

## Information Seeking behaviour of Engineering Faculty Members: A Study of Problems and Motivation

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### ABSTRACT

*The study explores the information seeking behaviour of faculty members of Engineering colleges in Tiruchirappalli. The study was conducted using questionnaire method with collection from 456 members to identify their problems and motivating them by different methods. The study revealed that motivating factor for the engineering faculty members are as their first choice 'make use of search engines on internet' followed by 'getting user education' and preferred to 'refer an individual, independent work'.*

**Keywords:** Information Seeking Behaviour, Motivation, Information search methods, Tiruchirappalli, Tamil Nadu

### Introduction

Information seeking behaviour is to refer the path of searching information and use them. The term was coined by Wilson in his 1981<sup>1</sup> paper as information needs. Further, he stated that information seeking behaviour as a consequence of a need to satisfy some goal. This process of searching behaviour starts from school level to research. There are enormous information resources available in the 21<sup>st</sup> 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. Cacioppo et al. (1984)<sup>2</sup> tested and devised a 'need for cognition' to measure a general trait related to an individual's motivation to engage in cognitive acts. The study has analysed problems, environment affecting and motivating the faculty members.

### Sample Size

Questionnaires were distributed among the Faculty members of 26 Engineering colleges in Tiruchirappalli. There are 550 questionnaires distributed and responses are received 456 and its response rate is 82.90 percentages.

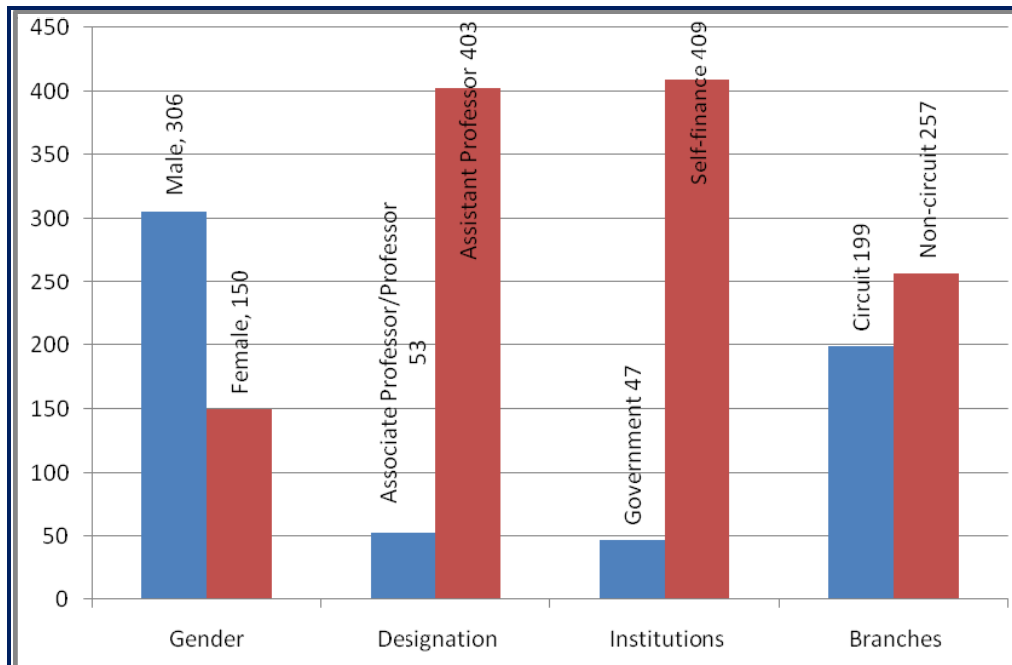
**Demographic Details of the Respondents**

The demographic details of the faculty members are presented with percentage analysis in table 1.

