Research on Information Seeking and Use in Pakistan: An Assessment

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Abstract

The paper describes the beginning of research activity on information needs and presents an analysis of the literature on information needs in Pakistan to discover that no research has so far been published. It reviews 14 student-research projects produced from 1975 to 1982 at the University of the Punjab which have remained unpublished; Laments the loss of impetus given to this topic in 1974-75; and urges the LIS academics and practitioners to promote and conduct research on this critical topic.

Keywords: *Information seeking; Information needs; Research; Pakistan.*

Introduction

Study of Information need, seeking and use of the targeted service community is, and has been, of fundamental concern to the LIS professionals. It is through the findings of such studies that one is able to design information systems, develop resources and plan services that are compatible with, and result in the satisfaction of the community information needs. Although research interest in this area started early during the 20th century, it took decades to take a solid footing. It has been pointed out that Bernal's (1948) research on scientific information in Great Britain has been followed by "hundreds of studies which have attempted to investigate the methods by which scientists and social scientists obtain the information they need for their research" (Hurych, 1986, p. 158). An important milestone was the research initiative taken at

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the Center for the Information Sciences, Lehigh University, USA with the financial support of the National Science Foundation (Taylor & Wuest, 1962). The first report on the project produced by Wuest (1965), a professor of psychology, stated that "the purpose of the research is to evaluate the comparative merits of the different research methods. In particular, it is desired to extend the evaluation to methods which have not been used extensively in the past" (p. 2). This effort was followed by another landmark when M. B. Line and his associates conducted extensive research on the use of information by social scientists during 1968-1971 at Bath University in UK (Line, Brittain & Cranmer, 1971a, 1971b). These and similar other efforts have served as motivators for a large number of studies conducted, mainly in the North American and European countries, that provide a strong basis to the LIS professionals for future planning.

The amount of research on identifying and knowing the information needs or behavior of the customer or the community in developing countries is insignificant. There may be a number of reasons for this state of affairs, e.g., lack of research skills, research literature, funding, language competence, publishing avenues, etc. But it seems that the LIS professionals in these countries are not exposed to this significant area in their formal education, are mainly prepared for house-keeping operations, the knowledge and skills imparted to them are mainly 'library-focused' and tradition-bound, and they are not made fully aware that 'knowing your customer' is the first step in satisfying his needs.

In this light, one needs to examine the status of research on information needs, seeking and use in Pakistan. Before talking about research on information needs in Pakistan, two developments need to be mentioned. Following the UNESCO lead of NATIS, the Ministry of Science and Technology, Government of Pakistan, constituted early in 1974 the National Committee for the UNISIST Programme led by Dr. Z. A. Hashmi, Chairman of the Pakistan Science Foundation (PSF). PASTIC (Pakistan Scientific and Technological Information Centre) was under the PSF. This Committee had the mandate to prepare the S&T infrastructure in Pakistan including planning for the establishment of a National

Science Reference Library in Islamabad. I was appointed a member of this Committee and served on it until I resigned from my position at the University of the Punjab in December 1976 and left the country. This Committee, under the very energetic, clear-headed and no-nonsense chairman, Dr. Z. A. Hashmi, took a lot of concrete initiatives that must be lying buried in the archives of PSF/PASTIC. My work with this Committee convinced me to place a strong emphasis on the study of information needs of various national sectors in student-research at the Department of Library Science, University of the Punjab that I was chairing at that time. This emphasis will become clear below when student-research is described.

The efforts of the UNISIST Committee soon resulted in some concrete work with several activities appearing in public. PASTIC & the University of Islamabad, sponsored a Seminar on Scientific and Technological Information from April 9 to 11, 1975 (PASTIC, 1975). The proceedings of this Seminar were soon reproduced and made available. These consist of two speeches, 11 papers, and a set of 20 recommendations. All of the papers are of descriptive and very general nature, with two that use the expression 'information needs'. Mohajir's (1975) paper 'Information needs of science and technology' engages in a general discussion for the development of S&T information service structure. The second paper 'Information needs of society' by Akhtar H. Siddiqui is far more general than that of Mohajir. Without discussing anything about 'information needs', it ends with the suggestion that the "information policy should also ensure that resources are available to study the habits and needs of users" (p. 4). However, the Seminar adopted two important recommendations: "This seminar recommends that PSF sponsor an extensive research programme on the information needs of science and technology. The results of this research will help PASTIC to organize its information services" (p. 5); and "This seminar recommends that M/O education [Ministry of Education] should consider establishing Social Sciences and Humanities Information Centers on the lines of PASTIC to meet the needs of research workers in the fields of social sciences and humanities" (p. 1-2). The following year saw the visit of an IDRC/UNDP (1978)

mission that examined and reported on the scientific and technological information in Pakistan, which is described below. What is the status of information needs research in the LIS literature on Pakistan three decades after these two events?

