

# **Information Seeking Behaviour of Teachers from Science Departments of Savitribai Phule Pune University**

**Kashinath J. Dhage<sup>1</sup>**

Librarian, Amrutvahini College of Engineering, Sangamner, Ahmednagar, Maharashtra

dhage.kashinath@gmail.com, kashinath.dhage@avcoe.org

## **ABSTRACT**

*The core purpose of the study was to explore the information seeking behaviour of teachers from science departments of Savitribai Phule Pune University, Pune. The purpose of the study was to know how teachers can access information from different resources and what type of difficulties face by teachers while seeking information. A questionnaire were circulated to one hundred fourth nine (149) teachers from science department of SPPU, Pune. Overall response rate was 88.59%. The study reveal that majority of respondents are well aware and use electronic media for sought out information. It was found that prima facie majority of teachers depends on electronic information resources for seeking information. The study also recommends that the user awareness programme, hands on training, library orientation programme should be organized at regular intervals.*

**KEYWORDS:** Information Seeking Behaviour, User Studies, Information Searches.

## **1. INTRODUCTION**

The world is changing rapidly. Information communication technology has developed and has a huge impact on access to information and also impact on information seeking behaviour. Technology has also influenced lifestyle; specifically the expectations have had repercussions on information access and information seeking. With the advent of the information explosion and the coming of the "Information age", newer technologies in computer development, transmission of information, storage and display of information have been wedded to the problem of supplying information to those who need it quickly and in ever increasing quantities.

Information seeking behaviour refers to the way people search for and utilize information. The term was coined by Wilson in 1981. The concept of information seeking, information retrieval and information behaviour is objects of investigation of information science. Information has become a focal point for the academics to support their teaching and research for which library is a major source of information to the user community.

## **2. NEED OF THE STUDY**

The development of information technology has offered today's information seekers different opportunities to access the information resources in variety of formats. The explosion of information available on the web has affected information seeking behaviour with many types of information in many different locations are available in one place. Teachers are especially consumer of academic information for their understanding and getting update knowledge. The researcher tried to get the answers from the following questions.

- i. What kind of information is sought by teachers?
- ii. What is the purpose behind the seeking the information?
- iii. What kind of sources and tools are used, how and why are they used?
- iv. What methods are used for seeking information?
- v. What are the problems of seeking information and how it can be solve?

## **3. OBJECTIVE**

The aim of the study is to study in detail the information seeking behaviour of teachers from science departments of Savitribai Phule Pune University. However in order to attain this aim following specific objective were set:

- i. To know the information seeking behaviour of the teachers.
- ii. To determine the sources that is used by users for seeking information.
- iii. To study the purpose of information seeking and information use by users.
- iv. To reveal the language of information sources used.
- v. To study the problems faced by users of teachers while seeking and use of information.
- vi. To propose behavioral model for information seeking.

## **4. HYPOTHESIS**

Following hypothesis was framed for the study:

Most of the teachers preferred sources published in English language for seeking information.

- i. All respondents are migrating from print to electronic information resources.

## **5. SCOPE AND LIMITATION OF THE STUDY**

The scope of the present study is limited to teachers serving in science departments of Savitribai Phule Pune University. The population of this project comprises of Permanent Teachers from science departments. The university has 17 science departments and 149 teachers from science departments.

## **6. METHODOLOGY**

The descriptive survey research method is been used and structured questionnaire is used as a tool for data collection. Apart from structure questionnaire interview is also be conducted so as to reveal information about the unanswered questions from the questionnaire and after taking feedback from the respondents Statistical Package for the Social Sciences (SPSS) software and MS-Excel is used for further analysis and for preparing graphs and tables.

## **7. LITERATURE REVIEW**

The review of literature is part of the process of understanding the problem and its context. The professional and scholarly literature should be careful reviewed and synthesized. Indeed the selection of a specific area of exploration can often to be the completion of successful enquires. Many

## ***Information Seeking Behaviour of Teachers from Science Departments of Savitribai Phule Pune University***

Studies in the recent past were carried out to discover the information seeking behavior of the teachers at different types of libraries across the globe. Some of the surveys pertaining to the information seeking behavior of teachers at various academic institutions is been reviewed here.