**TABLE 1  
DEMOGRAPHIC DETAILS OF THE RESPONDENTS**

S.No.	Description	Frequency	Percent
<b>Gender</b>			
1	Male	306	67.11
2	Female	150	32.89
<b>Designation</b>			
1	Associate Professors/Professors	53	11.62
2	Assistant Professors	403	88.38
<b>Status of Institution</b>			
1	Government	47	10.31
2	Self-Financing	409	89.69
<b>Subject Group</b>			
1	Circuit Branch	199	43.64
2	Non-circuit Branch	257	56.36
	<b>Total</b>	456	100

**Figure 1 Demographic details of the respondents**



From the table, the gender of respondents, 306 (67.11%) are male and 150 (32.89%) are female faculty members and the designation of respondents 403 (88.38%) are Assistant Professors and 53 (11.62%) are Associate Professors/ Professors. There are very less professors in engineering colleges, so the study has been considered only Assistant Professors and Associate Professors/ Professors. The status of institutions are classified into two

categories as government institutions 47 (10.31%) and self-financing 409 (89.69%). The branches are classified into two categories such as Circuit branches and Non-circuit branches. The circuit branches are Electronics, Electrical & Electronics Engineering, Computer Science Engineering, Information Technology, and Electronic & Instrumentation Engineering. The Non-Circuit branches are Mechanical Engineering, Civil Engineering, Chemical Engineering, Biomedical Engineering, Bio-Technology, Production Technology and Humanities (English Language, Physics, Chemistry, and Mathematics).

**Problems and Motivation**

The requirement of motivation basically depends upon problems faced in Information Seeking behaviour, and Environment Affecting Information Sources. It paved ways are different motivation methods. Therefore, Motivation were analysed based in the following The problems and accessing environmental difficulties are identified while information seeking from different sources. At the same time, there are some solutions to rectify or motivate to find out alternative ways to retrieve unavailable information.

- Problems faced in information seeking
- Environment affecting information seeking behaviour
- Motivation method to resolve information seeking behaviour

**Problems faced in information seeking**

The problems faced by the faculty members are identified in 9 variables and the opinions received through questionnaire in five point scales. The collected data has been presented with mean, standard deviation and rank in table 2.

**TABLE 2  
PROBLEMS FACED IN INFORMATION SEEKING**

S.No.	Description	A	F	S	SE	N	M	Std	R
1	Few information sources are very expensive	89 (19.52)	166 (36.4)	151 (33.11)	43 (9.43)	7 (1.54)	2.37	0.95	1
2	Latest information sources are not available	63 (13.82)	116 (25.44)	174 (38.16)	69 (15.13)	34 (7.46)	2.77	1.09	2
3	Needed information is not available	34 (7.46)	61 (13.38)	106 (23.25)	115 (25.22)	140 (30.7)	3.58	1.25	4
4	Lack of support from library staff	24 (5.26)	57 (12.5)	91 (19.96)	103 (22.59)	181 (39.69)	3.79	1.23	5
5	Lack of knowledge in using the library	16 (3.51)	41 (8.99)	81 (17.76)	91 (19.96)	227 (49.78)	4.04	1.16	9
6	Do not know how to use online catalogue	39 (8.55)	33 (7.24)	74 (16.23)	93 (20.39)	217 (47.59)	3.91	1.29	7
7	Do not know how to use electronic resources	36 (7.89)	48 (10.53)	73(16.01)	68 (14.91)	231 (50.66)	3.90	1.33	6
8	Language barrier (most of the material is in foreign languages)	16 (3.51)	56 (12.28)	89 (19.52)	75 (16.45)	220 (48.25)	3.94	1.21	8
9	Internet speed is slow - hardware, software	70 (15.35)	68 (14.91)	136 (29.82)	77 (16.89)	105 (23.03)	3.17	1.35	3

(A-Always; F- Frequently; S-Sometimes; SE-Seldom; N-Never, M-Mean, Std-Standard Deviation, R-Rank)

The above table reflects the order of the problems of information seeking behaviours by the faculty members and the top among them are, ‘Few information sources are very expensive’ with mean value of 2.37, followed by ‘Latest information sources are not available’ with 2.77 and ‘Internet speed is slow – hardware, software’ with 3.17. The least bothered problems by the faculty members are ‘Do not know how to use online catalogue’, ‘Language barrier’ and ‘Lack of knowledge in using the library’.

