Quality Assurance and LIS Programs in Pakistan: Practices and Prospects

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abstract. This paper examines the issue of quality assurance (QA) in library and information science (LIS) education in Pakistan. It identifies the practices of quality assessment prevalent in Pakistani LIS schools and examines the perceptions of faculty members concerning the accreditation of LIS programs. A questionnaire sent to heads of departments and semi-structured interviews with faculty were employed to collect data. The findings of the study identify human, physical, procedural, and behavioral hindrances to imparting quality education. The study revealed a need for developing and implementing robust internal and external quality assurance mechanisms. The findings may lead to the development of policy guidelines for quality assurance in Pakistan and other countries with a similar context.

Introduction

LIS education has undergone a major paradigm shift during the last two decades. The profession's intellectual jurisdiction has extended beyond libraries to a broader information environment. The evolving nature of this profession has stimulated the creation of new roles, thus changing the information market context that formerly required more traditional professional competencies. These fresh horizons are leading to new challenges, and LIS education programs must respond to them. Quality assurance (QA) is one of those complex *challenges* associated with the changing environment. To survive, LIS education and research should pay greater attention to the broader aspects of quality assurance and excellence.

In the field of education, "Quality assurance refers to the process by which an institution or a programme is evaluated using a planned and systematic method of review to determine that acceptable standards of instruction, scholarship and infrastructure are being maintained and enhanced."[1] Accreditation, audits, quality evaluations, and benchmarking are different forms of quality assurance efforts to ensure that educational programs have well-defined learning outcomes. Student attainment of these outcomes

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is validated at course and program levels. Universities continuously strive to introduce novel and innovative plans to raise their pedagogical standards.

Approaches for quality assurance of academic programs vary considerably across the world and involve many different stakeholders, such as government agencies, professional associations, and internal representatives from educational institutions. The American Library Association (ALA), Association for Library and Information Science Education, Australian Library and Information Association, Chartered Institute of Library and Information Professionals, and International Federation of Library Associations and Institutions (IFLA) are examples of LIS professional organizations instrumental in educational quality assurance efforts at the global, regional, and national level.

To trace quality assurance processes across different educational environments, it is imperative to develop a clearer understanding of current practice in LIS education. In this regard, studies of the perceptions of students, faculty, alumni, and employers about curriculum, faculty, resources, and other related factors play an important role. The present study is an attempt to understand the issues and challenges of QA in Pakistan by systematically evaluating the LIS programs' academic offerings, quality assurance mechanisms, and perceptions of faculty concerning accreditation.

LIS Education in Pakistan

LIS education in Pakistan has a historic legacy that can be traced back to 1915 with the initiation of a certificate program at the University of the Punjab in Lahore. An American librarian, Asa Don Dickinson, was appointed by the university authorities to teach modern library methods to the working librarians of the university and its affiliated colleges. He wrote *The Punjab Library Primer*, considered the first textbook of library science.[2] The University of the Punjab was one of the first institutions in the world, and the first ever in Asia, to offer a formal course of study in library science at the university level.[3] The Dickinson course was suspended for two years after his departure in 1916 and then was revived in 1918.[4] After the partition of the subcontinent in 1947, this course again was suspended for three years due to political turmoil until it was revived again in 1950.[5] That LIS program was the first at a Pakistani university after partition; the second started in 1956 at the University of Karachi. During the 1960s, two more programs were established at the University of Peshawar and the University of Sindh, Jamshoro. Both universities initially started a certificate course that was later converted into a diploma and a master's program.[6]

Nine universities in Pakistan have consistently offered LIS programs at various levels, including the BS (a four-year program), masters, MPhil, and PhD. The names of the departments were changed to Library and Information Science (LIS) during the 1990s, and most departments still use that traditional nomenclature.[7]

Though there have been significant achievements in the long academic journey from certification to PhD level, LIS education in Pakistan has experienced a variety of problems, including a shortage of faculty, financial issues, lab deficiencies, lack of updated curriculum, dominance of traditional teaching methods, and the admission of unprepared students. These issues have seriously affected the quality of LIS education in the country.[8] Studies conducted on the various facets of LIS education (for example, faculty,

curriculum, needed competencies, and research contributions and their quality) identify serious gaps in each area. A lack of strategically planned growth is prevalent. There is no accreditation body at the national level to ensure that educational offerings are of high quality and responsive to the needs of the changing market. The Higher Education Commission (HEC) of Pakistan has developed a standardized core curriculum of LIS, but it is more advisory than compulsory.[9]

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During the last decade, LIS education in Pakistan has grown in the number of departments and expanded program offerings. Moreover, HEC is determined to ensure quality educational outcomes in higher education institutions by introducing internal and external quality assurance mechanisms. Thus, it is important to address the issue of QA to determine that acceptable standards of academic offerings are maintained and enhanced in LIS.

