

Information Seeking and Reading Behavior in University of Social Welfare and Rehabilitation Sciences

Marzieh Golchin

University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

Robab Teymouri*, PhD.

Pediatric Neurorehabilitation Research Center

University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

Objectives: The aim of this research was to study information seeking behavior and the pattern of reading behavior of faculty members of University of Social Welfare & Rehabilitation Sciences in using printed and electronic resources.

Methods: The descriptive research method was a survey method. The research was implemented by using an organized questionnaire which was distributed among the statistical population, 114 faculty members of the university.

Results: The findings show that meeting the faculty members' research needs is the most important purpose and stimulation for this group, because 91.2% of faculty members had chosen this objective. The mean of the central library role was 3.15 for meeting the faculty members' information needs. In faculty members' opinion, the mean of existing facilities in the website of University of Social Welfare & Rehabilitation Sciences was 3.29. Finally, the most resources used by this group were the printed resources.

Discussion: Findings suggest that the facilities available in the central library and website of the university don't respond the faculty members' information needs. As the target group declared that they had problems in accessing information via the internet, it seems that they need for some formal training such as holding educational workshops about using library, internet and databases.

Key words: information behavior, reading behavior, electronic resources, printed resources

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Introduction

In today's world, information plays a key role to the extent that it can be deemed as the integral part of human activities. Since long ago, information has been operating a significant role in different aspects of human life, always streaming into various dimensions of human life and activity. Further, it involves recorded, written or oral messages and exerts an important influence on our decision making. As sciences made advances, information experienced considerable changes to its meaning. Information is an expansive and complex phenomenon (1). To acquire information, one needs to seek information. So, one should inevitably get, and remain, connected to information channels. The emergence of one's interaction with information environments is called

'information seeking behavior'. Through information seeking behavior, individuals' needs for information are met; and the way of searching, acquisition and retrieval of information from a wide variety of environments and also users' behaviors reveal while interacting with information retrieval systems are dealt with. Given the vast amplitude of information, an important issue is how to distribute it according to the actual needs of its users. Some scholars such as Rubin contend that individuals' needs for information vary in terms of their career, background, job experience, academic major and area of profession (2). Vickery (3), believes that people are in constant need for information and, further, that all activities require information. Information was defined as "any stimulus that reduces the uncertainty" (4, 5), and "a gap in

* All correspondences to: Robab Teymouri, email: <robab.teymouri@yahoo.com>

knowledge" (6), the experience of which requires a self-motivation in the individual. Information needs force individual to inevitably swim in the stream of information channels and cause the emergence of one's information seeking behavior.

Behavior of information seeking can be regarded as one of the most basic activities of mankind, helping learning, problem solving and decision making (7,8). This behavior involves goal setting, method, search tools, type of under-search information, and ways of access to information (9). It is further aimed at bringing promptly accurate and reliable information to the access of the right person in a usable format which may reduce loss of time and resources and prevent any unnecessary doing-over, adopting the most appropriate search method, facilitating research process and identifying the most reliable and related information resource for the research. In formulating informatics policy of the state, one of the main points to be paid attention to is identification of the society's information needs and information seeking behavior. The role research serves in development is critical; and for research to be accomplished, research-relevant scientific sources particularly up-to-date information are required. Libraries, info-banks and info-bases operate appreciable part in providing information sources needed. So, examining those factors related to the behavior of existent information users is of great importance for higher education centers in which most of research activities are performed. Further, since libraries incur a large amount of costs to provide research sources, it appears justifiable and essential for some studies to be carried out to identify actual information needs and information seeking behavior (ISB) of managers and professionals in organizations, of the members of university scientific directorate, and of other institutions (10).

