Information Needs and Seeking Behavior of Social Science Faculty at the University of Peshawar

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Abstract

Purpose: The study examines the information needs and seeking behavior of social scientists.

Design/methodology/approach: Using random sampling technique, a questionnaire was administered to 78 faculty members with equal proportionate to each department. Data for this study was gathered by administering the research instrument to the teaching faculty, partly in person and partly through research assistants followed by reminders after three days. In response, 65 questionnaires were received back dully filled in. SPSS-19 was used for statistical analysis.

Research limitation(s): This study includes only social science faculty of one public sector university in Peshawar, Khyber Pakhtunkhwa, Pakistan.

Key finding(s): The study indicated that social scientists knew about various information resources needed by them and they give more importance to scholarly journals, monographs/books and proceedings respectively, followed by abstracts, whereas, they gave least importance to audio-visual sources, technical reports, and manuscripts. Respondents were more satisfied with scholarly journals, monographs and abstracts, while they were least satisfied with proceedings, audio-visual sources, and manuscripts. The study also found that faculty members preferred to use either printed or both printed and electronic sources. The top three problems faced by respondents were the non-cooperative behavior of library staff, limited library hours, and unavailability of the needed information. Most of the teaching faculty used google followed by yahoo. Online journals, reference material and databases were found to be used more frequently, while software were used least. Most of the faculty members indicated that the internet contained excellent quality of information.

Practical implication(s): The study will help university librarians to design their information services to satisfy the information needs of social scientists.

Contribution to knowledge: The findings of this study are useful in building a holistic model of information resources and services that could meet the information needs of social scientists effectively.

Paper type: Research.

Keyword(s): Information needs; Information seeking behavior; Social scientists.

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Introduction

The information needs of an individual is a condition in which he requires certain information to satisfy his curiosity. Information needs and seeking behavior of various types of persons has been the focal point of inquiry in libraries and librarianship since long. (American Psychological Association, 1969; Earle & Vickery, 1969; Garvey & Griffith, 1971; Garvey, Lin, & Nelson, 1971; Line, 1973; Line, Brittain, & Cranmer, 1971). The earliest study undertaken on information needs was by Bernal in 1948. Since then hundreds of similar studies were undertaken in order to examine information needs and seeking behavior of various categories of people. The first comprehensive study on the subject, however, was conducted in 1963 by the American Psychological Association. Latter studies were too broadened with quantitative methods to understand information seeking behavior. Studies conducted by Menzel (1966), Herner and Herner (1961), Allen (1969), Martyn (1974), Crowford (1978), Dervin and Nilan (1986), Wilson, (1981), and Osiobe, (1988) paved ways for further research on similar subjects.

Information seeking behavior, now a days, is considered very important component of libraries and librarianship. Agosto and Hassel (2005) states that it is vital to understand information seeking behaviors and preferences of library clientele in order to plan better services. The outcomes of information seeking studies can be utilized to improve library collection as well as library services. Such studies may help to modify library services and make them more valuable to the library users.

Information seeking, as stated by Devin and Nilan (1986), Allen (1969), and Nasciminto and Weschenfelde (2002), is a mindful effort to obtain information for personal needs and to satisfy our curiosity. According to Case (2008) Information seeking means to gain information in order to fill up the gap in one's knowledge. According to Kuhlthau (2005) information seeking is an essential activity for human being. We search for information to improve our understanding of various phenomena. Marchionini (1998) states that information seeking in essence is a primary human activity where we engage ourselves purposefully to change our state of knowledge. Moreover, it is narrowly linked to education and self-improvement. There are several factors with which we start our search for information. This type of search is called "information seeking process" which also includes individuals' task or profession. The term "search" designates behavioral manifestation of an individual who is involved in information seeking. Therefore, the information seeking process is a normal but essential apparatus of human existence. Information seeking is wider activity as compare to information retrieval

as it includes perceiving, browsing, using different kind of information sources and interacting with mass media.

From a cursory of examination of the relevant literature, it appears that information seeking behaviour of the academicians remained a focus of inquiry for librarians and library and information science professionals since long. Earlier, such studies were conducted to evaluate library collection. Later on such kind of studies focused on to examine research trends of library users in order to plan proper mechanism that may facilitate those trends. Most of such studies have evolved into examination of information seeking behavior through holistic approach.

