

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/236173125>

Library and Information Services in Pakistan: A Review of Articles Published in Foreign Journals

Article in *The International Information & Library Review* · December 1996

DOI: 10.11006/iilir.1996.0026

CITATIONS

19

READS

433

1 author:



Khalid Mahmood

University of the Punjab

186 PUBLICATIONS 1,594 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Cross-national Invariant of the Technology Adoption and Gratification (TAG) Model in Higher Education [View project](#)



MPhil Study [View project](#)



Library and Information Services in Pakistan: *A Review of Articles Published in Foreign Journals*

KHALID MAHMOOD*

ABSTRACT

The paper presents a statistical and subjective review of the journal articles on various aspects of library and information services in Pakistan. Only the articles published in the journals outside Pakistan are included. Articles are selected from four abstracting services, i.e. LISA, ISA, LSA, and ERIC. Authorship characteristics of 97 articles are analysed and compared with the previous studies of LIS periodicals. Authorship details include collaboration, occupation, affiliation, and the author's country. Other publication details of the articles include year, language, journal, and the country of publication. The findings show that library science teachers write more than the other professionals and the most popular subject is the library and information science education. Library science faculty at Karachi University contributes more articles in international journals. The articles are mostly published in English language journals and in English speaking countries, i.e. UK and USA. *International Information and Library Review* published more articles on this topic. Problems in library research in Pakistan are discussed and recommendations are made. A brief review of the articles is given according to 16 major subjects. A bibliography of the articles reviewed is also compiled.

©1996 Academic Press Limited

INTRODUCTION

Pakistan came into being as the result of the partition of India in 1947, when the provinces of Sind, Balochistan, North-West Frontier and the parts of Punjab and Bengal having Muslim majority constituted as a separate country. Pakistan had two wings, West Pakistan and East

*Lecturer, Department of Library & Information Science, University of the Punjab, Lahore, Pakistan.

Pakistan, each separated from the other by a distance of about 1600 kilometers of Indian territory. East Pakistan became an independent country in December, 1971 and is now called Bangladesh. Pakistan (former West Pakistan) has a total area of 796 095 sq. km, with a population of 131.5 million in 1994. It is a federal Islamic republic and the per capita GNP in 1991 was US\$400. This country has progressed through several development plans and has made substantial progress in several vital areas such as education, scientific and technological research, industrialization, rural uplift and several other areas of socio-economic development. Overall literacy is estimated to be 34% in 1992 and the government has extensive programmes for the eradication of illiteracy in the country. The infrastructure of education and research consists of schools, colleges, polytechnics, universities, laboratories and research institutes. There are presently 23 universities, 691 colleges and a fairly large number of research institutes and laboratories in the country.

Hamid (1992) estimated the number of libraries in Pakistan to be 1500 which are employing 3000 professional librarians. There are six library schools offering library and information science education at postgraduate level. The 2-year academic programme is divided into 1 year diploma/bachelor and 1 year Master degree. Total number of diploma and Master degree holders was estimated in 1992 to be 3304 and 2349, respectively.

PURPOSE

Library research in Pakistan started when Asa Don Dickinson, an American, wrote a textbook, *Punjab Library Primer*, that was published in 1916 by the University of the Punjab. Afterwards, a number of books, reports and proceedings on various aspects of Pakistani librarianship were published. A remarkable research was carried out in six library schools in the form of Masters theses. Bibliographies of library literature in Pakistan were compiled time to time and some articles on this topic were also published.

The most popular media of publishing is the periodicals. Why are journals mostly used in research activities? Budd (1988) answers this question:

“A primary means of scholarly communication in virtually all disciplines (and certainly in library and information science) is the journal. The journal offers authors and readers some advantages over the monograph: the opportunity for dissemination of a larger number and broader scope of issues and questions; intensive study of very specific questions or aspects of large problems; and the timely publication of intended communication.”

Librarians of the area that is now called Pakistan understood the importance of library journals and *Modern Librarian*, the first professional journal, was published in Lahore in 1930 as a monthly organ of the Punjab Library Association. *Pakistan Library Bulletin* started its publication in 1968 and is being published regularly. Some other library journals are also published in the country. Besides the literature published within the country, there is a good number of international library journals published throughout the world. Bottle and Efthimiadis (1984) noted a cumulative total of 1545 professional journals currently published in 1983. Reviewing the period 1860–1933, they calculated that the number of journals for the profession doubles every 13.8 years. Since the existence of Pakistan, local and foreign authors have been contributing on Pakistani librarianship in the journals published outside Pakistan. How much research on this topic was published? Bibliographies and other studies published in the country did not cover these articles.

The purpose of this study is to investigate the contribution on the different aspects of library and information services in Pakistan in the form of articles published in professional journals of the countries other than Pakistan. How many articles were published? Who wrote more on this topic? What are the institutional affiliations and occupations of published authors? What is the trend of collaboration among authors of Pakistani librarianship? When and where were the articles published? Which journals published more articles? In which language were the articles published? What is the coverage of articles in different abstracting services? What are the subject contents of the articles with regard to different aspects of Pakistani librarianship? By answering these questions this study will present on one hand a subject review of the articles and a comprehensive bibliography on the topic on the other.

SCOPE

Only articles indexed/abstracted in the following abstracting services are included in the study:

- *Library and Information Science Abstracts* — *LISA* (UK based, covers 550 journals from 60 countries, 1969 to the present, updated monthly)
- *Information Science Abstracts* — *ISA* (USA based, covers 300 journals, 1966 to the present, updated monthly)
- *Library Science Abstracts* — *LSA* (UK based, published quarterly from 1950–1968, in 1969 changed into *LISA*)
- *Educational Resources Information Center* — *ERIC* (USA based, covers 750 journals, 1966 to the present, updated monthly)

Items other than articles, i.e. books, reports, dissertations, conference proceedings, research projects, etc. abstracted in these abstracting services are not included in the study. Other possible sources of information were also searched, and the reviewer made every effort to find such articles published abroad. These sources include published indexes like *Library Literature*. Senior professionals were also consulted in this regard. In spite of all efforts there is a chance that some articles may have been missed in this review. Two types of articles are included: (1) articles written particularly on the whole or any aspect of Pakistani librarianship; (2) articles that do not particularly deal Pakistani librarianship but discuss it partly.