Because universities and higher education centers operate as main organs in research, faculty members as researchers of these centers can be regarded as the most important groups of information users of libraries and informatics centers. Taking into account their career background (educational groups, academic major and expertise), these members have specific information needs leading to the appearance of information seeking behavior in them. Information is a phenomenon, ever-existent and effective in any action and reaction; and if information is prompt, accurate and relevant, it may bring substantial changes to the social, cultural and scientific structures of the society. While searching information serves as part of human beings' inherent nature, Chen considers

one's efforts, and ways, of satisfying one's needs for information as 'information seeking behavior' (11) which commences as such information needs emerge. Information indeed is the building block of planning since planning is nothing but an effort to find the most favorable method to achieve a set goal (12). Ever increasing mass and diversity of information necessitate different methods for faster access to information; that is why the present study is intended to explore, and investigate the efficacy of, these methods. Understanding individuals' information seeking behavior seems to antecede the provision of optimal information services. In other words, first trying to identify individuals' interests and inherent ISBs, librarians and other designers of information services should then make plans for their recourses and services in accordance with the identified interest and behavior patterns. They further can help informatics centers, by offering services appropriate to the users' needs (13). Because the main library in any university is employed mostly by the faculty members for research purposes, the extent of use and exploitation by professors of the librarian references and sources should be examined, as well. Studies conducted into the library users and information sciences have explored important perspectives on researchers' ISB. Given that a basic task one ceaselessly does is seeking for information; then one's information needs come to the spotlight.

A bundle of information that one utilizes to meet one's information needs is called 'information seeking behavior'. Studies conducted in this field as well as so-far designed ISB models have remarkably assisted in the advancement of information knowledge, learning of related special skills and designing of electronic sources, virtual libraries and traditional sources of information (14). Employing the findings of these studies allows designing information systems, expanding sources and planning services which are in more consistency with, and satisfy a larger number of, the society's information needs (15). Wilson defines information seeking behavior as a targeted searching to find required information (9, 16). This behavior emerges after perception of a need for information, and it involves all activities performed by a person to find out information for the purpose of satisfying such an emerged information need. Nearly all the scholars have developed a common idea that information seeking behavior springs from an information need. While individuals, at the time of need, perceive that their current knowledge already serves meager and

inadequate, they have actually no idea what may be useful for them and consequently unable to detect important features of potentially useful information data (17). Hayden (18) also holds that attempts of information experts to provide users' needs have made librarians and informatics experts investigate the concept of information seeking behavior and develop models by employing theoretical, psychological and sociological principles as well as the theory of communication. These models show in a simple way the relationship between theoretical theorems and such a process related to the identification of, and response to, information needs (11). Pettigrew and McKechnie (19) discuss that theories of information seeking behavior have in recent years experienced an ever increasing trend, and that many of these theories were developed based on other theories and findings of research carried out in the realm of such social sciences as anthropology, educational sciences, psychology and work science (20, 21).

The first study conducted in Iran into the users' reading and information seeking behavior dates back to 1975. Librarianship Department of the University of Tehran carried out that research to investigate the access purposes and methods adopted by the members of scientific doctorate of the Faculty of Sciences, University of Tehran. The results suggested that these members mostly made use of information sources for the preparation of course materials. Other studies include the investigations into information needs, information searching, ways of access to information, required information sources, and information seeking behavior. No clear boundary can be found among the above studies, in particular the studies into information needs, ways of access to information and information seeking behavior; so, those studies titled 'information needs research' encompass information seeking behavior, as well (22), for example, 'methods adopted by the faculty members in the Faculty of Agriculture, University of Shahid Chamran to obtain and disseminate scientific information' by Deyyani (23). Factors related to information seeking behavior of the faculty members of some research institutes were studied by Noushin Fard (24) and finally, in 2008, this specific type of behavior was investigated by Navadeh Ghareh Seyyed (25) among managers of Culture & Art Organization, Tehran Municipality.

