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Aims and Scope
IFLA Journal is an international journal publishing peer reviewed articles on library and information services and the social, political and economic issues that impact access to information through libraries. The Journal publishes research, case studies and essays that reflect the broad spectrum of the profession internationally. To submit an article to IFLA Journal please visit: journals.sagepub.com/home/ifl
The Dutch library system: Past, present and future

Dutch National Organising Committee of IFLA WLIC 2023

Introduction
In this article, the Dutch National Organising Committee of the 2023 World Library and Information Congress: 88th IFLA General Conference and Assembly (IFLA WLIC 2023) presents an overview of the current state of the Dutch library system. Its origins are briefly described before focusing on the role of Dutch libraries in the 21st century, from local public libraries across the country to larger institutions such as the National Library of the Netherlands (the Koninklijke Bibliotheek, hereafter KB) and university libraries. Special attention is also given to the Dutch model, where public libraries and bookstores cooperate closely with educational institutions and other partners to promote reading.

Our libraries strive to contribute to a more inclusive society, where everyone has the opportunity and feels welcome to participate. We are proud of the strides we have made and are eager to achieve our ambitions for the future. Would you like to know more? Then please join us at the IFLA WLIC 2023 in Rotterdam this coming August.

Beginning of publicly funded libraries
The current landscape of publicly funded libraries in the Netherlands has its roots in the Age of Enlightenment. In this era, spanning the late 18th and first half of the 19th century, there was a widespread sense in the Netherlands that free access to information and culture for everyone was essential to a well-functioning society. It was in this spirit that the KB was founded in 1798, as a gift from King Louis Napoleon to the Dutch citizens. This spirit also resulted in the formation of reading societies by citizens who were eager to enlighten themselves, and subsequently in the establishment of public reading rooms for those who could not afford to read otherwise. The citizens of Rotterdam have always excelled in these initiatives (Figure 1). These citizen initiatives spawned the first publicly funded libraries at around the turn of the 20th century. Their number has now grown to 139 local library organisations in approximately 1250 locations across 342 municipalities, covering the whole of the Netherlands and serving 3.8 million library members, of which 64% are under the age of 18.

Public libraries in the 21st century
Thanks to their wide reach and general accessibility, public libraries play an important role in the dissemination of information, knowledge and culture in the Netherlands – perhaps now more than ever. The Dutch government plays an important role in this. The government’s involvement in public library services is generally based on Article 7 of the constitution, in conjunction with Article 10 of the European Convention on Human Rights and Article 19 of the Universal Declaration of Human Rights. These articles safeguard freedom of thought and speech, which entails the possibility for every citizen to obtain information freely. In its Library Manifesto, UNESCO (1994) translates these general principles into duties for governments and the library sector. These general provisions are reflected in the Library Act of 2015, which positions public libraries as gateways to information, education and culture. As such, public libraries fundamentally stand apart from other providers of information by working on the basis of a number of public values: reliability, independence, authenticity, uniformity and accessibility. These public values apply to both the physical and the digital domains.

Visiting and using the services of a library thus contributes to the democratisation of society. Of course, people can still borrow books and other materials from libraries, and find information both offline

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and online, but the purpose of a library is no longer just to lend books. As a ‘third place’, libraries offer many more facilities and possibilities. They are a place where people can meet and engage in discussion, and thus become acquainted with other cultures and art. Libraries collaborate with schools and organise a multitude of activities, such as reading hours, exhibitions and language lessons for non-native speakers, including refugees and asylum-seekers. There are often many volunteers to support these activities. In the Netherlands, public libraries offer facilities that can be found in every library, but they also offer resources and activities in response to local demand.

Libraries are also a place to work on the Sustainable Development Goals. Sustainable development is a broad theme, encompassing different areas ranging from climate change to social inequality. There is a huge amount of knowledge and information produced and shared on all of these topics every day – and much of this can be found in libraries. It is not easy for the average citizen to become familiar with the issues and all the associated information. The United Nations has therefore taken on an important role in generating international attention with regard to sustainable development. In its 2030 Agenda for Sustainable Development, which was drawn up to promote worldwide cooperation towards a better world, the United Nations focuses on 17 key goals. These are the Sustainable Development Goals, which libraries want to help realise. Considering these 17 Sustainable Development Goals, libraries feel that the following three best fit the agenda of the sector currently: reducing inequality, good education, and good health and well-being. Of course, libraries are also continuing to make efforts in other areas relevant to the Sustainable Development Goals.

The KB: our world is built with words and shaped by people

The KB connects people and words, thereby contributing to a smarter, more skilled and creative country, both now and for the future. The KB makes research, reading, discovery and lifelong learning possible for everyone in the Netherlands. As a broad and multifaceted organisation, the KB ensures that its collection remains visible, usable and sustainable for all people and every type of use. In addition to tasks in the domains of science and heritage, in 2015 the KB was assigned a role in the domain of public libraries.
Founded in 1798, over the course of the past 225 years, the KB has grown into a nationally and internationally renowned scientific institution with almost 500 employees (Figure 2). Since 1974, the KB has collected one copy of every publication (book, magazine and newspaper) published in the Netherlands. Its repository contains 125 kilometres of books, newspapers and magazines, and it was the world’s first institution to boast a digital archive for publications. The KB stores an ever-growing number of digital publications in its e-Depot – the repository for all digital publications managed by the KB. It now contains over 40 million publications. Over 6 million Dutch people use the KB’s digital services, including the online library, Delpher and the Digital Library of Dutch Literature.

The KB plays an important coordinating role in the network of public libraries. Dutch library organisations differ in scale, in size of territory, and in their level of administrative control (local, provincial, national), but they are not entirely separate organisations. They are connected in a network as part of a greater whole. Working together in a network is an essential characteristic of the Dutch library system, and this has been intensified in the past few years. At the same time, the KB has shifted its approach to network collaboration from an institutional purpose towards a human-centred purpose, based on three major societal challenges: to preserve a literate society, to stimulate participation in the information society, and to empower people through lifelong learning. Public libraries, provincial support institutions and the KB jointly determine the course of the collective efforts in the ‘Network Agenda’.

The KB supports academic research in the Netherlands by providing access to its physical and digital collections, and the relevant knowledge it has acquired and recorded since its foundation. It is a partner in CLARIAH-PLUS, an infrastructure that offers researchers in the humanities access to large collections of digital text and innovative, user-friendly applications for data processing. Both the data and the applications are managed sustainably so that they will be of use to academics in the future – from literature experts, historians and archaeologists to linguists, speech technicians and media scientists.

The KB promotes open science and, more specifically, open access, making publicly funded academic publications freely available for people to consult and
reuse. Together with other organisations – including the Netherlands Organisation for Scientific Research, the Association of Universities in the Netherlands, the Association of Universities of Applied Sciences, the Royal Netherlands Academy of Arts and Sciences, and the information technology innovation cooperative SURF – the KB is working on its open access ambitions through the National Platform Open Science, which promotes the transition towards open science.

**University libraries**

The Netherlands has 14 universities and therefore as many university libraries. The libraries differ in nature, mainly due to the history of the universities. Universities were established in the Netherlands in the late 16th and early 17th century. A number of them still exist: the universities of Leiden (1575), Groningen (1614), Amsterdam (1632) and Utrecht (1636; see Figure 3). Specialised universities emerged in the 19th century – namely, Delft University of Technology (1842) and Wageningen Agricultural University (1876). Between 1850 and 1949, the Dutch population tripled and the number of universities grew. The youngest universities are the Open University (1984) and the University of Curaçao (1979). These historical developments are reflected in the collections of the university libraries. The older universities have libraries with extensive special collections, some of which are internationally renowned. Several pieces from the university collections are part of the UNESCO Memory of the World Register.

Most Dutch universities have a strong focus on research, and supporting open science is one of their key ambitions. Together with the KB, they make up the Universiteitsbibliotheeken & Nationale Bibliotheek (UKB), the Dutch academic library consortium. The UKB aims to support and expedite scholarly and scientific advances by sharing, concentrating and bringing together expertise in national and international networks. The UKB’s focus areas are as follows:

1. **Sustainably accessible collections and their utilisation**: intensifying nationwide cooperation with respect to facilitating education and research by finding relevant scientific information in digital and physical sources and making this information accessible in a sustainable way, as well as enhancing (digital) information literacy among students (and scholars).
2. Innovation in a shared knowledge infrastructure: using smart search technology and a linked open data infrastructure that helps students, lecturers and researchers to obtain the knowledge they are looking for. This ranges from sharing knowledge to jointly developing knowledge, and makes use of new technologies such as artificial intelligence.

3. Promotion and facilitation of open knowledge for and by Dutch universities: promoting open science and education, as well as helping researchers, lecturers and students make optimum use of this knowledge; in addition, giving the outside world access to the scientific knowledge of Dutch universities, and demonstrating and highlighting the societal relevance of Dutch education and research.

4. Inspiration and innovation in user applications: sharing knowledge and inspiring each other to work towards improving users’ experiences – for example, by creating inspirational hot spots for learning, production and research (both on campus and online), and by jointly developing new services.

5. Development of competencies and skills: working towards the sustainable employability of its employees and promoting its innovation role through knowledge sharing, direct collaboration and joint competency development.

The UKB and its individual members also attach much importance to the exchange of knowledge and experiences with international colleagues. The IFLA WLIC 2023 will offer a perfect opportunity to present the results and outcome of the developments in the Netherlands regarding these topics, and to share and discuss them with international parties, so that we can all learn and benefit from each other.

The Dutch model

Libraries have been highly regarded in the Netherlands for many centuries. Publicly funded library collections emerged at the beginning of the 17th century. Historical events explain the strong tendency towards equality and democracy, which have become an integral part of the national character. Information and education for every citizen to improve society has long been an important national creed. It is not surprising that libraries have such a respected status in the Netherlands. The core functions of public libraries are even laid down in the law. The Dutch library system has many unique characteristics.

The strengthening of nationwide collaboration has the aim of broadening the significance of libraries in close consultation with all participating parties in the field. The cooperation in this system has many of the characteristics of the well-known Dutch ‘polder model’ – the decentralised investment of responsibilities and a joint agenda based on consensus.