Literature Review

The area of quality assurance and the challenges relating to the equivalency and reciprocity of qualifications have long been subjects of interest to the LIS community. Barbara Moran discussed attempts to provide higher quality LIS education around the world (including developed and developing countries) and explored the possibility of creating a global quality assurance mechanism in recognition of greater student mobility.[10] She identified various international, regional, national, and individual efforts for QA in the discipline. She reported that three countries (the United States, United Kingdom, and Australia) provide accreditation through their professional associations and have some level of reciprocity with one another. Moran concluded that a universal quality assurance mechanism in LIS seems unlikely due to the diversity of practices and models.

Dennis Ocholla, Dan Dorner, and Johannes Britz agreed that most LIS programs in the world practiced some type of quality assurance, and the most common method was formal assessment by state authorities. They reported three dominant methods of QA, supervision by (1) professional associations and government regulating authorities, (2) government and universities, and (3) only professional organizations. They concluded that quality control in academic programs existed with variations in assessment and evaluation at international, regional, and institutional levels. However, they agreed that professional associations in most developing countries were weak and ineffective, and had limited influence or control over professional LIS education.[11]

Anna Maria Tammaro proposed a model of quality assurance while working on behalf of IFLA's Education and Training Division.[12] She applied this model in an international survey and reported that most countries employed some method of QA; the most commonly used was assessment by a government or nongovernment funded

agency. Accreditation by professional organization was predominant in North America, while the government agency model was strongest in Europe. In other articles, Tammaro identified the major trends and issues of quality assurance in LIS schools by measuring performance indicators and the impact of the Bologna Declaration, under which European countries pledged to work toward reciprocity in their education systems. She found major gaps in the quality of process, educational activities, and learning outcomes measures.[13]

Shaheen Majid, Abdus Sattar Chaudhry, Schubert Foo, and Elizabeth Logan carried out a questionnaire survey of LIS schools in Southeast Asia to explore perceptions regarding regional accreditation. Twelve of 14 schools surveyed in Thailand, the Philippines, Singapore, and Malaysia agreed to develop an accreditation system for LIS degrees in the region. They also outlined a model for the development and implementation of accreditation under the auspices of the Congress of Southeast Asian Librarians (CONSAL).[14] In another study, Christopher Khoo, Majid, and Chaudhry examined the issues involved in developing accreditation standards and procedures for educational programs in Southeast Asia. They concluded that dialogue with different parties, self-evaluation, and documentation were beneficial aspects of the accreditation process. They also proposed a model for regional accreditation and identified steps needed to develop the system.[15]

Sajjad Rehman explored the possibility of a regional accreditation agency for LIS programs in the Gulf Cooperation Council (GCC). He investigated the status and quality assurance strategies of eight LIS programs in the six member nations of the GCC (Saudi Arabia, the United Arab Emirates, Kuwait, Qatar, Oman, and Bahrain). The study favored an accreditation system by a regional body such as the Special Libraries Association Arabian Gulf Chapter.[16]

The issue of quality assurance has also produced a considerable amount of LIS literature in Asian countries such as India and Pakistan. India has established an autonomous body, the National Assessment and Accreditation Council, for quality assurance in higher education. However, its performance has not been considered satisfactory.[17] Various authors, including Tarkhanjit Kaur, Sanghamitra Pradhan, and Juran Krishna Sarkhel, have identified internal QA and accreditation by an external agency as critical needs.[18] Kanwal Ameen conducted a survey to identify the challenges of LIS education in Pakistan, India, Sri Lanka, and Bangladesh. Forty-six faculty members reported a number of common challenges faced by these countries, including quality assurance.[19]

In another article, Ameen identified the basic issues of quality assurance in eight LIS departments in Pakistan through a multi-method approach and concluded that the situation is not satisfactory. She called for concrete efforts to ensure the availability of quality education programs.[20] Midrar Ullah and Khalid Mahmood proposed a statutory professional body, the Pakistan Library and Information Council, and drafted an implementation document in 2011.[21] Apparently, however, no further development happened. Moreover, the last decade witnessed an increased number of LIS schools and level of programs in Pakistan. It is thus important to identify the current status of LIS education programs regarding their faculty, students, curriculum, and infrastructural resources, and to explore the challenges of imparting high quality LIS education. This study is an effort to fill this gap.