Literature Review

A survey of literature on information needs and seeking behavior reveals that enormous literature is available in the field. Therefore it was not possible to record the whole literature. However some of the significant studies that have been carried out in recent past on information needs and seeking behavior of various categories of people such as researchers, library users, faculty members, and so on are presented here:

According to Wilson (1999) information seeking behavior is an individual's conduct relating to channels of information. It includes direct interaction with others and the inactive receipt of information for instance watching advertisements on television or the internet without the intent to act on them.

Rafiq and Amin (2009) researched information seeking behavior of the teaching faculty of the National Textile University, Faisalabad, Pakistan. The study pointed out that faculty members utilized print and e-resources equally for seeking information. Printed stuff was found to be the chief information resource followed by scholarly journals and discussion with co-workers. The study revealed that the trend on dependency on the internet is increasing. The respondents showed disappointment over the library collection, especially showed concerns over the lack of printed books, magazines, scholarly journals, and latest reference books in their respective libraries. Siamian, Yaminfirooz and

Shahrabi (2013) found that among various information sources the faculty members have more undemanding and easy accessibility to the Internet technology as compare to print and other informational resources. However, about 50% of the teaching faculty obtained their needed information from printed stuff and the electronic databases.

In his study on information needs and seeking behavior of teaching faculty of Darul Ihsan University in Bangladesh, Mostafa (2013) observed that the main information needs of the study participants were closely

related to their teaching and research. Telephone and email were found to be the main sources for finding up-to-date information. Faculty members used the library very seldom to get their required information. The main problems identified by the study were that the faculty members could not locate the needed resources as the information were scattered in too many sources.

Al-Moumen, Morris and Maynard (2012) in their study found several factors such as library awareness, information literacy, and searching techniques that affect information seeking behavior of the teaching faculty.

Bansode and Nargide (2014) explored the information seeking behavior of the teachers of Sinhgad Institute of Business Administration and Research, Pune. This research study showed that most of the teachers used both purchased and open source e-information sources. The study stated that majority of the participants preferred to search for full text e-sources. The main purpose for information seeking was found to be research and class preparation. The study concludes by recommending awareness programs, hands-on trainings, and searching techniques to the faculty members on regular intervals.

Serrano and Robbins (2013) in their study on information seeking habits of education faculty found that faculty members took keen interest in e-journals and monographs for teaching, learning and research needs.

Bhatti (2009) indicated that majority of the faculty used library resources for research. Young faculty such as lecturers made greater use of books, while senior faculty preferred to used periodicals, indices, abstracts, and reference material. Majority of the teaching faculty considered their co-workers as their major informal source of information. The study found that there was lack of indexing and abstracting services in university libraries. The study further found that young faculty took keen interest in the internet for their informational needs as compare to senior faculty. Main problems identified by most of the respondents were lack of required material, shortage of computers, and lack of current journal in their libraries.

In a study on Information seeking behavior of the teachers of Engineering College of Orissa, India, Satpaty and Rout (2012) concludes that the major purpose of faculty members for seeking information is for study and research. They preferred electronic resources than printed stuff for their academic need. For majority of the respondents, library remained the major source of information. The study suggested to improve library services for the effective delivery of information to the faculty members.

Malliari, Korobili and Zapounidou (2011) studied information seeking behavior of the teachers of University of Macedonia. His findings showed that the study participants' behavior was mainly influenced by searching techniques, IT experiences, perceived ability and use frequency of e-resources and not by specific personal characteristics.

Research Context

University of Peshawar, founded in 1950, is the largest and oldest university of the Khyber Pakhtunkhwa, Pakistan, situated about 12 kilometers west from Peshawar city on the main G.T. road leading to Torkham, the Pak-Afghan border. It offers a wide ranging program in several disciplines. There are around 48 departments, four constituent colleges and two constituent schools with a student population of 14000. The students' population includes undergraduate, post graduate and doctoral students. The Social Sciences faculty of the University of Peshawar consists of the Departments of Economics, Education, Social Work, Sociology, Gender Studies, International Relations, Political Science, Psychology, and Law College. Currently, the faculty of Social Sciences consists of a population of 99 teachers (Prospectus of the University of Peshawar, 2012-13). University of Peshawar has a large library system. It has an excellent central library with around 160,000 collection besides print and e-journals and thousands of unpublished theses and dissertations submitted to the university as an academic requirement and 48 seminar/departmental libraries.

