

## A study of Information seeking Pattern of Faculty Members of Arts and Science Colleges in Thiruvallur District, Tamil Nadu

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### Abstract

This article deals with the study about the Information seeking Pattern of Faculty Members of Arts and Science Colleges in Thiruvallur District, Tamil Nadu. The study covers methods adopted by Faculty for keeping abreast of current developments, amount spent in information gathering, utilization of library services, use of information channels and to assess the adequacy, availability and accessibility of the college library collection. Teachers of various faculty members were interviewed about their use of electronic information resources for research purposes, their perception of electronic and print materials and the problems faced by the faculty members during information search.

**Keywords:** Communication Behaviour; Faculty Members; Information Channels; Users Satisfaction; Search Strategies.

### Introduction

Information is a valuable resource required in any society. The process of information is acquiring, using and implementing information seeking behaviour. Through the survey method, we can evaluate the strength and weakness of the library services. A SWOT analysis of the library helps us to evaluate the strength, weakness, opportunity, and threat of the library. Acquiring and using information are critical and important activities. It is considered as the first element in the search for wisdom in the human chain process. Information means the communication of knowledge about an event or a given condition or the spread of knowledge derived from observation, study, experience or instruction, whatever may be the formats and channels in which the information is available. It is essential for a Librarian to know to what extent these are useful to the user community in meeting their requirements. In any type of library, the user studies play a vital

role in planning, designing and introducing new information services and in assessing the quality of remaining services, facilities and their utilities. Information resources are various aspects covered in the user studies.

### Review of Literature

The literature of information seeking behaviour of faculty members available is greatly broad ranging. An attempt has been made to cover a number of works that go beyond discussions of the information seeking behavior itself and its direct applications to closely related topics such as information seeking. This broad review also includes topics like information seeking of faculty members.

Sethi, 1990<sup>1</sup> has examined the information seeking behaviour of social science faculty in Indian university. Respondents preferred journals, books, government documents and reference sources for meeting their information needs.

Hast, 1993<sup>2</sup> reported that faculty made about seven visits each semester to the library and looked at how scholars in different disciplines vary in their use of library resources.

Allen, 1996<sup>3</sup> emphasized that the user's information seeking is believed to be the concept of information needs, which fall into various categories: need for new information, need to expand or clarify the information obtained and need to confirm or

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validate the information added, that the goal of user's information seeking activities is to find information that satisfies his or her information needs. Wilkins and Leckie, 1997<sup>4</sup> the information technology revolution is expected to bring significant changes in the information-seeking behaviour of users. Modern technology has resulted in new services, targeted at the specialized and unique information needs of users. The availability of electronic communication facilities such as e-mail, discussion groups, bulletin boards, electronic conferencing, and chat-groups, has opened new channels for communication.

Babbie, 1998<sup>5</sup> adopted a qualitative approach to information-seeking behavior using the interview method as a tool for data collection. The interviewer is a neutral medium through which questions and answers are transmitted.

Fidazani, 1998<sup>6</sup> conducted a study at University of Botswana, Gabon on the information needs and information-seeking behaviour of graduate students. Findings revealed that the students relied on library books, textbooks, and journals. Spitzer et al, 1998<sup>7</sup> emphasized the importance of using information problem-solving skills across situations and their model gave students a systematic framework for solving information problems.

Nicholas and Williams, 1999<sup>8</sup> reported the findings of research conducted in UK to establish the impact of the Internet on information seeking behaviour in the media, specifically among journalists.

According to Line, 2000<sup>9</sup> in an information world radically changed by the Internet, it is judged as being essential to carry out new studies into information uses and needs.

Dalgleish and Hall 2000<sup>10</sup> studied the information seeking behavior pattern of researchers in the web environment. They found that access of online library information resources become easy and fast, without any space and time constraints. Researchers have shown that many information seekers prefer to use electronic resources and the Internet to obtain information quickly and easily.

Nazli 2001<sup>11</sup> conducted a study to find out the information seeking behavior of user community at the Islamia University of Bahawalpur Library. No study to date has been conducted at national or local level to find out the Information needs and seeking behavior of college teachers and administrators in Pakistan.

Kuhlthian and Tama 2001<sup>12</sup> explained the information search process of lawyers. Findings

revealed that these lawyers frequently were involved in complex tasks; they preferred printed texts over computer databases.

Bilal 2002<sup>13</sup> reports the key findings of the information seeking behaviour and success of students in using the web. The students' behaviour and success were compared in his study. The study reveals that the use of search engine and the level of research skills are directly proportional to their success.

Surya, Sangeetha and Nambi 2004<sup>14</sup> studied that information seeking behavior of faculty members for Government Arts College in Cuddalore District, to evaluate information-seeking patterns of faculty members in the library. Most of the respondents visited the library several times a week to meet their information needs.

Callinan, 2005<sup>15</sup> has studied students' awareness and use of different sources of information for their course-work. Further he analyzed the students habits to visit the University library, types of assistance used for collection of information, etc. Tahir, Mahmood, and Shafique 2008<sup>16</sup> studied the information needs and seeking behavior of Arts and Humanities Teachers of University of the Punjab.

Thannaskodi 2009<sup>17</sup> conducted a smaller kind of study at Central Law College, Salem, India. The study revealed that Law faculty members' preferred conventional source of information over IT based library resources and facilities for their academic and research purposes. They preferred personal collection. (Pradeep and Panchanathan 2010<sup>18</sup> had studied the e-learning in Arts and Science College Students. They did not concentrate more in using e-journals and e-books when comparing to the Engineering College students.

Sharma et.al. 2012<sup>19</sup> conducted a study of information seeking behaviour of faculty members at Sher-e-Kashmir University of Agricultural Sciences and Technology, Jammu. Authors revealed that faculty members preferred to use the Internet for seeking information on respective subjects and the use of the internet has influenced the usage of print resources.