Articles published in the Pakistani journals are not included. Articles particularly written on East Pakistan and similarly articles published in *Eastern Librarian* (Published from East Pakistan now Bangladesh) are excluded. The time period covered in the study is 1947–1995.

METHODOLOGY

Approach to the abstracting services in the field of library and information science was not possible in Pakistan. The author, during his stay at the Department of Library & Information Science, Haagse Hogeschool, The Hague in April 1996, searched for required articles in online databases of LISA, ISA, and ERIC provided by the DIALOG. Descriptors like Pakistan, four provinces of the country, big cities, etc. were searched (free-text) in the databases. The abstracts of articles were downloaded. For searching of articles abstracted in LSA, the author used the British Library Information Sciences Service (BLISS) at London. The required abstracts were photocopied. The decision of inclusion of the articles in this study was taken after having a careful look into the abstracts. In order to be fully aware of the topic, most though not all of the articles included in the study were physically seen by the author. Findings of the study were analysed and tabulated in Pakistan. For more information about LIS journals included in the study, various editions of *Ulrich's International Periodicals Directory* and other available reference tools were consulted.

FINDINGS

After searching in four abstracting services, 97 items were classified as journal articles falling in the scope of the study. Three articles were published twice in six different journals. For the purpose of this study those three articles were considered as six independent entries. See Bibliography for a full list of the articles included in the study.

TABLE I
Coverage of articles by abstracting services

Rank	Name of abstracting service	Number of articles abstracted	Percentage
1	Library and Information Science Abstracts (LISA)	74	76.29
2	Information Science Abstracts (ISA)	28	28.87
3	Library Science Abstracts (LSA)	14	14.43
4	Educational Resources Information Center (ERIC)	7	7.22

Coverage of Articles by Abstracting Services

The maximum number of articles, 74 (76.29%), were abstracted in LISA, followed by ISA which abstracted 28 (28.87%) articles. LSA and ERIC abstracted only 14 (14.43%) and seven (7.22%) articles, respectively (see Table I). Only 19 (19.59%) articles were abstracted in more than one abstracting service. Of those 19, 14 (14.43%) were included by two services while five (5.15%) were covered by three services.

Publishing Activities

69 (71.13%) articles were written particularly on Pakistani librarianship, and 28 (28.87%) articles contained partial information about Pakistan. In these 28 articles, most were written on South Asia, developing countries, and Third World countries.

Collaborative Authorship

A total of 66 authors were counted. Four (4.12%) articles were found to be anonymous. Of the 93 authored articles, only seven (7.53%) had more than one named author. The majority of the articles (92.47%) had a single author. Two authors were found in four (4.3%) articles. The maximum number of authors in one article was four (see Table II).

Affiliation and Occupation of Authors

Finding the type of institution with which each author was affiliated was not possible in many of the cases. According to a rough estimate, based on the personal knowledge of this reviewer, 25 (37.88%) authors were affiliated with Pakistani libraries and LIS schools. The other 41 (62.12%) were foreigners (see Table III). Of these, a large number of authors were from UK and India. Information about other authors is not available. Of 66 authors, 12 (18.18%) contributed more than one article. These 12

TABLE II
Collaboration among authors

Number of authors	Number of articles	Percentage
1	86	92.47
2	4	4.30
3	2	2.15
4	1	1.08
Total:	93	100.00

authors wrote a total of 48 (49.48%) articles. The six mostly published authors contributed 36 (37.11%) articles. Of these six authors, five were Pakistani and one was Indian. Of the six mostly published authors, five were library and information science teachers and only one worked as university librarian (see Table IV). Only two authors contributed more than 10 articles each, and both were the faculty members of library school at Karachi. In a study of five international LIS journals conducted by Raptis (1992), out of 184 authors, 59 (32.07%) were LIS teachers.

TABLE III
Affiliation of authors

Affiliation	Number of authors	Percentage
Pakistan	25	37.88
Other countries	41	62.12
Total:	66	100.00

TABLE IV
Authors published most

Rank	Name	Occupation	Number of articles
1	Syed Jalaluddin Haider	LIS faculty	12
2	Anis Khurshid	LIS faculty	11
3	Attaullah	University librarian	4
4-6	Mumtaz A. Anwar	LIS faculty	3
4-6	P. B. Mangla	LIS faculty	3
4-6	Sajjad ur Rehman	LIS faculty	3

TABLE V
Language of Articles

Language	Number of articles	Percentage
English	94	96.91
German	1	1.03
Portuguese	1	1.03
Russian	1	1.03
Total:	97	100.00

According to another survey of sixteen journals conducted by Buttlar (1991), most of the authors (18.69%) were faculty of LIS schools.

Language of Articles

Most of the articles 94 (96.91%) were published in English. The other three articles were in German, Portuguese and Russian (see Table V). The large number of articles published in English language is due to the reason that the official language of Pakistan is English. Almost all of the Pakistani authors who went abroad for education purposes went to English-speaking countries like the USA, UK and Australia. They wrote for foreign journals published in English. Other authors from abroad who had any concern with Pakistani librarianship and came to Pakistan for various assignments were also from USA to UK. They also wrote on the topics in which they had experience.

Publication Year of Articles

The span of 49 years was divided into nine groups. In the first group of 9 years only one article was published; that article was published in 1952. After 1980 there was a trend of increase in the publication. The maximum number of articles, 23 (23.71%), were published during 1991–1995 (see Table VI). If we examine the data according to the number of published articles during a single year, 1988 and 1994 will be ranked at the first two, when the number of articles were eight each. If we divide the total period studied, i.e. 49 years, into two equal parts, we will find that only 20 (20.62%) articles were published during the first half, while the rest, 77 (79.38%), were published in the second half.

Coverage of Articles by Journals

It was found that the total 97 articles were published in 52 journals. The

TABLE VI
Distribution of articles by year of publication

Year	Number of articles	Percentage
1947-1955	1	1.03
1956-1960	9	9.28
1961-1965	2	2.06
1966-1970	5	5.15
1971-1975	10	10.31
1976-1980	8	8.25
1981-1985	17	17.53
1986-1990	22	22.68
1991-1995	23	23.71
Total:	97	100.00

number of articles published in various journals varied. Only 15 (28.85%) journals published 60 (61.86%) articles. The other 37 (38.14%) articles were published in 37 (71.15%) journals. *International Library Review* is the first in the ranked order which published the maximum number of 16 articles. Afterwards, the *International Library Review* changed its title as the *International Information and Library Review*. The second and third are *Libri* and *Unesco Bulletin for Libraries* which published seven articles each (see Table VII).