The foregoing research cases, besides studying the information needs and the level of satisfaction of users, tried to deal with the technologies used for

searching information. They can be in more general sense classified as 'user-oriented studies.' Different ways of gaining access to information were evaluated in several research (15). Meho and Haas (26) performed a research titled 'Information-seeking behavior and use of social science faculty studying stateless nations: a case study'. Further, New Zealand Ethnical Councils Union carried out in 2007 an investigation with the help of Intercultural Studies Center of the University of Victoria and of Ethnical Minorities Councils Union of the New Zealand Federal Government in order to explore the information needs and information seeking behavior of 78 immigrants to New Zealand with an aim to assess their pre- and post-immigration needs for information (8). Abou-Auda further examined the behavior, in searching information, of 2000 Arab medical practitioners as well as their motive(s) for consulting medical information centers (27). Nearly all studies carried out inside, and a large number of those performed outside, of the country have pursued applied purposes, and fundamental studies appear to remain still rare. In addition, they were mostly of descriptive type. The present study, with its applied objective, is an attempt to investigate the information seeking behavior of the faculty members of the University of Social Welfare and Rehabilitation Sciences.

This research was aimed at studying the information seeking behavior, and information searching channels used by the faculty members of the University of Social Welfare and Rehabilitation Sciences; at identifying weak and strong points of the central library of the university in its support for provision of educational and research services for the faculty members; and at recognizing the means generally utilized by these members. Other focal questions posed here are: How are information resources selected and accessed to? How are methods of searching and acquiring information determined? And what purposes and motives direct the members to search information? How can the central library be reorganized to provide the members with the better educational and research services?

Methods

The University of Social Welfare and Rehabilitation Sciences (USWR) were population was the target of this study. 114 faculty members filled out the questionnaire. To carry out the research, a descriptive survey was used. In addition, data was collected by

means of a well-organized questionnaire. 130 faculty members were provided with the questionnaire, out of which 16 members did not complete it for different reasons. The questionnaire involved three parts: first part required personal particulars, second part dealt with the reading pattern(s) of subjects, and finally the last part explored various dimensions of their information seeking behavior. The data extracted from the filled-out questionnaires was then analyzed

by SPSS and later frequency distribution, mean, and other descriptive statistics and tables were obtained. In addition, the relationship between the research variables was analyzed by means of t-test.

Results

The extent of facilities available in the university central library to satisfy faculty members' printed or electronic needs are shown in table (1).

Table 1. The facilities available in the central library of USWR

Faculty member	Number	Mean	Theoretical mean	Standard deviation	Degree of freedom	t-value	Level of significance	Result
Facilities available	108	6.43	8	1.1	107	-11.53	0.05	Statistically significant

Since the obtained t-value (-11.53) appears to be significant at the degree of freedom 107, therefore it can be concluded that there is a statistically significant difference between the average amount of facilities and the questionnaire's theoretical mean. Also, because the t-value is negative, it can be said that from the faculty members' perspective, the existing facilities to gain

access to the printed or electronic resource are drastically insufficient. The methods are employed by the faculty members in seeking the required information and information resources are another main concern. The frequency distribution of the methods used by them is indicated in table (2).

Table 2. Frequency distribution of the methods used by the faculty members

Faculty member	Frequency	Percentage
Books	94	82.5
Theses and dissertations	27	23.7
Articles in specialized journals	26	22.8
Iranian public journals	18	15.8
Internet and other electronic resources	11	9.6
Foreign public journals	10	8.8
A =0.05	Df =5	X ² =161.9

The purposes and motives of the faculty members of university of social welfare and rehabilitation sciences in searching information had a great role.

The frequency distribution for the faculty members' purposes and motives are shown in table (3).

Table 3. Frequency distribution for the faculty members' purposes and motives

Faculty member	Total	Percentage
Research activities	104	91.2
Educational activities	88	77.2
Disseminating electronic scientific works	35	30.7
Fun and recreation	22	19.3
Identifying specialized resources	62	54.4
Up-dating specialized information	90	78.9
Establishing relations with colleagues	56	49.1
Gaining access to information unavailable in printed resources	72	63.2

Since the obtained Chi square value i.e. 83.97 was proved, with the degree of freedom 7, to be statistically significant ($\alpha=0.05$), then we can conclude that satisfying faculty members' research needs serves significantly as the most important

purpose for searching information resources. What are the most used information databases by the faculty members? Table (4) indicates the frequency distribution for the priority of information databases used by the faculty members.