The mean value of all the variables ranged between 2.37 and 4.04. The deviation of opinion ranged between 0.95 and 1.35 which indicates there is no significant of the respondent’s opinion in Problems faced in information-seeking.

**Environment affecting information seeking behaviour**

Environment affecting information needs and seeking behaviour has been ascertained based on eight variables and the opinions are obtained on five point scale such as Always, Frequently, Sometimes, Seldom and Never. Mean and standard deviation were calculated based on the opinion expressed by the respondents. Ranks were assigned based on mean and standard deviation. The same has been shown in Table 3.

**TABLE 3**  
**ENVIRONMENT AFFECTING FACTORS IN INFORMATION SEEKING BEHAVIOUR**

S.No.	Description	A	F	S	SE	N	M	Std	R
1	Information overloaded	56 (12.28)	104 (22.81)	163 (35.75)	66 (14.47)	67 (14.69)	2.96	1.20	5
2	Information is scattered in too many sources	50 (10.96)	112 (24.56)	164 (35.96)	86 (18.86)	44 (9.65)	2.54	1.11	1
3	Changing ICT environment	18 (3.95)	106 (23.25)	207 (45.39)	73 (16.01)	52 (11.4)	3.08	1.00	7
4	Changing pattern of new syllabus	44 (9.65)	137 (30.04)	166 (36.4)	67 (14.69)	42 (9.21)	2.84	1.08	3
5	Too many classes or administrative work	82 (17.98)	146 (32.02)	144 (31.58)	42 (9.21)	42 (9.21)	2.60	1.15	2
6	Cross questions raised by students	29 (6.36)	115 (25.22)	158 (34.65)	90 (19.74)	64 (14.04)	3.10	1.12	8
7	Extra work given by higher authority - arranging conference, seminars	68 (14.91)	98 (21.49)	173 (37.94)	63 (13.82)	54 (11.84)	2.86	1.18	4
8	Different types of source developed in library	43 (9.43)	112 (24.56)	160 (35.09)	72 (15.79)	69 (15.13)	3.03	1.17	6

(A-Always; F-Frequently; S-Sometimes; SE-Seldom; N-Never; M-Mean, Std-Standard Deviation, R-Rank)

From the table, it is observed that ‘Changing pattern of new syllabus’, ‘Extra work given by higher authority - arranging conference, seminars’ and ‘Different types of source developed in library’ are the few factors Environment affecting information needs and seeking behaviour for the faculty members. On the opinion of the respondents the environment affecting factors are Changing pattern of new syllabus, 44(9.65%), Extra work given by

higher authority - arranging conference, seminars, 68(14.91%) and Different types of source developed in library (9.43%) respectively.

The mean value of all the variables ranged between 2.54 and 3.10, it can be inferred that all the eight variables lies between higher and frequently, the deviation of opinion ranged between 1.00 and 1.20 which indicates there is no significant of the respondent's opinion environment affecting factors in information seeking.

Based on the responses, mean values were calculated and ranked. Out of the eight Environment factors affecting information needs and seeking behaviour were listed, faculty members pointed out the factor 'information is scattered in too many places' with the mean value of 2.54 and it is followed by too many classes or administrative works with (2.60) and changing pattern of new syllabus with 2.84 and are ranked 1, 2, and 3 respectively.

### Motivation methods to resolve information seeking behaviour

There are ten variables identified to resolve the information seeking problems, the same has been presented with five point scales, mean, standard deviation, ranks in table 4.