Objectives of the Study

1. To ascertain the purposes for which social science faculty of the University of Peshawar use various sources of information.
2. To examine the level of importance they give to various sources of information.
3. To find out use frequency of information sources by the faculty members of the University of Peshawar.
4. To examine satisfaction level of the teaching faculty from various information sources.
5. To know about the format of information sources they prefer to consult.
6. To examine their use of various information technology tools for obtaining information.
7. To find out the problems faced by faculty members while searching for various sources of information.

Methodology

This study is a descriptive survey designed to obtain data which describes available trends in the information needs and seeking behavior of the teachers of Social Sciences faculty in Peshawar University, Pakistan. Keeping in mind the successful use of questionnaire as a research instrument in the earlier studies on information seeking behavior, it was thus decided to utilize a self-administered questionnaire in the present study as well. The questionnaires used by Marouf and Anwar (2010) and Patitungkho and Deshpande (2005) were adopted with some modification for the data collection. The questionnaire was modified at par with the research objectives and the demographic characteristics of the respondents. The questionnaire was piloted in the Department of Library and Information Science (DLIS), University of Peshawar (Pakistan). The input of the faculty of the DLIS was applied to improve the final draft. Its reliability was estimated using Cronbach alpha which was found to be 0.89.

Population and sample

The study population comprised of 99 full time teaching faculty in nine departments of the faculty of Social Sciences, University of Peshawar. Using random sampling technique, questionnaires were administered to 78 faculty members with equal number of questionnaires to each department. Sixty-five of the questionnaires were received back with a response rate of 83.83%.

Data collection

The data for this study was gathered by administering the research instrument to the teaching faculty, partly in person and partly through research assistants, who were MA students in the DLIS in the University of Peshawar followed by reminders after three days of sending the questionnaire. This resulted in getting 65 responses. SPSS-19 was used for data analysis.

Demographic profile of the respondents

Department-wise details of the study participants are as follows: Economics (8), Education (12), Social Work (5), Sociology (4), Gender Studies (5), International relations (6), Law (13), Political Science (6), and Psychology (6). Out of the 65 respondents, 40 (61.53 %) were males and 25 (38.46%) were found to be females. As far as age of the sampled population is concerned, seven of them (10.76%) were above 55, forty (61.53%) were in the age range of 35 and 55 years, whereas 18 (27.69%)

were in the age group of 25 and 35 years. Considering respondents' academic designation, 4 (6.15 percent) were professors, 20 (30.76 percent) were associate professors, 15 (23.07 percent) were assistant professors and 26 (40 percent) were lecturers. Twenty (30.76%) possessed a teaching experience of 1 to 10 years, 26 (40%) had an experience of 11-20 years, and 19 (29.23%) of 21 years and above.

Table 1. Demographic Profile of the Study Participants (n=65)

Profile		**Number of respondents (n)**	**%**
Gender	Male	40	61.53
	Female	25	38.46
Discipline-wise distribution	Economics	8	12.30
	Education	12	18.46
	Social Work	5	7.69
	Sociology	4	6.15
	Gender Studies	5	7.69
	International Relations	6	9.23
	Law	13	20
	Political Science	6	9.23
	Psychology	6	9.23
Academic rank	Professors	4	6.15
	Associate Professors	20	30.76
	Assistant Professors	15	23.07
	Lecturers	26	40
Age	25-35 years	18	27.69
	35-55 years	40	61.53
	56 years and above	07	10.76
Teaching experience	1-10 years	20	30.76
	11-20 years	26	40
	21 years or more	19	40

Study Findings

Purpose of using information sources

The participants of the study were asked to indicate the purpose of using information sources. As given in Table 2, participants depended more on monographs/books, journals and audio-visual material for class preparation or teaching while for research needs they heavily depended on research journals, as indicated by 93.84% of the respondents followed by theses (89.23%), proceedings (78.46%) and monographs/books (75.8% of

the respondents). For keeping themselves up-to-date, 80% of the respondents preferred to use journals, 61.53% used newspapers and 49.23% preferred to use monographs/books. Similarly, for personal development, 78.46% of the faculty members indicated that they use journals, 56.92% indicated that they use monographs/books whereas 40% of the respondents preferred to use proceedings. The least used information sources for all the categories were found to be raw data, ancient manuscripts, technical reports and abstracts.