Searching Pakistani Literature on Information Needs

A search of both *LISA* and *Library Literature* databases, using 'information needs' and 'Pakistan' as keywords resulted in nine unique citations, an encouraging initial sign. These citations must be examined one by one to understand the relevance of the literature represented by them. The oldest citation is related to the field report of the Joint IDRC/UNDP (1978) Mission held during October-November 1976 which "reviewed Pakistan's S&T information needs and made recommendations on the future structure and development of a national S&T information network." This unpublished report, very significant if its recommendations were implemented, is based on the mission team's discussions with leading LIS professionals in Islamabad, Lahore and Karachi. Whatever its importance, its text relevant to 'information needs' is not the result of research. The second citation, Mohajir (1977), is the same paper that was presented at the 1975 Seminar mentioned above. The abstract mentions that the author "Classifies prime information needs as: (1) acquiring and organizing data in meaningful ways; (2) employing effective methods of marketing and distributing the information; (3) establishing who are the potential users of information and then assessing their needs." The third citation (Anwar, 1982) mentions the research projects on information needs carried out by the students at the University of the Punjab. The papers by Moinuddin (1986), Majid (1993), Minnatullah (1994), Khan (1996), Anwar and Saeed (1999) mention 'information needs' in passing. It may not be out of place to mention that a study of the information seeking behavior of Pakistani journalists, being conducted by Anwar and Asghar, has been completed and will be published soon.

The picture painted above is very disappointing. This dismal situation reflects badly on the awareness of, and

importance given to the area of information needs, seeking and use by various sections of the information users by the Pakistani academics in the discipline and the practitioners in the field. Perhaps, one should look at the unpublished research done by the students of various universities in the country to find some comfort. Luckily, Nasim F., Mahmood, K. & Hashmi, N. H. (2004) have compiled a comprehensive list of 855 LIS master's and doctoral theses submitted up to 2003 to six Pakistani universities. The citations are arranged under broad subjects with an author index. There are two strange examples as follows:

1) Krishan Kumar Rathi submitted two theses (No. 83 and 84), one in 1974 of 35 pages and the other in 1975 of 38 pages, to the same university on a closely related topic;

2) Najma Sultana submitted two theses (No. 838 and 839) with different titles to the same university in the same year with the same number of pages.

It seems that these two cases are mistakes (the second perhaps due to translation from Urdu) and should be considered as duplicate entries. Sixteen of the theses, due to the subject coverage, have been listed under two subjects each. Thus the total number, after removing duplicates in both categories, comes to 837. This figure includes two doctoral theses.

The compilers of the list have categorized all theses into 16 broad subjects, with 16 items listed twice under different subjects. Table 1 presents the number of theses submitted to each of the six universities under broad subjects, including the 16 duplicate listings.

Categorization of some items does not make the nature of the theses clear. For example, lists of basic books, indexes of a variety of materials, a group of entries compiled for a union catalogue are essentially bibliographical works. There are at least 101 theses, mainly from Sindh and Karachi, which are of this type. If these are added to the 166 bibliographies, the number reaches

276 theses, 31.3 percent of all - a very high figure considering the legitimacy of accepting bibliographies as master's theses.

Table 1. Number of Theses by Broad Subject and University (N=853)

Subject	Bahawalpur	Baluchistan	Karachi	Peshawar	Punjab	Sindh	Total	% of all
Academic Libraries	3	34	69	10	18	79	**213**	**24.97**
Bibliography	5	8	96	8	3	46	**166**	**19.46**
Technical Services	2	8	19	5	10	67	**111**	**13.01**
Special Libraries	3	20	34	6	9	29	**101**	**11.84**
Public Libraries	1	10	9	1	7	19	**47**	**5.51**
Lib. Science - General	0	5	20	5	3	6	**39**	**4.57**
Library Materials	0	1	22	2	0	13	**38**	**4.45**
Miscellaneous	0	2	22	1	1	8	**34**	**3.99**
Reading Habits	0	6	17	0	4	0	**27**	**3.17**
Information Needs	1	0	0	0	14	0	**15**	**1.76**
Library Surveys	0	0	11	0	0	2	**13**	**1.52**
Publishing	0	3	3	0	0	7	**13**	**1.52**
Automation	1	0	6	2	1	2	**12**	**1.41**
Library Education	0	1	4	2	0	4	**11**	**1.29**
Library Administration	0	4	4	0	0	0	**8**	**0.94**
Public Service	0	0	3	0	1	1	**5**	**0.59**
Total (% of all)	16 (1.88)	102 (11.96)	339 (39.74)	42 (4.92)	71 (8.32)	283 (33.18)	**853 (100)**	**100.00**

