

# Information Seeking Behaviors of Post Graduate Engineering Students in Chennai, Tamil Nadu: A Case Study

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**Abstract** - Information is the essential element for the progress of higher education and the very basis of human existence. The main aim of this study is to find out the information seeking behavior of Post Graduate Engineering Students from different disciplines of Velammal Engineering College in Chennai, Tamil Nadu, India. A well-structured questionnaire was circulated to collect the required information from 9 Post Graduate Engineering branches. This study examines several aspects of library use, including frequency of visiting the library, level of user satisfaction with library sources and services, library collection and cover the use of reference sources in the library. The study was conducted through a detailed survey by distributing questionnaires among 135 students and 94.8% of the students responded.

**Keywords:** Information Seeking Behaviour, Information Sources, Post-Graduate Engineering Students, User Study

## I. INTRODUCTION

Information seeking behavior is a broad terms which involves a set of actions that an individual takes to express information needs, seek information, evaluate and select information, and finally uses this information to satisfy his/her information needs. Various factors may determine the information seeking behavior of an individual or a group of individuals; it is, therefore, desirable to understand the purpose for which information is required, the environment in which the user operates users skills in identifying the needed information, channels and sources preferred for acquiring information, and barriers to information. Information seeking behavior is different from the actual information need. The information need is a subjective, relative concept in the mind of the experiencing individual Information seeking is a process in which human learners engage in order to advance and potentially alter their state of knowledge. It is also an important cognitive function related to learning and problem solving.” Information seeking behavior is an area of active interest among librarians, information scientists, communication scientists, socialists and psychologists. Information seeking behavior results from

the recognition of some need, perceived by the user, who as a consequence makes demands upon formal systems such as libraries, information centers, on-line services or some other person in order to satisfy the perceived need Information seeking is a term describing the ways individuals seek, evaluate, select and use information in the course of seeking new information, the individual may interact with different people, analog tools and computer based information systems.

## II. NEED FOR THE STUDY

Today, information technology has developed rapidly and has had a huge impact on access to information and on information seeking behavior. The librarian and library staff have to know and examine the criteria of information seeking and information utility by users for providing information services, designing new information systems, intervening in the operation of existing systems, or planning service programs. More and more people deliberately and consciously seek information and it has become an integral part of human activity especially in the area of education, research and development. User studies are one of the interdisciplinary areas of research in library and information science and form a large body of literature in the discipline. This study sought to establish ways of improving the information seeking behavior of Post Graduate Engineering students in Velammal Engineering College Chennai.

## III. INFORMATION SEEKING BEHAVIOUR

Information seeking behaviour is the behavior with respect to searching various sources, channels including use of that information. The terms information gathering habits, information seeking behavior, information searching behavior and information using behavior are synonymous. The study of information seeking behaviour can be an independent area of applied research where the motive for investigations is pragmatically related to system design and development. According to Wilson suggests that the

phrase 'information seeking towards the satisfaction of needs' be used instead of the term 'information needs.' He feels that personal need is the basis of the motivation to seek information and also affects the information seeking behaviour of user. Personal needs are categorized by psychologists as Physiological needs, such as the need for food, water, clothing, shelter, etc. Affective needs, such as the need for attainment, for domination, etc. Cognitive needs, that is, the need to learn a skill, take decisions, etc. These categories are obviously inter-related. The view is that in order to find ways and means to satisfy these needs the individual would seek information about them. Wiberley and Jones, information seeking is a basic activity in which all people participate, manifest through particular behaviors. It is of most interest to librarians in the areas of collection development, services, and organizational structures. Belkin and Croft suggest that a search begins with a problem and a need to solve it—the gap between these is defined as the information needs. Information need, then, leads to information seeking.

#### IV. LITERATURE REVIEW

Majid and Ali have studied the use of information resources by computer engineering students in Singapore and found that the top five information resources in order of preference were books (94%), Lecturers (84%), the internet (86%), and friends (84%). They relied heavily on printed sources of information and their use of electronic journals and databases was very low. Prabhavathi investigates how majority of the respondents are using books to support their curriculum and examinations needs of the course accounting to 94.6%. Thus books remain a popular source of information to the Post Graduate students in for their academic course and for curriculum support. The main purpose of visiting the library is preparing for examinations, followed by preparing for competitive examinations and dissertation work. Shenton revealed that effective information skills are a prerequisite for young people in today's society, relatively little is known about how youngsters actually find information. The existing knowledge base on the subject is scanty and piecemeal, and few efforts have been made to explore, as an entirety, studies of young people's information seeking and to isolate the methods, perspectives and strategies that researchers have adopted. Examination of these areas can alert prospective investigators to issues that they should explore and approaches that they might wish to take in their own work.