Research Objectives

The following are the research objectives of this study:

1. To identify the status of Pakistani LIS programs regarding their academic offerings, student enrollment, faculty strength, infrastructural resources, and physical facilities.
2. To identify the practices of assessment prevalent in Pakistani LIS programs.
3. To explore the perceptions of Pakistani LIS faculty members regarding accreditation of LIS programs.

Research Methods

Multiple approaches were employed for the collection of data. First, a questionnaire was designed with the following sections: profile of LIS programs (including nomenclature, degrees offered, commencing year of the programs, student enrollment, faculty strength, and physical and infrastructural resources); program evaluation practices; and perceptions of heads of departments for accreditation of their program offerings. The questionnaire was sent to LIS experts for content validity and was revised in light of their comments. The questionnaires were then mailed to heads of LIS departments, and the data were analyzed using SPSS software for statistical analysis.

Second, an interview guide was developed covering the role of HEC for quality assurance, perceptions of faculty members about accreditation of LIS programs, and the role of national associations. Faculty members from a pool of professors, associate professors, and assistant professors were interviewed. Senior faculty members were purposely selected because this group tends to be "information rich," seasoned, and aware of quality assurance issues. Face-to-face and telephone interviews were conducted with 17 faculty members of eight LIS departments with their prior consent. Three respondents were from the University of Peshawar, while five from the University of the Punjab were interviewed. At least two respondents were included from each of the three departments at the Universities of Karachi and Baluchistan and Islamia University of Bahawalpur. One faculty member from each of the remaining three departments—Allama Iqbal Open University, the University of Sargodha, and Sarhad University of Science and Information Technology—was contacted. Faculty members from one department never responded despite multiple requests. Initially, faculty members were contacted through telephone to get their consent and set a time for the interview. After that, an invitation letter and interview guide were sent via e-mail to those who agreed to participate. The participants were provided with a choice to speak in English or Urdu or bilingually (both English and Urdu) to avoid language barriers from becoming a distraction. Interviews were recorded and transcribed. Qualitative data were analyzed using the thematic analysis approach to identify common themes. After reading the interview guide and each interview transcript several times, a list of codes or code sheet was developed. The codes developed from the interview guide, and the first few interviews worked as a baseline for the remaining interview transcripts. Additional codes that emerged inductively from the data were added as needed. The quantitative and qualitative findings were merged, and they are presented in the following section.

Findings

Profile of LIS Schools

Table 1 shows the profile of nine LIS departments and their academic offerings in Pakistan. The departments at the Universities of Bahawalpur, Sargodha, and Sindh offer BS, master's, MPhil, and PhD degrees. The LIS department at University of the Punjab provides three programs (all except the BS), and Sarhad University of Science and Information Technology has two programs (master's and MPhil). The remaining four departments offer only a master's level program. The master's degree is the main focus of LIS education in Pakistan, and all the departments consistently offer this course of study.

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The LIS master's program founded at the University of Karachi in 1962 is the oldest in Pakistan. Twelve years later, a second master's program started at the University of the Punjab in 1974.[22] After a decade, three more master's programs were started in 1984 at the University of Balochistan in Quetta and the Universities of Peshawar and Bahawalpur. Allama Iqbal Open University in Islamabad started its master's program in 1985 through a distance learning program. The LIS master's programs at the University of Sargodha and Sarhad University of Science and Information Technology are more recent.

Pakistan's first four-year BS program in LIS was inaugurated at the University of Karachi in 2009, but it closed formally in 2013 due to a lack of prepared students. During the interview, a faculty member at the university explained, "This profession demands serious and mature students, and our experience of attracting such students at BS level was a failure. Consequently, the program was shut down." Other BS programs were started at the University of Bahawalpur (2010), the University of Sargodha (2011), and the University of Sindh, Jamshoro (2014). The University of Bahawalpur suspended its BS program in 2014 due to a lack of students seeking admission. However, the Universities of Sargodha and Sindh continue to admit students, with an intake of 50 students per year since 2011. All these departments offer BS and master's programs simultaneously. Students often take general and introductory courses during the first two years and later join the regular master's program.