Country of Publication

The journals having articles on Pakistani librarianship were published from 12 different countries. The country of publication of four journals having five articles could not be identified. Of 92 articles, 77 (83.7%) were published from only five (41.67%) countries. The maximum number of articles, 32 (34.78%), were published from UK. 22 (23.91%) articles were published from USA, and nine (9.78%) were from France (see Table VIII).

Subject Contents of Articles

Articles were classified in 16 broad subject categories. Library and information science education and research as a subject occupied a maximum number, 18 (18.56%) of the articles. The second and third most popular subjects were special library services and general library services, which were described in 17 (17.53%) and 15 (15.46%) articles, respectively. These three subjects covered 50 (51.55%) articles. See Table

TABLE VII
Journals that frequently publish articles on Pakistan

Rank	Journal title	Country	Number of articles
1	International Information and Library Review	UK	16
2-3	Libri	Denmark	7
2-3	Unesco Bulletin for Libraries	France	7
4	Information Development	UK	5
5-7	Herald of Library Science	India	3
5-7	Scientometrics	Netherlands	3
5-7	Special Libraries	USA	3
8-15	Asian Libraries	Hong Kong	2
8-15	Indo-Pacific Exchange Newsletter	*	2
8-15	Journal of Library History	USA	2
8-15	Library Journal	USA	2
8-15	Library Review	UK	2
8-15	Quarterly Bulletin of the International Association of Agricultural Information Specialists	France	2
8-15	SALG Newsletter	UK	2
8-15	Third World Libraries	USA	2

*Country unidentified.

TABLE VIII
Distribution by country of publication

Rank	Country	Number of articles	Percentage
1	UK	32	34.78
2	USA	22	23.91
3	France	9	9.78
4-5	Denmark	7	7.61
4-5	India	7	7.61
5-6	Hong Kong	4	4.35
5-6	Netherlands	4	4.35
7-9	Germany	2	2.17
7-9	Singapore	2	2.17
10-12	Brazil	1	1.09
10-12	Fiji	1	1.09
10-12	Russia	1	1.09
	Total:	92	100.00

TABLE IX
Subject coverage

Rank	Subject	Number of articles	Percentage
1	Lib. & inf. sc. education & research	18	18.56
2	Special libraries & inf. services	17	17.53
3	Lib. & inf. services	15	15.46
4	Inf. technology & lib. automation	8	8.25
5	Technical services	7	7.22
6-7	Academic libraries	6	6.19
6-7	Lib. materials & collections	6	6.19
8	Bibliography & bibliometrics	4	4.12
9-11	Archives	3	3.09
9-11	Co-operation/Resource sharing	3	3.09
9-11	Public libraries	3	3.09
12-13	Publishing & book trade	2	2.06
12-13	Reading promotion	2	2.06
14-16	Biography	1	1.03
14-16	National libraries	1	1.03
14-16	User education	1	1.03
	Total:	97	100.00

IX for the details of 16 subject categories. The study by Raptis also showed LIS education as most popular subject in the LIS journals, while in Buttlar's study the most popular subjects were cataloguing and automation. LIS education was placed at fourth position. See *Appendix 1* for a brief subject review of the articles included in the study.

DISCUSSION AND CONCLUSION

In the databases having a large number of entries (e.g. LISA contained 133 796 records and ISA contained 160 000 records in 1993) only 97 records were found which contained information on Pakistani librarianship. This amount of research cannot be considered satisfactory on this topic. What is the reason of this poor result? Basically, it is the responsibility of Pakistani professionals to do research on the topic of Pakistani librarianship and make their articles published in the international journals, while the study reveals that only 25 Pakistani authors worked in this field. Haider (1978) discussed the factors responsible for retarding the growth and expansion of research activities in the country. Lack of planning and co-ordination, use of unsatisfactory research techniques, lack of funds, and the lack of interest and encouragement among library professionals are the major obstacles. Usmani (1986) added

that the lack of recognition of librarianship as a profession affected the research activities in Pakistan. Rizvi (1987) also enlisted the factors affecting library research in the country. Lack of trained persons in library research was a major hurdle. Rizvi wrote that the first Masters programme, started in 1962 (after 15 years of the birth of Pakistan) at Karachi. In 1974, Punjab and Sind Universities started Masters programmes. Research methods were taught as a compulsory course in Masters programme. After the initiation of Masters programmes, these three library schools started to produce some research. The present study also confirms that there is an increase in the research activities after 1980. Rizvi also discussed some other problems as lack of literature required for research, lack of co-operation from the individual librarians (people do not fill the questionnaire), and the lack of the local periodicals in the field of librarianship. Muhammad Asghar (1992) discussed the major problems in library research as the lack of opportunities for proper training, appropriate guidance, availability and access to information sources, financial assistance and sponsorship, encouragement, publication or dissemination of research findings, and personal interest and initiative.

The study shows that the major share of publication activity is accounted for by LIS faculty and, due to this, the most popular subject is always LIS education. The LIS faculty at Karachi University contributed more research in international journals. There is a fair number of special libraries in the country and their condition is comparatively better. The second most popular subject is special libraries, which include medical, agricultural, law, and science and technology library and information services. To introduce the library situation in Pakistan to the world professional community, the articles of general nature were written in a large number. Continued interest in automation shows the ongoing technological innovations in Pakistani libraries.

Most of the articles (96.91%) which appeared in the journals were published in English language. Also, most of the articles were published in English speaking countries, i.e. the UK, and USA. There are three reasons for this. Firstly, most of the LIS periodicals are published from these countries. Secondly, English is taught as second language in Pakistan and the official communications are also in English, so the professionals can easily write in English. Thirdly, it is worth mentioning that the mostly published authors in this study have been in these English speaking countries for study purposes and have more acquaintance with the journals published in these countries.

The promotion of research activities in the field of librarianship in Pakistan is direly needed in this era of communication. Anwar (1982) suggested that the research carried out by the Masters students should be

published in international journals. The government of Pakistan should constitute a National Research Council for Librarianship to investigate the problem areas and to assign the research projects to the experts. Pakistan Library Association and the University Grants Commission can play an important role in the coordination of research activities in the country. There should be refresher courses for working librarians to teach them research methods and they should be encouraged to do research in the field of librarianship. Some international journals are specifically meant for developing countries. Pakistani researchers should approach these journals and send their research findings for publication.