Kumari, S. & Devi, S. (2013) studied the “Information needs and information seeking behavior of Teachers of NIT”. This study was use survey research method and questionnaire were use for gathering the data. A 142 questionnaire were distributed among the teachers. The study found that maximum teachers visited the library to issue books, used periodicals, journals and reference book for different purposes. The study shows that teachers are least concerned with government documents, thesis and proceeding of conferences as source of information. The study also found that maximum teachers were satisfied with the library collections.

Kumar, P. (2013) investigated the “Information seeking behaviour of faculty members of BPS Women University”. The objective of this study were to find out (a) to identify information seeking behaviour (b) to know the search engines and web browsers frequently use (c) to know purpose of information seeking behaviour (d) to know information needs of the faculty members. The study used the questionnaire based survey method for data collection. A random sample of seventy five faculty members was selected for the study and out of these fifty five faculty members fully responded. It is found that majority of faculty members required information for keeping up to date and for preparing lectures. It was also found that they use the internet strongly at home for education. Finally study suggest that library must provide adequate ICT facilities for reference librarians, such as internet, laser printers, scanners, fax machine, telephone etc.

Bansode, S. Y. & Nargide, B. (2014) studied a survey on the “Information seeking behavior of B-School faculty members in digital environment: a case study”. This study used descriptive survey research method and the instrument used for the data collection was a structure questionnaire. The study found that most of the time faculty member use subscribed as well as open source electronic information resources for locating the desired information. Most of the respondents prefer to locate for full text as well as abstract from of information.

### **8. DATA ANALYSIS AND INTERPRETATION**

Questionnaire was circulated to all 149 teachers working in the science departments in the campus of Savitribai Phule Pune University. However responses were received from 132 (88.59%) teachers. These responses become the base for further analysis. The entire analysis is based on the feedback of 132 teachers.

#### **8.1 Department of responded Teachers**

The attempt was made to find out department wise responded teachers to questionnaire. The clear picture of number of teachers working in each department as well as it also depicts the number of teachers who has actually responded to the questionnaire.

Name of Departments	Number of Teachers		Percentages
	Total Teachers	Responded Teachers	
Atmospheric and space science.	02	02	100%
Biotechnology.	01	01	100%
Botany.	14	12	85%

Chemistry.	29	25	86%
Communication studies.	04	04	100%
Electronic Science.	03	03	100%
Environmental Science.	01	01	100%
Geology.	12	12	100%
Geography & Geo-informatics.	09	08	88%
Computer Science.	07	06	85%
Instrumentation Science.	03	03	100%
Mathematics.	14	13	92%
Microbiology.	03	03	100%
Physics.	25	20	80%
Statistics.	10	09	90%
Zoology.	12	10	83.33%
Total	<b>149</b>	<b>132</b>	<b>88.59%</b>

The above table shows that department-wise distribution of teachers 132 (88.59%) Science teachers responded to questionnaire. It seems that, teachers from most of the departments Atmospheric science, Biotechnology, Communication Studies, Electrical Science, Microbiology, Geology, Instrumentation Science, and Environmental Science have responded hundred percent to the questionnaire.