Public libraries and bookstores in the Netherlands have been working closely with educational institutions to promote reading for many years. Several national programmes have been developed. Examples are the annual Children’s Book Week, launched in 1955, and the annual National Reading Aloud Contest, which recently celebrated its 30th anniversary. Funded by the Ministry of Education, Culture and Science, Stichting Lezen (the Reading Foundation) is devoted to promoting reading in both Dutch and Friesian (the second official language of the Netherlands). Stichting Lezen wants to ensure that all children and young people have an environment that offers them the opportunity to discover the pleasure of reading and to choose books that suit their interests. In this way, they can grow up to be lifelong readers.

One of Stichting Lezen’s programmes is Kunst van Lezen (the Art of Reading), a national reading-promotion programme targeting children and youngsters from birth to age 18 (with an emphasis on birth to 12). Kunst van Lezen consists of three components: BookStart (preschool), The Library in School (primary and secondary schools), and strategic reading-promotion networks. In this programme, which is implemented jointly with the KB, public libraries play a central role in engaging their audience, promoting reading and preventing illiteracy. This includes a digital system to monitor the impact of the programme on pupils’ reading behaviour and teachers’ reading-promotion behaviour.

The Reading Coalition was founded in 2012 and now comprises Stichting Lezen (Chair), Stichting Collectieve Propaganda van het Nederlandse Boek, Stichting Lezen en Schrijven, the Literatuurmuseum and Kinderboekennhuis, the KB and Vereniging van Openbare Bibliotheek, and the Nederlands Letterfonds. The Coalition has announced its ambition that, by 2025, no child will leave primary school with a reading-skills deficit and all adults will be literate or on the way to becoming literate.

In 2019, the Dutch Education Council and Council for Culture jointly released a report titled ‘Lees! Oproep tot een Leesoffensief’ (‘Read! A call for a reading campaign’). The report was motivated by a worrying decline in reading results among Dutch young people – also in comparison to other countries. In October 2020, 18 organisations in the education,
culture and youth health-care sectors raised the alarm in a collective manifesto. They urgently called on both the education and culture departments of the Ministry of Education, Culture and Science to jointly pursue an active and inclusive reading policy, with a focus on the pleasure of reading.

Similarly, in the ‘Bibliotheekconvenant 2020–2023’ (‘Library Covenant 2020–2023’), the library system and the municipal, provincial and national authorities pledge to concentrate collectively on the promotion of reading, digital inclusion and lifelong learning. Various regional reading campaigns have been launched since – for instance, in the cities of Rotterdam and The Hague and the provinces of North Holland and North Brabant.

**Conclusion**

The Dutch library system rests on a solid historical foundation and is growing and changing every day to keep up with the times. In addition to the traditional role of providing books and information to all citizens, libraries have become institutions at the centre of the public domain, helping citizens find their way in the digital world and enhancing their language, reading and digital skills. Libraries offer activities to broaden citizens’ horizons, and a place to work and study or to meet new people.

**IFLA WLIC 2023, Rotterdam**

It is hoped that this article will inspire you to reflect on your own library system and to come to IFLA WLIC 2023 to meet not only Dutch librarians, but also librarians from across the world. The Dutch National Organising Committee is honoured to host this year’s IFLA WLIC in the Netherlands. We look forward to welcoming you to Rotterdam and to discuss the similarities and differences between our systems. Learning from each other and finding new inspiration is an important part of the congress experience.

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“Libraries model sustainability”: The results of an OCLC survey on library contributions to the Sustainable Development Goals

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Abstract
A survey of more than 1700 library staff worldwide identifies how libraries contribute to five of the United Nations Sustainable Development Goals. The similarities between academic and public libraries’ adoption, contribution, and use of the Sustainable Development Goals are reported. The results indicate that library staff do substantial work around all five of the selected Sustainable Development Goals. Sometimes the activities are a result of integrating the Sustainable Development Goals into strategic planning, but at other times the activities are a result of programming that library staff undertake as part of their mission. The majority of the respondents have not incorporated the Sustainable Development Goals into their strategic planning. However, the libraries’ support of the Sustainable Development Goals is demonstrated by the activities the library staff are engaged with and the respondents’ comments. The activities identified here can be used to inform library strategic planning and to help library staff maximize their library’s impact on sustainable development.

Keywords
Strategic planning, marketing, advocacy, management, administration, public libraries, types of libraries and information providers, academic libraries, Sustainable Development Goals, inequities, collaboration

Introduction
Libraries play an important role in shaping the United Nations’ Sustainable Development Goals (SDGs). During the IFLA Congress in Lyon, France, in 2014, the Lyon Declaration on Access to Information and Development was signed by more than 600 libraries, library organizations, and others. It called on the United Nations to include access to information in the post-2015 Sustainable Development Agenda. The Declaration emphasized the importance of access to information in order for people to exercise their rights.

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engage in economic activities, learn new skills, express their cultural identity, and take part in decision-making within their communities (IFLA, 2014).

The SDGs were adopted in 2015 and include 17 overarching goals for global development by the year 2030. According to the United Nations (2022), the SDGs “are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice.” Each goal has several subgoals, with targets to measure progress attached. The Lyon Declaration influenced the creation of Subgoal 16.10, which seeks to protect and promote public access to information (Garrido and Wyber, 2019). Our research contributes to the literature by addressing whether the SDGs are integrated in libraries’ strategic planning. If so, what library activities do staff perceive impacting the SDGs?

The research questions were:

R1: Are library staff aware of the SDGs?
R1a: If aware of the SDGs, are library staff integrating them into their strategic planning?
R1b: If not aware of the SDGs, are library staff considering the integration of the SDGs into their strategic planning?
R2: Which of the five specifically identified SDGs do staff perceive libraries impacting the most?
R3: What activities are library staff doing to further the five specifically identified SDGs?
R3a: To what degree (i.e. do on a regular basis; do on occasion; used to do this but no longer do; never done this; not sure) has the library participated in activities to support the five identified SDGs?
R4: What other SDGs do staff perceive libraries impacting the most, and why?

From November 2020 to January 2021, OCLC, a global library cooperative organization, conducted an online survey of library staff worldwide to identify how library activities were advancing progress towards five of the United Nations’ SDGs. OCLC Global Council delegates shortlisted the five SDGs where they believed libraries could have the greatest impact: Quality Education (SDG 4), Decent Work and Economic Growth (SDG 8), Reduced Inequalities (SDG 10), Peace, Justice and Strong Institutions (SDG 16), and Partnerships for the Goals (SDG 17). The global survey, launched in November 2020, focused on the specific activities that library staff are doing to further these five SDGs, awareness of the SDGs in general, and how they were integrated into library strategic planning. The survey was disseminated widely by the OCLC Global Council delegates and via social media. Since library staff have been addressing many of these areas long before the SDGs were adopted, the researchers were interested in investigating the connection between the adoption of the SDGs and these activities.

Here, we present some of the findings from this survey. In particular, we discuss library staff’s awareness of the SDGs, the extent to which the SDGs have been incorporated into strategic planning, and some of the most common library activities for each of the five selected SDGs. The results indicate that, whether intentionally or incidentally, some libraries incorporate the SDGs into their planning and include SDG-related activities through their programs and offerings. Overall, library staff saw Quality Education as the top goal where they felt that libraries could have an impact. There was, however, variation in SDG activity based on region and library type. This is not surprising, as library staff serve their own unique communities and structure activities based on their communities’ needs.

**Review of literature on libraries’ impact on the SDGs**

Libraries play an important role in achieving the SDGs. As Omona (2020: 15) explains, “building an ideal nation requires a holistic approach and all facets of human activities and indices of nation building must be taken care of if all SDGs are to be achieved.” In some cases, libraries contribute to the SDGs through activities based on explicit strategic choices. More commonly, however, it is as a result of their overall mission, with activities that they were conducting long before the SDGs were adopted. Gayshun (2016) provides examples of how libraries have impacted all 17 of the SDGs—for instance, they have contributed to ending hunger (SDG 2) by helping farmers apply for subsidies; fostered innovation (SDG 9) through supporting open science; and helped the climate (SDG 14) through providing conservation education. Library associations have shown that the SDGs can act as a framework for evaluating library impact. For example, the European Libraries and Sustainable Assessment Working Group called for indicators of library impact to be framed around the SDGs (European Bureau of Library, Information and Documentation Associations, 2022). Similarly, IFLA (n.d.) created a storytelling manual to help libraries describe their activities in the context of the SDGs.

One of the main ways that libraries have been involved in furthering the SDGs is through providing access to information. This directly contributes to SDG 16, which, as mentioned above, has access to information as one of its subgoals. Garrido and Wyber (2019: 7) argue that access to information is “not an end in itself,
but rather a driver of progress across the board. It empowers people and communities, laying the foundations for equality, sustainability and prosperity.” They argue that there are four important dimensions for access to information to be meaningful in promoting development: an infrastructure for access to information; a positive social context for its use; community members capable of accessing information; and a favorable legal and policy landscape (Garrido and Wyber, 2019).

Libraries also are essential in bridging the digital divide—or inequality in access to computers and the Internet and the skills and confidence to use them—that exists globally. In many parts of the world, libraries are the only source of computer and Internet access (Sey et al., 2013). Even when individuals have private Internet access, public Internet access remains an important complement to it. In a study of teenagers in South Africa, Walton and Donner (2012) found that teenagers had different forms of Internet access (e.g., mobile phones and library computers) and developed use patterns around the strengths and weaknesses of each of these forms of access. A study of libraries working to bridge the digital divide in Lithuania found that libraries are important for creating digital inclusion, not only because they loan out materials, but also because they conduct digital literacy training and work with users to help increase their information capabilities (Manžuch and Macevičiūtė, 2020).