REFERENCES

1. Anwar, Mumtaz A. (1982) Research in library science at the University of the Punjab, Lahore (Pakistan). *Libri* **32**, pp. 284–287.
2. Bottle, R.T. and Efthimiadis, E.N. (1984) Library and information science literature: authorship and growth patterns. *Journal of Information Science* **9** (3), p.114.
3. Budd, John (1988) Publication in library & information science: the state of the literature. *Library Journal* **113** (14), p.125.
4. Buttlar, Lois (1991) Analyzing the library periodical literature: content and authorship. *College & Research Libraries* **52** (1), pp.38–53.
5. Haider, Syed Jalaluddin (1978) Status of library research in Pakistan, *Libri* **28**, pp.326–337.
6. Hamid Rehman (1992) Demand and supply of library science graduates in Pakistan. In Sajjad ur Rehman, Abdus Sattar Chaudhry and Afzal Haq Qarshi (Eds) *Library education in Pakistan: past, present and future*. Lahore, PULSAA.
7. Muhammad Asghar (1992) Problems of library and information science research in Pakistan. In Sajjad ur Rehman, Abdus Sattar Chaudhry and Afzal Haq Qarshi (Eds) *Library education in Pakistan: past, present and future*. Lahore. PULSAA.
8. Raptis, Paschalis (1992) Authorship characteristics in five international library science journals. *Libri* **42**, pp.35–52.
9. Rizvi, Syed Jamil Ahmad (1987) *Library science and research methods* (Urdu). Islamabad. Muqtadra Qaumi Zuban.
10. Usmani, Muhammad Adil (1982) Role of library research in Pakistan (Editorial). *Pakistan Library Bulletin* **17** (3–4), pp.i–x.

APPENDIX 1: SUBJECT REVIEW

A review of the articles included in the study is presented here. This review gives a brief historical background of the library and information services in Pakistan through various time periods. The arrangement is alphabetic according to the major 16 subjects. The reference of the article's entry in the Bibliography is given with each author.

Academic Libraries

In 1971, Anwar¹⁹ wrote on the secondary school libraries in Pakistan. Christine²⁸ described the experiences of a school librarian working at

Islamabad. Haider⁴⁴ discussed the condition of university libraries in 1975. There were eight university libraries in Pakistan with a total of 800 000 volumes. Haider⁴⁵ revised his paper on university libraries that was again published in 1986. In this paper, he suggested the ways of improving co-operation among university libraries. Mahmood ul Hassan⁶⁰ described the services of the Allama Iqbal Open University Library. Sajjad ur Rehman⁸³ analysed the book availability in Punjab University Library and compared the results of the study with the surveys conducted in US academic libraries.

Archives

Moir⁶⁹ discussed the provision of archives in Pakistan. He described various departments of government which held the archives. In 1990, Moir⁶⁸ again reported a survey of the administration, care and accessibility of district records in Pakistan. Slavin⁸⁹ gave an account of the activities of the National Archives of Pakistan. Problems faced by the department were discussed.

Papers on the conservation of archives are given under the heading "Technical Services".

Bibliography and Bibliometrics

Rafia⁷⁷ discussed the developments in bibliographic control in Pakistan focusing on the aspects of legal deposit, registration of publications and copyright, the national bibliographical agency, and retrospective and current national bibliographies. Qurashi⁷⁵ analysed the output of two prolific research groups in scientific discipline. Again, Qurashi⁷⁴ wrote on the publication rate of some university groups in various countries including Pakistan. Arunachalam, Srinivasan and Raman²⁰ discussed the collaboration among Asian scientists in scientific research.

Biography

Anis Khurshid¹⁶ presented an appreciation of the library career of Abdul Moid (1920–1984), who fought for and promoted the cause of librarianship in Pakistan. Abdul Moid served University of Karachi Library from 1952–1973. One of his major achievements is the establishment of the Pakistan Library Association in 1958. He also worked in Nigeria.

Co-operation/Resource Sharing

Begg²⁵ presented a paper on the development of resource sharing in Pakistan at the "International Conference of Directors of National Libraries on Resource Sharing in Asia and Oceania, Canberra, 1979."

Anis Khurshid¹⁴ discussed the situation of resource sharing among university libraries and suggested the co-operation in the fields of union lists of serials, union catalogues, photocopying and loan of library resources, acquisition of foreign periodicals, etc. Attaullah²³ proposed a new mechanism and framework for resource sharing among libraries in Pakistan.

Information Technology and Library Automation

This subject is quite new in Pakistan, and the first article on this topic appeared in the literature in late 1980s. During the span of 8 years, eight papers have been published in international journals. Horne⁵⁰ examined the varying degrees of application of information technology to information services in the different regions of the world. Primarily, the focus was on the use of international services, prevalence of user interface software, and development of national and regional networks. Attaullah and Johnson^{21, 22, 24} described the efforts made to modernize and computerize the NWFP Agricultural University Library. Their two articles on this topic were published in three different journals. Royan⁸¹ presented a paper at the Pakistan Library Association Seminar on "Information for Development", Lahore, 1992. He discussed the importance of the use of new technology in information handling. Hassan⁴⁷ used data from a number of case studies to identify the major environmental constraints that influence the introduction of information technology in Pakistan. Khalid⁵² described the different foreign and local computer software packages being used in Pakistani libraries. He discussed the problems in library software development in Pakistan.

Library and Information Science Education and Research

The first paper on library education in Pakistan was written by Anis Khurshid¹² in 1961. The four library schools in West and East Pakistan were producing 80 graduates each year for country's 500 libraries. There was lack of co-ordination and uniformity between the schools and between the libraries. In 1970, Anis Khurshid¹⁵ wrote on the standards of library education in Burma, Ceylon, India and Pakistan. In 1971, an article⁵⁷ was published on the history of library education in Pakistan. Bowden²⁶ gave the details of an experimental course at Loughborough University of Technology to educate the teachers of library science from developing countries. In a 1-year Masters in Library Science course, among seven students, one was from Pakistan. The course was mainly sponsored by Unesco. Qureshi⁷⁶ described the history of education and training of librarians in Pakistan from the early 20th century with some thoughts and suggestions for the future.

