INFORMATION NEEDS AND SEEKING BEHAVIOUR OF ENGINEERING COLLEGE FACULTY OF TIRUCHIRAPPALLI DISTRICT

D. William Abraham,
Librarian, Trichy Engineering College, Konalai, Trichy – 621 132.
E-mail: tamizhchelvan@gmail.com

Dr. M. Tamizhchelvan,
Deputy Librarian, Gandhigran Rural Institute
Deemed University, Gandhigram - 624 302.

and

Dr. S. Ally Sornam,
Associate Professor and Head, DLIS
Bishop Heber College Trichy – 620 017

Abstract

An Attempt has been made to study the present status of information needs and searching behaviour of engineering faculty of Tiruchirappalli district in Tamil Nadu. For evaluating the study a questionnaire was constructed and distributed among the faculty of Engineering Colleges. The data were collected from a sample of 150 Engineering faculty. Books, journals and Internet are the primary resources used often. Preparation of lectures and publication of articles are the main purposes for accessing and referring information resources. The study also found out the problems affecting the information needs as 'information overload', extra work given by management, low 'internet speed, lack of support from library staff.

Keywords: Information Seeking Behavior, Information Needs, ICT facilities

INTRODUCTION

People look for food, shelter and clothes in their day to day life. Information is necessary for fulfilling the above three needs. It differs from person to person according to their needs. Naturally, seeking and utilizing information are vary depending on the requirements. Information Seeking Behaviour and Information Needs are one of the fundamental areas of research today. If the seeking of information is for higher education or research oriented purpose then the looking of information has a definite purpose. There are enormous information resources available in the 21st century especially in the internet environment. In

higher education systems, there is a provision for making use of these resources available through library. It is necessary for the libraries to move towards digital resources which are more helpful for easy access.

INFORMATION SEEKING BEHAVIOR

The term information generally indicates the message received from the senders in their original context. It helps many tasks such as planning, decision making, executing and evaluating. So information has to be received in any way and should be used for action by educationalists. Wilson (2000) described information behaviour as the totality of human behaviour in relation to sources and channels of information, including both active and passive information-seeking, and information use.

The concept of Information Seeking Behaviour is emerged from the broad concept of user studies. User studies collect or gather information from different sources. So the study of information seeking behaviour can stand on its own as an area of applied research where the motive for the investigation is pragmatically related to system design and development. A different motivation is involved if one wishes to understand why the information seeker behaves as he does. This is an area of basic research and through the resulting knowledge may have practical application.

REVIEW OF LITERATURE

Raza et al (2010) have conducted a study on the information seeking behaviour of researchers in the Central Drug Research Institute, Lucknow. . The study showed that the researchers were satisfied with services of the library and there was a good application of information communication and technology. A study was executed by Shakeel and Farzana (2011) on the information needs and information-seeking behaviour of college faculty at Bahawalpur. It revealed that information technology affected the users' information seeking behavior and made their requirements be satisfied in an easier way.

Jaspal and Venkatarao (2011) surveyed the information seeking behaviour of students at Dev Samaj College, Chandigarh, India. The study revealed that the majority of the students were not aware of e- resources. Instead the students used search engines as a major source to access information to update their knowledge in their subject. Patil (2011) conducted a study to examine the use of the internet in Government First Grade College Libraries in Bidar District. Out of 320 questionnaires distributed to eight colleges, 260 filled in questionnaires were received. Results of the study made it clear that students should be motivated to use internet and the bandwidth of internet to be increased. Akporido (2014) examined the factors that influence the Information Seeking Behaviour of Sandwich students in selected Nigerian Universities. Yang and Kahlor and Li (2014) applied structural equation modeling to examine how the risk information seeking and processing model predicts information seeking intentions in the United States and China.