Five departments currently offer MPhil programs in Pakistan. The University of Karachi was the first to offer a thesis-based traditional PhD program, in 1967.[23] The University of the Punjab was the second to begin its doctoral program, hiring three faculty members in 1999. Syed Jalaluddin Haider and Khalid Mahmood presented a detailed historical account of research programs (MPhil and PhD) in Pakistan. They claimed that the second PhD program started in 1985 at the University of Bahawalpur, while the University of the Punjab and the University of Sindh, Jamshoro commenced their programs in 1999 and 2001, respectively. (The discrepancy may be attributed to the later suspension of programs at the Universities of Bahawalpur and Sindh; respondents likely preferred to mention only the latest programs). Haider and Mahmood also reported that these programs were traditional in nature and designed on the British

Table 1.

LIS degrees offered in Pakistan

University	Department	Master's degree since	BS since	MPhil since	PhD since	Number of programs
University of Balochistan, Quetta	LIS	1984–	…	…	…	1
University of the Punjab	Information Management	1974–	…	2005–	1999–	3
University of Peshawar	LIS	1984	…	…	…	1
Islamia University of Bahawalpur	LIS	1984–	2010–	2007–	2011–	4
Allama Iqbal Open University, Islamabad	LIS	1985–	…	…	…	1
University of Sargodha	LIS	2008–	2011–	2011–	2014–	4
University of Karachi	LIS	1962–	2009–2013	…	1967–	2
University of Sindh, Jamshoro	LIS & Archive Studies	1965–	2014–	2007–	2007–	4
Sarhad University of Science and Information Technology	LIS	2012–	…	2013–	…	2

system, wherein research is primarily based on thesis submission. The University of the Punjab played a leading role in commencing a formal MPhil leading to a PhD with coursework plus a thesis based on the American pattern in 2005. It is considered the first program of its kind in the country according to HEC requirements.[24] The departments at the University of Bahawalpur and the University of Sindh, Jamshoro began to offer MPhil programs following the HEC pattern in 2007. Two more programs were introduced at the University of Sargodha and Sarhad University of Science and Information Technology in 2011 and 2013, respectively. Over seven years (2007 to 2014), three more PhD programs began. During interviews, faculty members from three other institutions shared that they planned to offer MPhil programs in their respective departments after fulfilling procedural requirements. The data collected showed that research programs were gaining momentum.

Faculty

Table 2 reflects LIS faculty strength overall in the country and in individual departments at different ranks. Only 49 faculty members work in the nine departments surveyed for this study. Most departments have few senior faculty, as only two professors and five associate professors teach in all the programs combined, most at the University of the Punjab. However, the situation was better in the case of assistant professors (25) and lecturers (17).

Students

Data collected regarding students show that the master's programs had the largest number of students (1,107). The range of students in an individual department varied from 55 to 500. The largest number of students at any one institution (500) were enrolled in the Allama Iqbal Open University master's program, followed by the University of Bahawalpur with 117 (see Table 3). The Allama Iqbal Open University program is distance learning-based, and tutors are generally assigned in every region of the country. Other questions related to the number of regions, students, and assigned tutors were asked during the interview with the Allama Iqbal Open University faculty member, who reported that the master's program was offered in almost 12 regions of the country. One tutor was normally assigned for 50 students. The number of admissions was based on the number of applicants; hence, enrollments varied from year to year. However, nearly 500 students are admitted each year. The BS program was offered at three departments and had an enrollment of 231 students. MPhil (76) and PhD (43) programs, offered at five departments, had fewer student enrollments than the seats available. This might be due to a lack of competent and eligible students interested in higher degrees. Among on-campus programs, the University of Sindh, Jamshoro had the largest overall student enrollment (199), followed by the Universities of Sargodha and Bahawalpur.

A comparison of student enrollments and available faculty members depicts a student-teacher ratio in some departments which is of concern. Two departments had a ratio exceeding 60:1, while two others had ratios of 50:1 and 40:1 each. The HEC criterion for student-teacher ratio in subjects other than science is 30:1, while at least six full-time faculty members (of whom five must hold a PhD) per department are required.