Mangla⁶³ explained the need for manpower training for information handling and described the different categories of personnel for this purpose. He outlined the training programmes in India, Pakistan, Bangladesh and Iran. Rafia⁷⁸ discussed the facilities of library education and training for professionals and para-professionals in Pakistan. The lack of teaching staff and professional literature created serious problems. Anis Khurshid,¹⁰ in 1987, reviewed the growth of library education with special reference to five universities in Pakistan. Feather and Smith³² described a continuing education program which they experienced in Pakistan.

Ahmed³ gave an account of library training in Pakistan, Iran, Egypt, Sudan and some other Arab countries. Sajjad ur Rehman⁸⁴ examined the extent of coverage and nature of courses relating to information policy in the curricula of 48 library and information science programmes in North America and three Asian countries (Malaysia, Pakistan and Saudi Arabia), Mangla^{61, 62} wrote on the LIS education facilities in India, Pakistan, Bangladesh and Sri Lanka. His paper was published in two journals. Sajjad ur Rehman⁸² evaluated the faculty of six graduate programmes of library education in Pakistan.

Haider⁴³ described the status of research in the field of library science in Pakistan. Anwar¹⁸ reviewed the research carried out by Masters degree students at Punjab University, Department of Library Science 1975–1981. Harvey⁴⁶ examined library periodicals published from India, Pakistan, Malaysia and Taiwan. Haider³⁸ reviewed the library literature of Pakistan, including library periodicals, conference proceedings, bibliographical aids, reference works, master theses, and plans and surveys.

Library and Information Services

In 1957, Heyman⁴⁹ discussed the role of Asia Foundation in development and improvement of library facilities in 15 Asian countries. A grant was made to publish a "Guide to Pakistan Libraries, Learned and Scientific Institutions and Societies." In 1959–1960, three articles were published on the general library situation in Pakistan. Waller⁹³ gave an introduction to Pakistani libraries, including a description of Liaquat Memorial Library, Karachi, and library education and research in the country. Khan⁵⁵ discussed the problems faced by the libraries of a newly born country. Owen⁷³ described the situation of university libraries, national library, library science education and professional associations. Finance, accommodation and staff were the major problems of libraries. Khan's paper⁵⁴ mainly focused on the public libraries in the country. However, some information was also given on academic libraries. Anis Khurshid's

article⁸ on the general situation of librarianship in the country was published in 1971.

Haider⁴⁰ and Anis Khurshid⁹ painted a picture of library development in Pakistan during the decades of 1970s and 1980s, respectively. Anis Khurshid estimated that Pakistan had 1261 libraries and 700 box libraries in 1981, which were increased to 3700 by 1988. In 1981, in another article, Anis Khurshid¹³ discussed the problems in the proper development of libraries in Pakistan. He listed lack of co-ordinated library infrastructure, inadequate bibliographical control, lack of reviewing arrangements and limited use of books as the main sources inhibiting the book development in the country. Grover³³ described the history of library development in Pakistan including copyright ordinance, the contribution of foreign experts, the establishment of PASTIC, bibliographical activities, the National Archives, the International Book Exchange Centre, library associations, and university and special libraries. Yasmin⁹⁷ made an account of the working of some important information centres of Pakistan. Heitzman⁴⁸ discussed the information systems developed in the Third World countries. He described the problems in developing information infrastructure in South Asian countries including Pakistan. Haider³⁷ wrote on the library professional associations in the country. Methven⁶⁴ discussed the plan for library development in Pakistan.

Library Materials and Collections

In 1967, Lahood⁵⁶ reviewed the bibliographic coverage for newspapers in different directories. Among others, the writer described the newspapers indexes which also indexed newspapers published in Pakistan. Schlie⁸⁶ described a study of the use of the US patents by developing countries. The study was undertaken by the University of Denver Research Institute in collaboration with the Pakistan Council for Scientific and Industrial Research (PCSIR). The US patents used by the scientists at PCSIR in designing a particular equipment were studied. Wageman⁹² listed reference sources with annotations on South Asian countries including Pakistan.

Burlingham²⁷ wrote on the status of South Asian collections maintained by the American academic libraries. These collections including Pakistani publications were mainly in English and the regional languages to cater for the needs of the people from South Asia. Wells⁹⁴ described South Asia Microfilm Project (SAMP) at the Centre for Research Libraries (CRL), Chicago, Illinois which catalogued, stored and lent microfilm resources to the project's member libraries. SAMP started functioning in 1967. In 1990, Anis Khurshid¹¹ updated his earlier survey of library resources in

Pakistan. He mentioned that there were 6034 libraries in the country holding 13 354 500 volumes.

National Libraries

Akhtar⁴, the Director General of National Library of Pakistan contributed a paper in an issue devoted mainly to the subject of national libraries. He described the opening of NLP and noted its functions, resources, readers' services, application of modern technology, conservation of library materials and international relations.

Public Libraries

Mahindasa⁵⁹ described the public library development in some African and Asian countries. Pakistan is one of them. Anis Khurshid⁶ presented a paper at INTAMEL Meeting 1973, India on the topic of public library system in the city of Karachi. Muhammad Aslam⁷¹ gave a description of rural libraries in Pakistan.

Publishing and Book Trade

The Agreement on the Importation of Educational, Scientific and Cultural Materials of 1950, signed by 30 Unesco Member States, was discussed in an article⁹¹ published in 1952. According to that agreement, there was no duty on printed books, newspapers and periodicals. Some effects of the Agreement on various countries, including Pakistan, were given. Ali⁵ reported a meeting, held in Karachi, 1981 to discuss the needs of developing countries to provide books of the right quality and quantity and at prices people can afford.

Reading Promotion

Diehl³¹ gave an account of various schools and colleges in Pakistan and India and recorded the existence of libraries and the use of books. The mass need for books did not exist in South Asia. The writer recommended a complete change in the examination system to promote the need of books. Stelmakh⁹⁰ described the World Book Congress, which was arranged by Unesco to stress the importance of reading as a means of both individual and social development. The writer also mentioned regional book centres set up by Unesco in Tokyo, Karachi, and Bogota.

