

Towards Effective South Asian and International Collaboration in Library and Information Science Education and Research

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Abstract

Collaboration is the act of people coming together to achieve common objectives. There has been growing interest for regional and international collaboration in the Library and Information Science (LIS) field. Such collaboration has been for education, research, or collaboration enabled by professional associations. However, there is a lack of prior research on regional collaboration opportunities for LIS education and research pertaining to South Asia, which has more than a fourth of the world population. Using the knowledge-creation model as a theoretical lens, this study investigates the current state of LIS education and research in South Asia; the opportunities for regional and global collaboration in LIS in the eight South Asian countries; and the possibilities for the future based on these collaboration opportunities. The study will help researchers and professionals from this region to know what they have, what they lack, and how they could grow, and benefit the member countries they come from and beyond.

Keywords

Collaboration; knowledge sharing; South Asia; Library and Information Science; education; research

Introduction

Collaboration is the act of two or more persons, organizations, or other groupings coming together to achieve goals of mutual benefit or interest. It

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helps pool resources and expertise and can have intrinsic rewards, based both on the process as well as the outcome. Shah (2012) defines collaboration as “an activity of multiple parties coming together to work toward a mutually-beneficial common goal” (p.4), and likens it to (one side of a) tug-of-war, where every individual in the team is contributing one's strength to pull the rope in a particular direction to win the game (Shah, 2012; Agarwal and Rahim, 2019). Collaboration is about “sharing and exchanging of knowledge and skills” to solve problems faster through collective effort (Ocholla, 2008, p. 469). Agarwal and Rahim (2019) identified a number of determinants for successful collaboration, which could relate to individuals and motivation, timing, and the organizational and regional environment.

Researchers and practitioners in many interdisciplinary and multidisciplinary research fields have been collaborating for a long time to address shared problems. Like other disciplines and research areas, there has been a growing interest for regional and international collaboration in the field of Library and Information Science (LIS) (Virkus, 2007; Chaudhry, 2007). This collaboration has taken several forms such as collaborative research between people in different universities, regions, or countries, joint research within international research groups, faculty and students-exchange programs, visiting fellowships, regional, country, and student chapters in professional associations, regional and international conferences, seminars, workshops, and many more. Collaboration in the LIS field can be broadly classified under three categories: collaboration in education, collaboration for research, and collaboration in education and research fostered through professional associations.

As an example of collaboration in education, three European universities, Oslo University College in Norway, Tallinn University in Estonia, and Parma University in Italy collaborated to develop the International Masters in Digital Library Learning program under the Erasmus Mundus scholarship (Wenger and Snyder, 2000). In another example, the School of Library and Information Science at Simmons University has “trained over 600 international students from more than 80 countries” since its founding in 1902 and has had international collaborations with St. John’s University, Paris, Yonsei University, South Korea, and other countries where students are able to take courses at each other’s campuses (Simmons University, n.d.).

For collaboration in research, many bibliometrics studies have shown that joint research and international collaboration has been increasing among LIS researchers and professionals internationally (Agarwal and Islam, 2020; Ronda-Pupo and Katz, 2018). The co-authors of this study also serve as an example of successful international collaboration when the first author, as a doctoral student in the Japan Advanced Institute of Science in Technology, wrote to the second author in 2013 about the possibility to collaborate. Since then, we have co-published more than 15 journal and conference articles.

Various LIS associations provide a fertile ground for collaboration among researchers, practitioners, and educators. The International Federation of Associations and Institutions (IFLA), a worldwide network of library and information professionals, offers training programs, workshops, conferences, and publication platforms for LIS professionals across the world (IFLA, 2021). Other associations such as the American Library Association (ALA), the Association for Information Science and Technology (ASIS&T), the Association for Library and Information Science Education (ALISE), iConference, etc. provide platforms to that help form a greater LIS community that can learn from each other and grow together (Agarwal and Islam, 2016; Agarwal and Islam, 2020).

Enabled by technology, there are many examples of regional collaboration for LIS education and training, including in the ASEAN region (Khoo, 2013), Gulf Co-operation Council (Al-Suqri, 2012), Africa (Ocholla, 2008), and Europe (Virkus, 2007). A few studies have focused on the South Asian region, but in the context of LIS education in the countries of this region (Phuritsabam and Devi, 2009; Singh and Wijetunge, 2006; Mangla, 1994). However, all of these South-Asian studies are more than a decade old and only discussed LIS education in this region. There is a lack of studies on regional collaboration opportunities for LIS education and research pertaining to the countries of the South Asian region.