OBJECTIVES

- To investigate the engineering colleges in the region of Tiruchirappalli
- To survey the needs and requirements of information of faculty members.
- To know the priority sources among the faculty members.
- To know the purpose of information gathering activity among the faculty members.
- To highlight the sufficiency of the various resources at the libraries.
- To know the means and ways of developing and updating the latest information by the faculty members.
- To find out the problems faced while seeking information and solutions for the same from various sources.
- To resolve the information seeking problems

METHODOLOGY

A questionnaire was constructed based on previous studies and distributed among 150 engineering faculty members and 108 faculty members responded in the 18 selected Engineering colleges affiliated to Anna University, Tiruchirappalli. The response rate is 72 percent and it is the target population for the study.

DATA ANALSIS

Sample Size

Questionnaires were distributed among the faculty members in 18 colleges engineering colleges situated in Tiruchirappalli district (Appendix – 1). Number of questionnaires distributed and the response received are shown in Table 1.

Table 1 Sample Size

Sl. No.	No. of Questionnaires Distributed	No. of Questionnaires Received	Percentage
1	150	108	72

Demographic details of respondents

Table 2: Demographic details of respondents

Description	Frequency	Percent
Gender		
Male	68	62.96
Female	40	37.04
Designation		
Professors	11	10.18
Assistant Professors	97	89.81
Status of Institution		
Self-Financing	87	80.56
Government	21	19.44
Courses handled		
PG	*66*	61.1
UG	*42*	38.9
Ph D guidance	*21*	19.4
Total	**108**	**100**

The demographic details in the above table shows that 68 (62.96%) of the respondents were male and 40 were (37.04%) female. Further, 11 (10.18%) of the respondents were Professors and 97 (89.81%) respondents were Associate Professors. It also indicates that 87 (80.55%) of the respondents were working in Self–Finance Engineering College and 21 (19.44%) of the respondents from Government College Engineering. It is observed that 66 (61.11%) of the respondents were handling Post Graduate classes and 42 (38.9%) of the respondents were handling Undergraduate courses and 21 (19.44%) faculty members PhD are guides.

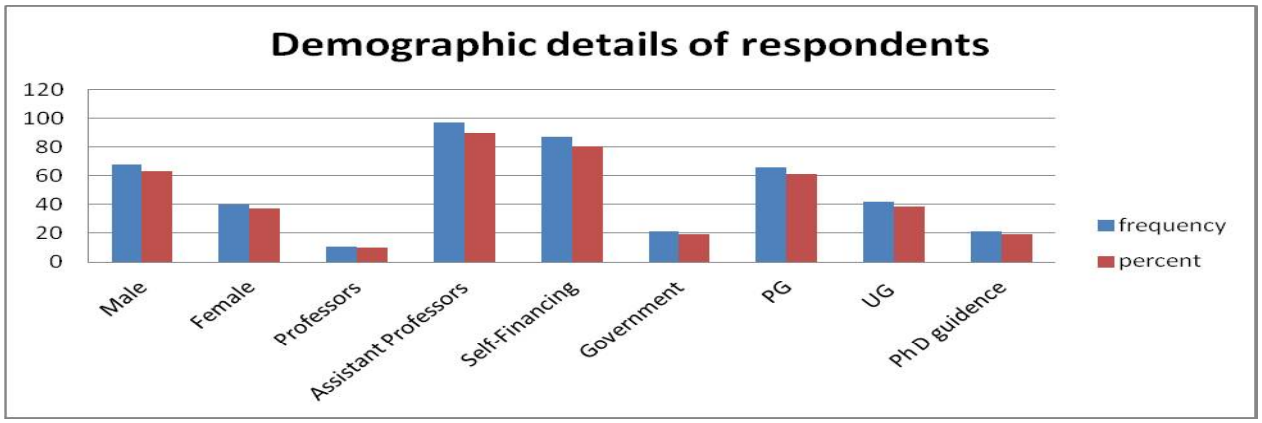

Fig.1 Demographic details of respondents

Department Wise Response

Table 3 indicates that 32 (29.62%) of the respondents were from Department of Science & Humanities and followed by 20 (18.52%) of the respondents from Electrical and Electronics Engineering departments and 18 (16.6%) of the respondents from Mechanical Departments.