## 8.2 Sources of Information Seeking

To get to know sources adopted by teachers in general for searching the information. The responses received from the teachers are tabulated in following table

Sr. No	Source of Information Seeking	Number of Teachers	Percentages
1.	Discussion with colleagues	83	62.87%
2.	Consult knowledgeable person in the field	86	65.15%
3.	Consult supervisor	17	12.87%
4.	Discussion with librarian or reference staff of library	07	5.30%
5.	Review article	116	87.87%
6.	Abstracting journals	105	79.54%
7.	Indexing journals	76	57.57%
8.	Library catalogue	40	30.30%
9.	Any other (Please mention)	12	9.09%
	Total <i>(Total percentage is not hundred because of multiple responses)</i>	-	-

## ***Information Seeking Behaviour of Teachers from Science Departments of Savitribai Phule Pune University***

The above table shows that majority of the teachers i.e. 116 (87.87%) seek information by review articles. While 07 (05.30%) teachers' preferred discussion with librarian or reference staff of library for seeking information. Emphasis is also given by 83 ( 62.87% ) teachers going for discussion with colleagues, 86 ( 65.15% ) teachers preferred consult knowledgeable person in the field, 105 ( 79.54% ) teachers preferred abstracting journals, 76 ( 57.57% ) teachers preferred indexing journals, 40 ( 30.30% ) teachers preferred library catalogue for accessing the information, 17 (12.87%) teachers preferred consult supervisor and 12 (9.09%) teachers use other methods such as Databases, Internet etc. for accessing the information.

### **8.3 Preferred sources for Information Seeking by Teachers**

The purpose behind asking this question was to analyses which sources of information do teachers consult most and whether the source is authentic source of information. The responses received from the teachers are depicted in the following table

<b>Sources of Information</b>	<b>Number of Teachers</b>	<b>Percentages</b>
Library / library staff	110	83.33%
Friends	37	28.03%
Colleagues	85	64.39%
Family	28	21.21%
Expert in field	88	66.66%
TV	36	27.27%
Radio	14	10.60%
Telephone	15	11.36%
Electronic media	126	95.45%
Any other (please mention)	00	00%
Total <i>(Total percentage is not hundred because of multiple responses)</i>	-	-

From the above table shows that majority of teachers depend on electronic media for source of information. Most of the teachers depend on sources of information such as library/library staff, expert in the field, colleagues, and friends respectively. The reason might be that most of the science literature available in electronic format and it is also available at desktop and fulfill most of the needs of teachers.

### **8.4 Purpose of Information Seeking Behaviour**

Teachers use library for different purposes according to their needs such as some teachers use for preparation for teaching, some teachers for writing books, some for read current periodicals etc. The response received from teachers are tabulated in the following table

<b>Purpose of visiting Library</b>	<b>Number of Teachers</b>	<b>Percentages</b>
To prepare teaching	97	73.48%
To write a book	50	37.87%
To write a research paper for conference / seminar	83	62.87%
To conduct literature search on topic of	84	63.63%

research		
To search documents	72	54.54%
To read current periodicals	71	53.78%
To read current literature for teaching	67	50.75%
Any other (Please mention)	12	9.09%
Total (Total percentage is not hundred because of multiple responses)	-	-

From the above table shows that majority of the teachers i.e. 97 (73.48%) visit the library for preparation of teaching. Followed by 84 (63.63%) teachers visit the library to conduct literature search on topic of research, 83 (62.87%) teachers visit the library to write a research paper for conference, seminars, 72 (54.54%) teachers visit the library to search the documents which they required, 71 (53.78%) teachers visit the library for reading current periodicals, 67 (50.75%) teachers visit the library to read current literature for teaching, 50 (37.87%) teachers visit the library to write a book and 12 (9.09%) teachers visit the library for other purposes.

### 8.5 Language of Information Seeking

The language is the one of the most important component of information communication. The sources of information are available in various languages and in science field most of the literature is available in English language therefore researcher was asked questions regarding the preference of language by the teachers for reading materials and options provided were English, Hindi, Marathi and any other. The response received from teachers are been depicted in following table.

Sr. No.	Languages	Number of Teachers	Percentage
1.	English	132	100%
2.	Hindi	12	9.09%
3.	Marathi	48	36.36%
4.	Any other	00	00%
	Total (Total percentage is not hundred because of multiple responses)	-	-

From above table shows that, majority of teachers i.e. 132 (100%) preferred English language for searching the desired information, followed by 48 (36.36%) teachers preferred Marathi language and very few 12 (9.09%) teachers preferred Hindi language. It seems that majority of teachers use English language as a first priority for reading and searching the information. Thus the second hypothesis that “**Most of the teachers preferred sources published in English language for seeking information**” is proved.