Umesha and Chandrashekara 2013<sup>20</sup> tried to understand the information seeking and searching behaviour of dental science professionals in Karnataka. This paper tries to find out the suitable e-information sources available for dental professionals, the areas in which dental professionals seek information, and the barriers they face in accessing information.

### Objectives of the study

- To study the information needs of the faculty members of arts and science colleges.
- To identify the major sources of bibliographic information.
- To find out the utilization of library and its services.
- To know how far the staff members are dependent on the library.
- To identify the various modes of access to information sources.
- To assess the use of information channels.
- To analyze the user satisfaction.
- To evaluate the adequacy, availability and accessibility of the college library collection.
- To determine whether or not different kinds of information needs leads to different information seeking behavior and communication channels.

### Information Seeking Behaviour

Information Seeking Behaviour is mainly concerned with who needs what kind of Information and for what reasons and how information is found, evaluated and used, and how their needs can be identified and satisfied. The following process takes

place in the information seeking behaviors - identifying objectives, defining needs, accessing information system, establishing sources of information, information acquisition, and use of information and satisfaction. The present study attempts to understand, justify and explain the library usage and consequently, to gain more knowledge about the use of library facilities by the faculty members of arts and Science Colleges.

### Methodology and Scope

The present study is based on primary data collected from the faculty members through a well designed questionnaire. Besides, secondary data have been collected from the sources of journals, reference books and conference proceedings and other facilities and services of faculty members. The information needs and information seeking behaviour of faculty members differ from person to person. The review of literature helps to formulate research design. Information technology has developed rapidly today. So that it has had a huge impact on access to information and information seeking behavior.

### Data collection

### Data analysis and Interpretation

For the purpose of collecting the data the faculty members were asked to fill in the pre-structured questionnaire on the above mentioned topic. The

**Table 1: College-wise distributing the respondents**

Name of the Colleges (Thiruvallur District)	Questionnaires Distributed		Response Received	
	No	%	No	%
Shree Chandraprabhu Jain College, Kattur Road, Minjur	45	18.29	34	13.82
DRBCCC Hindu College, Pattabiram.	48	19.51	42	17.07
Sriram College of Arts & Science, Perumalpattu.	54	21.95	45	18.29
Jaya College of Arts & Science, Thiruninravur.	52	21.14	44	17.89
Sri Subramaniswami Govt. Arts College, Tiruttani.	47	19.11	38	15.45
<b>Total</b>	<b>246</b>	<b>100</b>	<b>203</b>	<b>83</b>

questionnaires were distributed to 246 respondents of faculty members in five Arts and Science colleges around Thiruvallur District. The respondents were distributed randomly for the purpose of collecting the data. 203 faculty members responded to the questionnaires (i.e.) 83%. Data collected from 203 respondents in the form of tables and diagrams were designed.

Table - 1 shows that the research questionnaires were distributed to 246 faculty members, working in five colleges and 120 faculty members responded for this study. From the sample, 13.82% of respondents belong to Shree Chandrababhu Jain College, 17.07% of respondents belong to DRBCCC Hindu College and 18.29% respondents belong to Sriram College of Arts & Science, 17.89% respondents belong to Jaya

**Table 2: Respondents formal Communication Behaviour**

Name of the Colleges	No. of research articles Published in the Journals/conferences.		Books Published	Total
	National Journals/Con.	International Journals/Con.		
Shree Chandrababhu Jain College	26(16.88)	18(20.00)	2(16.66)	46(17.96)
DRBCCC Hindu College	32(20.78)	16(17.78)	4(33.33)	52(20.31)
Sriram College of Arts & Science	28(18.78)	20(22.22)	1(8.33)	49(19.14)
Jaya College of Arts & Science	35(22.73)	14(15.56)	3(25.00)	52(20.31)
Sri Subramanisawmi Govt. Arts College	33(21.43)	22(24.44)	2(16.67)	57(22.27)
	154(100)	90(100)	12(100)	256(100%)

College of Arts & Science, 15.45% Sri Subramanisawmi Govt. Arts College.

Table -2 indicates that 22.73% are published in the national journals/conferences by the respondents whom they belong to Jaya College of Arts & Science, 22.22% are published in the International Journals/Conferences. They belong to Sriram College of Arts & Science. Maximum number of books 33.33% is published by the DRBCCC Hindu College.