South Asia is a region comprising eight countries: India, Pakistan, Bangladesh, Sri Lanka, Maldives, Nepal, Bhutan, and Afghanistan (Figure 1). The southern region of Asia, it is defined in both geographical and

ethno-cultural terms. Together, its population is 1.891 billion, which is more than one-fourth of the world's population. The name South Asia is represented in the regional grouping – the South Asian Association for Regional Cooperation (SAARC, 2018), which, since its establishment in 1985, has provided a platform for collaboration of these countries in different areas ranging from agriculture, education, women empowerment, cultural exchange, etc.



Figure 1: Countries of the South Asian region (source: Google Maps)

Objectives and Research Questions

The South Asian region has immense potential for further enhancing LIS education and research through knowledge sharing and collaboration. The primary objective of this paper is to investigate how LIS educators, researchers, and professionals in this region could benefit from regional and international collaboration. We have three specific research questions: *RQ1) What is the current state of LIS education and research in South Asia? RQ2) What are the opportunities for regional and global collaboration in LIS in different South Asian countries? RQ3) What are the possibilities for the future based on the collaboration opportunities?*

Answering these research questions would help LIS researchers and professionals in South Asia to know what they have, what they lack, and how they could grow, and also benefit the member countries they come from and beyond.

Literature Review and Theoretical Lens

Knowledge Management

Knowledge Management is the set of processes followed in an organization (may it be a for-profit company or a non-profit such as a hospital, library, or university, or even a professional association e.g., see Agarwal and Islam, 2016) in order to help improve efficiency and effectiveness and achieve organizational objectives. With technology, infrastructure, culture, and measures serving as enablers, there are several phases of the knowledge cycle – knowledge capture and creation, knowledge sharing and transfer, and knowledge application and use (Dalkir, 2017; Agarwal and Islam, 2016; Agarwal and Islam, 2014). The knowledge exchanged in these processes can be in one of two forms – tacit or explicit (Nonaka and Takeuchi, 1995). Tacit knowledge is something that resides in our heads and is learned through experience or observing by doing. Explicit knowledge, on the other hand, is codified in books, journals, online repositories, etc. where it is captured for potential future use. Only explicit knowledge can be exchanged through documents, while the more important tacit knowledge can only be exchanged through human interaction (Agarwal and Islam, 2014). In the distinction between information and knowledge, it might help in understanding to think of ‘information’ as explicit knowledge, and ‘knowledge’ as tacit knowledge. Both types of knowledge are important and interdependent, as seen in Nonaka and Takeuchi (1995)’s knowledge creation model, which we use as a theoretical lens for the study.

Theoretical lens

Nonaka and Takeuchi (1995)’s knowledge-creation model is also called the SECI model, where S is socialization, E is externalization, C is combination, and I is internalization. Each of these represents the point of conversion between types of knowledge. See Figure 2.