Table 2.

Faculty strength of LIS departments in Pakistan

University	Professors	Associate professors	Assistant professors	Lecturers	Posts filled
University of Balochistan, Quetta	…	…	3	4	7
University of the Punjab	2	3	1	2	8
University of Peshawar	…	…	4	2	6
Islamia University of Bahawalpur	…	1	6	2	9
Allama Iqbal Open University, Islamabad	…	…	2	1	3
University of Sargodha	…	…	1	2	3
University of Karachi	…	…	6	2	8
University of Sindh, Jamshoro	…	1	1	1	3
Sarhad University of Science and Information Technology	…	…	1	1	2
Total	**2**	**5**	**25**	**17**	**49**

Table 3.

LIS student enrollment by degree programs in Pakistan

University	BS students	Master's students	MPhil students	PhD students	Total
University of Balochistan, Quetta	…	117	…	…	117
University of the Punjab	…	76	20	15	111
University of Peshawar	…	75	…	…	75
Islamia University of Bahawalpur	24	80	17	8	129
Allama Iqbal Open University, Islamabad	…	500	…	…	500
University of Sargodha	88	70	20	7	185
University of Karachi	…	55	…	6	61
University of Sindh, Jamshoro	119	64	9	7	199
Sarhad University of Science and Information Technology	…	70	10	…	80
Total	**231**	**1,107**	**76**	**43**	**1,457**

Table 4.
Infrastructure and facilities of LIS programs in Pakistan

Infrastructure	Number of universities
Internet	9
Local area networking	9
Computer lab for students	8
Departmental library or reference/seminar library	7
Wi-Fi	7
Alumni association	5
Separate department building	4
Classroom facilities	**Number of universities**
Multimedia	9
Whiteboard	9
Internet connection	7
Sound system	5
Temperature control system	4

A shortage of faculty members means that these departments fail to meet HEC criteria regarding student-teacher ratios. In four departments, the ratio was from 13:1 to 17:1. Only one department had a ratio of 8:1.

Physical Facilities and Infrastructural Resources

Table 4 presents data related to physical and infrastructural resources. All departments mentioned Internet availability along with local area networking. They also had visibility on their respective universities' websites but did not have their own sites. Seven departments mentioned the availability of Wi-Fi. The same number also had their own library along with the university's central or main library.

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Five departments claimed to have an alumni association, but faculty members disclosed that most were inactive or dormant. Most LIS departments did not have their own building and instead occupied space in the central or main library of their parent universities or conducted classes in other departments' buildings. All nine departments had whiteboard and multimedia capability in their classrooms, while seven had Internet available in the classrooms. However, sound systems and temperature control

existed in only five and four departments, respectively. This demonstrates that facilities upgrades are necessary to make the classroom environment conducive for learning.

A mixed response was also noted during the qualitative phase of the survey. A majority of the respondents reported a shortage of human, financial, physical, and technological resources. Newly established departments generally suffered more in this respect than did established programs.

Practices for Quality Assurance

This section presents the analysis of data collected on the evaluation practices of LIS programs in the country. It also presents the preferences of faculty members for an appropriate body for accrediting LIS programs.

Program Assessment

The purpose of this question was to identify the program assessment practices of the departments. Assessment is the systematic process of gathering, reviewing, and using important data and information from multiple and diverse sources about academic programs for evaluation purposes. Three modes of assessment were identified: "alumni academic programs evaluation," "self-study," and "self-assessment" by the university's Quality Enhancement Cell established by HEC.

First, respondents were asked about alumni evaluation. Only two departments conducted formal alumni evaluation of their academic programs annually, while the other three received feedback from alumni informally. Further inquiries were made about the use of data generated during the alumni evaluation report. The feedback received was usually used for revising and updating course content and delivery methods. Sometimes, it was also helpful in improving consultancy and advisory services and other department facilities. Three departments planned to initiate this activity in the future.

Only one department had conducted a self-study at the time of data collection. The departments themselves did little to assess their own quality and performance. The next question asked was about self-assessment by the Quality Enhancement Cell as required by the HEC. The commission characterized self-assessment as "an important tool for academic quality assurance and provides feedback for faculty and administration to initiate action plans for improvement." HEC has also developed objectives, procedures, and standards for self-assessment. Eight of nine departments mentioned a Quality Enhancement Cell that conducted internal evaluations of their programs annually.