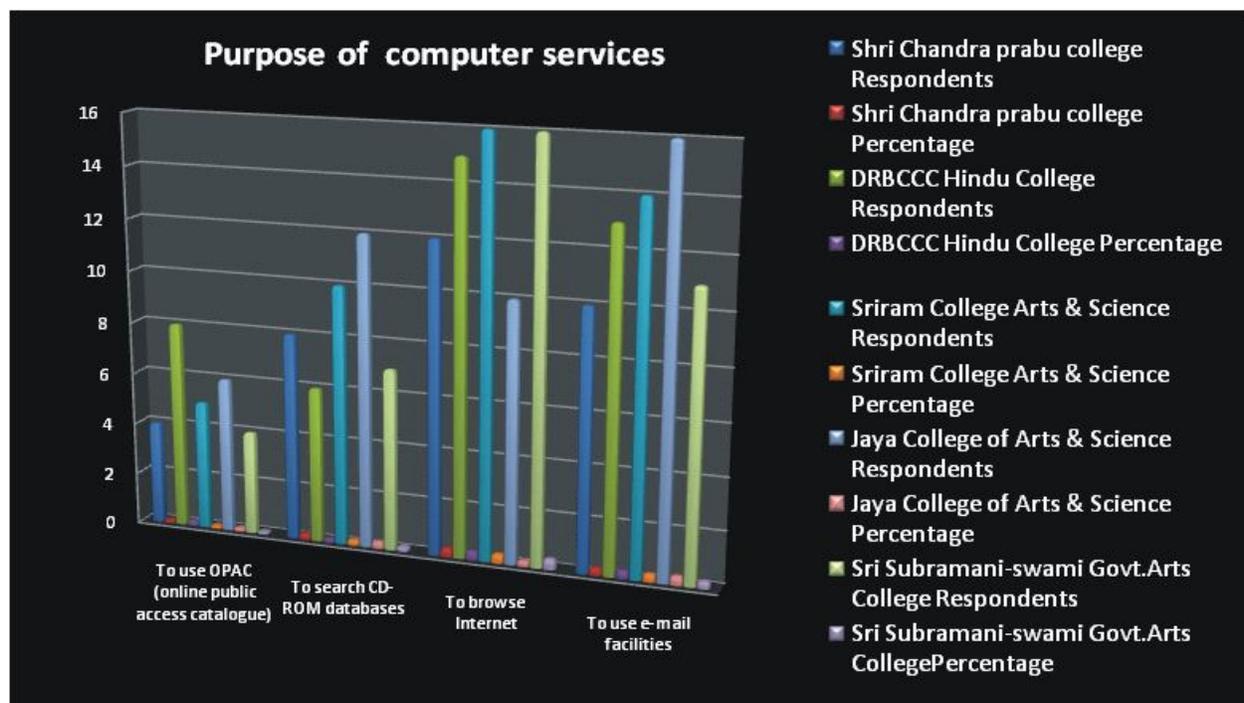
Table -3 shows the purpose of using computer based services for accessing information. 19.05% of respondents using online public access catalogue in which belong to DRBCCC Hindu College. 27.27% of Staff members belong to Jaya College of Arts & Science using CD-ROM data bases. Both colleges (35.56%, 42.11% of respondents) belong to Sriram College Arts & Science and Sri Subramanisawmi Govt Arts College to browse Internet. 36.36% of respondents are using e-mail services which belong to Jaya College of Arts & Science.

It is derived from Table-4 that 28.57% of respondents of DRBCCC Hindu College felt that their libraries were very adequately stocked and 38.10% of respondents are on a level adequately stocked in the stock effectiveness level. 40.91% of respondents of Jaya College of Arts & Science are moderately stocked and 15.90% of the staff members of Jaya College of Arts & Science are very inadequately stocked. 21.05% of respondents of Sri Subramanisawmi Govt. Arts College are inadequately stocked whereas a few of the respondents of all colleges indicate they do not know stock effectiveness level.

Table - 5 shows the purpose of visit by the respondents for accessing of information. 20% , 22.22%, and 26.67% of respondents of Sriram College of Arts & Science visit the library for preparing class lectures, for updating knowledge, and for doing research work. 15.91% and 11.36% of respondents of Jaya College of Arts & Science are coming to the library for writing and preparing papers and for entertainment. 11.90% and 14.29% of respondents of

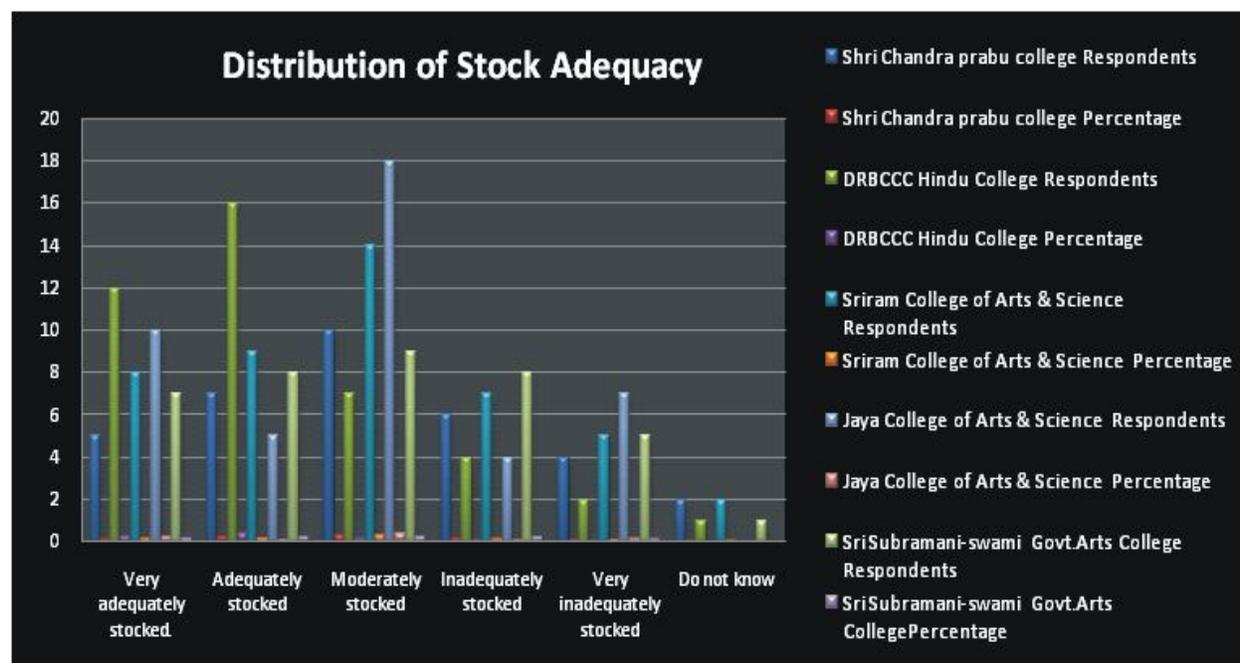
**Table 3: Purpose of using Computer based services.**