Table 2. Purpose of Information Use (n=65)

Information Sources	Purpose									
	Class preparation		Research		Consultation work		Keeping up to date		Personal development	
	n	%	n	%	n	%	n	%	n	%
Monographs/books	60	92.30	49	75.8	20	30.76	32	49.23	37	56.92
Journals	34	52.30	61	93.84	21	32.30	52	80	51	78.46
Abstracts	8	12.30	42	64.61	12	18.46	21	32.30	14	21.53
Theses	9	13.84	58	89.23	9	13.84	18	27.69	16	24.61
Technical reports	3	4.61	21	32.30	11	16.92	14	21.53	18	27.69
Proceedings	10	15.38	51	78.46	12	18.46	32	49.23	26	40
Raw data	4	6.15	18	27.69	5	7.69	9	13.84	3	4.61
Ancient manuscripts	6	9.23	24	36.92	7	10.76	16	24.61	9	13.84
Newspapers/ magazines	14	21.53	10	15.38	7	10.76	40	61.53	20	31.76
Audio-Visual	31	47.69	8	12.30	10	15.38	12	18.46	14	21.53

Level of importance to information sources

Respondents were asked to indicate their level of importance to various information sources they use. As Table 3 shows that the respondents give more importance to Scholarly journals and Monographs/books and Proceedings with a mean score of 3.61, 3.46 and 2.56 respectively, followed by Abstracts (mean 2.51 and Raw data (mean 2.37). While they gave least importance to Audio-visual sources, Technical reports and manuscripts.

Table 3. Importance to Information Sources (n=65)

Information source	n	Mean
Scholarly journals	62	3.61
Monographs/books	62	3.46
Proceedings	58	2.56
Abstracts	47	2.51
Raw data	56	2.37
Theses and dissertations	46	1.89

Newspapers/magazines	44	1.88
Audiovisual sources	41	1.87
Technical reports	48	1.85
Manuscripts	40	1.78

Scale used: 4= Highly Important to 0=Not Important

Frequency of information use

The frequency of information use indicates how often faculty members resort to obtain information from various sources given. As is shown in Table 4, the respondents used books and Scholarly journals more often than other sources of information with mean scores of 3.78 and 3.66 respectively. Proceedings, abstracts newspapers/magazines, and theses and dissertations ranked next respectively. While the least used sources found were technical reports, manuscripts, audio-visual material and raw data with mean scores of 2.33, 2.00, 1.20 and 1.15 respectively. This is mainly because of the least availability of these sources.

Table 4. Frequency of Information Use (n=65)

Information source	n	Mean
Monographs/books	65	3.78
Scholarly journals	65	3.66
Proceedings	55	2.68
Abstracts	55	2.60
Newspapers/magazines	38	2.46
Theses and dissertations	46	2.44
Technical reports	38	2.33
Manuscripts	34	2.00
Audio-visual sources	36	1.20
Raw data	35	1.15

Scale used: Very frequently=4 to never=0

Level of satisfaction

Table 5. Satisfaction with Information Sources (n=65)

Information source	n	Mean
Scholarly journals	65	4.44
Monographs/books	61	4.36
Abstracts	61	4.10
Theses and dissertations	60	3.88
Raw data	56	3.70

Newspapers/magazines	56	3.66
Technical reports	58	3.48
Proceedings	56	3.21
Audiovisual	53	3.18
Manuscripts	50	3.00

Scale used: Very satisfied=5 to very dissatisfied=1

Preferences for format of information sources

Respondents were asked to mention what format of information sources they prefer to consult. They were given three options viz printed, electronic/digital, and both out of which they had to choose one. The responses are presented in Table 6 below. It is evident from table-6 that faculty members prefer to use either printed or both printed and electronic followed by electronic/digital. Thus their preference for electronic/digital is secondary.