Further aspects of academic life related to self-assessment were investigated. The curriculum, faculty, strategic planning, students, instructional resources, and institutional support were mentioned by all respondents.

During interviews, all the participants confirmed the use of Quality Enhancement Cells in their respective universities, regularly collecting data about academics, students, curriculum, and infrastructure after every semester. Generally, academics were satisfied with the functioning of the cells and considered their establishment a positive move toward maintaining and improving quality educational programs. A few participants indicated some loopholes in the use of Quality Enhancement Cells. They thought that the QEC program was in its infancy but hoped that with time, things would improve.

One respondent said, "QEC is working but it needs some serious improvements in certain criteria. For example, [the same criterion] is not appropriate for all disciplines, courses and programs level such as BS, master, MPhil, and PhD." Respondents suggested that separate criteria should be designed considering the diverse nature of the disciplines, courses, and programs. Some advised better orientation to students and proper training for faculty in weak areas after evaluation. Rewards and incentives were also advocated.

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Accreditation of LIS Programs

Accreditation of LIS educational institutions is practiced in the developed world and considered desirable to maintain quality. In Pakistan, there are no accreditation agencies to evaluate LIS programs. Therefore, the respondents were asked to select which agency they considered more appropriate for accrediting LIS programs. The majority of heads of departments regarded HEC as the most appropriate forum, followed by an international professional agency such as IFLA or ALA. The national professional association in Pakistan was the least considered option, possibly due to the weak state of national professional associations in the country.

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Interview data revealed that all the respondents favored accreditation and considered it necessary for improving the quality of academic programs, attracting students, and enhancing quality. They viewed it as a noncontroversial issue; as one said, "It [accreditation] must be there to ensure quality: no second opinion regarding this."

The respondents were also asked about the role of national associations in this regard. The majority of the interviewees were not satisfied with the performance of the national professional body, the Pakistan Library Association (PLA). They rejected it as an accrediting agency due to its weak social, political, and professional status. Some called it "dead" or "dormant," with one respondent saying, "Unfortunately, national association is dead," and another commenting, "PLA is not socially, politically and financially strong. It can't deliver like ALA, IFLA or other international associations." Instead, the interviewees (n = 15) emphasized the formation of an autonomous accreditation body or council for accrediting LIS programs like those of other professions in the country, such as nursing, engineering, and law. One respondent said:

> For accreditation, my proposal is the establishment of a council as an accredited body. The establishment of council by Government or Parliament has more power to regularize the issue [accreditation]. We should talk to HEC to have deeper insight in making this council. Council usually has more power than that of association as it is enacted by law.

Another stated, "Council as an accrediting body will assess all the resources in terms of physical infrastructure, faculty, and curriculum." Some participants thought that the council should be formed under HEC as other accreditation agencies, for example, the Pakistan Engineering Council, had been.

Discussion

LIS as a profession and discipline is constantly evolving, expanding, and encompassing changes across the globe, and Pakistan is no exception. The quantitative results showed an increase in the number of departments and the expansion and growth of Pakistani LIS programs during the last decade. The departments at the University of the Punjab and the University of Karachi have played leading roles in initiating academic programs. The University of the Punjab has a historic edge, offering the first training program in 1915 and then a formal MPhil leading to a PhD in 2005 as per HEC requirements. The program at the University of Karachi was the first in the country to offer a master's, a traditional thesis-based PhD, and a four-year BS program. Nevertheless, the two-year master's program is predominant in Pakistan. These findings align with international trends.

The four-year BS programs were initiated at the insistence of HEC and were not successful until recently. Among four BS programs, two were suspended due to a lack of students. However, research programs gained popularity in the country as five departments offered LIS research programs (MPhil and PhD), and the other four planned to begin these types of programs. Except for the University of Karachi, others followed HEC criteria based on the American pattern (coursework plus thesis). The University of Karachi PhD program is designed on the British system, primarily based on a thesis submission.