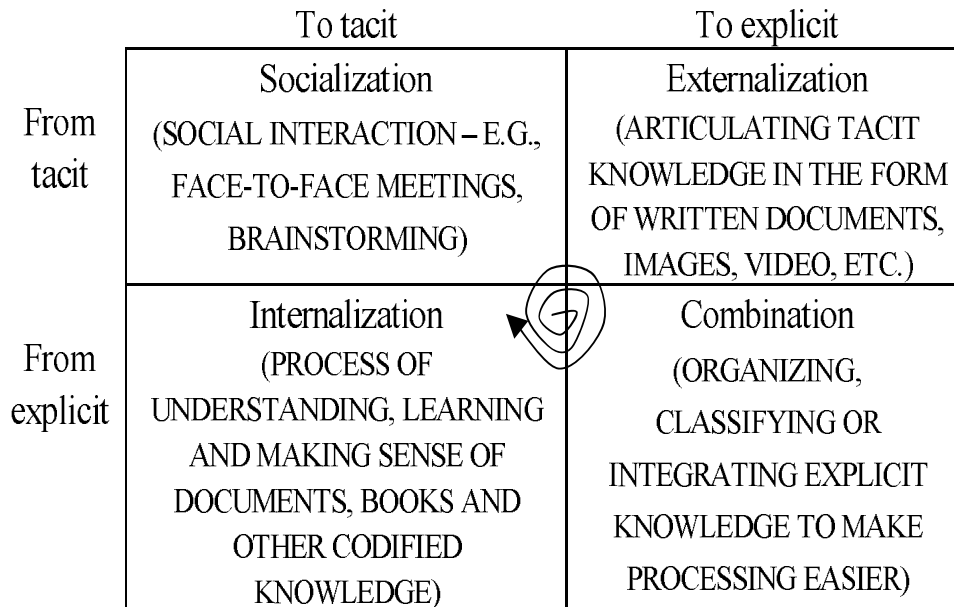


Figure 2 Nonaka and Takeuchi’s (1995) model of knowledge creation in organizations

Tacit to tacit knowledge transfer or conversion happens during the phase of socialization (top left quadrant in the figure) such as synchronous face-to-face or online interaction. Converting tacit knowledge to explicit form is the process of taking one’s internal knowledge and externalizing it in some written or recorded form (top right quadrant in the Figure). Explicit to explicit conversion happens when we choose to combine, summarize, visualize, or organize something that is already in the recorded form (bottom right quadrant in the Figure). Explicit to tacit conversion happens in the process of understanding – when we choose to internalize something in the written or recorded form e.g., when reading a book (bottom left quadrant in the Figure). The model shows how new knowledge is created in this manner within an organization. What it implies is that knowledge conversion, and thus, knowledge creation continuously takes place (the spiral shown in the model) within an organization in the simple processes of reading a book or an email (internalization), writing a letter or an email or a message (externalization), talking to someone (socialization), or writing an abstract or creating a table of contents to better organize a document (combination).

In this study, we apply Nonaka and Takeuchi's model in the context of effective regional and international collaboration in library and information science education and research in South Asia, and how such a collaboration can be understood by looking at the quadrants of the SECI model. Along with this lens, two other sources have been important. Shukla and Maurya (2018) help in understanding LIS research in South Asia, and Karisiddappa, Asundi and Lin (2018) list the LIS educational programs being offered in this region.

Current State of LIS Education and Research in South Asia

In this section, we discuss the history of the LIS education in South Asia, the current programs offered, and LIS research pertaining to this region.

A history of LIS education in South Asia

In South Asia, India has the oldest history of LIS education. In 1910, Maharaja Savajirao Gaekwad III of Baroda invited the American engineer-librarian, William Alanson Borden to create and direct a free public library system for the people of his state. Borden started the first training program for library workers at the Central Library in Baroda in 1911. A one-year postgraduate certificate program was launched in 1915 by American library pioneer Asa Don Dickinson at the University of the Punjab, Lahore. This was the first formal program in Asia and the second in the world after Columbia University (suspended in 1947 due to low enrollment, but revived in 1950). In 1929, S.R. Ranganathan introduced a certificate course at the Madras Library Association, which later moved to the University of Madras. In 1937, the course was converted to a one-year postgraduate diploma program. The first department of library science was established at the University of Delhi in 1946. It offered a postgraduate diploma in 1947 and a Master of Library Science in 1951 (which was renamed Master of Library and Information Science in 1972). A certificate course in librarianship was offered by the Dhaka University Library in 1952, but ran for only one session. The first postgraduate diploma program was established at the University of Karachi in 1956 (followed by the University of Punjab in 1959). In Sri Lanka, the first training on LIS was offered by the Ceylon Institute of Scientific and Industrial Research (CISIR) in 1957, and the postgraduate diploma on LIS was started by the University of Peradeniya. A Department of Library Science was established in 1959 at the University of

Dhaka with a post graduate diploma program (the department was renamed to the Department of Library and Information Science in 1987). The first Master's program was introduced in 1962 at the University of Karachi, where the first PhD program was offered in 1967. A PhD program in library science was approved by the University of Dhaka in 1978. In Maldives, the formal postgraduate diploma on LIS education was offered by Maldives National University in 2010. Today, while the number and size of LIS programs have grown in this region, some countries still have a minimal education in LIS. Nepal has one master's program in LIS offered by Tribhuvan University. Bhutan is in the preliminary stage of LIS education. Afghanistan does not have any LIS schools or associations at the national level. (Karisiddappa, Asundi and Lin, 2018; Kaur, 2015; Wijetunge, 2011).