Table 6. Preference for Format of Information Sources (n=65)

Information source	Printed			Electronic/ digital		Both	
	N*	n*	%	n*	%	n*	%
Monographs/books	65	40	61.53	4	6.15	21	32.30
Scholarly journals	65	17	26.15	19	29.23	29	44.61
Abstracts	55	9	16.36	22	40	24	43.63
Manuscripts	50	25	50	8	16	17	34
Theses/dissertations	65	22	33.84	15	23.07	28	43.07
Proceedings	62	15	24.19	12	19.35	35	56.45
Technical reports	55	10	18.18	16	29.09	29	52.72
Raw data	52	18	34.61	9	17.30	25	48.07
Newspapers/ magazines	60	28	46.66	8	13.33	24	40
Audiovisual	45	3	6.66	16	35.55	26	57.77

N*= total respondents; n*=respondents who opted

Obstacles/problems faced while searching for information

Faculty members were asked to indicate the obstacles/problems they face while searching for information. As is shown in Table 7, the top ranking problems faced by respondents was the uncooperative attitude of library staff mentioned by 61.53% respondents, followed by lack of time (59.37%), followed by unavailability of information (58.46%). At the

other hand least number of respondents compained about the lack of information searching skills (29.23%), Information are scattered (29.23%) and Too much information to deal with (31.74%).

Table 7. Obstacles/Problems Faced while Searching for Information

Problem	n	Yes	%	No	%
Non-cooperative attitude of library staff	65	40	61.53	25	38.46
lack of time	64	38	59.37	26	40.62
Unavailability of information	65	38	58.46	26	40
Information is outdated	65	36	55.38	29	44.61
Lack of knowledge to use the library	63	26	41.26	37	58.73
Too much information to deal with	63	20	31.74	43	68.25
Information is scattered	65	19	29.23	46	70.76
Lack of information searching skills	65	19	29.23	46	70.76

Internet use

When the faculty members were asked to mention whether or not they use the internet, all of them indicated that they use the internet. They were then asked how often they use the internet. A majority of the faculty members (73.84%) indicated that they use the internet on daily bases. The relevant data is presented in Table 8.

When asked where do they use the internet. About 69% of the respondents indicated that they use the internet in their offices while rest of faculty members used the internet at home.

Table 8. Frequency of Internet Use (n=65)

Frequency	n	%
Daily	48	73.84
once a week	12	18.46
Few times a month	5	7.69

Purpose of internet use

One of the significant questions was to explore the purpose for which the respondents were using the internet. Table 9 shows that majority, 30.76% of the respondents, were using the internet for communication, 29.23% for research, 24.61% for education, while only 15.38% of the

respondents reported that they use the internet for entertainment. Thus the analysis indicates that majority of the respondents used the internet for communication followed by research.

Table 9. Purpose of Internet Use (n=65)

Purpose	n	%
Research	19	29.23%
Entertainment	10	15.38%
Education	16	24.61%
Communication	20	30.76%

Use of search engines

Respondents were asked to mention search engines they use most. As is shown in Table 10, most of them preferred google and yahoo engines with a response rate of 58.46% and 24.61% respectively. Whereas MSN and Altavista secured 3rd and 4th position with 9% and 2% responses. None of the respondents used other search engines such as ask.com, scirus, and so on. The most use of google search engine is probably due to the fact that it is regularly updated, easy to use, fast in access, and its links are regularly updated (Asemi, 2005; Patitungkho & Deshpande, 2005).

Table 10. Use of Search Engines (n=65)

Search engine	n	%
Google	38	58.46
Yahoo	16	24.61
Altavista	2	3.07
MSN	9	13.84
Ask.com	nil	nil
others	nil	nil

Kind of information sources

The survey also asked the respondents to mention the kind of information sources they searched through the internet. As Table 11 indicates, online journals 41.53%, reference material 33.84%, and databases with a response rate of 18.46% were the most frequently used information sources, while softwares were least used information sources. None of the respondents used library catalogues and statistical documents.

Table 11. Kind of Information Sources Used (n=65)

Information source	n	%
Online journals	27	41.53
Databases	12	18.46
Library Catalogues	Nil	Nil
Statistical Documents	Nil	Nil
Reference Material	22	33.84
Software	4	6.15

Quality of information available on the internet

A huge quantity of information are available over the internet. Thus it becomes quite difficult to ascertain the quality and authenticity of such information. As is shown in Table 12, a majority of the respondents, 38.46%, were of the opinion that good quality of information were available on the internet. 33.84% of the respondents considered internet information excellent, 15.38% of the respondents were only satisfied while 12.30% stated that information available over the net are poor.