Computer based Services	Shri Chandra prabu college	DRBCCC Hindu College	Sriram College Arts & Science	Jaya College of Arts & Science	Sri Subramani-swami Govt.Arts College	Total
To use OPAC (online public access catalogue)	4 (11.96%)	8 (19.05%)	5 (11.11%)	6 (13.64%)	4 (10.53%)	27 (13.30%)
To search CD-ROM databases	8 (23.53%)	6 (14.29%)	10 (22.22%)	12 (27.27%)	7 (18.42%)	43 (21.78%)
To browse Internet	12 (35.29%)	15 (35.71%)	16 (35.56%)	10 (22.73%)	16 (42.11%)	69 (33.99%)
To use e-mail facilities	10 (29.41%)	13 (30.95%)	14 (31.31%)	16 (36.36%)	11 (28.94%)	64 (31.53%)
Total	34 (100%)	42 (100%)	45 (100%)	44 (100%)	38 (100%)	203 (100%)



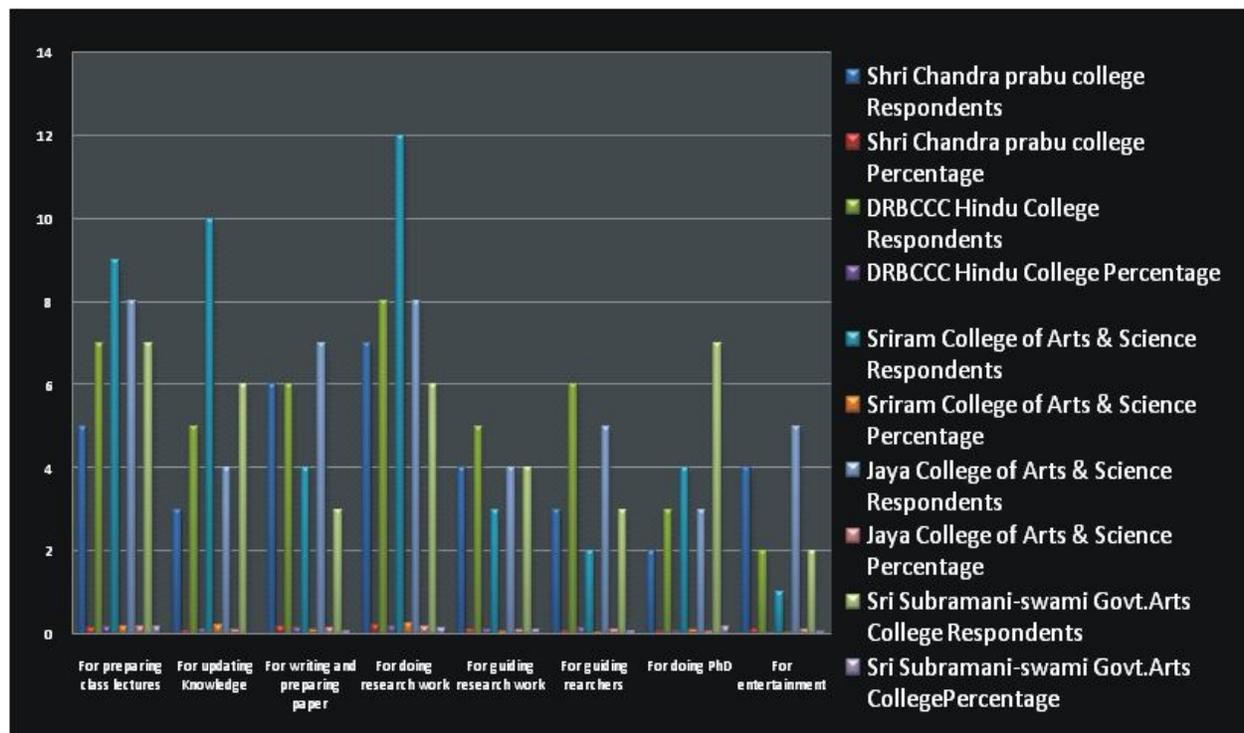
**Table 4: Adequacy of Stock availability in the Library**

Adequacy of Stock effectiveness level	Shri Chandra prabu college	DRBCCC Hindu College	Sriram College of Arts & Science	Jaya College of Arts & Science	Sri Subramani-swami Govt.Arts College	Total
Very adequately stocked.	5 (14.71%)	12 (28.57%)	8 (17.78%)	10 (22.73%)	7 (18.42%)	42 (20.69%)
Adequately stocked	7 (20.59%)	16 (38.10%)	9 (20%)	5 (11.36%)	8 (21.05%)	45 (22.17%)
Moderately stocked	10 (29.41%)	7 (16.67%)	14 (31.11%)	18 (40.91%)	9 (23.68%)	58 (28.57%)
Inadequately stocked	6 (17.65%)	4 (9.52%)	7 (15.56%)	4 (9.09%)	8 (21.05%)	29 (14.28%)
Very inadequately stocked	4 (11.76%)	2 (4.96%)	5 (11.11%)	7 (15.90%)	5 (13.16%)	23 (11.33%)
Do not know	2 (5.88%)	1 (2.38%)	2 (4.44%)	-	1 (2.63%)	6 (2.96%)
Total	34 (100%)	42 (100%)	45 (100%)	44 (100%)	38 (100%)	203 (100%)



