

INFORMATION SEEKING PATTERN IN ELECTRONIC ENVIRONMENT OF SCIENCES AND ARTS RESEARCHERS: A COMPARATIVE STUDY

Sanjay Kumar

Praveen Shukla

Banaras Hindu University
India

ABSTRACT

The purpose of this paper is to examine information seeking pattern of science and art research scholars and for this the data was gathered using questionnaire survey of 139 (one hundred and thirty-nine) randomly selected, PhD scholars of science and arts departments of Asia's largest residential university Banaras Hindu University, India. It has been found that both the groups of researchers have some similarities and some dissimilarity in information seeking. Even in this electronic era some research scholars of art discipline depend on print form of publications for their information needs.

Keywords: Information Seeking-Behavior; Electronic Environment; User Studies; Researcher Arts Area; Researcher Sciences Area.

1 INTRODUCTION

A researcher is always curious to know what is going in his field of interest and for this he/she accesses library documents, attends conference, seminars, discusses experts of concerned field etc. to update him/her. But in the era which we are living have been blessed with electronic resources which seemed to be the best among the all mediums of information seeking for researchers.

A library is supposed to fulfill the researcher's information need(s) and it must recognize the information seeking pattern of the researcher. Information seeking behavior and need differs from user group to group, as for example the need of arts researcher may vary from science researcher. This study tries to analyze the

information seeking pattern of research scholars (arts and science only) of Banaras Hindu University.

2 BACKGROUND INFORMATION

Banaras Hindu University (BHU) established by the parliamentary legislation BHU Act 1915, is one of the oldest and internationally reputed universities, it ranks among the first few in the India in the field of academic and research output. This university has 2 (two) campuses, 3 (three) institutes, 16 (sixteen) faculties, 140 (one hundred forty) departments, 4 (four) advanced centers and 4 (four) interdisciplinary schools. The University is making its mark at the national and international levels in a number of frontier areas of Science, Arts, Social Science, Technology, Medicine and Agriculture etc. The University Library System consists of Central Library and Department Libraries supporting researchers learning and research needs. Library is opened 12 (twelve) hours a day while the electronic journals subscribed by the Library can be accessed through library website within the campus 24 (twenty four) hours a day.

3 OBJECTIVES

The study intends to look at differences and similarities between arts and science research scholars regarding information seeking. In other words the objective has been broken to: a) Determine the kinds of information sources used by researchers of both the groups; b) Find out the time spent on electronic resources by researchers; c) Investigate the main information intermediary to researcher; d) Find the most preferred way for monitoring recent information.

4 LITERATURE REVIEW

There is no dearth of literature on information seeking behavior. Although there have been relatively few studies found on information seeking among arts

research scholars compared with other academic groups. This literature review is not intended to cover all of the literature on information seeking behavior rather it highlights the comparative studies of academic user groups.

Ellis, Cox and Hall (1993) carried out a study in which he investigated the information seeking patterns of researchers in the physical and social science. They identified the information seeking pattern of scientists that included 6 (six) generic features (*starting; chaining; browsing; differentiating; monitoring; & extracting*) for getting information from electronic resources.

Prasad (1998) found significant difference in information seeking behavior of physical and social scientists. Their study highlighted the methods used by scientists for gathering information they concluded with scientists differed in their approaches, need and sources used. Brown (1999)³ conducted a survey of Science Faculty at the University of Oklahoma and he found that at less than 50% of the science faculty were using electronic journals for teaching and research.

Dalgleish and Hall (2000) 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.

Tenopir (2003) conducted a study of the ways in which students and faculty in an academic use Internet and others electronic resources, the study revealed that relevant articles were generally got from electronic resources.

Francis' (2005) study of social scientists' information seeking behavior at University of West Indies revealed that a preference for journal articles in electronic format over print articles, which demonstrated that social scientists "have embraced electronic resources.

Hamid and David (2008) studied at differences and similarities between different research areas within physics and astronomy with regard to two aspects of information-seeking behavior, including methods used for keeping up-to-date and methods used for identifying articles.

Sheeja (2010) in her study examined the information seeking behavior of science and social science research scholars, including service effectiveness, satisfaction level on different type of sources and various method adopted by the scholars for keeping up to date.