Table 4. Frequency distribution for the priority of information databases

Faculty member	Number	Percentage
ELSEVIER	75	65.8
PUBMED	58	50.9
PROQUEST	49	43.0
ISI	37	32.5
BLACKWELL	35	30.7
OVID	32	28.1
SPRINGER	23	20.2
IRAN MEDEX	23	20.2
SCOPUS	21	18.4
IRAN DOC	21	18.4
OXFORD	13	11.4
MBJ	11	9.6
SAGE	11	9.6
JAMA	8	7.0
NURSING C	6	5.3
THIEME	6	5.3
END NOTE	6	5.3
MD C	4	3.5
UP TO DATE	4	3.5
FIRST C	1	0.9
PATH C	1	0.9

As the above table shows, the Elsevier info-base occupies the first place in terms of being referred to by the faculty members. PubMed and ProQuest have, respectively, the second and third ranks. How

much is the extent of faculty members' skills for searching printed and electronic resources? Table (5) shows the of the faculty members' skills in searching printed and electronic resources.

Table 5. The extent of the faculty members' skills in searching printed and electronic resources

Faculty members	Number	Mean	Theoretical mean	SD	DF	t value	Level of significance	Conclusion
electronic resources	112	3.73	4	0.6	111	-4.72	0.05	statistically significant
printed resources	114	3.18	4	0.86	113	-10.18	0.05	statistically significant

Considering that t-test appeared statistically significant for two variables of skills of searching printed and electronic resources and that it is a negative value; so, it can be concluded that the faculty members are slightly familiar with these skills.

Discussion

The t-test obtained with regard to the facilities available in the central library and the extent to which they are used to meet information needs shows a negative value and suggests that the facilities provided by the central library to satisfy information needs are insufficient. In addition, the facilities available in the website are in a moderate level. In terms of the resources that the faculty members use for their research, the results obtained from Chi square reveal a statistical significance, that is, the faculty members' the priority among other resources is book. What are the faculty members' motives and purposes for searching information?

The Chi square test was found to be significant, so it suggests that satisfying research needs serves significantly as the most important purpose of the faculty members. With regard to the extent to which info-bases are exploited, it was found that the Elsevier info-base occupies the first place, and PubMed and ProQuest come next, in order. Since Elsevier operates as an international agent providing information resources in both printed and electronic formats, it seems that it is more useful to give priority to maintaining the subscription of Elsevier. The t-test results found for the skills of searching in printed and electronic resources are negative, indicative of the slight familiarity of the faculty members with these skills. Then results of the current research consisted with the findings of Deyyani (23), Mazinani (28) and Yamin Firouz (29). They suggest that many researchers have serious problems in identifying resources and information

systems, utilizing effectively them, and gaining access to information.

Conclusion

The findings of many studies, particularly projects implemented in Iran indicate that researchers in the field of information resources face the major difficulties for identifying the information needs of their research field and submitting it as a query to the databases, and also recognizing the types of relevant resources and information systems. Hence it can be argued that the quality of many researches, in

particular research projects and graduate theses, is not at the expected level. It is likely that researchers have been unable to identify suitable databases, to do good search, to gain access to more relevant resources and information systems with better quality, and to effectively use them.