Chowdhury and Koya elaborate on the necessity of digital literacy to achieve the targets in the SDGs:

> While these [data management] skills are essential for information professionals, some of these may also be helpful for students, researchers, professionals and managers in every discipline and sector so that everyone becomes familiar with the basic data skills...[These] can be promoted through education and training in sustainable data and information practices. (Chowdhury and Koya, 2017: 2133–2134)

In addition to providing access to information and information literacy, libraries contribute to sustainable development through fostering social capital within their communities—a contribution that researchers have increasingly come to recognize. Social capital refers to the connections among individuals within a community and the norms of reciprocity and trust between them (Putnam, 2000). In a study of differences between northern and southern Italy, Putnam et al. (1994) argue that the economic differences between the two regions can be attributed to the differences in social capital. In Putnam’s (2000) study focused on the USA, he argues that there has been a decline in social capital over the past several decades.

As one of the few centers within the community that can be considered a welcoming environment, where people can congregate with no expectation of spending money, libraries can help bring members of a community together. In a 2020 survey of Danish citizens, Lauersen (2021) developed four dimensions for understanding the impact of this; libraries can be a haven for people to immerse themselves; they can offer perspective; they can stimulate creativity; and they can form and maintain community. Libraries’ connections within the community have allowed them to generate social capital within parts of the community that other organizations are not always able to reach. A study of refugee integration by Oduntan and Ruthven (2021) highlighted the importance of information professionals in this regard, showing that people are an important source of information as refugees navigate integration systems and legal processes.

This role as a community center can help generate social capital by fostering bridging and bonding between different parts of the community. This topic received widespread attention in 2018 when Klinenberg wrote a popular book arguing that libraries can be a third place, or a place where members of the community can come outside of home and work, which can bring people together to generate social capital. Klinenberg (2018) was building on a larger body of academic literature that focuses on the role that libraries play in generating social capital.

Varheim (2007) was an early proponent for research into how public libraries create social capital. Varheim (2011) has shown that libraries are able to generate social capital among immigrant communities through activities that are designed to appeal to immigrant populations, such as English for Speakers of Other Languages classes and civics programs. He has also demonstrated that libraries were a key part of the recovery efforts after a tsunami in Japan (Varheim, 2015). Cox and Streeter (2019) have reported that Americans who live close to amenities like libraries feel greater levels of social connection with their communities. Ferguson (2012) argues that libraries can generate additional social capital through community outreach, provision of meeting spaces, and provision of universal spaces. All of these studies provide examples of the different ways that libraries benefit community development through creating social capital.

There are also studies addressing green libraries and environmental sustainability. For example, Mathiasson and Jochumsen’s (2022) recent literature review indicated that the number of research
publications on the topic of libraries and librarians working with or contributing to sustainability and sustainable development has grown since the late 1990s, with notable increases since the 2010s. However, they contrast the vast number of publications on green libraries with the few reviews of research on libraries, sustainability, and/or sustainable development. The literature on sustainable architecture (e.g. Hauke et al., 2021) and green information literacy (e.g. Kurbanoğlu and Boustany, 2014), and best practices for environmental sustainability in academic libraries (e.g. Jankowska, 2014), is beyond the scope of this article. This research addresses the five specific SDGs that were identified by the OCLC Global Council delegates as the ones that libraries are most likely to impact.

Kosciejew (2020) noted that the emerging library and information science literature addressing the Sustainable Development Agenda concentrates on case studies of the role of libraries or librarianship in specific countries related to the SDGs. Edwards (2018: 7) concluded that the research indicates that quite a bit of what libraries are already doing aligns with the SDGs but “librarians and information professionals need to find better ways to communicate and assess their contributions as well as new ways to build partnerships and collaborations towards SDG achievement.”

While previous research provides evidence that libraries perform essential functions in the achievement of the SDGs in general, little work has been done to identify the ways in which the SDGs are used in library planning and how library activities could impact the SDGs. The sparsity of research in this area provided the impetus for the survey that OCLC conducted to identify the library activities that can further the SDGs, and if and how the SDGs are being considered and integrated into library strategic planning.

**Research design**

The OCLC Global Council is made up of 48 member-elected library leaders from around the world to represent library interests from each of OCLC’s three Regional Councils and help inform OCLC strategic directions. In March 2020, the Global Council selected the SDGs as its 2020–2021 area of focus. Activities around this area of focus included research and engagement events that were designed to identify how libraries can further the SDGs and to help library staff include the SDGs in their strategic planning. As part of this activity, OCLC disseminated a survey to library staff worldwide to identify the specific activities that they are doing to address the SDGs.

Prior to the survey, researchers at OCLC conducted three virtual focus-group interviews (for the Focus Group Protocol, see Appendix 1) with a total of 16 Global Council delegate participants and a survey that was completed by 40 OCLC Global Council delegates (Cyr and Connaway, 2020). One major goal from this was to identify the five SDGs that the Global Council believed libraries could have the greatest impact on, which would then be used to design the survey distributed to the broader library community. The five SDGs selected from this process were:

- **SDG 4: Quality Education**
- **SDG 8: Decent Work and Economic Growth**
- **SDG 10: Reduced Inequalities**
- **SDG 16: Peace, Justice and Strong Institutions**
- **SDG 17: Partnerships for the Goals**

For each of the five SDGs chosen, the researchers identified common library activities that support the goals based on a literature review of libraries and their impact on the SDGs, and the discussion in the virtual focus-group interviews. For example, under SDG 4 (Quality Education), some of the activities included in the survey were: “Offer training/instruction/classes/courses, etc. for students, faculty, and/or staff”; “Provide services and/or facilities specifically for remote learning”; and “Provide technology hardware for teaching and learning (e.g. Chromebooks, laptops, tablets).” Academic library respondents and public/other library respondents received different lists of activities, though many were similar.

A survey was conducted from 9 November 2020 to 30 January 2021 (see Appendix 2). An invitation to participate in the survey was shared with OCLC Global Council delegates on 9 November 2020, who were encouraged to share the survey link within their networks. Invitations to participate in the survey were also shared with previous IFLA/OCLC Fellows online, through the OCLC Community Center and through OCLC social media channels such as Facebook, LinkedIn, and Twitter. It was a purposive convenience sample that also relied on the snowball sampling technique to identify and include global library staff.

In the survey, the respondents were asked about the type of library in which they work, the community size, and the country where their library is located. They were given a list of between six and nine activities for each of the five SDGs (35 activities in total) and asked to indicate the degree to which their library participates in each activity. The choices for answers were: “We do this on a regular basis (e.g., daily, weekly, monthly, etc.)”; “We do this on occasion or
as the need arises”; “We used to do this but no longer do”; “We have never done this”; and “Not sure.” For each SDG, the respondents also were given an open-ended text box where they were asked to provide and describe examples of activities that their library has done in the last five years related to the SDG.

In addition to being asked about library activities, the respondents were asked about their familiarity with the SDGs; where they first learned about the SDGs; the extent to which the SDGs are incorporated into their library’s strategic planning; how they would rank the five chosen SDGs in terms of the level of impact libraries could have on them; and which SDG not included in the survey they believed that libraries could most impact. If the respondents were not familiar with the SDGs, skip logic was used to omit any questions specific to familiarity with the SDGs or incorporation of the SDGs into strategic planning. The respondents were then asked questions about the perceived impact of the library’s activities on the five identified SDGs (for the complete survey, including skip logic, see Appendix 2).

The online survey had 1722 respondents in total. As shown in Figure 1, 65% (n = 1125) of the respondents came from the Americas; 26% (n = 448) from Europe, the Middle East and Africa; and 9% (n = 148) from the Asia-Pacific. Sixteen countries represent the Americas, with the majority of the responses coming from the USA (n = 973) and Canada (n = 75). Within Europe, the Middle East and Africa, the largest groups of respondents were in Italy (n = 69) and Germany (n = 46). The Asia-Pacific comprises 20 countries, with the most responses coming from Taiwan (n = 30), Australia (n = 24), and the Philippines (n = 24).

**Figure 1. Respondents by region (N = 1722).**

Fifty percent (n = 866) of the respondents represented academic (or educational) libraries. As shown in Figure 2, nearly a third (31%, n = 533) were from public libraries and 19% (n = 323) were from other library types, such as national, government, corporate, law, museum, and medical libraries, as well as research centers/institutes and consortia.

**Figure 2. Respondents by library type (N = 1722).**

**Results and discussion**

To answer question R1 (Are library staff aware of the SDGs?), the respondents were asked: “How familiar are you with the United Nations’ Sustainable Development Goals (SDGs)?” Nearly two-thirds (63%) of the total respondents reported that they are at least somewhat familiar with the SDGs. The respondents in the Asia-Pacific region (82%) and Europe, the Middle East and Africa region (78%) are more likely to be at least somewhat familiar with the SDGs compared with those in the Americas (54%). The respondents also were asked how they first learned about the SDGs. More than a quarter learned about the SDGs from OCLC (28%) and IFLA (27%). About a fifth learned about them from news sources (20%), the United Nations (18%), at a conference or other event (17%), or from a colleague (16%). One percent (n = 17) of the respondents first learned about the SDGs from the Association for Information Science and Technology.

To answer questions R1a (If aware of the SDGs, are library staff integrating them into their strategic planning?) and R1b (If not aware of the SDGs, are library staff considering the integration of the SDGs into their strategic planning?), the respondents were asked: “To what degree, if any, has your library
incorporated the SDGs into your strategic planning?" While fewer than a tenth (6%) of the total respondents have explicitly referenced the SDGs in their strategic plans, 30% have considered the SDGs as part of their strategic planning efforts even though they do not explicitly reference them; 41% have not incorporated the SDGs and just under a quarter (23%) are not sure (Figure 3).

Some variation by region is worth noting. The Americas had the highest percentage (52%) who did not incorporate the SDGs in their strategic plans, compared to 26% in Europe, the Middle East and Africa and 28% in the Asia-Pacific region. Similarly, the Americas had the lowest percentage (2%) who explicitly referenced the SDGs in their strategic plans, while the Asia-Pacific region had 9% and Europe, the Middle East and Africa had 13%.