**TABLE 4**  
**MOTIVATION METHOD TO RESOLVE INFORMATION SEEKING BEHAVIOUR**

S. No	Description	A	F	S	SE	N	M	Std	R
1	Referring other library	59 (12.94)	131 (28.73)	161 (35.31)	70 (15.35)	35 (7.68)	2.59	1.09	9
2	I prefer an individual, independent work	167 (36.62)	133 (29.17)	117 (25.66)	34 (7.46)	5 (1.1)	2.10	1.00	3
3	I take support from my colleagues	110 (24.12)	158 (34.65)	136 (29.82)	37 (8.11)	15 (3.29)	2.48	1.02	8
4	I make use of search engines on internet	209 (45.83)	143 (31.36)	97 (21.27)	7 (1.54)	0 (0)	1.92	0.82	1
5	I consult more and more sources	138 (30.26)	170 (37.28)	115 (25.22)	31 (6.8)	2 (0.44)	2.39	0.96	5
6	Training/User education to the users	32 (7.02)	43 (9.43)	136 (29.82)	117 (25.66)	128 (28.07)	2.07	1.18	2
7	E-mail alerts from publishers	110 (24.12)	172 (37.72)	89 (19.52)	55 (12.06)	30 (6.58)	2.39	1.16	7
8	Awareness services like CAS & SDI	46 (10.09)	119 (26.1)	168 (36.84)	90 (19.74)	33 (7.24)	2.88	1.06	10
9	Interaction with colleagues and experts	84 (18.42)	203 (44.52)	102 (22.37)	40 (8.77)	27 (5.92)	2.39	1.06	6
10	Attending conferences, workshops, etc	94 (20.61)	167 (36.62)	144 (31.58)	30 (6.58)	21 (4.61)	2.38	1.02	4

(A-Always; F-Frequently; S-Sometimes; SE-Seldom; N-Never M-Mean, Std-Standard Deviation, R-Rank)

The above table shows the respondents opinion their always most preferred motivational methods are 'I make use of search engines on internet' 209 (45.83%), 'I prefer an individual, independent work' 167 (36.62%) and 'I consult more and more sources' 138 (30.26%), to highly resolve information seeking problems and are ranked 1, 2 and 3 respectively.

The mean values of the motivational methods 'I make use of search engines on internet, (1.92), I prefer an individual, independent work (2.07) and I consult more and more sources (2.10) respectively.

The mean value of all the variables ranged between 1.92 and 2.88, it can be inferred that all the 10 variables lies between always and frequently. The deviation of opinion ranged between 0.82 and 1.18 which indicates there is no significant on the respondent's opinion in methods adopted to resolve information seeking behaviour problems.

Based on the responses, the mean were calculated and ranked. Out of the ten different methods used to resolve information seeking problems adopted, the faculty members mostly prefers the method 'I make use of search engines on internet' with the mean value of (1.92) followed by 'Training/User education to the users' with (2.07) and 'I prefer an individual, independent work' with (2.10).

## **Findings**

The findings of the research has been presented below:

- The faculty members responded the questionnaire (82.90%).
- The engineering institutions are 24 self financing colleges. Two government institutions are covered under the study.
- More Male faculty members (67.11%) responded the questionnaire than female members (32.89%). More responses (83.38%) received from Assistant Professors followed by Professors (11.62%). The more members are belonging to Non-circuit branch (56.36%) and followed by circuit branch (43.64%)
- The respondents faced the top most of the problems are 'Few information sources are very expensive' 2.37 followed by 'Latest information sources are not available' 2.77 and 'Internet speed is slow – hardware, software' 3.17 in information seeking.
- The respondents faced the least bothered problems are 'Do not know how to use online catalogue' 3.91, 'Language Barrier' 3.94 and 'Lack of Knowledge in using the library' 4.04.
- The first top most problems faced by the faculty members are 'Few information sources are very expensive', 'Latest information sources are not available'. The third problem is varied among the faculty from government institution in the variable 'Internet speed'.
- 'Information is scattered in too many sources' 2.54 is top most affecting the information seeking behaviour among faculty members of the engineering institutions. It is followed by 'Too many classes or administrative work' 2.60. Changing ICT environment and Cross questions raised by students are least environmental problems by the faculty members.
- Motivating factor for the engineering faculty members are 'I make use of search engines on internet' 1.92, 'Training user education to the users' 2.07 and 'I prefer an individual, independent work' 2.10.
- On the other side the variables interaction with colleagues and experts, Referring other library, awareness services like CAS and SDI services and Training/User

education to the users are the least priority motivational methods used to resolve information seeking problems.

### **Conclusion**

It appears that the study on problems and motivation of faculty members are well known and implementing in libraries. There should be best practices in the library to provide best services to the faculty members. This is all due to the latest development of information and communication technology.

### **References**

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