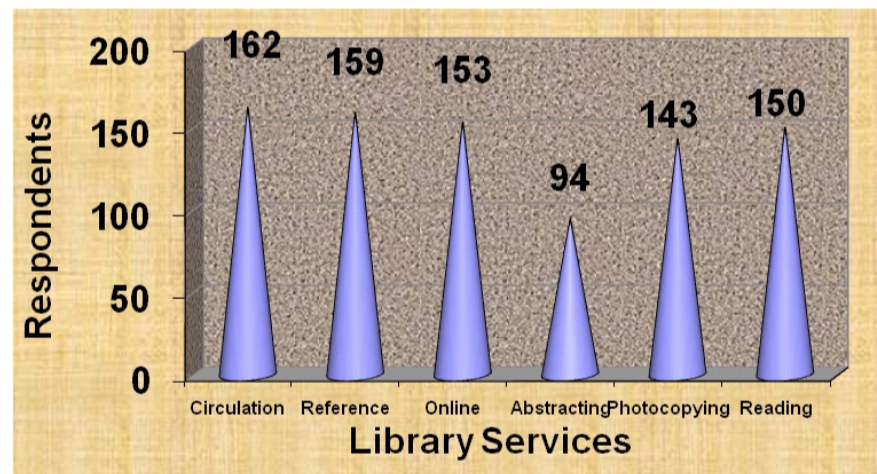


Fig.-6.3 USEFULNESS OF INFORMATION SERVICE

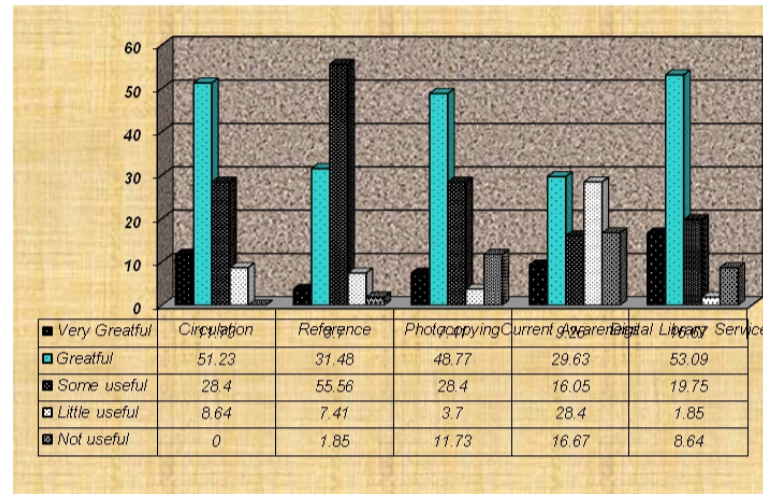


Fig.-6.4 FIND BACK VOLUMES IN THE LIBRARY

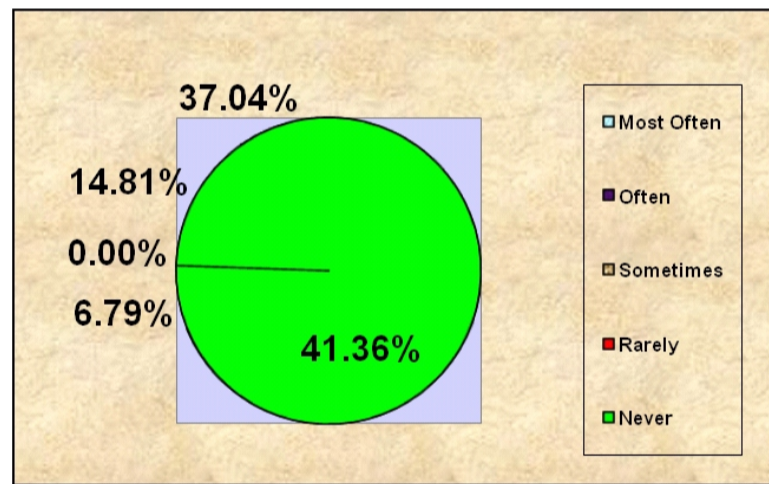


Fig.-6.5 LIBRARY OPENING HOURS

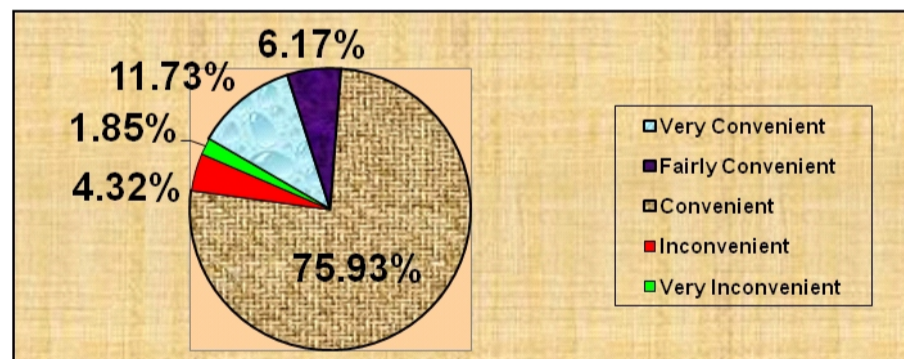


Fig.6.6 LIBRARIAN AND STAFF IN FINDING ANSWER TO RESPONDENTS' QUARRIES

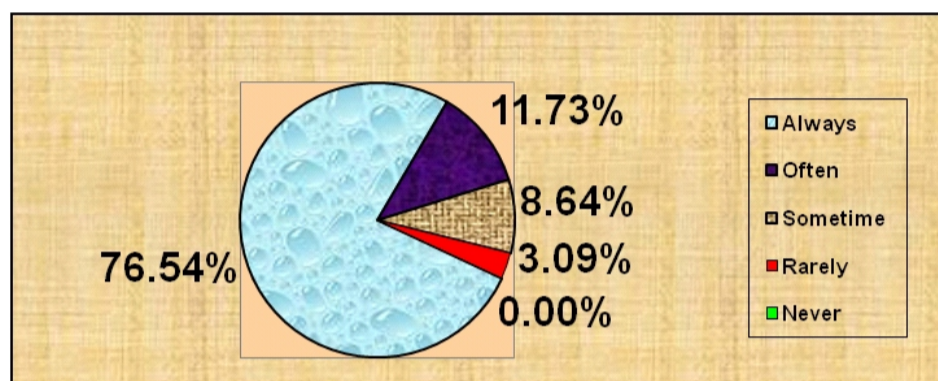
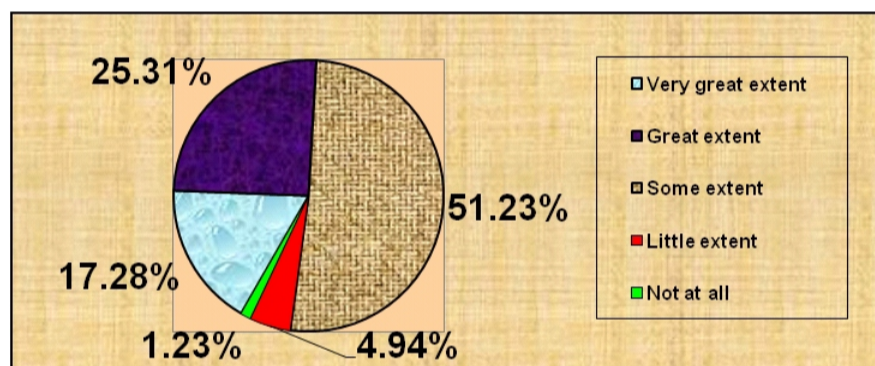


Fig.-6.7 LIBRARY SHOULD PROVIDE TRAINING PROGRAMMED TO USERS FOR EFFECTIVE USE OF LIBRARY OR NOT



REFERENCES:

- 1.Amin Yousefi & Shima Yousefi (2007). 'Information need and information seeking behavior of professionals at an Iranian company', Library Student Journal
- 2.Anwar, M. A. (2007). Research on information seeking and use in Pakistan: An assessment. Pakistan Journal of Library and Information Science, 7, 15-32..
- 3.Cothey, V. (2002). A longitudinal study of World Wide Web users' information-searching behavior. Journal of the American Society for Information Science and Technology, 53(2), 67.
- 4.Hanna Stelmaszewska , B.L. William Wong & Penelope M. Sanders (2010). Methods for gathering and analyzing information seeking behaviour in electronic resource discovery systems. Proceedings of The Human Factors And Ergonomics Society 54th Annual Meeting-2010, 807-811.
- 5.<http://searchsqlserver.techtarget.com/definition/information>
- 6.Jarvelin, K., & Wilson, T.D. (2003). One conceptual model for information seeking and retrieval research. Information Research, 9(1), 163.