Figure 4 shows the average number of SDG-related activities that academic and public library staff regularly do in relation to how the SDGs are incorporated in their strategic planning. On average, academic library staff who explicitly referenced the SDGs in
their strategic planning did almost 13 activities regularly. Those who did not explicitly reference the SDGs but considered them as part of their strategic plan did a little more than 11 activities on average, while those who did not incorporate the SDGs did a little under 10 activities. For public library staff respondents, there is a similar relationship, though the impact is not quite as strong. Public library staff who explicitly referenced the SDGs or considered them as part of their activities did an average of a little more than 11 activities regularly, while those who did not incorporate them did a little under 10 activities regularly. This data indicates that library staff who explicitly or implicitly consider the SDGs in their strategic planning also tend to carry out more SDG-related activities. There could be a relationship between SDG-related activities and the explicit or implicit consideration of the SDGs in strategic planning.

Library impact on top-five SDGs

To answer question R2 (Which of the five specifically identified SDGs do staff perceive libraries impacting the most?), the respondents were asked: “Out of the following five SDGs identified by your elected OCLC Global Council delegates, please rank where you think libraries could have the greatest impact.” As shown in Figure 5, the respondents from all regions and library types ranked SDG 4 (Quality Education) the highest. This goal has an average ranking score of 4.5 out of 5. SDG 10 (Reduced Inequalities), SDG 16 (Peace, Justice and Strong Institutions), and SDG 8 (Decent Work and Economic Growth) were all ranked similarly near the middle, with SDG 17 (Partnerships for the Goals) having the lowest average ranking of any of the five SDGs.

To answer question R3 (What activities are library staff doing to further the five specifically identified SDGs?) and R3a (To what degree has the library participated in activities to support the five identified SDGs?), for each of the five identified SDGs, the respondents were asked how frequently their library participated in a list of activities identified from the literature and the virtual focus groups conducted by OCLC. The results and discussion follow.

SDG 4: Quality Education. Quality Education was the top SDG that respondents of all library types thought libraries could have an impact on. Almost all of the respondents said they offered training, instruction, classes, or courses (see Figure 6).

Seventy-six percent of the academic library respondents said that they regularly offered training, instruction, classes, or courses for students, faculty, and staff, and another 21% said that they did so on occasion. In the open-ended section of the questionnaire, the respondents were asked to describe examples of their library’s activities that related to Quality Education. The most mentioned example was library or information literacy
instruction, which 59% of the academic library respondents discussed. One academic library staff member in the Bahamas described the diverse types of instruction that their library provided:

We provide new students with Library Orientation classes. We also provide research assistance for students completing course assignments. We offer lecture series on relevant, historical and current events in our country. We have students visit other countries for worldview exposure, during their course of study.

The second most frequent activity was providing services or facilities specifically for remote learning. Seventy-four percent of the respondents said that they did this on a regular basis and another 19% said that they did it on occasion. A majority of the academic library respondents also either regularly or occasionally assisted with the delivery of course content (76%), and provided technology hardware for teaching and learning (72%). As one academic library staff member in the USA explained: “We are the first stop for technology and writing support. We create videos and assist patrons with research strategies and provide good resources.”

Among the public and other types of libraries, the top activity for Quality Education also was providing training, instruction, courses, and classes for the community, with 56% of the respondents doing this regularly and 28% doing it on occasion. A majority of the public and other library type respondents also said that they provided services or facilities for remote learning, with 40% doing this regularly and 35% doing this on occasion. As one Canadian public library staff member explained: “The public library is the cornerstone of equal access to education and learning in any community. We work with our communities to offer free and relevant programming and collections that meet our community needs.”

When describing examples of activities, the top example, by a large margin, was outreach and programming (72%) for things like English-language classes, computer literacy, book clubs, and finance. Thirty-three percent also discussed providing educational support and resources—for example, online training websites and test proctoring services.
A regression analysis to test for the relationship between awareness of the SDGs and the number of library activities supporting them was conducted. The results indicate that the public library respondents who were aware of SDG4 were expected to do 11.5% more activities related to the goal than those who were not. However, the effect size for academic libraries was not strong (3.3%), indicating that awareness of SDG 4 does not impact the academic library activities supporting this SDG. No other test indicates that awareness of SDGs supported activities in public or academic libraries.

SDG 8: Decent Work and Economic Growth. The most commonly reported activities by all library types to support Decent Work and Economic Growth were library involvement in various types of strategic planning (Figure 7). As one academic library staff member from the USA noted:

We are currently finalizing our library strategic plan in alignment with the campus strategic plan... Career Services reserves multiple rooms early each spring for mock job interviews in the library and students have used library study rooms for virtual interviews for internships and jobs after graduation. We have partnered with Financial Aid to provide financial literacy programs and we are looking to be more involved in business development, entrepreneurship, and innovation in our new strategic plan. We train our student employees to articulate the transferability of skills and experience working in the library to future job opportunities e.g. students should understand that they are engaged in customer service rather than just checking out books at the circulation desk.

The other activities supporting this SDG showed more difference by library type. While a majority of libraries reported activities supporting this SDG, the activities were more often done occasionally than regularly. Hosting office space or workspace for other campus departments was among the most frequently reported activities by academic library respondents to support Decent Work and Economic Growth. Forty-one percent indicated that they did it regularly and another 32% said that they did it on occasion. One academic library staff member in Japan described their activities in this regard: “Visiting scholars at the university are provided with (shared) offices and the use of a shared printer. Librarians are involved with any campus redevelopment project that involves expanding or moving a library or student reading room.” Academic library staff also frequently participated in campus strategic planning, with 33% of the respondents doing this regularly and another 50% doing it on occasion. Fifty-nine percent of the respondents also either regularly or occasionally held strategic planning meetings with other campus departments.

**Figure 7.** Percentage of respondents reporting regular or occasional activities to support SDG 8: Decent Work and Economic Growth (N = 576 academic libraries, N = 533 public libraries). Note: Some questions were only applicable to public libraries and others only to academic libraries, so some responses only have data from one type of library.
In the open-ended question, the most frequently mentioned example of academic library activity (28%) to support Decent Work and Economic Growth was hosting events like job fairs, author visits, or industry events. One academic library staff member in Hungary explained that their library “developed LGBT [lesbian, gay, bisexual, transgender] health research to promote decent work and economic growth of LGBT youth and persons.” Twenty-one percent of the respondents also mentioned that they helped prepare résumés or job applications, or helped students develop interview skills.

Among the respondents from public libraries and other library types, the top activity was offering job-preparedness, job-searching, and job-seeking advice. Twenty-four percent of the respondents at public and other libraries said that their library did this regularly and another 33% said that they did this on occasion. Participation in community-wide strategic planning and strategic planning with other community organizations was also common for these libraries, with 56% and 50%, respectively, doing it either regularly or occasionally. One public library respondent in Australia listed several different examples of activities that they did at their library:

- Create a CV [curriculum vitae], cover letter workshops
- Help to apply for jobs online
- Small business workshops
- Youth workshops related to obtaining safety certificates, first aid certificates, learning how to budget and manage adulthood for school leavers

**SDG 10: Reduced Inequalities.** Of all the SDGs in the survey, the activities in support of SDG 10: Reduced Inequalities were most similar across library types (Figure 8). The most common activity was to offer programs, services, or collections to promote awareness and education around equity, diversity, and inclusion. However, a majority of libraries also reported providing employee training around equity, diversity, and inclusion; providing inclusive facilities; implementing policies to ensure diverse staffing and leadership; and implementing services or programs designed to reduce inequality. Note that some questions were only applicable to public libraries and others only to academic libraries, so some responses only have data from one type.

Academic library staff worked to reduce inequalities for their communities. One activity that the respondents
did regularly was providing inclusive facilities. These could be, for example, gender-neutral restrooms, feminine hygiene products, or physically accessible facilities. Forty-nine percent of the academic library respondents said that they did this regularly and another 23% said that they did this on occasion.

Most academic library respondents also offered programs, services, or collections to promote awareness and education around diversity. Forty-eight percent (48%) of academic library staff in the survey did this regularly and another 34% did this on occasion. One academic library staff member in the USA described the breadth of these activities at their library:

> Campus activities have been ramped up this year with virtual programming several times a month tackling subjects of racial injustice, sustainability, white privilege, digital divide, ethnicity, gender bias, politics and race, health and race, girls in STEM [science, technology, engineering, and mathematics], etc. We have a food pantry and community garden on campus. Our Office of Student Diversity and Inclusion has been spearheading many of these events in cooperation with student groups on campus.

There were several other activities that a majority of the academic library respondents did either regularly or occasionally. These included promoting employee training around equity, diversity, and inclusion (69%); implementing policies to ensure diverse leadership (65%); implementing services or programs to reduce inequality (58%); and implementing vocabularies and metadata policies designed to reduce bias (54%).

Among the public and other types of libraries, the most common activity to reduce inequalities was to offer programs, services, or collections to promote awareness and education around diversity. Forty-two
percent of the public and other library type respondents did this regularly and 31% said that they did it on occasion. A majority of the public and other library type respondents also either regularly or occasionally provided employee training around equity, diversion, and inclusion (69%); implemented policies to ensure diverse staffing and leadership (61%); provided inclusive facilities (61%); and implemented services or programs designed to reduce inequality (55%). One US public library staff member explained:

We have formed an Equity, Diversity and Inclusion task force that is taking a close look at our collections, buildings, programs, services, policies and hiring practices through an EDI [equity, diversity, and inclusion] lens and making changes where necessary to ensure our materials, programs and services are representative and equitable.

SDG 16: Peace, Justice and Strong Institutions. There was a large degree of commonality between the activities reported by academic libraries and public and other library types to support SDG 16: Peace, Justice and Strong Institutions (Figure 9). The most common was providing a welcoming space for all members of the community, followed by providing an environment to facilitate engagement between different populations and allowing the use of library facilities for open discussion.

When promoting Peace, Justice and Strong Institutions, providing a welcoming space on campus was the most common activity for academic library staff. Seventy-six percent of the respondents said that they did this regularly and another 14% said that they did it on occasion. As a museum library staff member in the USA explained:

We invite all members of our local community into our library free of charge… We have partnered with our public library colleagues in order to present programs to underserved communities in order to make sure that these patrons understand that they are welcome in our special collections environment.