5 METHODOLOGY

The survey was conducted by means of a structured questionnaire circulated among research scholars of faculty of arts and faculty of science, Banaras Hindu University. A stratified accidental random sample method was used for the selection of respondents and interaction with those who were available in the university during the survey period (Nov. 2010 to Mar. 2011). The collected data was analyzed, classified and tabulated by implying statistical methods.

6 DATA ANALYSIS AND INTERPRETATION

When we see the comparative use of each resource individually we can conclude that e-books are more preferred by Arts researcher than the Science researchers. The e-journals is more used by the Science researchers than their counterpart, electronic-thesis is being more used by the Arts researcher than the Science researcher, electronic patents are only seen by the Science researchers, electronic conference proceedings are being used by Science researchers more than the Arts, it has also been found that there are some researchers of Arts stream who never used to use electronic resources in the forms mentioned above they even today use the print form of information resources but this population is very nominal. Hence we can conclude that both the group of researchers use electronic resources for information seeking and electronic journal is mostly preferred by them for the same.

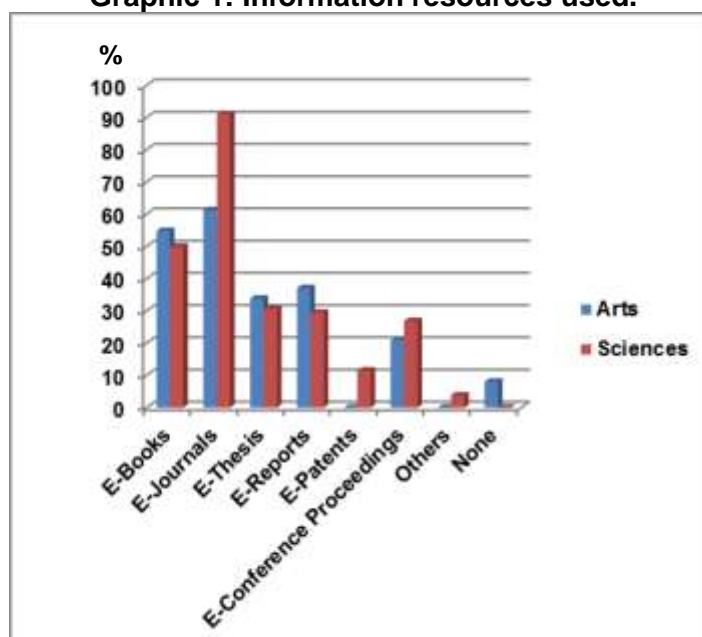
Table 1: Information resources used.

Resources	Arts Researcher		Sciences Researcher	
	Number of Respondents (n=61)	%	Number of Respondents (n=78)	%
E-Books	34	54.83	39	50
E-Journals	38	61.29	71	91.02
E-Thesis	21	33.87	24	30.76
E-Reports	23	37.09	23	29.48
E-Patents	0	0.00	9	11.53
E-Conference Proceedings	13	20.96	21	26.92
Others	0	0.00	3	3.84
None	5	8.06	0	0.00

Note: It permitted to multiple choices.

From the Graphic 1, it is clear that the best choice for information seeking to both the groups of research scholars i.e. arts and science researchers is electronic journals then electronic books, electronic reports, electronic thesis, electronic conference proceedings respectively and then the other sources are thought of for information.

Graphic 1: Information resources used.