Special Libraries and Information Services

Special libraries and information services have always been better in comparison with the other libraries in Pakistan. A number of articles were published on various aspects of special library services. In 1977, Muhammad Aslam⁷² discussed the problems of 242 special libraries in the

country. The author also gave some hints to improve the condition of special libraries. In 1960, Mohajir⁶⁷ described the services of Pakistan National Scientific and Technical Documentation Centre (PANSDOC) which was established in 1957 upon Unesco recommendations. Haider⁴¹ wrote on the science and technology libraries in 1974. Rafique⁷⁹ described the services of Nuclear Science libraries in Pakistan.

Medical information services is an important area in special librarianship. In 1960, Cunningham³⁰ wrote about the collection and services of the library of the Basic Medical Sciences Institute in Pakistan. Haider³⁹ discussed the state of medical information in the country. He discussed medical education and research and gave an account of important medical libraries. Morgan⁷⁰ discussed the program and objectives of a workshop for medical librarians held at the Agha Khan University (AKU), Karachi in 1987. Abrantes, Myhre and Oliveira² wrote on the software programs used in primary health care. Several packages were studied. Microcomputer simulation of PHC developed by the Agha Khan University, Karachi was discussed. Husein and others⁵¹ also wrote on the same topic in 1993.

Agricultural information is another important aspect of special librarianship. Schenck and George⁸⁵ described two collections focusing on food and feed grain. Information needs and information center activities in developing countries including Pakistan were also discussed. Haider⁴² wrote on the existing resources and facilities in the field of agricultural science. Problems of agricultural libraries were also discussed. Shaheen⁸⁸ described the objectives and activities of an agricultural library strengthening project, with financial assistance of USAID. He recommended resource sharing among agricultural libraries in Pakistan. In 1995, Shaheen⁸⁷ reviewed the status of agricultural librarians in the country.

Law librarianship is also an important area. Haider's paper^{35, 36} on law libraries in Pakistan was published in two journals. He examined the problems of legal information service in the country. Lindley⁵⁸ discussed the difficulties facing parliamentary libraries in developing countries including Pakistan.

Minnatullah⁶⁶ explained the need for management information system for water and sanitation agencies. He also presented a proposal for developing such an MIS.

Technical Services

In 1957, Khan⁵³ presented the results of a survey about the acquisition and availability of foreign literature in Pakistani libraries. Similarly Abdul Haq¹ described the problems in acquiring US scientific and technical

books in Pakistan. Haider³⁴ discussed the policies, procedures and problems in the acquisition of scientific literature in Pakistani libraries. This paper was published in a special issue of 'Information Development' which was on the acquisition of scientific literature in developing countries.

Cataloguing of Muslim names has always been a problem. Anis Khurshid⁷ discussed this issue in detail. Rait⁸⁰ described the practice of British public libraries regarding the cataloguing of Punjabi Muslim names.

Conservation of archives is a vital issue which was discussed in two papers. First article²⁹ gave the details of a training course held in the conservation laboratory of the National Museum of Pakistan, Karachi in 1987. The course's objectives were the conservation of official government records. Wettasinghe⁹⁶ discussed the issues of archival conservation in South Asian countries.

User Education

Anwar¹⁷ described developments in user education since 1926, when it first became a serious study. He presented the findings of two surveys carried out to discover the extent to which college students and working scientists in Pakistan received any formal user education. He also put forward a plan for a national user education programme in Pakistan.

BIBLIOGRAPHY

A bibliography of 97 articles arranged alphabetically by author/title is given here. The code for the source abstracting service is given at the end of each entry.

1. Abdul Haq, A.M. (1964) Difficulties in procurement of U.S. scientific and technical publications in Pakistan. *Library Resources* **8** (1), 47-50. (LSA)
2. Abrantes, A., Myhre, T., Oliveira, A. (1989) Microcomputers in primary health care planning and management decision modelling. *Information Technology for Development* **4** (4), 813-828. (ISA)
3. Ahmed, Munir D. (1988) The training of librarians, documentalists and archivists in the Near East. *Auskunft* **8** (4), 277-286. (LISA)
4. Akhtar, A.H. (1994) The National Library of Pakistan. *Herald of Library Science* **33** (3-4), 226-228. (LISA)
5. Ali, Feroz A. (1981) Unesco Collective Consultation on National Book Strategies in Asia and the Pacific, April 1981: a report. *Fiji Library Association Journal*, 16-18. (LISA)
6. Anis Khurshid. (1974) INTAMEL Meeting 1973, India: Research methods in developing public library system in the metropolitan city of Karachi, Pakistan. *International Library Review* **6** (1), 103-107. (ISA, LISA)
7. Anis Khurshid. (1977) Is uniformity in cataloguing Muslim names feasible or possible?: a Pakistani point of view. *Libri* **27** (4), 282-295. (LISA)
8. Anis Khurshid. (1971) Libraries and librarianship in Pakistan. *Libri* **21** (4), 301-327. (LISA)