Table 3: Department wise analysis of respondents

Department	Frequency	Percent	Rank
Science & Humanities	32	29.62	1
EEE	20	18.52	2
MECH	18	16.67	3
CSE	15	13.89	4
ECE	15	13.89	4
IT	5	4.63	5
CIVIL	3	2.78	6
Total	**108**	**100**	

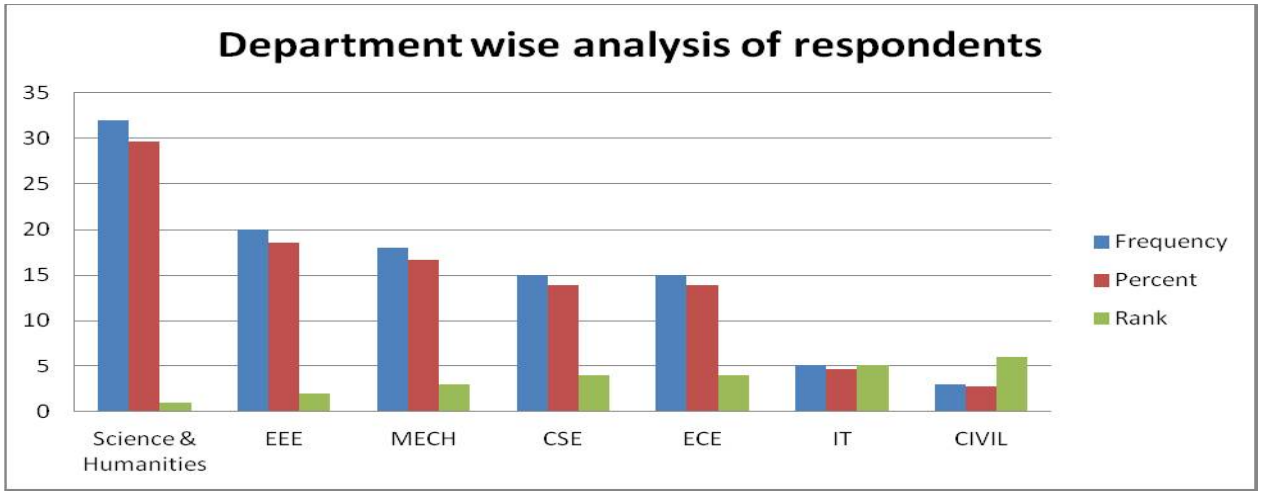

Figure 2: Departmentwise analysis of Respondents

Experience of Respondents

The experience of faculty members shows the strength and weakness of educational status of the institutions. The experienced faculty members gained more exposure to the students and hence more strong academically and research wise also.

Table 4: Experience of respondents

Experience (No of Years)	Frequency	Percent	Rank
1-5 years	33	30.6	**2**
6-10 years	34	31.5	**1**
11-15 years	27	25	**3**
16-20 years	6	5.6	**5**
Above 20 years	8	7.4	**4**
Total	**108**	**100**	