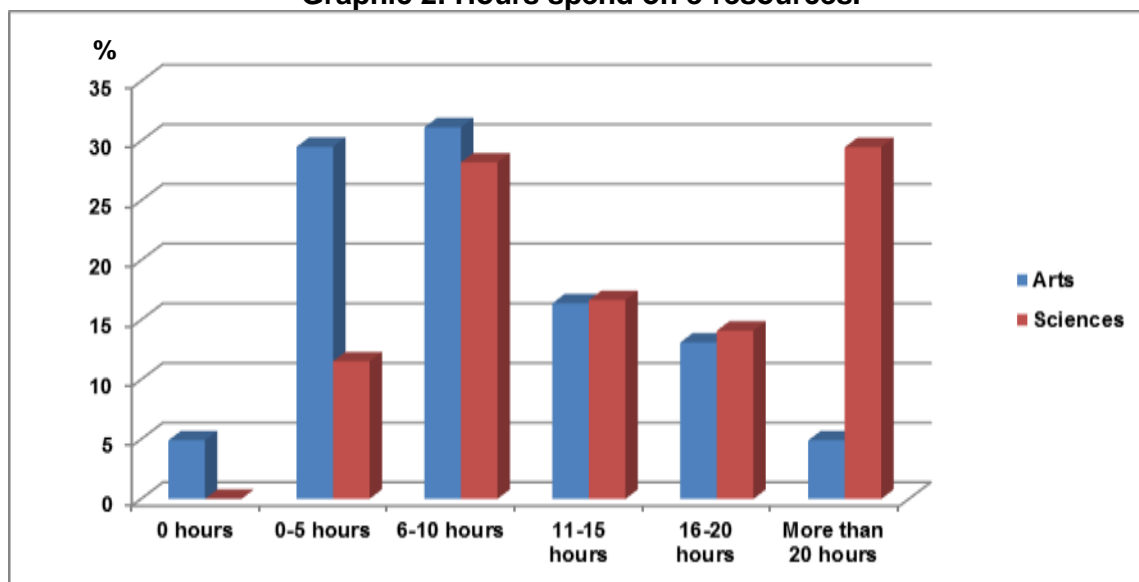


From the Table 2 it is clear that there are still in this era some researchers of arts discipline which never used to use electronic resources while on the other hand the scholars of science used to spend more than twenty hours a week gazing for information on electronic resources. Thirty percent of arts researchers used to spend approximately five hours a week while ten percent of science researchers spend the same time on electronic resources.

Table 2: Hours spend on e-resources.

Hours Spend	Arts Researcher		Sciences Researcher	
	Number of Respondent (n=61)	%	Number of Respondent (n=78)	%
0 hours	3	4.91	0	0.00
0-5 hours	18	29.50	9	11.53
6-10 hours	19	31.14	22	28.20
11-15 hours	10	16.39	13	16.66
16-20 hours	8	13.11	11	14.10
More than 20 hours	3	4.91	23	29.48

Graphic 2: Hours spend on e-resources.



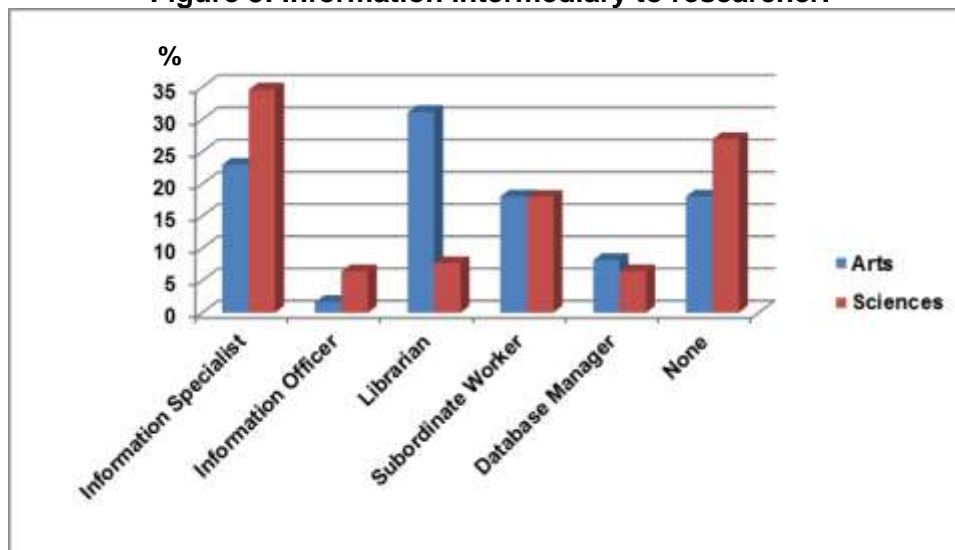
From the Table 3 it is clear that information specialist seems to be information intermediary to science scholars in majority of cases, while in the case of arts researcher the same role is played by the librarian. Subordinate and coordinate

workers also play important role as information intermediary to both the groups of researchers as the Graphic 3 shows both the group of researchers had approximately given the equal preference to subordinate, coordinate worker as information intermediary. It is interesting to note that there are 18% of arts researchers which never rely on any of the information intermediary while on the other hand 27% of science researchers are also in favor of searching the required information without the help of any information intermediary.