### 8.6 Type of Information seeks by Teacher

There are various types of material available in Jayakar library, such as books, reference books, online journals/ Databases, Periodicals, Research reports etc. Each material has its own characteristics and it is provide different information. The purpose of the question was to find out type of materials which the teachers use for seeking the information and frequently use sources of information.

**Information Seeking Behaviour of Teachers from Science Departments of Savitribai Phule Pune University**

Type of Materials	Number of Teachers	Percentages
Books	103	78.03%
Reference Books	115	87.12%
Periodicals	120	90.90%
Newspapers	15	11.36%
Government publications	15	11.36%
Patents	10	7.57%
Thesis	27	20.45%
Research reports	83	62.87%
Indexes / Abstracts periodicals	30	22.72%
Pamphlet	06	4.54%
Clipping	04	3.03%
Pictures/ Photographs	08	6.06%
Maps	03	2.27%
Slides	03	2.27%
Tapes Recordings	02	1.51%
Video Recording	04	3.03%
CD-ROMs	17	12.87%
Any other (Please mention)	04	3.03%
Total ( <i>Total percentage is not hundred because of multiple responses</i> )	-	

It is found that majority of teacher's i.e. 90.90% use mainly Periodicals followed by Reference books, Books, research report for their fulfilling purposes. The reason may be that these sources are primary sources of information which is more useful for research.

### 8.7 Problem of seeking information by teachers:

The library is learning resource center. The Jayakar library is investing lot of money for information sources and services. It is very important to know the problems face by users while seeking the information, otherwise the investment is meaningless.

Sr. No.	Problems	Number of Teachers	Percentages
1.	Material is not available	31	23.48%
2.	Library staff are unwilling for service	04	3.03%
3.	Information materials incomplete	13	9.83%
4.	Information sources are so far located	08	6.06%
5.	Lack of time	29	21.96%
6.	Do not know how to use library catalogue	06	4.54%
7.	Lack of knowledge in using of library	10	7.57%

8.	Lack of understanding in English language	00	00%
9.	Information scattered in too many sources	55	41.66%
10.	Information is too vast	77	58.33%
11.	Any other (please mention)	10	7.57%
	Total (Total percentage is not hundred because of multiple responses)	-	-

It shows that majority of the teachers i.e. 77 (58.33%) face the problem of availability of information in vast amount followed by 55 (41.66%) teachers stating problem of information scattered in too many sources. The reason behind that it may be because of information explosion. The teachers find it difficult to select exact source of information from the vast amount of information resources available also the information needed may have scattered in number of resources.

### 8.8 Propose Information Seeking Behaviour Model:

Researcher studied various models, based on the literature review and the data researcher developed a behavioral model of information seeking. While Taylor’s and Wilson’s model of information seeking are still valid to some extent but they in need updating to reflect the various technological, lifestyle and demographic trends. Rather than considering the user, this model considers the information seekers in his or her environment. The presents a proposed updated model of information seeking from the perspective of an information of an information seeker reflects technological advances and combines sources and channels from both the Taylor and Wilson model.