Providing an environment to facilitate engagement between different populations was another common activity, with 36% of the academic library respondents doing it regularly and another 37% doing it on occasion. A majority of the academic library respondents also either regularly or occasionally allowed the use of library facilities for open discussion (69%);
promoted involvement in civic activities like voting (63%); and sought community input to influence library policies (56%) (see Figure 9).

Public and other types of libraries similarly worked to serve as a welcoming space for all members of the community, with 69% of the respondents saying that they did this regularly and 14% saying that they did it on occasion. The majority of public and other libraries also either regularly or occasionally promoted active involvement in civic activities (69%) and allowed the use of library facilities for open discussion (66%).

This was articulated by a public library staff member in the USA, who responded:

The library serves as an early voting location, hosts commission workshops and city council workshops, has hosted community wide civic events that are timely and address hot topic civic issues. The library also hosts a variety of community civic group board meetings and group meetings.

A public library staff member in Germany described the different sorts of activities that their library did in this area:

We have a series of events called “Living Books”. Here we bring people from different fields together in conversation. We always offer these “books” on specific topics: Fugitives, disabled people, care workers, we have also had Holocaust survivors or former GDR [German Democratic Republic] citizens etc. There are always new topics.

Providing an environment to facilitate engagement between different populations within the community (66%), providing transparency and public access to library-board decision meetings (65%), and seeking public input to influence library policies (61%) were among the other activities that a majority of the public library staff respondents indicated they did regularly or on occasion.

**SDG 17: Partnerships for the Goals.** Libraries tend to be collaborative institutions (Horton and Pronevitz, 2015), so it is perhaps unsurprising that almost all of the respondents worked to create partnerships to further the SDGs (Figures 10 and 11). This included developing partnerships with other libraries as well as collaboration with other academic departments and/or community agencies. The other activity options differed fairly significantly between academic libraries and public and other library types, as detailed below.

Seventy-four percent of the academic library respondents regularly developed partnerships with other libraries and 21% did this on occasion (Figure 10). As one academic library staff member in the Philippines explained: “We forged partnership through Memorandum of Agreement to the different State Universities and Colleges in our region to collaborate and help ease the accessibility of resources not available in... [some] academic libraries in the region.” The academic library respondents also commonly collaborated with other
academic departments or community agencies to provide instruction for the community. Forty-two percent of the respondents did this regularly and another 35% did it on occasion. Fifty-eight percent of the academic library respondents also regularly or occasionally partnered with other university departments to apply for grants. One academic library staff member in the USA offered a view of what such partnerships can look like:

We partner with organizations to promote awareness of reliable health information, such as that offered by the National Library of Medicine. Through grants from the National Network of Libraries of Medicine, we have offered programming on consumer health information and the NIH [National Institute of Health] All of Us research initiative.

Public and other library staff similarly sought partnerships with other libraries, with 72% doing this regularly and 21% doing it on occasion (see Figure 11). Seventy-five percent of the public and other library type respondents also either regularly or occasionally collaborated with community agencies to provide instruction. Seventy percent either regularly or occasionally partnered with local school systems to provide technology, and 61% partnered with local businesses to provide technology and spaces (as shown in Figure 11). Fifty-seven percent also regularly or occasionally partnered with other community agencies to apply for grants or to fundraise. As one public library staff member in Latvia explained: “We have very good connection with other public libraries in Latvia as well as National Library of Latvia. We provide space and computers for entrepreneurs. We closely collaborate with local museum, municipality, youth centre, schools, kindergardens.”

**Library impact on other SDGs**

To answer question R4 (What other SDGs do staff perceive libraries impacting the most, and why?), the respondents were asked which other goal they thought libraries can most impact. The results, reported by region, are shown in Figure 12.

Overall, the largest number of respondents (26%) selected Good Health and Well-Being (SDG 3). One academic library staff member in Canada outlined several ways that a library can impact health and well-being:

- Improving social isolation
- Providing access to information
- Providing access to technology
- Building literacy and digital literacy
- Providing equal access to services
- Helping to address and mitigate the social determinants of health

Sustainable Cities and Communities (SDG 11) was the second choice, with 25% of the respondents seeing it as the top goal outside of the five mentioned. The world’s cultural and natural heritage is protected,
safeguarded, and made accessible to all through libraries. Support for this is heard in the following quote from an Australian academic library staff member: “Libraries can play a role in providing the infrastructure to facilitate innovation (for example, research data stores, institutional repositories, archives, etc.).”

Gender Equality (SDG 5) was the third most commonly chosen goal, with 17% of the respondents selecting it. A public library staff member in the USA described their library’s activities related to gender equality:

> Our department provides investing and basic finance for women. Women need to know about money and how to manage money to be able to become more independent... Also, we introduce a variety of careers for women, for example careers in trades. We offer coding sessions for young girls so they can start thinking about careers in [the] computer field. We support women who own a small business in our city.

Within the comments, several broader themes about library contributions to the SDGs surfaced. Inclusivity was an important theme that came up in many of the opened-ended comments. Libraries are commonly open to a diverse community. A French academic library staff member echoed this sentiment, saying: “Libraries are places of tolerance, openness and diversity. They have all the assets to go forward in this direction and to be an active actor of change.” A US public library staff member also discussed openness, saying that the library “is in a unique position to coordinate services and build networks across the community through information distribution, community partnerships and community leadership.” There is an overall theme in these comments—the library has a reach within its community that is virtually unparalleled among other institutions and could be leveraged for environmental, economic, and social change.

Another major theme in the comments was the idea of the library responding to the specific needs of the community. In many cases, this is through the services that the library staff provide. As one public library staff member in the USA explained: “The library serves as an amplifier and connector in the community it serves.” One Puerto Rican academic library staff member mentioned that their institution “has staff such as counselors, nurses who work in collaboration with other agencies of the public and private community. They use the library facilities to carry them out.” An academic library staff member in the USA echoed this sentiment, commenting that their library “is a ‘jack of all trades’. If we can find a way to help, we will.” Library staff have also worked hard to serve populations who might be underserved by other public institutions. For example, one Greek public library staff member described having a mobile library at refugee camps, exemplifying the reach of the library so that no one is left behind.

**Conclusion, limitations, and future research**

This survey has several limitations: the use of snowball and convenience sampling means that this is a purposive sample with limited generalizability. Since the survey was only offered online, the sample was limited to people with Internet access, with a social media presence, or connected to library staff through professional virtual networks. However, with a large, global sample size and respondents from different library types, the results provide information about the activities that library staff are conducting, and the respondents’ perception of the impact these activities have on the SDGs. To our knowledge, these findings have not been reported in the literature to date.

The survey results paint a picture of the ways library staff have embedded the library within their communities and how staff are working to promote sustainable development in different ways. Even though the majority of the respondents have not incorporated the SDGs into their strategic planning, the libraries’ support of the SDGs is evident by the activities the library staff are engaged with and the respondents’ comments. Libraries are particularly involved with Quality Education (SDG 4) and, by and large, library staff see it as the SDG where they can have the greatest impact.

The results from the survey highlight that library staff, whether through strategic planning or through their everyday activities, are doing much to further the SDGs. The activities identified here can be used to inform library strategic planning and to help library staff maximize the library’s impact on sustainable development. This research builds on the writing of Edwards (2018), who encourages all libraries to link their work to the global agenda as a way to demonstrate their value. The SDGs are a logical place to begin. Edwards notes that connecting libraries and sustainable development in the library’s own governing documents helps the SDGs become more institutionalized and part of the culture. Edwards also suggests reviewing the library’s strategic plan and finding ways to make explicit links between the goals and action items with the SDGs. Finally, Edwards (2018: 7) challenges library staff “to find better ways to communicate and assess their contributions as well...
as new ways to build partnerships and collaborations towards SDG achievement.” IFLA’s Library Map of the World can be a place to start. It can be used as an advocacy tool to demonstrate how libraries in different countries contribute to the SDGs and serve as partners in meeting local development needs.

To include the SDGs and their impact on the community in library strategic planning, further research is needed that builds on this work. Future research could identify how library staff integrate the SDGs into their planning and how they develop activities to support the SDGs, such as the activities highlighted in these survey results, and how these contributions can be evaluated to assess their impact on this ecosystem. A case study approach with library staff who have integrated the SDGs into their strategic plans could be a logical next step. A content analysis of library strategic plans could be conducted, followed by interviews with leaders and staff to identify the impact of the SDGs on the community.

Through their work in the community and collaboration with other institutions, library staff create an environment that is an important part of a larger economic, social, political, and information ecosystem. Identifying and articulating the role the library can play in advancing and impacting the SDGs can demonstrate libraries’ value within the larger ecosystem is an important next step.

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Notes
1. “Libraries model sustainability” comes from a survey respondent’s answer.
2. See https://librarymap.ifla.org

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Academic libraries’ main strategies and services during the COVID-19 pandemic

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Abstract
This study aimed to identify and evaluate the most important activities of academic libraries during the COVID-19 pandemic. This research was conducted using qualitative content analysis to discover the services that supported education and research, and social responsibilities, at the time of the crisis. Three hundred and one of the world’s top universities were randomly selected and analysed. The findings show that libraries used four strategies in supporting education and research: creating new services and activities, developing previous services and activities, changes in previous services and activities, and support for research on COVID-19. Seven substrategies were identified for social responsibilities: documentation of events, preparation of guidelines, current awareness of the public, COVID-19 rumours versus reality, physical and mental health-care programmes, providing useful information about COVID-19, and providing medical information about COVID-19. As the pandemic continues, the experiences presented in this article can help in the provision of library services during the current crisis and be used in times of similar crises in the future.