However, our main concern was to identify student research on 'information needs'. There are 15 theses on this topic, 14 from Punjab and one from Bahawalpur which is listed under 'Academic Libraries'. Nazli (2001) prepared her thesis entitled *Information Seeking Behavior of Community of IUB Library Users*. This is not clear from the title if it was in fact a study of the information seeking behavior. Of the 14 theses produced at Punjab, six were completed in 1975, four in 1976, one in 1977, two in 1978, and one in 1982. It must be pointed out that during the 1974-75 academic year Master's research report was not a full thesis; it carried only 25 out of 100 marks allocated to the Research Methodology course. Unfortunately, none of these very useful 14 information needs studies conducted at the University of the Punjab resulted in published papers. These studies are now dated but still significant enough to be introduced to the profession so that they might serve as examples and a source of motivation to the younger researchers in the country. These studies will be briefly reviewed below for the benefit of those who may have such interests and want to conduct research in this area.

Review of Information Needs Research in Pakistan

Nighat (1975) investigated the information needs of scientists working in the Oils, Fats and Waxes Division of the PCSIR Laboratories at Lahore using personal interview. Out of 38 scientists of the Division, 35 (92%) participated in the study. Major findings included: (1) The participants use both formal and informal sources of information; however, they mainly rely on personal contacts; (2) They regularly scan scientific literature, especially current journals and that reading current scientific literature is their main source of research ideas; (3) On the average they spend nine hours per week on reading; (4) They maintain their own files of off-prints and other materials for their personal use; (5) They also use other sources of obtaining information in case their own library was unable to supply; (6) Information was received in 80 percent of the cases; (7) However, they were not fully satisfied with the services of their library. The

researcher makes several recommendations to improve information services being provided to these scientists.

Siddique (1976) studied the information needs of chemists working in the PCSIR Laboratories, Lahore, using a questionnaire. One hundred usable questionnaires were returned from a total population of 110, with a response rate of 90.9 percent. His major findings were: (1) A large majority of the participants (94%) makes considerable use of oral communication; (2) The participants are mainly induced to research ideas through reading the literature related to their subject; (3) Most of them (80%) need specific information frequently; (4) Most useful information sources to them are current journals, abstracts, and reviews; (5) The mean number of journals regularly scanned by these chemists was 5.26; (6) Their main source (96%) for finding literature was the PCSIR Library whereas 69 percent used the services of PASTIC also; (7) On an average, they spend eight hours per week on reading; (8) Their literature searches were done with the help of librarians; and (9) Only 51 percent of the participants were satisfied with the resources and services of the PCSIR Library. Major problems faced by these participants included: (1) Lack of up to date material in the library; (2) Shortage of scientific and technical books and journals; (3) Late arrival of foreign journals; (4) Inadequate translation facilities; and (5) Non-availability of inter-library loan services as well as reprographic services. It makes some pertinent recommendations for the improvement of the current situation.

Bokhari (1976) explored the information needs of the engineers working in the Heavy Mechanical Complex (HMC), Taxila. Two engineers were traveling abroad. All of the remaining 46 engineers were interviewed. Only four (8.7%) engineers have research experience, therefore, most of their information needs originate from their 'production work' in the 'shops'. Major results of this study are: (1) These engineers make heavy use of informal channels to obtain needed information; (2) Most engineers use current journals regularly for new ideas and, in addition, they use books and datasheets for their daily work; (3) On an average up to 5 journals are regularly scanned by these participants; (4) A large majority of the respondents use the HMC Library in addition to

manuals available in shops, outside libraries and their personal collections; (5) Less than half of the information requirements of these engineers are adequately met; (6) A large majority (95.65%) lack information searching skills; and (7) A majority of the respondents do not regard library services as satisfactory. The researcher makes many important recommendations to improve the current situation. A comprehensive study of the information needs of the scientists and technologists working in DESTO Laboratories, Chaklala, was carried out by Nuzhat (1978). Text of this study is not available at this time for review.