LIS education in South Asia

Table 1 shows various LIS programs offered in the individual countries of South Asia, the number of universities offering them (more than 150), year first offered, and the number of LIS associations in these countries. The LIS schools and education in South Asia are quite different from those in the Americas and Europe in the aspects of accreditation, cultural emphasis, and other requirements.

Table 1. LIS degrees offered in South Asian countries

| Country | Lis Degrees Offered | No. Of Univ. Offering | Year First Offered | No. Of Lis Associations | Source |
|-------------|-----------------------------------------|-----------------------|--------------------|-------------------------|--------------------------------------|
| India | All | 128 | 1911 | 23 | Ila (2021) |
| Pakistan | All | 09 | 1915 | 1 | Malik and Ameen (2020) |
| Bangladesh | All | 12 | 1959 | 2 | Lab (2021) |
| Sri Lanka | All | 2 | 1957 | 2 | Karisiddappa, Asundi and Lin, (2017) |
| Maldives | Adv. Cert., Diploma | 1 | 2010 | 1 | De Alwis (2019) |
| Nepal | M.A. | 1 | 1995 | 1 | Tribhuvan University (2021) |
| Bhutan | Library Degrees Not Offered / Not Known | | | | |
| Afghanistan | | | | | |

All: B.A., M.A., M.Phil., Ph.D., Certificate, Diploma

LIS research in South Asia

LIS research and publication activities in South Asia has been captured in a few bibliometric studies. These studies show the existing status and growth of research here.

Siddique, Rehman, Khan, and Altaf (2020) conducted a bibliometric study covering sixty-two years (1957–2018), and saw a positive rising trend of LIS research in Pakistan, with national and international collaboration increasing and rising number of LIS publications in the last two decades. From four data sources – Web of Science, Scopus, Library and Information Science Abstract (LISA), and Library, Information Science and Technology Abstracts (LISTA), they selected 1,305 publications of Pakistani LIS researchers. The Department of Information Management, University of the Punjab was the most productive, Professor Khalid Mahmood was the top researcher with 133 publications, ‘Library Philosophy and Practice’ is the most popular journal, and ‘Pakistan Journal of Information Management and Libraries’ (PJIML) is the only journal that is indexed by the Scopus.

Sonkar (2020) analyzed LIS publications during 2014-18 in India and located 1,275 publications by Indian LIS researchers in the Web of Science. The study found continuous growth in LIS publications in India, with ‘DESIDOC Journal of Library & Information Technology (DJLIT)’ as the most popular journal. DJLIT, along with ‘Annals of Library and Information Studies’ (ALIS), is indexed by Scopus. National and international co-authorship and organizational cooperation is increasing. Gupta, BM (Emeritus Scientist) is the most prolific LIS author. Jawaharlal Nehru University and University of Delhi are on top in joint authorship of LIS publications. While authors from fifty countries published with Indian LIS researchers, USA became the top collaborator.

Past bibliometric studies on LIS research in Bangladesh are Khan et al. (1998) and Shuva and Ahmed (2007). In a study of LIS publications in Bangladesh from 1971-2020, Islam and Roy (2021) found 266 publications from Scopus and Web of Science. Department of Information Science and Library Management at Dhaka University and its faculty members have published the most in Bangladesh (with Professor S.M. Zabed Ahmed having

36 LIS publications). Publishing trends has shown positive growth during the last two decades. Of Bangladesh's two LIS journals, 'The Eastern Librarian' was launched in 1966, and 'Bangladesh Journal of Library and Information Science' (BJLIS) was launched at Dhaka University in 1998 (Ahmad, 1987; Khan, et.al., 1998). However, both journals are irregular and not indexed by Scopus, or listed in Scimago journal ranking (SCImago, n.d).

In the Sri Lanka context, Pratheepan and Suthakaran (2019) imported 1,057 LIS publications between 2009 and 2019 from Web of Science. There is positive publication growth since 2009. LIS researchers from Sri Lanka have published the most in 'The Electronic Library'. With ten publications, Surla D. has published more than others. The two Sri Lankan LIS journals, 'Journal of University Librarian's Association' and 'National Library Review' are not listed in the SCImago journal ranking (Chamani, 2008; SCImago, n.d).