Keywords
Academic libraries, information providers, crisis, COVID-19, pandemic, higher education

Introduction
The continuity of the services of academic libraries, as important centres for the provision of information and support of research, is an essential activity during crises such as the COVID-19 pandemic. Strengthening the activities of libraries could have a significant impact on the efficient management of this pandemic and help mitigate its negative effects. Two important tasks have been the provision of common services among academic libraries during the pandemic, and of new services to the community to manage the crisis nationally and internationally. The duties and responsibilities of libraries and librarians in the face of unforeseen crises such as this pandemic are a significant issue that can be traced in the literature on crisis management in libraries. Witt and Smith (2019), for example, have pointed out the efforts of the IFLA to highlight the role and importance of libraries in the face of a crisis. They predict that the objectives of the United Nations 2030 Agenda on access to information will improve libraries’ educational structures and social role, provide solutions to global challenges and access to collections and services, and guide the library community to serve people, communities and cultures.

The COVID-19 pandemic is considered to be an ongoing social crisis worldwide. Due to the characteristics of the virus and the dangers it poses to individuals in society, policies were adopted by most governments around the world to maintain strict physical distancing and enforce the closure of public places, such as community halls, leisure centres and,
of course, libraries and information centres. These closures or reduction of face-to-face service hours led some organizations to turn to the opportunities offered by cyberspace to provide services and pursue them through technological tools.

One of the main issues in any crisis is its impact on the perceptions and determinations of actors, systems or areas affected by the crisis because a crisis always affects the identity, individuals, social life and living conditions of human beings (Nozari, 2005). Libraries have always been important as institutions that reflect social tendencies and cultural practices. The collections, services and cultural activities offered by libraries take on new meaning in the face of war, revolution, immigration, natural disasters, economic turmoil and other crises. In addition, crises can add value to library collections and information centres, as these social institutions need to provide a platform for cultural dialogues, values and other social benefits, such as the provision, production, storage, organization and dissemination of knowledge and ideas (Witt and Smith, 2019). However, crises can open up new areas of services and activities to provide to societies, and the use of existing opportunities can help to keep pace with changes in a community and even create new capacities to provide information and social services.

As Rayward and Jenkins (2007) have pointed out, social cohesion and changes are linked to the information infrastructure provided by libraries and implemented with the support of these institutions. In crises, the role of information and the scientific and cultural transfer of information resources and services cannot be ignored. According to the literature, the role of memory and activist institutions in pursuing social justice and providing mechanisms to overcome existing difficulties has been inevitable. For instance, Buenrostro and Cabbab’s (2019) study addresses the role of Libraries in justice. Moreover, Sabolovic-Krajinatite (2019) discusses the role of public libraries in times of crisis. These studies touch on only a small part of the roles of these information centres and do not cover them comprehensively. Since it is important to know about these roles and the services provided by various libraries in crises, it seems essential to monitor existing efforts and experiences.

Academic, college and research libraries provide various services to academic and professional communities. These activities include educational and research services; data, information and knowledge management; scientometrics; current awareness, and the dissemination of information. As Hisle (in Association of College and Research Libraries, 2010: 55) emphasizes, the services of all types of libraries are valuable to the community, and the value of academic libraries is to develop an educated population for a democratic society. Therefore, the positive social return on investment is used as a framework for identifying criteria to assess the value of these libraries. What maintains the position of a library for an organization and rebuilds it in the face of existing crises is considered the value that these organizations create for their stakeholders. In other words, all organizations, including university libraries, should remember their underlying and fundamental values to handle crises and take the necessary measures to deal with them. Therefore, it is clear that libraries – particularly academic libraries – play a significant role in crisis management.

Since crises typically have structural and functional implications for all aspects of people’s lives, examining the status of academic libraries in the COVID-19 crisis is important for several reasons: (1) the background of these social institutions’ services is determined in the face of crises; (2) the accurate identification of the activities during the COVID-19 pandemic can provide valuable methods and experiences for decision-makers and policymakers sharing these activities in the context of libraries’ logical, purposeful and effective response to crises; (3) the value areas of the involved systems are identified; and (4) revealing results of such studies in the face of the COVID-19 crisis can make them coordinated and influential organizations to confront with similar situations. The main objective of the present study is to analyse the educational and research services offered by academic libraries around the world during the COVID-19 crisis to present the lessons learned from this experience and make suggestions for how to deal with potential crises. The results of this study are expected to be useful for libraries’ administrators and policymakers.

Accordingly, the present investigation sought to find answers to the following questions:

1. How did academic libraries’ services support education and research during the COVID-19 pandemic?
2. What types of activities manifest the social responsibilities of academic libraries in the COVID-19 crisis?

Literature review

The most relevant literature to this research studies the activities of libraries in times of crisis. The analysis of these studies showed that the main activity of
libraries in times of crisis can be divided into two categories: (1) the role of libraries in responding to crises and (2) the services and activities of libraries in the face of COVID-19.

**Role of libraries in responding to crises**

Some research is related to the role of libraries in crises. For example, Harris et al. (2005) describe the role of public libraries in Ontario, Canada, in responding in a timely and appropriate manner to health information needs’ during the severe acute respiratory syndrome (SARS) crisis in 2003. Sixty-nine state libraries were surveyed on their telephone and electronic reference services, and the findings indicate that the services posed a serious challenge to the appropriate role of these libraries in providing health information and the readiness of staff to answer related questions during the crisis.

An oral history project was conducted at the National Library of Medicine in the USA by Featherstone et al. (2008) to provide a clear and convincing description of librarians’ expected and specific roles during and after a disaster. Using four broad questions in telephone and email interviews, the researchers collected the stories of 23 North American librarians who had been faced by various incidents, such as earthquakes, epidemics, fires, floods, hurricanes, bombings and terrorist acts. The results indicate that the health science librarians played an important role in the preparation and remedial measures for the events that occurred. Zach (2011) surveyed public libraries’ websites in 50 major cities in the USA. The results show that people sought answers to questions about the nature of threats and how to respond to them, and that libraries should make the most of their position as a reliable primary source of information by providing quick and easy access for those seeking reliable information in a crisis. The impact of the global economic crisis on the roles of the University of Malawi and Mzuzu academic libraries was examined by Chaputula (2011). The findings demonstrate that the libraries were not affected by the global economic crisis. Moreover, the libraries’ budgets were constantly being recorded, which positively impacted collection development activities, staff recruitment and training, and infrastructure development, as well as domestic and foreign travel. However, the impact of the economic crisis was evident in the stagnation of some university budgets and the lack of scholarships for studying abroad. In addition, in their case study, Featherstone et al. (2012) compared the presentation of pandemic information by medical librarians using a comparative series design, semi-structured interviews and supplementary sources. In this study, health-care administrators were identified as the key audience for pandemic information, and news agencies were used as essential sources of information. Librarians’ ability to evaluate available information and select evidence to support administrative decisions was extremely important. The qualitative analysis of this study led to an increase in understanding of information needs during epidemics and the identification of methods for disseminating information during stressful periods due to the outbreak of new or unknown diseases, as well as the growth of librarians’ professional initiatives in medical disasters.

Kostagiolas et al. (2015) conducted a survey and present the results of interviews with the directors of academic music libraries in Greece during the economic crisis. The findings show that, in this period, these libraries should define their policies and priorities, and further consider the needs and expectations of wider audiences, such as musicians outside the academic community. This crisis could be seen as an opportunity to rebuild academic music libraries and create a broader framework to achieve a strategy of collaborating with foreign music associations and organizations. Wang and Lund (2020) studied instant information about COVID-19 and the reactions of 50 public libraries to the pandemic through online leaflets. The results show that the content of many announcements changed, indicating the pandemic’s rapid evolution. These libraries also played significant roles in supplying their users with accurate information about epidemics and pandemics.

A systematic review by Akhshik and Beglou (2022) took into account the main strategies used by libraries to prepare for a crisis. Their findings show that preparedness instruction, training programmes, preparation assessment and important crisis management factors were the topics most frequently discussed in libraries with regard to crisis management. Additionally, most studies concentrated more on financial or economic crises than natural, social or health-related crises. Furthermore, there was a recent increase in the number of articles dealing with crisis preparedness and management, and a significant increase in the number of published articles, mostly considering academic and research libraries, between 2008 and 2017.

**Services and activities of libraries in the face of COVID-19**

Studies confirm that libraries’ activities change during times of crisis. For example, Kostagiolas et al. (2013) describe strategies for the sustainability of services and resources in academic libraries in Greece.
and offer solutions to adapt to a new financial situation. These strategies include all the improvements that these libraries can make in their parent institutions. Liu et al. (2017) took social media into account when examining the roles of libraries during a crisis. During the South Carolina disaster, these services included increasing public awareness, updating public knowledge and information, providing voluntary information, and effectively communicating and interacting with users. Their findings include recommendations for using social media to create efficient risk communication and information services during a disaster. In response to COVID-19, a total of 213 US academic libraries were employed in various activities, including prevention and service reduction, as described by Hinchliffe and Wolff-Eisenberg (2020). Fasae et al. (2021) examined how academic libraries in Nigeria were handling the coronavirus in 2019. Their results reveal that these libraries implemented some safety measures, such as complete closure, the provision of hand sanitizer, and the use of face masks by library patrons, as well as social distancing measures; the measure were implemented through social media, attendance to patrons, classes and lectures, training sessions and conferences, and paper presentations. Less than 10% of these libraries offered access to print and online materials, while the majority only offered online materials to their users. Fasae et al. believe that libraries should continue providing information resources to support research and must find ways to modify their services to effectively meet users’ needs during the pandemic.

Arapasopo and Adekoya (2021) investigated the viewpoints of 137 academic library executives in Nigeria and concluded that libraries could effectively manage the COVID-19 waves. According to their findings, transformational and transactional leadership styles were more productive in managing libraries than laissez-faire attitudes, and library executives with effective leadership styles would be successful in the face of the pandemic. In handling the crisis, the managers were also susceptible to a leadership crisis. Academic libraries’ responses to the COVID-19 pandemic in South Africa, according to Chizwina et al. (2017), may be an opportunity to assert and re-emphasize their roles in the country’s national disaster management matrix. They reviewed libraries’ responses in an interpretive research paradigm. The results demonstrate that publishers and libraries had risen to the challenge by providing more free content and preserving personalized collections. Harris (2021) examined how the COVID-19 pandemic affected people, places, products and services in academic libraries in Jamaica. The results reveal that academic libraries’ responses were influenced by government and university mandates and the lack of vaccines.