Bashir (1975) conducted an investigation of the information needs of veterinary surgeons working in the district veterinary hospitals of the Punjab. A questionnaire was used to collect data from 16 respondents. The findings of this study were very disturbing and included: (1) These hospitals possess a very small collection of out-dated books and the respondents do not have access to any other library with literature of their interest; (2) These respondents have no access to current professional journals; (3) No funds are provided to the hospitals for the purchase of related literature; (4) They mainly depend on the literature provided by the pharmaceutical companies; and (5) The respondents are unable to keep themselves up to date and are not happy with the role played by the Directorate of Livestock and the Pakistan Veterinary Association in helping them update their knowledge. Some recommendations are made to improve information supply to the veterinary hospitals.

A study of the information needs of dental surgeons working in the Dental College and Hospitals of Lahore was conducted by Parvez (1975). The respondents' need for information arises from: keeping themselves up to date (68%), learning about new medicines and techniques (48%), solving problems faced in daily practice (28%), and to become familiar with what has already been done in the field (24%). They keep themselves up to date by scanning current journals (88%), using citations in other papers (24%), and searching abstracting and indexing services (16%). In addition to the above, consultation with colleagues (80%) was a major source of information. A large

majority of the respondents (92%) use their institutional library to obtain information. They prefer to receive from their library current contents lists, bibliographies on desired topics, and photocopies of papers. Most respondents (88%) complain of a shortage of literature in their field but do not seek help from PASTIC (92%). On an average, the respondents spend 12 hours a week in reading current literature. It makes some recommendations to improve the existing situation.

Fazlul-Haq (1976) examined the information needs of the faculty members of the University of Engineering and Technology (UET), Lahore, using a questionnaire. Out of a total of 145 respondents, 132 returned their questionnaires, with a response rate of 91 percent. The major findings of this study are: (1) Their information needs arise out of gaining 'current awareness', 'exhaustive literature survey', and 'the need for some specific information'; (2) The participants use a variety of sources to meet their information needs, with a large majority using standard textbooks, current journals, and monographs, with reviews used occasionally; (3) Discussions with colleagues was mentioned as the next most useful source of ideas for research; (4) Strangely, the least used source are the abstracts; (5) Their literature searchers, with the assistance of the staff, were successful in 50 percent of the cases; (6) Twenty percent of the respondents hardly ever sought assistance from library staff; (7) Services offered by PASTIC leave much to be desired; (8) According to the results, only 25 percent of the needs are satisfied by the UET Library, 50 percent by their departmental library, and 25 percent by other libraries of Lahore; and (9) On an average, the respondents spent five hours per week on reading. Major problems facing these respondents were: (1) Non-availability of latest reading materials; (2) Exorbitant prices of books and journals in their field; (3) Bottle-necks in mailing current journal issues; (4) Incomplete back-files of journals; (5) Defective organization of materials on shelves; and (6) Lack of translation facilities.

An investigation of the information needs of the science faculty members of the University of the Punjab, Lahore, was conducted by Aslam Mujahid (1977). This study was conducted

using both a questionnaire and an interview for gathering additional data. Out of a total of 108 respondents, 104 (96.29%) provided the data. The major findings were: (1) Participants are very active in research in addition to their other duties and almost 76 percent of the respondents have published research, with 39 (37.5%) publishing anywhere from 9 to more than 30 papers each; (2) In order to keep themselves up to date, these respondents make use of current journals, abstracts, and reviews; (3) About 70 percent of the participants regularly scan up to 4 journals while 20 percent scan from 5 to 8; (4) They make use of abstracts to search a specific piece of information (74.15%), to keep abreast of new developments (68.53%), and to select current material to read (64.04%); (5) They also make heavy use of informal channels of information exchange such as conferences (69%), consulting colleagues (59%), and mutual exchange of publications (33%); (6) A majority spends up to five hours per week on reading; (7) Almost all use their departmental library while 64.42 percent also use the main university library; (8) A majority of the participants (63.33%) are not satisfied with library services; (9) Almost all (97.12%) respondents know how to search for scientific information. A set of recommendations is made to improve information services provided to these respondents.

Parveen (1976) explored the information needs of social sciences faculty members of the University of the Punjab using a questionnaire. Out of 80 faculty members, 75 participants returned the questionnaires, a response rate of 93.75 percent. Her major findings are: (1) Information needs of these respondents mainly emerge from their teaching and research activity, (2) Over 70 percent are actively engaged in research; (3) Almost all (97.3%) use informal sources to obtain information; (4) Formal sources include: news magazines (98.6%), books (97.3%), research reports (97.2%), current journals (93.2%), and abstracting and indexing services (77%); (5) Their use of libraries is extensive: departmental library (96.0%), personal library (66.7%), libraries outside the university (61.3%), and the university library (56%); and (6) Most of them (65%) spend anywhere from nine to more than 16 hours per week on personal study and research. She

makes some recommendation for the improvement of service to the faculty.