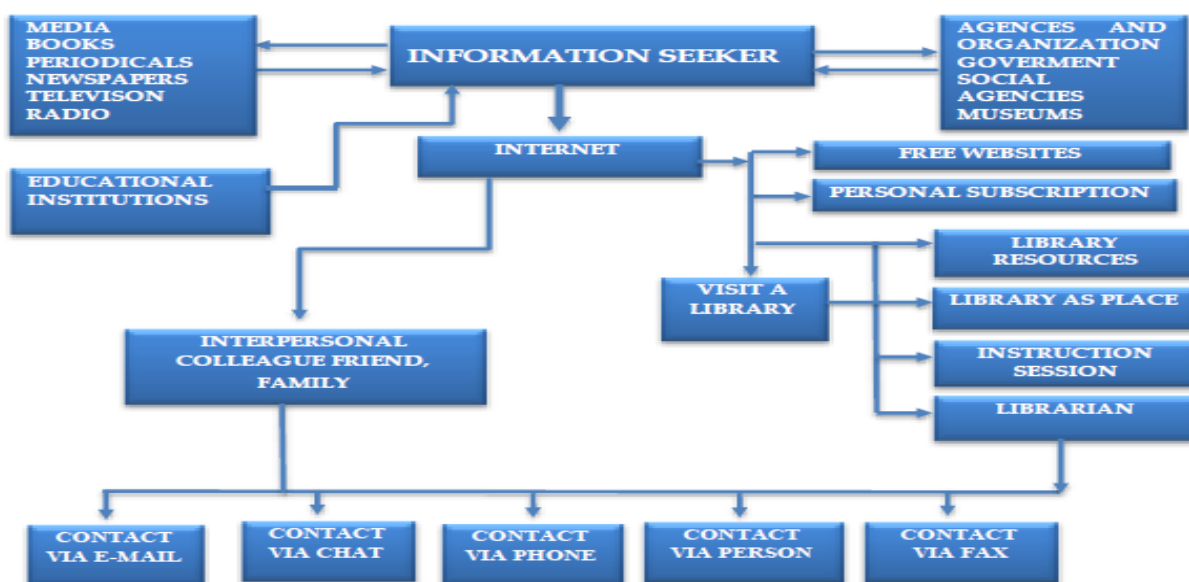


Fig 1: Propose Information Seeking Behaviour Model

The propose model incorporates information received by the information seeker from the media as well as various agencies and institutions. In the updated model, the notion of personal files has greatly expanded. In 1970s the information seekers would have checked the file cabinets and print books and journals on nearby shelves. Today,



information seekers check both print and electronic files, including documents stored on personal computers, laptops and other electronic devices. Technology now allows information seeker to search World Wide Web for information. The update model assumes that the first stop in information seeking is the Internet, till in 1970s, consultation with colleagues primarily would have occurred face to face or perhaps by telephone and now of course via e-mail and chat. It seems that librarian is not considered amongst the first interpersonal source to be consulted and for that reason, in this model the librarian is placed within the confines of the library. The proposed updated model places interpersonal sources after consultation of the internet. Consulting the library formerly required a trip to the library (as suggested with Taylor model). Consultation with librarians does not required in person visit or even a telephone call; information seekers may send an e-mail message to a librarian or in some cases may chat real-time.

## **9. MAJOR FINDING OF THE STUDY**

- It is found that most of the teachers 126 (95.45%) are used Electronic Media for sought out the information and very few teachers 14 (10.60%) used Radio for accessing information. It means majority of teachers depend on electronic media for source of information. Therefore the hypothesis **“All respondents are migrating from print to electronic information resources.”(Hypothesis no.2) is valid.**
- It is found that most of teachers 116 (87.87%) seek information from review articles and very few 07 (5.30%) teacher seek information from discussion with librarian or reference staff of library. It means they are well literate about library resources.
- It is found that most of teachers 119 (90.15%) prepare for class lecture followed by 118 ( 89.39%) teachers do research work, 115 (87.12%) teachers up to date themselves and 105 (79.54%) teachers guiding to researchers.
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- It is seen that most of the teachers i.e. 109 (82.57%) use references from a book for seeking information. Followed by 108 (81.81%) teachers used abstracting journals, 101 (76.51%) teachers used indexing journals, 100 (75.75%) teachers used references form periodicals, 37 (28.03%) book reviews, 33 (25.00%) teachers used library catalogue and very few teachers 02 (1.51%) used any other tool for getting information.
- It is found that, periodicals are more prominently used by the teachers. Out of 132 teachers 120 (90.90%) teachers use mainly Periodicals followed by Reference books, Books, Research reports and very few 02 (1.51%) teachers use tape recording for seeking the information.
- It is found that all the teachers i.e. 132 preferred English Language for searching the desired information. Followed by Marathi and Hindi Language. Hence the hypothesis **“Most of the teachers preferred sources published in English Language for seeking information” (Hypothesis no. 1) is valid.**
- It is found that most of the teachers i.e. 64 (48.48%) visit library monthly and very few 10 (7.57%) teachers visit library daily, weekly and fortnightly. It is also observed that 22 (16.66%) teachers never visit to library at all time.
- It is found that all the teachers i.e. 132 (100%) use electronic sources for seeking the information. Among these electronic sources Internet is mostly use by the teachers i.e. 129 (97.72%). Followed by E-Journals, E-Books, Online Databases and CD-ROM is use by the maximum number of teachers. Therefore the hypothesis **“All respondents are migrating from print to electronic information resources.”(Hypothesis no.2) is valid.**