Table 3: Information intermediary to researcher.

Intermediary	Arts Researcher		Sciences Researcher	
	Number of Respondent (n=61)	%	Number of Respondent (n=78)	%
Information Specialist	14	22.95	27	34.61
Information Officer	1	1.63	5	6.41
Librarian	19	31.14	6	7.69
Subordinate Worker	11	18.03	14	17.94
Database Manager	5	8.19	5	6.41
None	11	18.03	21	26.92

Figure 3: Information intermediary to researcher.



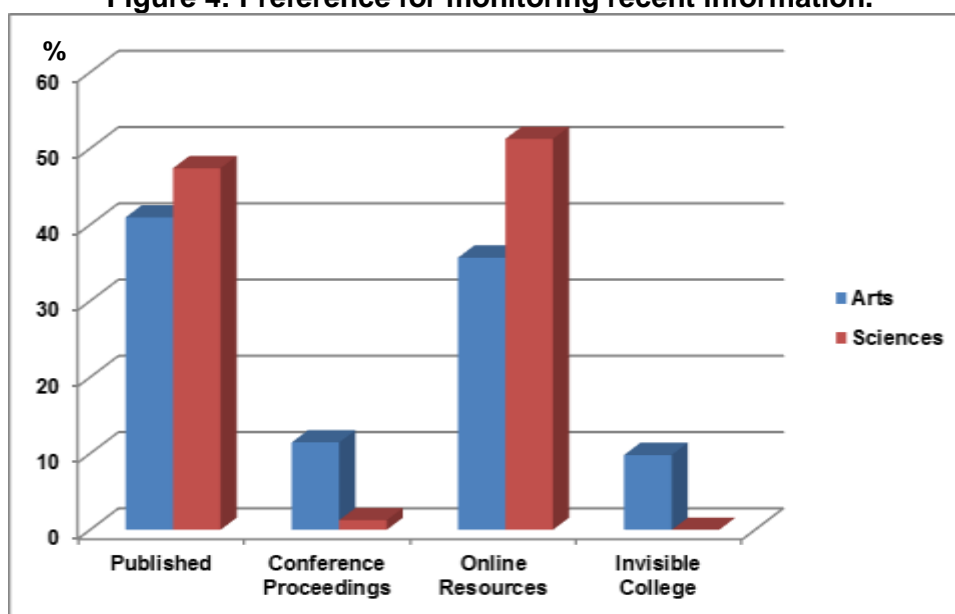
More than half of the science researchers used to use online resources to gain nascent information while on the other hand still many of arts researchers used

to use information published in print form, it is interesting to see that none of the science researcher had favored invisible college as source of nascent information.

Table 4: Preference for monitoring recent information.

Monitoring	Arts Researcher		Sciences Researcher	
	Number of Respondent (n=61)	%	Number of Respondent (n=78)	%
Published	25	40.98	37	47.43
Conference Proceedings	7	11.47	1	1.28
Online Resources	23	37.70	40	51.28
Invisible College	6	9.83	0	0.00

Figure 4: Preference for monitoring recent information.



7 CONCLUSION

Information seeking pattern of arts researcher and science researcher seems to be same in several cases while they also differ. Though the statement seems to be contradictory but this is the reality. The information needs differ to both the groups of researcher hence the information seeking patterns too. On the one hand it is seen that science researcher used to use electronic resource for information seeking in majority of cases while arts researcher even rely on print resources. The result of the study may be used by the library authorities to understand the information seeking

pattern of two important groups of users in university and accordingly mold their collection development to satisfy their user's information needs.

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**Sanjay Kumar
Banaras Hindu University
Research Scholar
E-Mail: sanjaykumarvns@gmail.com
India**

**Praveen Shukla
Banaras Hindu University
Research Scholar
E-Mail: praveenshuklabhu@gmail.com
India**