Internationally, LIS education is moving toward the broad-based information landscape. Some schools have dropped the word "library" from their names altogether and focused on "information." Similarly, the majority of Pakistani LIS programs use the nomenclature of "Library and Information Science" except at the University of the Punjab. The department there changed its name from "Library & Information Science" to "Information Management." The courses were thoroughly revised, but much more needs to be done.[25] The department at the University of Sindh, Jamshoro included the words "Archives Studies" in its nomenclature. However, a review of course titles and content on its website showed little or no focus on archives management in either the BS or master's program except one elective course in the field of archives.

Lack of faculty, particularly professors and associate professors, indicates that Pakistani LIS programs face an academic leadership crisis and have less visibility in their respective universities.

Another point of concern is the high student-teacher ratio in LIS departments. The intake is high; the number of available faculty is modest. The number of full-time regular faculty members in the departments range from two to nine. Most LIS departments were

below adequate levels in terms of senior positions. Lack of faculty, particularly professors and associate professors, indicates that Pakistani LIS programs face an academic leadership crisis and have less visibility in their respective universities. LIS departments in Pakistan have confronted the issue of poor student-teacher ratios and a shortage of regular faculty for decades.[26] The consequences associated with inadequate faculty size are numerous. It generally leads to teacher and administrator overload and makes it difficult to perform research. Implications for student learning outcomes, research programs, and supervision of students are also mentioned by the respondents. Furthermore, they noted that in some parts of the country, the large number of LIS graduates contributed to high unemployment. LIS programs in Pakistan need to revise admission policies and recruit new faculty to strike a balance.

The availability of physical resources in terms of Internet, Wi-Fi connectivity, laboratory and library facilities, and multimedia was adequate, but temperature control systems, websites, and separate department buildings were deficient. A mixed response was also noted during the qualitative phase. Many respondents reported a shortage of human, financial, physical, and technological resources. The intensity of these problems varied from department to department, and newly established departments reported the greatest deficiencies. Previous studies also established that Pakistani LIS programs have faced scarcity of resources and financial constraints.

In Pakistan, HEC is the focal regulatory authority and funding agency for universities. Both the internal and external quality assurance mechanisms of HEC (such as the establishment of Quality Enhancement Cells in universities) are effective for enhancing the quality of curriculum, teaching, physical resources, and IT infrastructure. Both quantitative and qualitative findings acknowledged the positive role of HEC in ensuring quality higher education in general.

Still, quantitative and qualitative data reveal the need for formal accreditation. Indeed, accreditation might be considered critical for ensuring the quality of academic programs. Though HEC provides policy guidelines, norms, standards, and quality assurance mechanisms for higher education, an accreditation agency seems essential to normalize quality academic programs. HEC accredits the institution as a whole and lacks a way to regulate the initiation of new programs and departments within accredited institutions. In certain instances, universities appeared to officially fulfill all HEC requirements but actually did not meet them. Furthermore, HEC criteria seem more applicable for establishing a new university, not new departments within an existing university. In these circumstances, the absence of a national accreditation agency has seriously affected the quality and standards of LIS programs. The departments are established without meeting minimum academic standards in terms of permanent faculty members, physical facilities, and IT infrastructure. That may explain the repeated opening and closing of Pakistani LIS departments and programs. Sajjad Ahmad and Khalid Mahmood reported 13 LIS departments during 2000 to 2009.[27] However, only nine are well-established and regularly offer courses of study.

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HEC and international professional associations and agencies were the forums preferred by heads of departments for accreditation of Pakistani LIS academic programs, while faculty interviews called for establishing a council under HEC. The Pakistan Library Association was the least considered option by both groups due to its weak political, social, and structural condition. The association was established in 1956 but remained ineffective in determining quality standards and future directions of LIS education and the profession in general. Other studies have also reported its weak position. This situation is like that in other developing countries in Asia and Africa.[28]

Conclusion

The quality of LIS education has become a global phenomenon, and much literature has appeared on the topic during the last two decades. The present study, based on both quantitative and qualitative approaches, analyzed the academic aspects of nine LIS departments, including academic offerings, student enrollment, faculty strength, infrastructure, and program assessment. The findings pointed to various human, physical, procedural, and behavioral issues that hinder the delivery of quality education. The issues regarding quality assurance are similar to those of other countries in the region. Furthermore, the study also focused on current quality assurance practices and the desirability of accreditation for LIS education programs. Further studies should be conducted involving various stakeholders, such as professionals, HEC, and national and international associations, to develop a quality assurance model and accreditation system for LIS education in Pakistan.

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Notes

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