Information needs of the humanities faculty members of the University of the Punjab were investigated by Anjum (1978) using a questionnaire supplemented by selected interviews. Thirty-eight of the 43 respondents returned the questionnaire, a response rate of 88.37 percent. An interesting feature of this research is that it compares its results with those of Samia Parveen (1976) and Aslam Mujahid (1977). Major findings of this study are: (1) Humanities scholars are less interested in informal sources of information; (2) Most of the respondents are actively engaged in research (68.42% have published papers and 45% have published books); (3) Humanities scholars spend more time on personal study and research as compared to their colleagues in the social sciences and sciences; (4) They mostly use original texts (78.94%), textbooks (63.15%), journals (60.25%), and edited books (57.89%); (5) They use libraries and their staff more than the social scientists and scientists do; (6) They come to know about the existence of a document they need through bibliographies (92.11%), catalogues (84.22%), and librarians (78.95%); (7) A large majority of the respondents (80.9%) possesses reasonably good personal collections; and (8) In general, they are not fully satisfied with the services offered by the university libraries.

Jonathan (1975) studied the information needs of the Senior Population Planning Officers of the Punjab. The study concluded that (1) The basic information needs of the respondents are of the literature required in connection with their training and supervisory duties and the publicity material needed to publicize their programmes; (2) Publications produced by their department are considered as essential and 69.8 percent of the respondents consider their department as the main source for meeting their information needs; (3) A majority (75.4%) is not satisfied with quality of the population planning literature produced in the country; (4) They consider the libraries as the least important source to meet their information needs; (5) A majority of the respondents (65%) possess and use their personal collections for

their job-related needs, indicating that library resources are not attuned to their needs; (6) Films dealing with population planning are considered the best publicity material; and (7) There is a need of an agency that is responsible to collect, consolidate, reproduce, and disseminate population planning information systematically and to inform the producers of such information about the consumer needs.

An investigation of the information needs of Pakistan Television news producers located in Karachi, Lahore, Peshawar, Quetta, and Rawalpindi was conducted by Butt (1975) using a questionnaire. Out of the 34 respondents, 20 (58.8%) returned the questionnaires. His major findings were: (1) A large majority of the respondents (95%) use radio, press releases, official notifications, news received from APP/PPI, newspapers, foreign journals and professional books as sources of information; (2) A majority of the participants (85%) use TV centre and other libraries but in general are not satisfied with the available resources and services received; (3) Inadequacy and lack of current materials and a shortage of AV materials are the major reasons for dissatisfaction; and (4) Lack of qualified librarians forces them to search information on their own which is very difficult and affects the quality of their production.

Gureja (1975) explored the information needs of 30 newspaper editors in Lahore using a questionnaire. Major findings of the study were: (1) Mostly used sources of information include: dictionaries (96.67%), government reports (66.67%), old newspaper files (53.33%), handbooks (40%), gazetteers and directories (36.67%), abstracts (30%), and indexes (23.33%); (2) The respondents use libraries for: reference (73.33%), editorial writing (66.67%), data collection (60%), news verification (56.67%), and researching topics (50%); (3) For keeping themselves up to date in their field they attend meetings (86.67%), use personal contacts (83.33%), attend conferences (66.67%) and seminars (56.67%), and use correspondence (30%); (4) Other libraries are considered more useful by 73.34% of the respondents while 26.67% are unable to find information in their own libraries;

and (5) Most of the respondents (73.33%) seek the assistance of librarians to gather information.

A study of the information needs of the teachers of the religious schools of Lahore was conducted by Aseer (1982). This thesis should be of much interest these days but unfortunately the text is not available to the writer to give further details.

Concluding Remarks

The review presented above adequately proves that very little attention has been given to 'information needs' research in Pakistan by both the academics and the practitioners. As a result, no research on this critical topic has thus far been published. The strong impetus given in 1974-75 to 'information needs' as a significant subject of student research activity at the University of the Punjab produced within a short period of two years 10 substantial research reports on a variety of sectors. That push was soon lost and the following 6 years produced only four such studies. And the land has been barren since 1983. Unfortunately, the results of these studies have remained unpublished. If the momentum of 1974-75 was maintained and the results of research had been published, by now we would have had a large amount of quality research literature on this topic.

There is a critical need for the LIS academics and practitioners in Pakistan to take note of the current state of affairs and take steps to promote and conduct research in this area. At least University of the Punjab has the seeds lying dormant for quite long in its scholarly soil. If properly nurtured these dormant seeds should have the potential to sprout soon.

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