- 7.Lewin, D., & Stokes, J. P. (2004). Information-seeking behavior of nurse teachers in a school of health studies: A soft systems analysis. Nurse Education Today, 24(1), 47-54.
- 8.LISWiki, (2007). Information behavior theories. History. Retrieved August 28, 2008, from: http://liswiki.org/wiki/Information_behavior_theories
- 9.Monica L. Merritt, Spring 2007 SLIS 5200 TXWI_C Concept Briefing
- 10.Qureshi, M. T., Zafar, K.M. & Khan, B.M. (2008). Information needs & information seeking behavior of students in Universities of Pakistan. Journal of Applied Sciences Research, 4(1), 40-47.

11. Robinson, M. A. (2010). An empirical analysis of engineers' information behaviors. *Journal of the American Society for Information Science and Technology*, 61(4), 640–658. <http://dx.doi.org/10.1002/asi.21290>
12. Shokeen, Ashu and Kaushik, Sanjay K. (2003) "Information Seeking Behavior of Psychologists and Sociologists: A Case Study of Delhi and Haryana Universities" *ILA Bulletin*, 39(3), 11-14.
13. Singh, K.P.; and Satija, M.P. (2008), "Information Seeking Strategies of Agricultural Scientists Working in the ICAR Institutions in India", *DESIDOC Journal of Library and Information Technology*, Vol. 28, No. 3, PP. 37-45.
14. Suriya, M., Sangeetha, G., & Nambi, M. A. (2004). Information seeking behavior of faculty members from Government Arts Colleges in Cuddalore District. *Library and Information Networking*, 285-292.
15. Watson, D., Blakeley, B. & Abbott, C. (1998). Researching the use of communication technologies in teacher education. *Computers & Education*, 30(1-2), 15-21.
16. Wilson, T.D., 1999. "On user studies and information needs," *Journal of Documentation*, 37(1): 3-15.