Shokeen and Kushik studied about information seeking behaviour of social scientists working in the universities located in Haryana. They reported most of the social scientists visit the library daily. The first preferred method of searching the required information by the social scientists followed by searching through indexing and abstracting periodicals, and citations in articles respectively. The social scientists use current journals followed by books. Suriya, Sangeetha and Nambi carried out a research on information seeking behavior of faculty members from Government Arts Colleges in Cuddalore District. The purpose of their study was to investigate, how faculty members seek information from the library. It was concluded that most of the respondents 61 (38.12%) used to visit the library several times a week to meet their information needs. Regarding the type of search made by the respondents, majority of the respondents (57%) made their search by subject. Tackie and Adams reiterate that literature on information seeking behavior acknowledges that mechanisms related to information seeking is different from everyday information seeking. Furthermore, the different characteristics of various work environments make one type of information seeking different from the other. Tackie and Adams, therefore, suggest that it would be more beneficial to study one group of information seekers at a time and use the result to develop user oriented information systems in order to serve the group better. This submission tends to confirm the focus of this research.

#### V. INFORMATION ABOUT INSTITUTION

The Velammal Engineering College was established in 1995. The institute has 9 undergraduate programmes in Engineering Technology, 11 Post Graduate programme and Management. The Velammal Engineering College Library has 72,000 volumes of books, and 22,300 titles, printed journals subscribed are National and International -151, 4000 back volumes and 4500 project reports. In addition to that 'Digital Library' with 20 PCs with hi-speed Internet connection enables users to access and download information. The 3500 CD-ROMs database collection is enabled by users. The library is a member of DELNET, the library has computerized the whole spectrum of information retrieval services. The bar code system is used for books circulation with biometrics bar coded ID cards and scanners. E-journals subscribed are IEEE, SCIENCEDIRECT, ASME, ASCE, MCGRAW-HILL, SPRINGER, ASTM, J-GATE ENGG. J-GATE MGT, EBSCO MGT. Display of Conference/Seminar/Exhibition details, Publishers

Catalogues, News letters from various professional bodies, Reference Services, Library News & Statistics, OPAC are the services provided. Anna Edusat live programme, NPTEL video courses facilities are available in this library.

### VI. OBJECTIVES

The objectives of the study are:

1. To study the information needs and seeking behavior of Engineering Post Graduate Students in Velammal Engineering College;
2. To find out the purpose of visiting the library and the time spent for which they gather information;
3. To understand students level of satisfaction about the respective library sources and services;
4. To find out the problems in respect of access the information sources and their use;
5. To get the valuable suggestions for the improvement of the library.

### VII. METHODOLOGY

This study used questionnaire –based survey method. The questionnaires were personally distributed to the Engineering Post Graduate Students of Velammal Engineering College at their library hour in the month of April 2013. Velammal Engineering College which comprises 9 departments and totally 162 students. From such a number, a sample of 135 students each branch 15 students was selected. The questionnaires were distributed to the students who were present in the library. 128 filled in questionnaires were returned by the users with overall response rate being 94.81%. The collected data were analyzed classified and tabulated.

### VIII. DATA ANALYSIS AND INTERPRETATION

A sample of 135 students from whom the respondents out of 162, under different departments has been considered in this study drawn from first year students to final year of Velammal Engineering College. Distribution of Questionnaires and responses received are shown in Table I, from the Table it can be seen their response rate is 94.81%.

TABLE I DISTRIBUTION OF QUESTIONNAIRE AND RESPONSES RECEIVED

S.No.	Department	Questionnaires Distributed	Questionnaires Received	Percentage
1	M.E. Computer Science & Engineering	15	15	100
2	M.E. Applied Electronics	15	13	86.67
3	M.E. Power Systems Engineering	15	15	100
4	M.E. Internal Combustion Engineering	15	14	93.33
5	M.Tech Information Technology	15	13	86.67
6	M.E. Pervasive and Mobile Computing	15	15	100
7	M.E. Embedded Systems Technology	15	14	93.33
8	M.E. Software Engineering	15	15	100
9	M.E. Control & Instrumentation	15	14	93.33
	Total	135	128	94.81

The above Table I shows that the distribution of samples by department wise i.e., Post graduate Engineering Students.

TABLE II GENDER WISE RESPONSE

S. No.	Gender	No. of Respondents	Percentage
1	Male	65	50.78
2	Female	63	49.22
	Total	128	100

Table II shows that in total 128 respondents responded against the questionnaire, of which 50.78 % were male and 49.22% were female.

TABLE III FREQUENCY OF USING THE LIBRARY

S. No.	Frequency	No. of Respondents	Percentage
1	Once in a day	26	20.31
2	2-3 times in a day	47	36.72
3	Once in a week	39	30.47
4	Occasionally	16	12.50
	Total	128	100

Table III shows that the students using the library once in a day are about 20.31%, 2-3 times in a day are 36.72%, once in a week are 30.47%, and occasionally using the library are 12.50%.