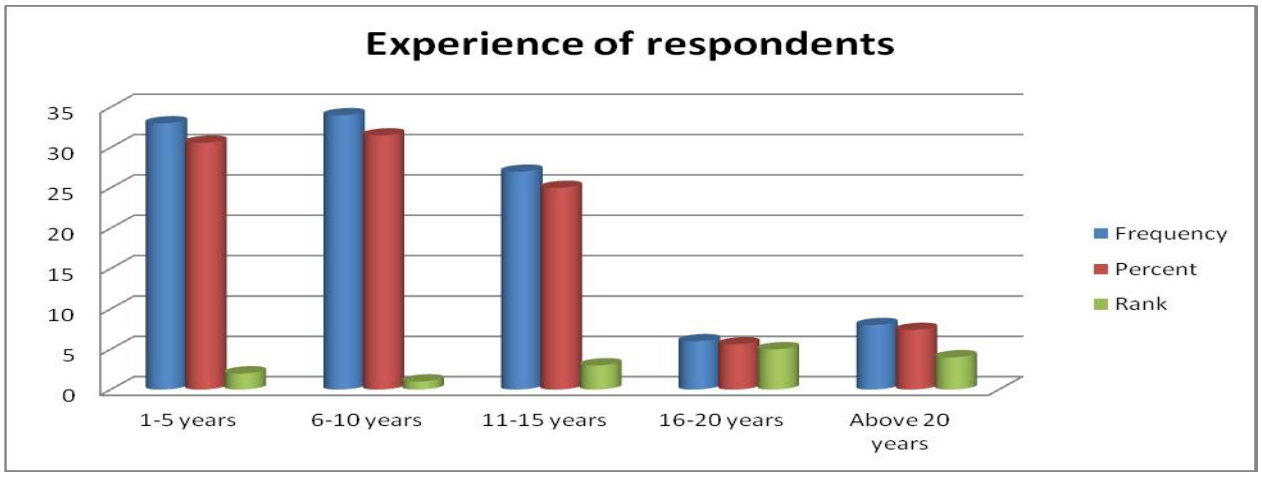

Figure 3: Experience of Respondents

The analysis based on the experience of faculty reveals that 31.5% of repondents having 6-10 years of experience. This is followed by 1-5 years of experience (30.6%) and 11-15 years (25%). Faculty with above 16 years and 20 Years are less in numbers among the respondents.

Source of Information used for Teaching

The teaching faculty must be updated in every movement of their field. They must read and searching information from various sources. It has been identified and classified to give their preference using Likert's five point scales on 'Frequency' such as Always, Frequently, Occasionally, Rarely and Never. These values are subject to analysis with WAM and Rank methods and presented in the table 5.

Table 5: Source of Information use

Sources	Always	Freq.	Occ.	Rare	Never	WAM	STD	RANK
Books	73(67.60)	31(28.7)	4(3.7)	0	0	1.26	0.55	1
Journals	54(50.0)	36(33.3)	16(14.8)	2(1.9)	0	1.81	0.78	2
Internet	24(22.2)	57(52.8)	19(17.6)	8(7.4)	0	2.79	0.82	3
Reference materials	23(21.3)	46(42.6)	22(20.4)	15(13.9)	2(1.9)	2.61	1.01	4
Newspapers	9(8.3)	34(31.5)	49(45.4)	14(13.0)	2(1.9)	2.90	0.86	5
Seminar/Symposium	14(7.4)	39(36.1)	47(43.5)	6(5.6)	2(1.9)	2.88	0.85	6
Thesis/Dissertations	9(8.3)	25(23.1)	42(38.9)	24(22.2)	8(7.4)	2.61	1.04	7
Technical Reports	8(7.4)	35(32.4)	36(33.3)	25(23.1)	4(3.7)	2.80	0.98	8
Conference Proceeding	7(6.5)	29(26.9)	47(43.5)	18(16.7)	7(6.5)	2.78	0.97	9
Indexing and Abstracting	5(4.6)	31(28.7)	40(37.0)	25(23.1)	7(6.5)	2.79	0.98	10

From the table, it is observed that 'Books', 'Journals' and 'Internet' are the top sources of information for teaching purposes among the Engineering Faculty Members. 'Books' 73 (67.6%), 'Journals' 54 (50%) and 'Internet' 24 (22.2%) are preferred as always options and secured the top ranks as 1, 2, 3 respectively. Technical Reports, Conference Proceeding and Indexing and Abstracting sources are least priority among them.

Time spent for gathering information

To find out the time spent for information gathering activities by faculty members, the timing has been classified into four groups and values as given in the table 7 with WAM and Rank.

Table 6: Time spent for gathering information

Source of information	> 10hrs	7-9 hrs	4-6 hrs	< 3hrs	WAM	STD	Rank
Books	65(60.2)	18(16.7)	15(13.9)	10(9.3)	1.27	1.016	1
Journals	61(56.5)	28(25.9)	17(15.7)	2(1.9)	1.55	0.81	2
e-mails Alerts, Correspondence	60(55.6)	30(27.8)	13(12.0)	5(4.6)	1.56	0.86	3
Scanning & printing	54(50.5)	27(25.0)	18(16.7)	8(7.4)	1.66	0.96	4
Interaction with Colleagues / Experts	51(47.2)	37(36.3)	16(14.8)	4(3.7)	1.89	0.84	5
Browsing e-journals	48(44.2)	35(32.4)	22(20.4)	3(2.8)	1.96	0.85	6
Searching online Databases	43(39.8)	37(34.3)	21(19.4)	6(5.6)	2.08	0.90	7
Accessing e-books	43(39.8)	34(30.5)	27(25.0)	3(2.8)	2.08	0.87	7
Searching for Related websites	34(31.5)	36(33.3)	31(28.7)	6(5.6)	2.33	0.90	8