9. Anis Khurshid. (1987) Library development in Pakistan in the mid-1980s. *International Library Review* **19** (1), 61–71. (ISA, LISA)
10. Anis Khurshid. (1987) Library education in Pakistan. *Library Times International* **4** (3), 46–48. (LISA)
11. Anis Khurshid. (1990) Library resources in Pakistan: progress, problems, and achievements. *Third World Libraries* **1** (1), 10–21. (LISA)
12. Anis Khurshid. (1961) Library training in Pakistan. *Unesco Bulletin for Libraries* **15** (1), 31–33. (LISA)
13. Anis Khurshid. (1981) Problems of libraries: a study in relation to book development in national and regional languages in Pakistan. *Herald of Library Science* **20** (3–4), 155–160. (LISA)
14. Anis Khurshid. (1982) Resource sharing of university libraries in Pakistan. *Herald of Library Science* **21** (3–4), 169–182. (LISA)
15. Anis Khurshid. (1970) Standards for library education in Burma, Ceylon, India and Pakistan. *Annals of Library Science and Documentation* **17**, 23–34. (ISA, LISA)
16. Anis Khurshid. (1994) The pioneers: Abdul Moid. *Third World Libraries* **5** (1), 6–10. (LISA)
17. Anwar, Mumtaz A. (1981) Education of the user of the information. *International Library review* **13** (4), 365–383. (LISA)
18. Anwar, Mumtaz A. (1982) Research in library science at the University of the Punjab, Lahore, Pakistan. *Libri* **32** (4), 284–287. (LISA)
19. Anwar, Mumtaz A. (1971) Secondary school libraries in Pakistan. *International Library Review* **3** (3), 349–352. (LISA)
20. Arunachalam, S., Srinivasan, R., Raman, V. (1994) International collaboration in science: participation by the Asian giants. *Scientometrics* **30** (1), 7–22. (ISA)
21. Attaullah, Johnson, Jane S. (1991) From camels to computers: the realities of increasing the flow of agricultural information in Pakistan's Northwest Frontier. *Microcomputers for Information Management* **8** (2), 105–117. (ISA, LISA)
22. Attaullah, Johnson, Jane S. (1991) From camels to computers: the realities of increasing the flow of agricultural information in Pakistan's Northwest Frontier. *Quarterly Bulletin of the International Association of Agricultural Information Specialists* **36** (1–2), 105–109. (LISA)
23. Attaullah. (1992) Need a change? try exchange: a framework for resource sharing among libraries in Pakistan. *Library Review* **41** (5), 60–64. (LISA)
24. Attaullah. (1994) Use of microcomputers for library automation: NWFP Agricultural University Peshawar experience. *Quarterly Bulletin of the International Association of Agricultural Information Specialists* **39** (3), 237–247. (LISA)
25. Begg, Nemattullah. (1980) Development of resource sharing: Pakistan. *International Library Review* **12** (3), 287–304. (LISA)
26. Bowden, Russell. (1976) Improving library education in the developing countries: a Unesco and Loughborough University experiment. *Unesco Bulletin for Libraries* **30** (5), 255–261. (LISA)
27. Burlingham, Merry. (1988) South Asian collections: using research resources for a more general public. *Collection Building* **9** (1), 32–37. (LISA)
28. Christine, E.R. (1972) An American school librarian learns the meaning of enshallah-if Allah wills: Islamabad, West Pakistan. *Wilson Library Bulletin* **46** (10), 918–920. (LISA)
29. Conservation of Sind Government Archives. (1988) *Library Conservation News* (21), 6–8. (LISA)
30. Cunningham, Eileen R. (1960) The library of the Basic Medical Sciences Institute in Pakistan. *Bulletin of the Medical Library Association* **48** (3), 292–298. (LISA)

31. Diehl, Katherine Smith. (1967) Books and common education in the Indo-Pak subcontinent, 1959–1962. *Journal of Library History* **2** (3), 201–210. (LSA)
32. Feather, John, Smith, Inese A. (1988) Post-qualification training. *International Library Review* **20** (4), 459–468. (ERIC, ISA, LISA)
33. Grover, D.R. (1984) Library movement in Pakistan. *International Library Movement* **6** (2), 75–85. (LISA)
34. Haider, Syed Jalaluddin. (1989) Acquisition of scientific literature in developing countries: Pakistan. *Information Development* **5** (2), 73–115. (LISA)
35. Haider, Syed Jalaluddin. (1985) Law information facilities in Pakistan. *International Journal of Public Administration* **17** (1), 91–101. (ISA)
36. Haider, Syed Jalaluddin. (1985) Law information facilities in Pakistan. *International Library Review* **17** (1), 91–101. (ERIC, ISA, LISA)
37. Haider, Syed Jalaluddin. (1969) Library associations in Pakistan. *Unesco Bulletin for Libraries* **23** (3), 148–150, 165. (LISA)
38. Haider, Syed Jalaluddin. (1988) Library literature in Pakistan. *International Library Review* **20** (1), 65–100. (ERIC, ISA, LISA)
39. Haider, Syed Jalaluddin. (1981) Medical information in Pakistan. *International Library Review*, **13** (1), 117–128. (LISA)
40. Haider, Syed Jalaluddin. (1983) Pakistan librarianship in 1970s: current issues and emerging patterns. *Libri* **33** (3), 208–235. (ISA)
41. Haider, Syed Jalaluddin. (1974) Science-technology libraries in Pakistan. *Special Libraries* **65** (10–11), 472–478. (ISA, LISA)
42. Haider, Syed Jalaluddin. (1985) Some aspects of agriculture information in Pakistan. *Libri* **35** (1), 43–61. (LISA)
43. Haider, Syed Jalaluddin. (1978) Status of library research in Pakistan. *Libri* **28** (4), 326–337. (LISA)
44. Haider, Syed Jalaluddin. (1975) University libraries in Pakistan. *College & Research Libraries* **36** (5), 379–383. (ISA, LISA)
45. Haider, Syed Jalaluddin. (1986) University libraries in Pakistan. *International Library Review* **18** (2), 195–216. (ERIC, ISA, LISA)
46. Harvey, John F. (1982). Critique of seven Asian-English language library serials. *Serials Librarian*, **7** (2), 61–72. (LISA)
47. Hassan, S.Z. (1994) Environmental constraints in utilizing information technologies in Pakistan. *Journal of Global Information Management* **2** (4), 30–39. (ISA, LISA)
48. Heitzman, James. (1990) Information systems and development in the third world. *Information Processing & Management* **26** (4), 489–502. (LISA)
49. Heyman, Juliane M. (1957) Asia Foundation Libraries. *Indian Librarian* **12** (3), 213–216. (LSA)
50. Horne, Esther E. (1987) International comparison and problems in the application of information technology to information services. *Reference Librarian* (17), 23–44. (LISA)
51. Husein, K., Adeyi, O., Bryant, J., Cara, N.B. (1993) Developing a primary health care management information system that supports the pursuit of equity, effectiveness and affordability. *Social Science and Medicine* **36** (5), 585–596. (LISA)
52. Khalid Mahmood Malik. (1995) Library software in Pakistan. *Information Development* **11** (3), 165–167. (LISA)
53. Khan, Abdur Rahim. (1957) Foreign literature in the libraries of Pakistan: acquisition and availability. *Unesco Bulletin for Libraries* **11** (5–6), 111–114. (LSA)
54. Khan, M. Siddiq. (1967) Libraries in Pakistan. *Journal of Library History* **2** (1), 58–65. (ISA, LSA)