Table 12. Quality of Information on Internet (n=65)

Quality	n	%
Excellent	22	33.84
Good	25	38.46
Satisfactory	10	15.38
Poor	8	12.30

Discussion

The study has investigated the information seeking behavior of social science faculty members of the University of Peshawar (Pakistan). The findings of this study has several implications to understand the information seeking behavior of social science faculty and to develop information resources and to design systems and services that are appropriate for their needs. The study indicated that social science faculty members were aware of the importance of the information needed by them. In examining the findings of this study and comparing those with similar studies a number of similarities and dissimilarities can be observed. The study found that similar findings regarding the use of books and journals for teaching and research were reported by Asemi (2005), Allen (1969), Bhatti (2009), Baruchson-Arbib and Bronstein (2007), Rafiq and Amin (2009), Marouf and Anwar (2010), Lai (2014), Ge (2010), Reed and

Tanner (2001) and Perrault (2007), who found that faculty members give more importance to Scholarly journals and Monographs/books and Proceedings respectively, followed by Abstracts. While they gave least importance to Audio-visual sources, Technical reports, and manuscripts. This could be due to the fact that books and journals can be had quite easily than other informational stuff. Similarly with regard to the satisfaction level of the respondents, the study found that the respondents were more satisfied with scholarly journals, books/monographs and abstracts. While they were least satisfied with proceedings, audio-visual sources, and manuscripts. This also corroborates the findings of Marouf and Anwar (2010), and Bhatti (2009).

With regard to their preference for using print and electronic resources, faculty members preferred to use either printed or both printed and electronic sources followed by electronic/digital resources. Similar findings were also reported by Marouf and Anwar (2009), Ge (2009), Rafiq and Amin (2009), Tahir, Mahmood, and Shafique (2010), Serrano and Robbins (2013), Siamian, Yaminfirooz, and Shahrabi (2013) and Patitunkho and Deshpande (2005).

The top three problems faced by respondents was the uncooperative attitude of library staff, lack of time, and unavailability of information. It is interesting to note the uncooperative attitude of library staff was reported by most of the respondents as the major problem. However lack of time and unavailability of information is a common problem reported by most studies conducted on similar topics. Least number of respondents complained about the lack of information searching skills, scattered information and too much information to deal with. Again these findings are in line with the findings of Asemi, (2005), Allen (1969), Bhatti (2009), Baruchson-Arbib and Bronstein (2007), Rafiq and Amin (2009), Marouf and Anwar (2010).

As far use of the internet is concerned, it was found that all of the faculty members use the internet quite regularly. A large majority of the faculty members used the internet in their offices. Majority of the respondents used the internet for communication followed by research.

Majority of the faculty members used google followed by yahoo.Online journals, reference material, and databases were the most frequently used information sources, while softwares were least used information sources. Majority of the respondents were of the opinion that good quality of information were available on the internet. These findings corroborate the findings of Meho and Tibbo (2003), Al-ansari (2006), Kumar and Kaur (2006), Ogiegbaen (2006), Prameshwar and Patil (2009), and Schonfeld and Guthrie (2007).

Conclusion and Recommendations

In regard to information needs and seeking behavior of social science faculty in the University of Peshawar (UOP), it is recommended that staff of the libraries in the UOP could use their time in a better way by focusing on assisting users. The librarians at reference sections must assist users to enhance their information retrieval skills and to find the different type of information they need. Professional librarians should also help library users in learning the use of Online Public Access, use of different search engines, and inform them of the web sites available through the various networks. Hence, the library must provide adequate ICT facilities for reference librarians, such as Internet, laser printers, scanners, fax machine, telephone, and so on to offer various services in the library.

The central library should arrange training sessions for faculty members to learn the use of modern technologies in libraries. The contents of these trainings sessions should include (a) preliminary orientation to library resources and services (b) use of online public access catalogue (c) searching techniques (d) internet use (e) use of online databases (f) use of online journals (g) the use of difference kinds of reference tools (h) the use of audio/video stuff and (i) use of digital libraries especially the HEC digital library.

It is also suggested that the central library and seminar libraries of the University of Peshawar should promote their activities through journal, bulletin board, and library websites. The library website should also contain link for news regarding their new activities.

Library and information scientists should conduct further studies on information use and seeking behavior of social science faculty by analyzing their expertise and learning facilities provided by university authorities to them. Furthermore, comparative studies can be conducted among the social science faculty of various universities/institutions in Pakistan to find out their information needs seeking behaviors.

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