**Table 5: Distribution of purpose of information seeking.**

Purpose of information seeking	Shri Chandra prabu college	DRBCCC Hindu College	Sriram College of Arts & Science	Jaya College of Arts & Science	Sri Subramani-swami Govt.Arts College	Total
For preparing class lectures	5 (14.71%)	7 (16.66%)	9 (20%)	8 (18.18%)	7 (18.42%)	31 (15.27%)
For updating Knowledge	3 (8.82%)	5 (11.90%)	10 (22.22%)	4 (9.09%)	6 (15.79%)	32 (15.76%)
For writing and preparing paper	6 (17.65%)	6 (14.29%)	4 (8.88%)	7 (15.91%)	3 (7.89%)	27 (13.30%)
For doing research work	7 (20.59%)	8 (19.05%)	12 (26.67%)	8 (18.18%)	6 (15.79%)	36 (17.73%)
For guiding research work	4 (11.59%)	5 (11.90%)	3 (6.67%)	4 (9.09%)	4 (10.53%)	24 (11.82%)
For guiding researchers	3 (8.82%)	6 (14.29%)	2 (4.44%)	5 (11.36%)	3 (7.89%)	19 (9.36%)
For doing PhD	2 (5.88%)	3 (7.14%)	4 (8.88%)	3 (6.82%)	7 (18.42%)	20 (9.85%)
For entertainment	4 (11.76%)	2 (4.76%)	1 (2.22%)	5 (11.36%)	2 (5.26%)	14 (6.90%)
Total	34(100%)	42(100%)	45(100%)	44(100%)	38(100%)	203(100%)



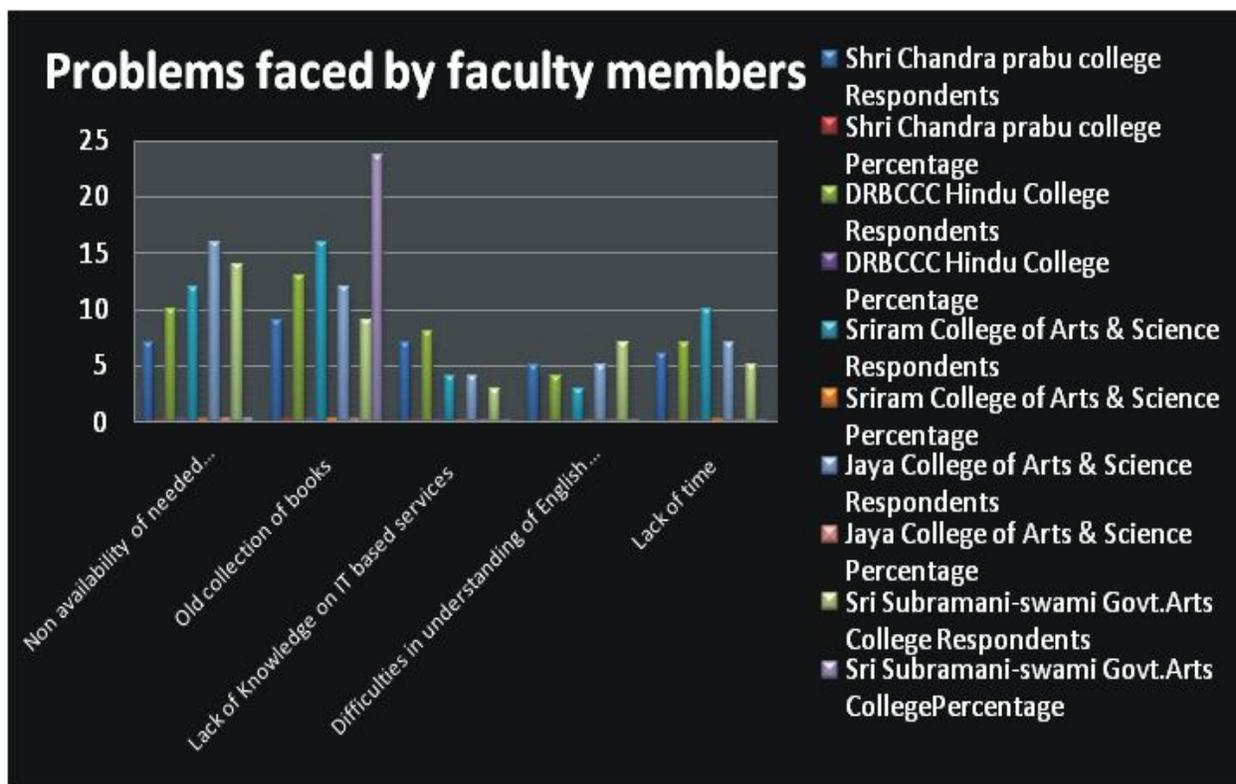
**Table 6: Distribution of facilities in Library.**

Facilities in Library	Shri Chandra Prabhu Jain College			DRBCCC Hindu College			Sriram College of Arts & Science			Jaya College of Arts & Science			Sri subramani-swami Govt. Arts College.		
	Y	N	T	Y	N	T	Y	N	T	Y	N	T	Y	N	T
Open- ing hours	26 (20)	8	34	32 (18)	10	42	28 (15)	17	45	35 (18)	8	44	22 (15)	16	38
Library environ- ment	19 (14)	15	34	33 (19)	8	42	32 (17)	13	45	32 (17)	12	44	18 (12)	20	38
Location	20 (15)	14	34	29 (16)	13	42	36 (19)	9	45	20 (11)	14	44	25 (17)	13	38
Coll. of books & journals	18 (14)	16	34	31 (18)	11	42	26 (16)	19	45	38 (20)	6	44	32 (22)	6	38
Issue-return system	22 (17)	12	34	28 (16)	14	42	38 (15)	7	45	34 (18)	10	44	26 (18)	12	38
Arrange- ment of materials	28 (21)	6	34	24 (14)	18	42	31 (13)	14	45	31 (16)	13	44	24 (16)	14	38
Percent-age Total	65 133	35 71	% 204	70 177	30 74	% 251	71 191	29 79	% 270	75 190	25 63	% 253	64 147	36 81	% 228