55. Khan, M. Siddiq. (1960) The library situation in Pakistan. *Indo-Pacific Exchange Newsletter* (6), 1–11. (LSA)
56. Lahood, Charles G., Jr. (1967) Newspapers: directories, indexes and union lists. *Library Trends* **15** (3), 420–429. (ISA)
57. Library school histories: library education in Pakistan. *International Library Review* **3** (1), 83–88. (LISA)
58. Lindley, Jane Ann. (1988) Third world parliaments and their libraries. *Inspel* **22** (2), 169–172. (LISA)
59. Mahindasa, P.G.M.G. (1956) The public library and the community in Africa and Asia. *Malayan Library Group Newsletter* **1** (5), 97–104. (LSA)
60. Mahmud ul Hassan. (1984) The Allama Iqbal Open University Library. *International Library Review* **16** (1), 45–87. (ERIC, ISA, LISA)
61. Mangla, P.B. (1994) Library and information science education in South Asia: India, Pakistan, Bangladesh and Sri Lanka. *Education for Information* **12** (4), 399–427. (LISA)
62. Mangla, P.B. (1993) Library and information science education in South Asia: India, Pakistan, Bangladesh and Sri Lanka. *Asian Libraries* **3** (4), 23–40. (LISA)
63. Mangla, P.B. (1979) Manpower development for information handling. *Journal of Library and Information Science* **4** (2), 113–126. (LISA)
64. Methven, Mildred. (1957) Planning in Pakistan. *Library Journal* **82** (10), 1287–1289. (LSA)
65. Middle East datafile. *Bibliography, Documentation, Terminology* **15** (5), 320. (ISA)
66. Minnatullah, K.M. (1994) Management information systems for water and sanitation agencies: a conceptual framework. *Information Development* **10** (2), 96–101. (ISA, LISA)
67. Mohajir, A.R. (1960) The development of PANSDOC and its services to the scientific and technical workers in Pakistan. *Indo-Pacific Exchange Newsletter* (7), 1–6. (LSA)
68. Moir, Martin. Administering and preserving district records in Pakistan. *Information Development* **6** (3), 144–149. (ISA, LISA)
69. Moir, Martin. (1983) Archives in Pakistan: some recent developments. *SALG Newsletter* (21), 9–12. (LISA)
70. Morgan, Peter B. (1988) A workshop for medical libraries in Pakistan. *Health Libraries Review* **5** (1), 7–10. (LISA)
71. Muhammad Aslam. (1975) Rural libraries in Pakistan. *Unesco Bulletin for Libraries* **29** (3), 156–158. (LISA)
72. Muhammad Aslam. (1977) Special libraries in Pakistan. *Special Libraries* **68** (4), 161–164. (ISA, LISA)
73. Owen, John E. (1960) Libraries in Pakistan. *Library Journal* **85** (4), 715–718. (LSA)
74. Qurashi, M.M. (1993) Dependence of publication-rate on size of some university groups and departments in UK and Greece in comparison with NCI, USA. *Scientometrics* **27** (1), 19–38. (ISA, LISA)
75. Qurashi, M.M. (1991) Publication rate and size of two prolific research groups in departments of organic chemistry at Dacca University (1944–1965) and zoology at Karachi University (1966–1984). *Scientometrics* **20** (1), 79–92. (ISA, LISA)
76. Qureshi, Naimuddin. (1979) The education and training of librarians and information scientists in Pakistan. *Libri* **29** (1), 79–89. (LISA)
77. Rafia Mohammadally. (1986) Bibliographical control in Pakistan. *International Library Review* **18** (1), 33–56. (ERIC, LISA)
78. Rafia Mohammadally. (1985) Information training in Pakistan. *Information Development* **1** (1), 31–37. (LISA)

79. Rafique, M.M. (1971) Nuclear science libraries in developing countries: with particular reference to Pakistan. *Unesco Bulletin for Libraries* **25** (2), 79–83. (LISA)
80. Rait, S.K. (1983) Cataloguing Punjabi Muslim names in British public libraries. *International Library Review* **15** (1), 105–113. (ISA)
81. Royan, B. (1993) Our reach and our grasp: development information and the technological imperative. *Focus on International & Comparative Librarianship* **24** (3), 106–114. (LISA)
82. Sajjad ur Rheman. (1994) Appraisal of faculty preparedness by using selected variables. *Journal of Education for Library and Information Science* **35** (1), 20–30. (ERIC, ISA, LISA)
83. Sajjad ur Rehman. (1993) Comparative measurement of book availability in academic libraries. *International Information and Library Review* **25** (3), 183–193. (LISA)
84. Sajjad ur Rehman. (1993) Manpower preparation for developing and implementing information policies. *Library Review* **42** (6), 23–37. (LISA)
85. Schenck, H.D., George, P.F. (1986) Using special libraries to interface with developing country clientele. *Special Libraries* **77** (2), 80–89. (ISA)
86. Schlie, Theodore W. (1977) The use of patent information in developing countries: a study of a case in progress. *Ciencia da Informacao* **6** (2), 55–58. (LISA)
87. Shaheen Majid. (1995) Characteristics of agricultural manpower in Pakistan. *Asian Libraries* **4** (1), 12–21. (LISA)
88. Shaheen Majid. (1993) Strengthening agricultural libraries in Pakistan. *International Information and Library Review* **25** (4), 233–245. (LISA)
89. Slavin, Timothy A. (1991) The National Archives of the Islamic Republic of Pakistan. *American Archivist* **54** (2), 220–226. (LISA)
90. Stelmakh, V.D. (1984) From a literate society-to a reading society: some results of the World Book Congress. *Bibliotekovedenie i Bibliografija za Rubezhom* (97), 24–37. (LISA)
91. Unesco “Free Flow” Agreement achieves ratification. (1952) *Unesco Bulletin for Libraries* **6** (5–6), E61–E63. (LSA)
92. Wageman, Lynette M. (1986) Reference sources on South Asia. *International Association of Orientalist Librarians Bulletin* (28–29), 39–46. (LISA)
93. Waller, Jean. (1959) The library scene in Pakistan. *Newsletter of the Library Association of Malaya* **3** (3), 12–15. (LSA)
94. Wells, Jack C. (1988) The South Asia Microfilm Project. *Microform Review* **17** (1), 26–31. (LISA)
95. Wells, N.A. (1989) A program in BASIC for facies-by-facies Markov chain analysis. *Computers and Geosciences* **15** (1), 143–156. (ISA)
96. Wettasinghe, Saroja. (1989) Archive conservation in South Asia. *SALG Newsletter* (34), 9–14. (LISA)
97. Yasmin, N. (1991) Status of information management in Pakistan. *Journal of Hong Kong Library Association* (15), 173–178. (LISA)