TABLE IV PURPOSE OF USING THE LIBRARY

S. No.	Purpose	N.o of respondents	Percentage
1	To read Books	10	7.81
2	To borrow books	25	19.53
3	To borrow periodicals	8	6.25
4	To photocopy	4	3.13
5	To access online	30	23.44
6	To prepare assignment and notes	6	4.69
7	To read news paper	15	11.72
8	To improve General knowledge	9	7.03
9	To read journals and magazine	21	16.40
	Total	128	100

Table IV shows that students mainly using the library for the purpose to access online 23.44%. The next purpose is to borrow books 19.53 %. These two are followed by to read journals and magazine 16.40%, to read newspaper 11.6, to read books 7.81%, to improve General knowledge 7.03%, to borrow periodicals 6.25%, to prepare assignment and notes 4.69%, to photocopy 3.13%.

TABLE V TIME SPENT IN THE LIBRARY

S. No.	Frequency	No of respondents	Percentage
1	1hour	35	27.34
2	2hours	47	36.72
3	3hours	33	25.78
4	Above 3hours	13	10.16
	Total	128	100

The Table V shows that 27.34% of the respondents spent one hour in the library, 36.72% of the respondents spent 2 hours, 25.78% spent 3 hours, 10.16% spent above 3 hours.

TABLE VI PROBLEM FACED BY USERS

S. No.	Problems	No of respondents	Percentage
1	Materials not available	8	6.25
2	Incomplete information materials	9	7.03
3	Information is too vast	15	11.72
4	Library staff unwilling to service	0	0
5	Lack of time	72	56.25
6	Some information materials are old	24	18.75
	Total	128	100

The respondents were asked to mention the problems they faced while seeking information. Table 6 shows that majority of respondents give the first priority to lack of time, i.e., 56.25% second priority was some information materials are old 18.75% respectively information is too vast 11.72%, incomplete information materials 7.03%, materials not available is 6.25%.

As per the above Table VII, it can be seen that the satisfaction level of the students in the institution’s library sources and services that 66.41% students are satisfied with sources of books while 33.59% are not satisfied, 70.31% students are satisfied with periodicals while 29.69% are not satisfied, 55.47% students are satisfied with newspaper while 44.53% are not satisfied, 74.22% students are satisfied with project reports while 25.78% are not satisfied, 50.78%

TABLE VII SATISFACTION OF LIBRARY SOURCES AND SERVICES

S. No.	Library Sources and services	Level of satisfaction		Total
		Satisfied	Not satisfied	
1	Books	85 (66.41%)	43 (33.59%)	128 100%
2	Periodicals	90 (70.31%)	38 (29.69%)	128 100%
3	Newspapers	71 (55.47%)	57 (44.53%)	128 100%
4	Project reports	95 (74.22%)	33 (25.78%)	128 100%
5	CD- ROMs	65 (50.78%)	63 (49.22%)	128 100%
6	Back volumes	66 (51.56%)	62 (48.44%)	128 100%
7	Lending	70 (54.69%)	58 (45.31%)	128 100%
8	Reference	75 (58.59%)	53 (41.41%)	128 100%
9	Reservation	72 (56.25%)	56 (43.75%)	128 100%
10	CAS	84 (65.63%)	44 (34.37%)	128 100%
11	SDI	87 (67.97%)	41 (32.03%)	128 100%
12	Online	91 (71.09%)	37 (28.91%)	128 100%
13	Interlibrary Loan	92 (71.88%)	36 (28.12%)	128 100%

students are satisfied with CD- ROMs while 49.22% are not satisfied, 51.56% students are satisfied with back volumes while 48.44% are not satisfied 54.69% students are satisfied with lending service while 45.31% are not satisfied, 58.59% students are satisfied with reference service while 41.41% are not satisfied, 56.25% students are satisfied with reservation service while 43.75 are not satisfied, 65.63% students are satisfied with CAS while 34.37% are not satisfied, 67.97% students are satisfied with SDI while 32.03% are not satisfied, 71.09% students are satisfied with online service while 28.91% are not satisfied, 71.88% students are satisfied with interlibrary loan while 28.12% are not satisfied. It is concluded that most of the students are satisfied with library sources and services.

IX. CONCLUSION

From the above study, it is revealed that majority of the students are using the library for the purpose to access online resources, next to borrow books and highly satisfied with library sources and services. Internet has become an indispensable information source of the Engineering students. To further enhance internet usage at central library, the number of computers with internet connection needs to be increased in central library considering the fact that majority of the students prefer to access the internet from the central

library. User education about library usage must and should be carried out as a seminar or workshop training. Therefore the librarian should conduct user education programmes to educate the students about library resources and services.

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