**Table 7: Problems faced by faculty members.**

Problems faced by faculty members	Shri Chandra prabu college	DRBCCC Hindu College	Sriram College of Arts & Science	Jaya College of Arts & Science	Sri Subramani-swami Govt.Arts College	Total
Non availability of needed information materials	7 (20.59%)	10 (23.81%)	12 (26.67%)	16 (36.36%)	14 (36.84%)	59 (29.06%)
Old collection of books	9 (26.47%)	13 (30.95%)	16 (35.56%)	12 (27.27%)	9 (23.68%)	59 (29.06%)
Lack of Knowledge on IT based services	7 (20.59%)	8 (19.05%)	4 (8.89%)	4 (9.09%)	3 (7.89%)	26 (12.81%)
Difficulties in understanding of English knowledge	5 (14.71%)	4 (9.52%)	3 (6.67%)	5 (11.36%)	7 (18.42%)	24 (11.82%)
Lack of time	6 (17.65%)	7 (16.67%)	10 (22.22%)	7 (15.91%)	5 (13.16%)	35 (17.24%)
Total	34(100%)	42(100%)	45(100%)	44(100%)	38(100%)	203(100%)

**Problems faced by faculty members.**



DRBCCC Hindu College visit the library for guiding research work and for guiding researchers whereas 18.42% of respondents of Sri Subramaniswami Govt. Arts College are coming to the library for doing PhD.

Table 6 indicates that 20% of respondents of Shri Chandra Prabhu Jain College were satisfied with the opening hours facilities whereas 19% of respondents of DRBCCC Hindu College were contented with the Library environment facilities. 19% of respondents of Sriram College of Arts & Science were satisfied with the location of the library. 22% of respondents of Sri Subramaniswami Govt. Arts College were contented with the collection of books and journals whereas 18% of respondents of Jaya College of Arts & Science and Sri Subramaniswami Govt. Arts College were satisfied with the Issue-return system .21% of respondents of Shri Chandra Prabhu Jain College were satisfied with the arrangement of materials in the library.

Table -7 shows that the problem are faced by the faculty members in Library. 36.36% of respondents of Jaya College of Arts & Science inform the Librarian about the non- availability of needed information materials in Library.35.56% of respondents of Sriram College of Arts & Science inform the Librarian that the materials are outdated collection of books. 19.05% of respondents of DRBCCC Hindu Colleges display

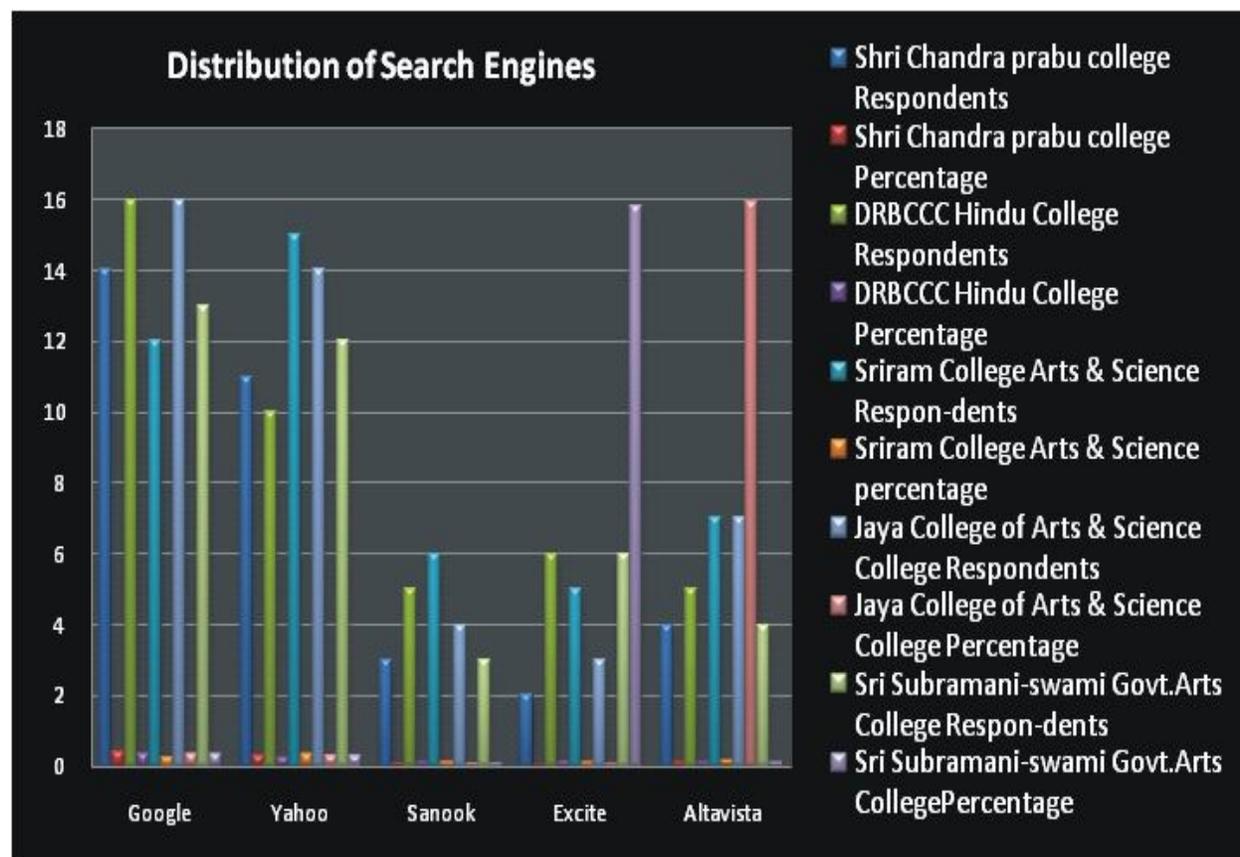
lack of Knowledge on IT based services.18.42% of respondents of Sri Subramanisawmi Govt. Arts College face difficulties in understanding of English language whereas 22.22% of respondents of Sriram College of Arts & Science indicate the lack of time with the Library.