The literature review shows that the main roles of libraries in times of crisis could be summarized as providing primary, reliable and straightforward access to information, preparing society to deal with the crisis, and maintaining the privileges and services of access and cooperation for libraries. Although some studies have addressed health-related crises, the COVID-19 pandemic and the role of academic libraries at this time remains unclear. This shortcoming can also be seen in the category of literature that is related to library activities and services in times of crisis. Although the number of studies related to library services during the COVID-19 pandemic is not insignificant, there are still gaps in research that comprehensively reflects the services provided by academic libraries in this period. Most of these studies only refer to the changes in services and do not specify the type and manner of these alterations. Therefore, the current investigation discusses the role of academic libraries during the COVID-19 pandemic and presents a comprehensive analysis of their activities during the pandemic.

Research methods

The present study was conducted using qualitative content analysis with a summative approach. As Schreier (2012) claims, qualitative content analysis is a method for systematically describing the meaning of qualitative material. This work was carried out by assigning successive parts of the material to the categories of the research’s coding framework. In a summative qualitative content analysis approach, keywords or content are counted and compared, which is followed by the interpretation of the underlying context with the purpose of understanding the contextual use of the words or content (Hsieh and Shannon, 2005). Using this unobtrusive and non-reactive approach, academic libraries’ services and social responsibilities were analysed to provide insight into their main strategies and services during the COVID-19 pandemic. In this research, the analysis process involved three phases: preparation, organization and the reporting of the results.

Preparation

Data collection. Academic libraries were identified according to the Times Higher Education’s world university rankings, and the pages/files related to their
library services during the COVID-19 period that appeared on their websites were reviewed using a simple credited checklist. Data was gathered from 1 May to 1 March 2021.

Sampling. The study population was all of the academic libraries in the world based on the Times Higher Education’s world university rankings. A total of 1397 universities were selected and then 301 available samples were selected based on the Krejcie–Morgan table. The frequency of the academic libraries selected are shown by country in Table 1.

Selecting the unit of analysis. The unit of analysis was a ‘paragraph’. Each paragraph that reported the services or activity of the library during the pandemic was considered a unit of analysis.

Organization

Categorization and analysis. The same concepts were categorized under a subcategory. After reviewing the subcategories, the main categories were created based on the two research questions. In order to ensure that the categories were correct, any overlap between them was checked.

Representativeness. In order to ensure the accuracy and consistency of the data coding, the results were tested by seeking the opinions of three experts.

Reporting

The data analysis was performed by creating a database using MAXQDA 2020. In this phase, pages or files related to library services during the COVID-19 period that appeared on the libraries’ websites were analysed using a summative approach. The trustworthiness of the qualitative content analysis was improved with peer debriefing and triangulation. Peer debriefing was performed using three experts in the academic library field, and investigator triangulation was created with two researchers to provide multiple observations and conclusions.

In order to present the content and structure of the concepts clearly and in a way that could be easily understood, the report was based on the two main objectives of the study – namely, academic libraries’ services for supporting education and research, as well as the types of activities that manifested the social responsibilities of academic libraries during the pandemic. Moreover, the credibility of the checklist was approved by three experts.

Some limitations appeared in the study, which affected the research findings. Most of the academic libraries’ websites were in English due to their international research and educational programmes. However, some of the university and academic library websites did not have English versions, and some university websites did not have particular websites for their academic libraries; therefore, some of the library services and activities did not appear on the university websites or were in languages other than English.

<table>
<thead>
<tr>
<th>Row</th>
<th>Country</th>
<th>Number of academic libraries</th>
<th>Row</th>
<th>Country</th>
<th>Number of academic libraries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USA</td>
<td>80</td>
<td>17</td>
<td>Ireland</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>UK</td>
<td>41</td>
<td>18</td>
<td>Finland</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Germany</td>
<td>31</td>
<td>19</td>
<td>Japan</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Australia</td>
<td>23</td>
<td>20</td>
<td>Russia</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Canada</td>
<td>14</td>
<td>21</td>
<td>New Zealand</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Netherlands</td>
<td>13</td>
<td>22</td>
<td>South Africa</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>China</td>
<td>8</td>
<td>23</td>
<td>Norway</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>France</td>
<td>8</td>
<td>24</td>
<td>Saudi Arabia</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>South Korea</td>
<td>7</td>
<td>25</td>
<td>Singapore</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Sweden</td>
<td>7</td>
<td>26</td>
<td>Israel</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Switzerland</td>
<td>7</td>
<td>27</td>
<td>Luxembourg</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Denmark</td>
<td>6</td>
<td>28</td>
<td>Macau</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Belgium</td>
<td>6</td>
<td>29</td>
<td>Brazil</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Italy</td>
<td>6</td>
<td>30</td>
<td>Taiwan</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>Spain</td>
<td>5</td>
<td>31</td>
<td>Lebanon</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>Hong Kong</td>
<td>5</td>
<td></td>
<td>Total</td>
<td>301</td>
</tr>
</tbody>
</table>
Findings and discussion

According to the results of the present study, the world’s academic libraries had seven main strategies for dealing with the COVID-19 crisis: four in support of education and research; one for social responsibilities; and two for stopping and reopening services.

Strategies for education and research services

Based on the findings of this research, it can be concluded that the main strategies for the education and research services provided by libraries were: creating new services and activities; developing existing services and activities; making changes to existing services and activities; and supporting research on COVID-19. An overview of Tables 2 to 5 reveals that the most useful actions in libraries were ‘creation’ (39 actions), ‘development’ (18 actions) and ‘change’ (12 actions).

Creating new services and activities. As shown in Table 2, there are five substrategies in the ‘creation’ strategy: access, educational services, research services, consulting and financing.

The five substrategies of the ‘creation’ strategy represent the general approach of libraries in the development of activities during the pandemic. The two main substrategies are educational services and access. A review of the substrategies in Table 2 indicates that the frequency of the practical actions in educational services (n = 15) is more than that of the other substrategies. This finding indicates that libraries emerged as the main pillar of e-learning during the pandemic, especially with the limitation of library services and online education, and the need to help users make better and unrestricted use of educational content. The activities related to the support of educational services reflect the diversity of the user community and attention to their educational needs. For instance, educating students to attend and use virtual classrooms and training teachers to hold these classes were common activities. Paying attention to the needs and requirements of holding practical classes was outstanding. Some of these requirements were met by setting up a virtual laboratory for laboratory lessons, as well as creating a digital repository of the content of previous lessons, pamphlets and tests.

The same can be said regarding ‘access’ based on the practical actions related to this substrategy (n = 11). The practical actions demonstrate three points: efforts were made to increase access to the resources needed by users through activities such as agreements with local publishers to access online books and scanning on-demand resources; the software and networking requirements for resource utilization were met with measures such as the provision of credit for using Adobe products for virtual events and access to remote multimedia software; and attention was paid to reducing the costs of using resources remotely by offering an open hotspot or free Internet.

The small number of actions in the other substrategies, such as research services (n = 5), is probably due to the independence of these activities from the academic libraries or meeting their needs through the actions provided in the access and educational services strategies.

Developing existing services and activities. As indicated in Table 3, the substrategies and practical actions of the ‘development’ strategy are narrower than those of the ‘creation’ strategy. The subcategories are remote service access, access, resources and activities.

The practical actions of the subcategory of remote service access (n = 9) demonstrate the emphasis on compensating for library services during the pandemic with various technologies. Although some of these services were offered before the pandemic, the focus of libraries during this period has been on the expansion of services and increasing the diversity of services to meet remote users’ needs.

The three other substrategies and their practical actions confirm the above point as these seemingly ordinary activities (e.g. digitizing resources in the access substrategy or lending out electronic equipment in the resources substrategy) are not considered a priority in non-pandemic situations. However, they became the main focus of service development in this period.

Changing existing services and activities. The third strategy of academic libraries in relation to their educational and research services was to change existing services and activities. The analysis of the substrategies and practical actions of this strategy is shown in Table 4.

According to the review of practical actions in Table 4, it is evident that there were more practical actions in relation to the substrategy of rules and procedures (n = 7) than the other subcategories, which indicates that the nature of the services and activities of the surveyed libraries did not change significantly. Although important activities were designed and developed in the creation and development strategies, most changes were made to the way libraries or their resources were used, as well as in redefining rules to reduce potential harm to users and facilitate the use of offline services.

Support for research on COVID-19. Table 5 illustrates the substrategies and practical actions of the strategy of support for research on COVID-19.
The number of practical actions related to the sub-strategy of open access ($n = 4$) indicates the efforts made by libraries to facilitate research during the pandemic. The emphasis on open access indicates that providing research information on COVID-19 and free access to articles was the most important concern of these libraries in supporting research activities.

### Table 2. Substrategies and practical actions of the ‘creation’ strategy.

<table>
<thead>
<tr>
<th>Main strategy</th>
<th>Substrategy</th>
<th>Practical actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating new services and activities</td>
<td>Access (11)</td>
<td>Providing access to resources in a variety of ways</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing access to remote multimedia software</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agreement with local publishers to access online books</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing a list of free publishers, journals and libraries during the COVID-19 period</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing free/cheap Internet access</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Setting up a system for downloading articles remotely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Securing remote access to library resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scanning on-demand resources and sending emails</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing credit for using Adobe products for virtual events</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing an open hotspot</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing free content</td>
</tr>
<tr>
<td></td>
<td>Educational services (15)</td>
<td>Innovative services in support of teaching and learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing a platform for publishing online classroom content</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing online video resources for students’ educational use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introducing and presenting digital content production tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Designing a platform for free sharing of course content</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Setting up a virtual laboratory to create and share laboratory videos for lessons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guiding teachers to hold online classes and examinations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing links for class contents to library resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Making a list of free online distance learning resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Virtual access to the repository of texts and textbooks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Online class guides for teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preparing live educational videos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing a repository of previous online examination questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning to use the online classes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preparing instructions for improving individual skills</td>
</tr>
<tr>
<td></td>
<td>Research services (5)</td>
<td>Preparing an online planner to support students’ research activities and assignments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing a virtual calendar to guide research activities at an appropriate time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Open data platform design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supporting an information literacy team for researchers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Setting up a social network of specialists</td>
</tr>
<tr>
<td></td>
<td>Consulting (7)</td>
<td>Preparing a procedure to deal with COVID-19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continuous publication of methods to provide library services in the COVID-19 period</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preparing a copyright guide in the COVID-19 period</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Answering copyright questions during the COVID-19 period (via email)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing live videos by librarians to introduce online services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Online copyright consulting in COVID-19 courses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guiding librarians to perform teleworking</td>
</tr>
<tr>
<td></td>
<td>Financing (1)</td>
<td>Attracting new funding sources to support education and research in the field of COVID-19</td>
</tr>
</tbody>
</table>

The number of practical actions related to the sub-strategy of open access ($n = 4$) indicates the efforts made by libraries to facilitate research during the pandemic. The emphasis on open access indicates that providing research information on COVID-19 and free access to articles was the most important concern of these libraries in supporting research activities.