In a scientometric study, Shukla and Maurya (2018) found that between 1996 and 2015, Nepal, Bhutan, Afghanistan, and Maldives collective publish in single digits and 1% of all LIS publications from South Asia. To promote LIS research in South Asia, Emerald started the 'Emerald South Asia LIS Research Fund Award' (£1,000) in 2019. The 2020 award was named in the memory of Dr H. Anil Kumar from India for his contributions to LIS (Emerald South Asia LIS Research Fund Award, 2020).

Opportunities for regional and International Collaboration in LIS – A Case Study of the South Asia Chapter of ASIS&T

Current LIS collaboration among South Asian countries

There are a few existing platforms for collaboration among South Asian LIS researches and professionals. These include consortia such as the Digital South Asia Libraries, the Digital Library Network of South Asia (DLNetSA), the Committee on South Asian Libraries and Documentation (CONSALD), and the Southeast Asia Library Group (SEALG). A number of conferences and workshops, extending to other countries within Asia, also provide avenues for LIS educators and professionals to meet and present their work. Examples of these are the Congress of Southeast Asian Librarians (CONSAL), the International Conference for Library and Information

Science Educators in the Asia Pacific Region (ICLISE), International Conference on Asian Digital Libraries (ICADL), and the Asia-Pacific Conference on Library & Information Education & Practice (A-LIEP). Apart from these, there have been limited avenues for collaboration among South Asian countries in LIS education and research.

ASIS&T South Asia Chapter: A platform for collaboration among LIS schools in South Asia

Founded in 1937, the Association for Information Science & Technology (ASIS&T) is the premier international association for researchers and practitioners from over 50 countries studying how people interact with information and technology, and innovating theories, techniques, and technologies to improve people's access to information (www.asist.org). Engagement opportunities in ASIS&T center around its committees, special interest groups (SIGs), regional chapters, and student chapters. For a long time, most regional chapters were centered in North America, with a chapter in Europe and in Taiwan. Coinciding with the ASIS&T move to go international, its name was changed from 'American Society for Information Science & Technology' to its current name in 2013. A year prior, the Asia-Pacific chapter was started.

In 2016, as Chair of the membership committee, the second author proposed starting a South-Asia chapter of ASIS&T, as one of the ways for ASIS&T to increase member recruitment and engagement in a populated region with 8 countries and one-fourth of humanity. The first author took on starting the South Asia chapter as his New Leaders Award Project in 2017 under the mentorship of the second author. At the 2017 Annual Meeting in Washington, D.C., both the authors met with Professor Kanwal Ameen from Pakistan and discussed forming the chapter. The first author and Professor Ameen went back to their countries (Bangladesh and Pakistan respectively) and actively recruited ASIS&T members. In 2018, the authors drafted the petition and by-laws for the formation of the South Asia chapter, got member signatures, and sent it to the ASIS&T Board for approval. The by-laws state that the Chair and the Chair-elect of the Chapter should be from different South Asian countries. This would allow different South Asian countries to lead the chapter. Professor Ameen (from Pakistan) became the inaugural Chair, and the

first author (from Bangladesh) was the Chair-elect and Co-chair of the newly-formed Chapter, and the second author served as the Advisor. Under the leadership of the first author, the chapter went on to win the ASIS&T Chapter of the Year in 2020. In 2020-2021, Dr. Bhakti Gala from India is the Chair, and Dr. Ruwan Gamage from Sri Lanka is the Chair-elect. The committee has representation from India, Pakistan, Bangladesh, and Maldives. There are no members yet from Nepal, Bhutan, and Afghanistan. To encourage increased membership in this region and beyond, the ASIS&T Board of Directors voted to provide free membership to information professionals from 78 Tier 2 developing countries according to WHO ranking (ASIS&T Tier 2, n.d.).