Table 8 reveals that the faculty members are using search engines.38.10%,36.36% of both respondents of two colleges namely, DRBCCC Hindu College and Jaya College of Arts & Science are using Google engines.33.33% and 13.33% of respondents of Sriram College of Arts & Science are using Yahoo and Sanook engines.14.29% and15.79% of respondents of DRBCCC Hindu College and Sri Subramanisawmi Govt. Arts College are using Excite engines whereas15.56% and 15.91% of Sriram College of Arts & Science and Jaya College of Arts & Science are using Altavista engines.

Table- 9 indicates that the faculty members are using preferred study places. 47.47% of respondents of Sri Subramanisawmi Govt. Arts College are using Home for study places.16% of respondents of Jaya College of Arts & Science College use Library for study places. 33.33% and 22.22% of respondents of DRBCCC Hindu College prefer using staff room and other places for study.

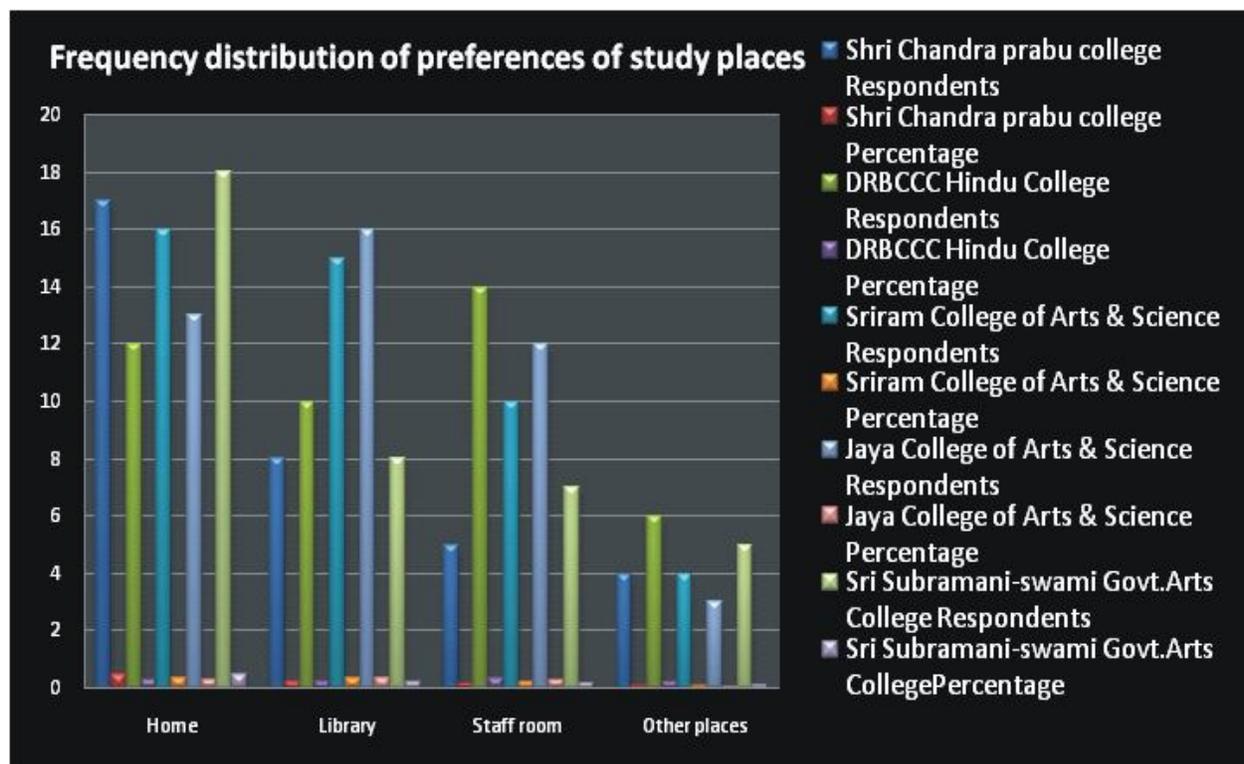
**Table 8: Usage of Search Engines.**

Search Engines	Shri Chandra prabu college	DRBCCC Hindu College	Sriram College of Arts & Science	Jaya College of Arts & Science	Sri Subramani-swami Govt.Arts College	Total
Google	14 (41.18%)	16 (38.10%)	12 (26.67%)	16 (36.36%)	13 (34.21%)	71 (34.98%)
Yahoo	11 (32.35%)	10 (23.81%)	15 (33.33%)	14 (31.82%)	12 (31.58)	62 (30.54%)
Sanook	3 (8.82%)	5 (11.90%)	6 (13.33%)	4 (9.09%)	3 (7.89%)	21 (10.34%)
Excite	2 (5.88%)	6 (14.29%)	5 (11.11%)	3 (6.82%)	6 (15.79%)	22 (10.84%)
Altavista	4 (11.76%)	5 (11.90%)	7 (15.56%)	7 (15.91%)	4 (10.53%)	27 (13.30%)
Total	34(100%)	42(100%)	45(100%)	44(100%)	38(100%)	203(100%)



**Table 9: Frequency distribution of preferences of study places.**

Study Places	Shri Chandra prabu college	DRBCCC Hindu College	Sriram College Arts & Science	Jaya College of Arts & Science	Sri Subramani-swami Govt.Arts College	Total
Home	17 (50%)	12(28.57%)	16(35.56%)	13(29.55%)	18(47.47%)	76(37.44%)
Library	8(23.53%)	10(23.81%)	15(33.33%)	16(36.36%)	8(21.05%)	57(28.08%)
Staff room	5(14.71%)	14(33.33%)	10(22.22%)	12(27.27%)	7(18.42%)	48(23.65%)
Other places	4(11.76%)	6(22.22%)	4(8.89%)	3(6.81%)	5(13.16%)	22(23.65%)
Total	34(100%)	42(100%)	45(100%)	44(100%)	38(100%)	203(10.84%)



**Summary of Findings**

1. It is clearly understood that the majority of the articles published by the staff members are in national journals/conferences
2. It shows most of the staff members are able to browse the Internet.
3. It is inferred that the majority of the respondents are able to inform the level of books which are adequately stocked.
4. It is observed that most of the staff members are getting information for doing research work.
5. The user community is being faced by the non-availability of needed information materials and outdated collection of books.
6. It indicates that the majority of the staff members are using Google as a search engine.
7. It is found that most of the staff members preferred the Library as a place to study.