From the table, it is observed that 'Books', 'Journals' and 'emails Alerts, Correspondence' are the top sources of information for which more time was spent by the Engineering Faculty

Members. For books, 65 (60.2%), journals 61 (56.5%) and e-mails Alerts, correspondence 60 (55.6%) the respondents spent more than 10 hours respectively. Scanning and Printing, Interaction with Colleagues / Experts, Browsing e-journals, Searching online Database, Accessing e-Books and Searching for Related websites how lower priority among them.

Methods to keep abreast of current developments.

The methods to keep abreast of current developments have been identified and classified by using five point scale such as Always, Frequently, Occasionally, Rarely and Never. The values are subject to analysis with WAM and Rank methods and presented in the table 7

Table 7: Methods to keep abreast of current developments

Method for keeping abreast of current developments	Always	Often	Sometimes	Rarely	Never	WAM	STD	Rank
Accessing e-books	32(29.6)	42(38.9)	29(26.9)	5(4.6)	0	2.45	0.86	1
E-mail alerts from publishers	23(21.3)	45(41.7)	24(22.2)	13(12.0)	3(2.8)	2.59	1.031	2
Attending conferences, workshops, and etc.	23(21.3)	47(43.5)	28(25.9)	9(8.3)	1(.9)	2.69	0.91	2
Interaction with colleagues and experts	14(13.0)	58(53.7)	23(21.3)	12(11.1)	1(.9)	3.02	0.87	3
Awareness services from library like CAS & SDI	9(8.3)	35(32.4)	41(38.0)	20(18.5)	3(2.8)	2.83	0.94	4

From the table, it is observed that 'accessing e-books', 'e-mail alerts from publishers' and 'attending conferences, workshops, and etc.' are the top methods to keep abreast of current developments. For accessing e-books, 32 (29.6%) and E-mail alerts from publishers 23(21.3%) and Attending conferences, workshops, etc, 23 (21.3%) of the respondents are preferred always and secured the top ranks as 1, 2, 3, respectively. Interaction with colleagues and experts, awareness services from library like CAS and SDI occupy lower priority among them.

Environment affecting information needs and seeking behavior

The environment affecting information needs and seeking behaviour has been identified and classified using five point scales such as Always, Often, Sometimes, Rarely and Never with variables. The values are subject to analysis with WAM and Rank methods and presented in the table 8.

Table 8: Environment affecting information needs and seeking behavior

Description	Always	Often	Some times	Rarely	Never	WAM	STD	Rank
Extra work given by higher authority - arranging conference, seminars, etc.	11 (10.2)	28 (25.9)	35 (32.4)	21 (19.4)	13 (12.4)	2.52	1.15	6
Information overloaded	10 (9.3)	16 (14.8)	47 (43.5)	18 (16.7)	17 (15.7)	2.39	1.13	8
Changing pattern of new syllabus	7 (6.5)	32 (29.6)	47 (43.5)	17 (15.7)	5 (4.6)	2.85	0.93	1
Cross questions raised by students	7 (6.5)	22 (20.4)	34 (31.5)	25 (23.1)	19 (17.6)	2.44	1.16	7
Changing ICT environment	5 (4.6)	21 (19.4)	52 (48.1)	22 (20.4)	8 (7.4)	2.71	0.94	2
Too many classes or administrative work	18 (16.7)	39 (36.1)	30 (27.8)	13 (12.0)	8 (7.4)	2.59	1.12	5
Latest information sources are not available	11 (10.2)	30 (27.8)	40 (37.0)	20 (18.5)	7 (6.5)	2.66	1.04	3
Internet speed is slow - hardware, software	11 (10.2)	13 (12.0)	32 (29.6)	22 (20.4)	30 (27.8)	2.06	1.28	10
Do not know how to use online catalogue	7 (6.5)	7 (6.5)	14 (13.0)	23 (21.3)	57 (52.8)	1.60	1.22	13
Lack of support from library staff	6 (5.6)	14 (13.0)	21 (19.4)	19 (17.6)	48 (44.4)	1.90	1.27	11
Needed information is not available in library	6 (5.6)	18 (16.7)	26 (24.1)	20 (18.5)	38 (35.2)	2.11	1.26	9
Language barrier (the material is in foreign languages)	4 (3.7)	14 (13.0)	17 (15.7)	19 (17.6)	54 (50.0)	1.84	1.22	12
Few information sources are very expensive	22 (20.4)	38 (35.2)	35 (32.4)	12 (11.1)	1 (.9)	2.60	0.96	4