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References

1. Horri A. A review of information and information science. Tehran: The Board of Trustees of State Public Libraries, Secretariat.; 1993.
2. Rubin RE. Information policy as library policy. Foundations of library and information science. New York: ERIC; 2004.
3. Vickery BC. Information science in theory and practice. Berlin: Walter de Gruyter; 2004.
4. Heng LK. Impact on Learners' Uncertainty Reduction with The Infusion of Information Literacy Skills Training in Problem-Based Learning Environment. *Academic Research International*. 2013; 4(6): 249 - 60.
5. Savolainen R. Information Behavior and Information Practice: Reviewing the "Umbrella Concepts" of Information- Seeking Studies1. *The Library*. 2007; 77(2): 109-32.
6. Ajiboye JO, Tella A. University undergraduate students' information seeking behaviour: Implications for quality in higher education in Africa. *Turkish online Journal of Educational Technology*. 2007; 6(2).
7. Lloyd A, Williamson K. Towards an understanding of information literacy in context Implications for research. *Journal of Librarianship and Information Science*. 2008; 40(1): 3-12.
8. Mason D, Lamain C. *Nau mai haere mai ki Aotearoa: Information seeking behaviour of New Zealand immigrants*. Wellington: Centre for Applied Cross-Cultural Research, Victoria University of Wellington; 2007.
9. Wilson TD. Human information behavior. *Informing Science*. 2000; 3(2): 49-56.
10. Yamini Firuz M, Davarpanah M. Information needs, behavior and pattern of information searching. *Book Quarterly*. 2005; 63: 123-32.
11. Davarpanah MR. *Scientific relationship: information needs and information seeking behavior*. Tehran: Dabizesh, Chapar; 2007.
12. Horri A. *Principles of Scientific Writing*. Tehran: Institution of State Public Libraries; 2006.
13. Agosto DE, Hughes-Hassell S. People, places, and questions: An investigation of the everyday life information-seeking behaviors of urban young adults. *Library & information science research*. 2005; 27(2): 141-63.
14. Foster A. A nonlinear model of information-seeking behavior. *Journal of the American society for information science and technology*. 2004; 55(3): 228-37.
15. Anwar MA. *Research on Information Seeking and Use in Pakistan: An Assessment*. *Pakistan Journal of Library & Information Science*. 2007; 8: 15-32.
16. Wilson TD. Information needs and uses: fifty years of progress. *Fifty years of information progress: A Journal of Documentation review*. 1994: 15-51.
17. Belkin NJ. Helping people find what they don't know. *Communications of the ACM*. 2000; 43(8): 58-61.
18. Hayden H, O'Brien T, Rathaille MO. User survey at Waterford Institute of Technology Libraries: how a traditional approach to surveys can inform library service delivery. *New Library World*. 2005; 106(1/2): 43-57.
19. Pettigrew KE, McKechnie LE. The use of theory in information science research. *Journal of the American society for information science and technology*. 2001; 52(1): 62-73.
20. Fisher KE, Erdelez S, McKechnie L. *Theories of information behavior: Information Today, Inc.*; 2005.
21. Fisher KE, Erdelez S, McKechnie L. *Theories of Information Behavior*. Medford, NJ: Information Today, Inc; 2005.
22. Talachi H. The information needs of medical experts in Iran & in the world. *Quarterly Journal of Book*. 1996; 7(4): 43-58.
23. Deyyani MH. Methods adopted by the faculty members in the Faculty of Agriculture, University of Shahid Chamran to obtain and disseminate scientific information. *Shahid Chamran University: Faculty of Psychology and Educational Sciences, Library Department* 1986.
24. Nooshin Fard F. personal factors related to information seeking behavior in the research centers in the country. Tehran: Faculty of Humanities, Islamic Azad University, Science and Research Branch; 2003.
25. Navadeh Ghareh Seyyed M. Information-seeking behavior of managers in Aesthetic-Cultural Organization of Tehran Municipality. Hamedan: Faculty of Humanities, Islamic Azad University of Hamedan; 2008.
26. Meho LI, Haas SW. Information-seeking behavior and use of social science faculty studying stateless nations: A case study. *Library & Information Science Research*. 2001; 23(1): 5-25.
27. Abou-Auda HS. Information-seeking behaviors and attitudes of physicians towards drug information centers in Saudi Arabia. *Saudi medical journal*. 2008; 29(1): 107-15.
28. Mazinani A. Study of information needs and uses in the educational and research communities. *Message of Library Quarterly*. 1997; 7(2): 10-22.
29. Yamin Firouz M. Knowledge and knowledge management in organizations *Journal of National Studies on Librarianship and Information Organization*. 2003; 14(1): 97-108.