### Suggestions

Based on the findings of the study, the following suggestions are put forward to improve the library services in user community.

- ❖ To improve the library service new arrivals of books may be displayed.
- ❖ Periodicals / books that are displaced should be properly arranged every day.
- ❖ Current awareness service may be implemented to increase the satisfaction level of the library service.
- ❖ Interpretation orientation program may be conducted to the faculty members.
- ❖ The reading section should be separate without any disturbance.
- ❖ Faculty development program has to be conducted by exploring various library facilities namely online journal availability and e-books.

While seeking information from internet the users should use more than one search engine because only one search engine cannot be considered as comprehensive

### Conclusion

Today is an age of information and tremendous flow of information is emerging in all fields throughout the world. So it has become very difficult to manage the information manually due to exponential growth of literature and publications. The problem of providing timely information is not due to lack of information, but the way in which it is handled to enable the user to fulfill his needs. Henceforth this study has examined the acquaintance of the faculty members with the information seeking process. The findings showed that main information needs of faculty members are related to their class teaching and research purposes. The internet and email are the main channels for obtaining the latest information. However, majority of faculty members use the library as their place of study. The problems identified by faculty members that they cannot locate the targeted sources as information is scattered in too many sources. Therefore the library staff members will provide the right information to the right users at the right time as per Ranganathan's definition for reference service. Finally the study hopes that faculty and university authority will take note of the findings, and endeavor towards meeting the

information needs for more development of academic function.

### References

1. Sethi, A 1990. Information seeking behaviors of social scientist: An Indian conspectus, New Delhi: Hindustan Publishing Corporation.
2. Hart, R.L (1993).The information –gathering behaviour of the faculty of a four Year state college.Ph.DTheses: University of North Carolina.
3. Allen, B. L., (1996) Information Needs. In Information task; Toward a User Centered Approach to Information System CA: Academic Press, (pp.55- 107).
4. Wilkins, J.L.H. and Leckie, G.J.( 1997). University professional and managerial staff: information needs and seeking. *College & Research Libraries*, Vol. 58, no. 6, 561-574.
5. Babbie, Earl (1998). *The Practice of Social Research*. Wadsworth Publishing Company.
6. Fidzani, B. T. C (1998). Information needs and information-seeking behavior of graduate students at the University of Botswana. *Library Review* 47(7): 329-340.
7. Spitzer, K. et al (1998). Information literacy: essential skills for the information age. ERIC Clearinghouse on Information and Technology. New York: Syracuse.
8. Nicholas, D., & Williams. P. (1999). The changing information environment: The impact of the internet on information seeking behaviour in the media. In T.D. Wilson & D.K. Allen (Ed.), *Information Needs, Seeking and Use in Different Contexts*. Proceedings of the Second International Conference on Research in Information Needs, Seeking and Use in Different Contexts, 1998(451-462). Los Angeles: Taylor Graham Publishing.
9. Line, M.B. (2000). Social science information: The poor relation. *IFLA Journal*, 26(3), 177–179.
10. Dalglish, A.; Hall, R.(2000) Uses and Perceptions of the World Wide Web in an information-seeking environment. *Journal of Librarianship and Information Science*, v.32, n.3, p.104-116
11. Nazli, S. (2001). Information seeking behaviour of community of IUB library users unpublished master's thesis, Department of Library and Information Science, the Islamia University of

- Bahawalpur.
12. Kahlthan, C.C. & Tama, S.L. (2001). Information search process of lawyers: a call for "just for me" information services. *Journal of Documentation*. Vol.57 (1).pp25-43.
  13. Bilal, D. (2002). Perspectives on children's navigation of the World Wide Web: Does the type of search task make a difference? *Online Information Review*, 26(2), 108-117.
  14. Suriya, M.Sangeetha, G., and Nambi, M.A (2004) Information seeking behavior of faculty members from government arts colleges in Cuddalore district. In: Kaul, H.K and patil S.KIEds), *Library and information networking (NAACLIN 2004)*. New Delhi 2165-292.
  15. Callinan, E.J (2005). Information seeking behaviour of undergraduate Biology students. A comparative of first year and final year student.
  16. Tahir, M., Mahmood, K. & Shafique, F. (2008). Information Needs and Seeking Behavior of Arts and Humanities Teachers. *Library Philosophy and Practices*. Retrieved December 2008, from: <http://digitalcommons.unl.edu/libphilprac/227>
  17. Thanuskodi, S. (2009). Information-seeking behavior of law faculty at central law college, Salem. *Library Philosophy and Practice* (June), 1-8. Retrieved from <http://www.webpages.uidaho.edu/~mbolin/thanuskodi-legal.htm> on November 10, 2009.
  18. Pradeepkumar, E.I & Panchanathan, N (2010). A study on impact of rural college students in e-learning in e-learning (Nagapattinam District, Tamilnadu-India).
  19. Sharma, B & Gupta, S. (2012). Information seeing behavior faculty member at Sher-e- Kashmir University of Agricultural Sciences and technology, Jammu, India in Internet era: a Survey. *IASLIC Bulletin*, 57(1), 23-33.
  20. Umesha, U., & Chandrashekara, M. (2013). Information Seeking and Searching Behaviour of Dental Science Professionals in Karnataka. *DESIDOC Journal of Library & Information Technology*, 33(2). 147.
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