From the table, it is observed that 'changing pattern of new syllabus', 'changing ICT environment' and non availability of 'latest information sources' are the highly ranked

problem in the environment. 'Lack of support from library staff', 'language barrier' and 'lack of knowledge on how to use online catalogue' are low ranking problems by the respondents.

Different methods used to resolve information-seeking problems

The methods to resolve the problems faced in information-seeking have been identified and classified to give their preference using five point scale such as highly preferred, Frequently, Occasionally, Rarely and Never. The values are subject to analysis with WAM and Rank methods and presented in the table 9.

Table 9: Different methods used to resolve information- seeking problems

Description	Always	Often	Some times	Rarely	Never	WAM	STD	Rank
I make use of search engines on internet	46 (42.6)	39 (36.1)	22 (20.4)	1 (.9)	0	2.07	0.79	1
I prefer an individual, independent work	35 (32.4)	40 (37.0)	21 (19.4)	10 (9.3)	2 (1.9)	2.27	1.02	2
I consult more and more sources	34 (31.5)	43 (39.8)	24 (22.2)	7 (6.5)	0	2.39	0.89	3
I take support of my colleagues	21 (19.4)	40 (37.0)	34 (31.5)	13 (12.0)	0	2.69	0.95	4
Referring other library	18 (16.7)	24 (22.2)	41 (38.0)	19 (17.6)	6 (5.6)	2.44	1.10	5

From the table, it is understood that 'making use of search engines on internet'(42.6%), 'preferring an individual, independent work '(32.4%), and 'consulting more and more sources '(31.5%), are the top methods used to resolve information- seeking problems, and secured the top ranks as 1, 2, 3, respectively, The other methods found in the table occupy lover ranks.

Findings

1. Majority of the respondents of the present study are Male (62.96%).
2. Majority of the respondents of the present study are Assistant Professors (89.81%).
3. Majority of the respondents of the present study have 6-10 years of Experience (31.5%).
4. Majority of the respondents of the present study belong to Departments of Science & Humanities (29.62%).
5. With regard to preference for information sources books top the list (67.6%) followed by journals (50%) and online sources (22.2%)
6. Accessing e-books (29.6%), (21.3%), E-mail alerts from publisher (21.3%), and (21.3%), attending conferences, workshops, etc (21.3%), are the top methods to keep abreast of current preferred by the faculty.

7. Change pattern of new syllabus (29.6%), changing ICT environment (19.4%) and latest information sources are not available(27.8%) and are highly ranked problems in the environment affecting information needs and seeking behavior.
8. Make use of search engines on internet (42.6%), prefer an individual, independent work (32.4%) , consult more and more sources(31.5%) , and use of e-resources e-mail alert from problems they are the top methods used to resolve information-seeking problems.

Conclusion

The user studies have to be conducted periodically by the library professionals to know the expectations of the users. The latest technologies are to be updated. Based on the findings of the survey, the library professionals can post a proposal for managing authorizes establishing ICT facilities in the libraries. The faculty expectations from the library are to be conveyed through user studies. This is a sample study among the Engineering Faculty. The existing resources are to be disclosed to the users for proper utilizations. These types of surveys will help the library professionals providing better sources and services to the user community.

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