- It is found that majority of the teachers 77 (58.33%) face the problem information is too vast, followed by information scattered in to many sources, lack of time and material is not available problem face by maximum number of teachers.
- It is observed that most of teachers 48 (36.36%) use library catalogue occasionally, 31 (23.48%) teachers use library catalogue regularly and very few 7 (5.30%) teachers not use library catalogue. It is found that teachers used the catalogue occasionally in the case of OPAC they were comfortable to search it and retrieving information, it shows that teachers are well comfortable with OPAC facility. A small percentage of them were not aware about OPAC, due to the not giving orientation programme for them.
- It is found that majority of the teachers i.e. (72.72 %) are happy with existing collection of journals and very few 29 (21.96%) teachers are not happy with existing collection of the journals they required more journals according to his requirement.

## **10. MAJOR SUGGESTIONS FOR STUDY**

- It is recommended that library has no rich collection about e-books so library should subscribe e-books for users.
- It is suggested that library should establish committee of all departmental library In-charge so that there will be continuous flow of information will lead towards teachers about new arrivals, services in the library.
- It is recommended that modern equipment and media should be introduced in the library for the reading and usage of e-resource.
- It is suggested that books for teachers should be made available in multiple copies & if PDF are available they should be accessible to teachers through intranet.
- It is recommended that library should provide high speed internet service for accessing electronic resources.
- It is suggested that library staff behavior should be made user friendly.
- Library must be develop non print collection ( i.e. e-resources and Audio-visual)
- It is suggested that new information materials arrived in the library should be sent to the end user through e-mail.

## **11. AREA FOR FURTHER STUDY:**

The present study made an attempt to study the Information Seeking Behaviour of Teachers from Science Departments of Savitribai Phule Pune University; till the study is not complete and has some scope to go further for more improvement; for present study only Information seeking behaviour of the faculty members has been considered whereas similar studies can be carried out on

- Information seeking behaviour in Public libraries.
- Information seeking behaviour and communication.
- Information seeking behaviour of research scholars.

## **CONCLUSION**

It can be summarized that the present study is of significance to the investigation of “Information Seeking Behaviour of teachers from science departments of Savitribai Phule Pune University”. The study shows that teachers demand towards online/digital information is increasing and they required current and updated information for various

purposes. The library is the most widely used source of information available to literate societies. Knowledge generated by user studies can help to develop information systems and information service. Information need and information seeking behavior, two complementary concepts which are affected by many factors. Research results in these areas of user studies indicate that information seeking behavior of teachers vary from one department to another department. The librarian should be aware, how to seek and what kind of information users sought. In light of the escalating cost to libraries for purchasing and archiving printed scholarly journals and electronic media. The library has the duty to provide and maintain efficient service. The data and research findings that shed light on how information seeking behaviour has been influenced are presented. Librarians are most interested in those sources that they can help supply but they must see these sources in the context of teachers overall information seeking behaviour.

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