Currently, ASIS&T has 10 regional chapters and 39 student chapters in different universities (ASIS&T Communities, n.d.). Of these, the South Asia (ASIS&T South Asia Chapter, n.d.) and Africa chapters are the newest. Starting with 32 members in September 2018, and with 195 members in March 2021 and growing, the chapter provides a networking platform for South Asian information science professionals, help increase ASIS&T membership in South Asia. The networking opportunities take the form of webinars, presence in the ASIS&T Annual Meeting, regional conferences, seminars and workshops, and opportunities for collaborative research. In the short period since its founding, events where the South Asia chapter have joined hands have included the 2nd International Conference on Information Management & Libraries 2018 in Pakistan, Asia Pacific regional conference 2019 in Cambodia, Seminar on Archives, Libraries and Museums: Hubs of Preservation of Cultural Heritage 2019 India, International Symposium on Empowering Library and Information Professionals for Achieving the Sustainable Development Goals 2020, Bangladesh, and the National Institute of Library and Information Sciences (NILIS) Research Symposium on Challenges and Opportunities for Libraries in the New Normal 2020, Sri Lanka.

Discussion and Conclusions

Possibilities for the future based on regional and international collaboration opportunities in LIS

While the countries in South Asia have done well in establishing LIS education programs, and showing positive research trends in the recent decades, there is

tremendous opportunity for further growth in improving both the quantity and the quality of research and educational leadership coming from this region. The formation of the South Asia chapter of ASIS&T is only the fulfilment of the first dream for this region. LIS professionals in Nepal, Bhutan, and Afghanistan are yet to establish their presence in ASIS&T. The second dream is the leverage the South Asia chapter as a vehicle to improve research rigor to international standards, and increase the research and networking opportunities provided to students and other researchers in South Asia. Individual universities in South Asia could also follow the example of formation of the South Asia Chapter described in the previous section and form ASIS&T student chapters in their universities, which would work closely with the South Asia chapter.

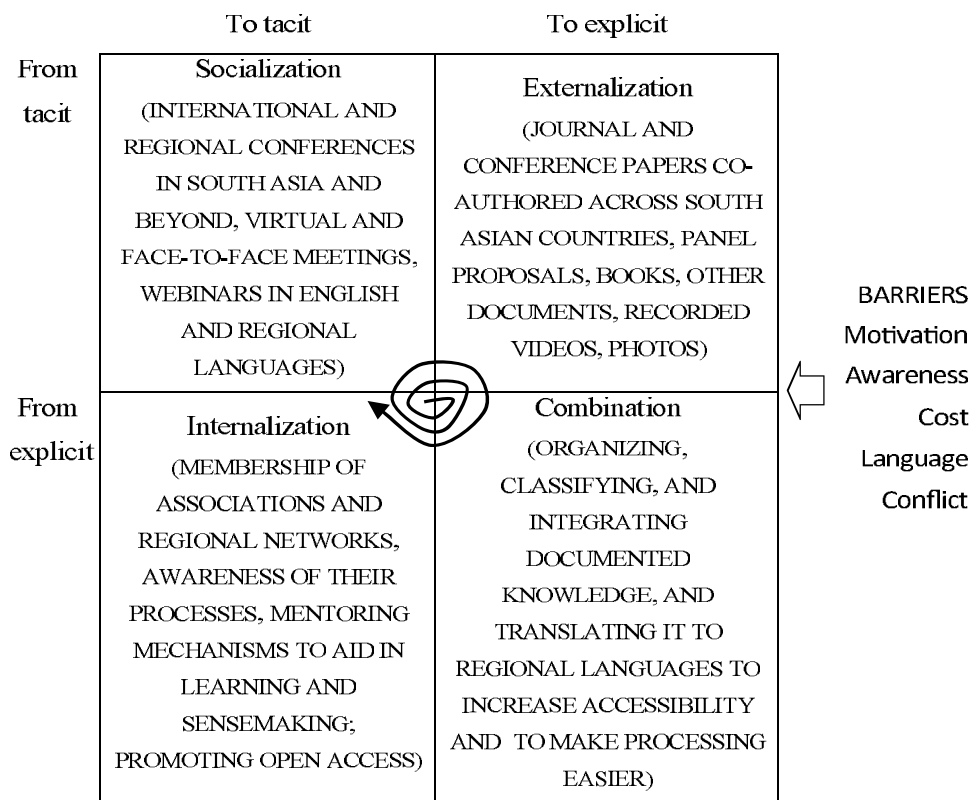


Figure 3 A knowledge-sharing model for LIS education and research collaboration in South Asia

In Figure 3, building on our theoretical lens of the SECI model, we present a knowledge-sharing model for LIS education and research collaboration in South Asia. The proposed model follows the SECI model in its four quadrants, the conversion of knowledge between tacit and explicit forms, and the spiral denoting the movement between these various knowledge creation processes. What is added in the model are barriers to collaboration and specific strategies for socialization, externalization, internationalization, and combination in the South Asian context that we discuss below.

- 1) *Opportunities for socialization:* Currently, there are a few socialization opportunities for South Asian researchers and practitioners to network and collaborate with each other for education and research listed earlier. Membership in premier international associations such as ASIS&T and IFLA and participation in their annual conferences would greatly increase the level and scope of opportunities afforded to LIS professional from this region. Regional conferences within South Asia, e.g., those sponsored by the ASIS&T South Asia chapter, would go a long way in bringing researchers in this regional closer. Motivation and awareness are barriers, which this paper aims to help bridge somewhat. Cost is a barrier, which is circumvented by travel grants and scholarships provided by associations (e.g., the annual travel grant by the ASIS&T SIG International Information Issues; Agarwal & Singh, in-press 2021, document the lives of 25 Indian students changed by a scholarship to study in Singapore which helped them discover their Ikigai or life purpose). Another barrier is language. Talks could be held in regional languages such as Bengali, Hindi, Tamil, Urdu, Sinhalese, Dhivehi, etc., apart from English. Lastly, political conflict within/among regional countries might limit/prohibit collaboration and travel within the region. In the years 2020-21, during the Coronavirus pandemic, many universities in South Asia successfully organized well-attended webinars where they invited international speakers.
- 2) *Opportunities for externalization:* Joint authorship of papers, panels, books, etc., and joint recording of videos and panels provide further opportunities for LIS professionals from different South Asian countries. This is greatly enabled by the easy availability of

conferencing tools such as Zoom, Google Meet, and Microsoft Teams. The second co-author started an initiative Project Oneness World (projectonenessworld.com) to bring interviews of people from all walks of life, and document the journeys of leading LIS authorities. ASIS&T also has an Oral History project where they interviewed information science pioneers (Williams, 2015). LIS professionals from South Asia would benefit from learning about the life and research journeys of these people.

- 3) *Opportunities for combination:* While there is a lot of research and educational material worldwide, libraries and universities of the South Asian region have been active in creating directories, digital libraries, and repositories of documents, publications, and media that would be of use to LIS professionals in their countries or the South Asian region. There are opportunities to increase awareness of these assets, improving websites for usability, and translating documents to media to regional languages to overcome the language barrier. A number of faculty are already starting YouTube channels to sensitize South Asian students of research methods (e.g., the YouTube channel 'Information, Education, and Research' started by Dr. Khalid Mahmood, and the channel 'Research Tube' started by Dr. Syeda Hina Batool, both from Pakistan).
- 4) *Opportunities for internalization:* This is where learning and understanding comes in. South Asian researchers face access issues to top journals. Promoting open access would go a long way in helping researchers. Collaboration, networking, and travel are ways to increase awareness which can sensitize students and young researchers in South Asia to various possibilities that they may not have been exposed to yet. Membership of ASIS&T and other associations, and its regional chapters e.g., the South Asia chapter, joining as officers and committee members, and attending the annual conference and other events, would help South Asian LIS professionals learn about the processes of how these large international organizations work. This would help them become active contributors and learn from the experience of researchers and experts worldwide. Towards this end, a mentoring mechanism

whereby an LIS international expert guides or collaborates with a student or faculty researcher from South Asia can be very helpful – the New Leaders Award by ASIS&T enables such a mechanism. The second author would also like to start a virtual fellowship whereby he works with about 5 LIS researchers from developing countries each year to collaborate and co-publish. The two authors of this paper are an example of such a collaboration for research whereby they have co-published more than 15 research articles since 2014 while being located and working virtually.

Using the knowledge-creation model as a theoretical lens, we have described the current state of LIS education and research, the opportunities for regional and global collaboration in LIS, and the possibilities for the future based on these collaboration opportunities for the eight countries in South Asia. The proposed knowledge-sharing model for LIS education and research collaboration in South Asia should be useful to information professionals to assess what they have, what they lack, and how they could grow and benefit from greater regional and international collaboration. However, the proposed model needs to be tested through empirical studies. Its primary impact will be when it is utilized practically to enhance collaboration for LIS education and research in the South Asian context.

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