**Strategy for social responsibility**

A noteworthy point in relation to the strategy for social responsibility is that there are seven substrategies. This means that, during the COVID-19 crisis, academic libraries focused their attention on creating new services and a commitment to their social responsibility to continue to operate under these conditions.
### Table 3. Substrategies and practical actions of the ‘development’ strategy.

<table>
<thead>
<tr>
<th>Main strategy</th>
<th>Substrategy</th>
<th>Practical actions</th>
</tr>
</thead>
</table>
| Developing existing services and activities | Remote service access (9) | Providing telephone, text and email services  
Consultations with a personal librarian by appointment  
Providing online services round the clock seven or five days a week  
In-depth consultations via Zoom  
Separating services and common questions based on different groups  
Live chat with the librarian  
A 30-minute chat with a specialized librarian  
In-depth consultation with a specialized librarian  
Scheduling an appointment with a librarian |
|               | Access (2)                | Digitizing resources that have no electronic versions  
Providing a collection of digital books and articles |
|               | Resources (3)             | Preparing and sending confidential data to researchers  
Providing a collection of virtual reference books  
Lending out electronic equipment such as laptops and modems |
|               | Activities (4)            | Scanning and sending print sources  
Preparing new membership cards and sending them to the mailing addresses  
Separating digital resources based on discipline  
A virtual technology help desk |

### Table 4. Substrategies and practical actions of the ‘change’ strategy.

<table>
<thead>
<tr>
<th>Main strategy</th>
<th>Substrategy</th>
<th>Practical actions</th>
</tr>
</thead>
</table>
| Changing existing services and activities | Rules and procedures (7) | Abolishing late-return charges  
Automatic renewal of resources  
Changing the way services are provided  
Physical access to collections for specific people  
Physical use of dissertations/theses by appointment  
Sending out electronic versions of dissertations and theses  
Changing copyright regulations |
|               | Services (2)              | Free delivery of requested print resources  
Providing virtual inter-library loan services |
|               | Access (2)                | Providing customized content  
Virtual access to the collection |
|               | Activities (2)            | Online exhibitions  
Workshops and virtual events |

### Table 5. Substrategies and practical actions of the ‘support’ strategy.

<table>
<thead>
<tr>
<th>Main strategy</th>
<th>Substrategy</th>
<th>Practical actions</th>
</tr>
</thead>
</table>
| Support for research on COVID-19 | Research guide (2) | Developing a research platform for COVID-19  
Guidance in conducting research on COVID-19 |
|               | Networking (1)            | Launching a network of COVID-19 researchers |
|               | Open access (4)           | Free access to COVID-19 research information  
Preparing guidelines for free resources during the COVID-19 period  
Preparing a research list and a collection related to COVID-19  
Accessing analytical information about COVID-19 |
|               | Data sharing (2)          | Providing a data-sharing mechanism for COVID-19 research  
Preparing a database of images and photographs for COVID-19 research |
|               | Financial support (1)     | Financial support for research on COVID-19 |
In other words, academic libraries had an extensive range of services that were defined to play a role in communities that were not primarily the main users of university libraries.

Among the substrategies, the frequency of the activities related to the documentation of events, current awareness programmes for the public, and providing guidelines was the same \( n = 3 \), which shows that in addition to paying attention to providing pandemic and crisis information, the surveyed libraries provided ongoing information to the community and practical consultations in their programmes. Table 6 shows the substrategies and related actions for the strategy of social responsibility.

The number of practical actions related to the substrategies of the social responsibility strategy shows the efforts made by these libraries to provide information and guidelines to their users so that they might become better informed about the pandemic. Furthermore, documenting events for future research and revealing the needs, challenges and situations their users had to deal with in this period was important in these libraries’ activities. Moreover, these activities empowered people to control and manage their physical and mental circumstances.

### Discussion and conclusion

During the COVID-19 pandemic, complex situations prevailed among communities and libraries. Before the pandemic, there was little global experience of being exposed to epidemics, and they were limited to certain countries. Our world is interconnected and complex, and most organizations have a common front that needs to be lined up and confronted. The COVID-19 pandemic forced libraries and information centres to close or cut back on their operating hours, and to turn to the opportunities provided by the Internet to provide services and pursue their services using these technological tools. It could also be assumed as a means to overcome the limitations and challenges prepared mainly by technology, and it might even be regarded as an escape forward to better services. Let us consider overcoming some of the challenges associated with social acceptance and bringing a range of people into the scientific community to benefit from its ultimate values. These values include basic values such as cultivating educated populations for a democratic society and a social return on investment, and instrumental values such as communicating to express the library’s contribution to the university problems and issues, adapting library evaluation to the mission of the institution, and influencing students’ success and improving the education and learning of stakeholders. All of these educational and research activities have been carried out in academic libraries around the world in a situation where the need for researchers to access information and data remotely was significant, and the challenges of the physical presence of students, researchers and teachers needed to be addressed.

Academic libraries’ various strategies and actions demonstrate their critical role in responding to the crisis. The literature review indicates that libraries
have played active and responsive roles in dealing with crises, including providing reliable primary information and easy access to information, preparing for social crises, and maintaining the privileges and services of access and cooperation between libraries. The research findings also demonstrate that the most frequent strategies were related to creation, development, commitment to social responsibility and change. Furthermore, in creation strategy, the needs and necessities in the time of crisis forced these libraries to create or rebuild new services and programs. Moreover, in the development strategy, services and activities launched before the crisis were needed and, in the change strategy, services had to change according to the crisis situation. As a result, some of these changes were cross-sectional and unique to the development of libraries, while others are likely to continue after the crisis, depending on what a library decides. Because these activities align with other ongoing library activities and physical spaces, and library resources are at the forefront of dealing with the crisis, two further strategies – updating and reducing/stoping – were used.

In the strategy of commitment to social responsibility, some programmes and activities were used in these libraries that seemed to be applied in normal situations for non-library users. In supporting research on the COVID-19 strategy, libraries committed to speed up the research related to the crisis and facilitate researchers’ access to the information they needed. A review of these libraries' activities indicates that nearly all of them were constantly updating their activities according to advice from the health authorities, and these updates occurred in various ways, including updating library guidelines, portals and websites. The implementation of these programmes seems to have had a profound impact on the social acceptance of academic libraries in their target community. In other words, because many social crises change the foundations of social communication in society, they cause serious psychological, cognitive and social harm for the users and stakeholders of these organizations.

The experience of academic libraries during the pandemic shows that when considering the purpose of education and research in universities to train specialists, professionals and researchers, there is no choice but to consider a prominent and worthy role for these libraries in education and research. More importantly, one can be certain that education and research at universities will be carried out in an appropriate way when there is integration between the information gathered, the information services provided, the courses and classes, and the research that is being undertaken.

Coordination and integration between ‘education and research’ and ‘information resources and services’ can provide surprising results for institutions. In the current context of the COVID-19 pandemic, integration and links among university libraries, educational and technological centres or units, and research centres and laboratories seems to be the only solution. Although the pandemic put university libraries’ activities and services under pressure, it has also helped clarify some of the inconsistencies and educational and research challenges in higher education institutions. Perhaps crises can be considered as an opportunity arisen in which libraries must take the right actions in this regard.

As the international community acts as a single body to combat the COVID-19 pandemic worldwide, the virus seems to be eradicating the inconsistencies among the mechanisms of educational and research institutions through the pragmatic integration of academic libraries and other educational and research units. The way organizations, including libraries, respond to such crises is directly related to the training they have received to deal with crises and, of course, the training they have received to take action in the face of such situations. In other words, libraries can rely on various experiences in similar situations from around the globe. However, the degree to which they have used these experiences to confront COVID-19 requires a wide range of requirements and competencies, as well as a technical and operational infrastructure.

Therefore, taking into account the experiences and professional competencies of library professionals, the management and executive structures of educational and research institutes allow libraries to manage their educational content. As the research findings indicate, these practices have been common among academic libraries worldwide, and a positive and double impact on research can be expected.

This decision can be made based on the information of the directors of educational and research institutes regarding libraries’ capabilities, needs and conditions of libraries. In this case, the need to establish links among resources, databases and educational systems cannot be ruled out. Therefore, assuming that these systems are typically designed, supported and implemented by information technology professionals, the presence of librarians and professionals (e.g., information technology specialists, archive science and knowledge managers, and educational technology and information technology managers) is desirable. Furthermore, as Garner et al. (2021: 3) claim,
social work professions that are involved in human rights and social justice promote well-being, empowerment and social change by working ‘at the interface between people and their social, cultural and physical environments’. Therefore, they try to redress inequities, reduce social barriers, and work directly with the users and indirectly through research, social policy, education and training. They believe that ‘equitable access to social, economic, environmental, and political resources is central to the profession’s efforts’ and ‘the breadth of the social work domain intersects with the enabling, inclusive practices of libraries as they promote wellbeing, reduce barriers to engagement, and equity of access to a range of information and resources’. In addition, the educational roles that librarians can play to support people’s empowerment goals and librarians’ awareness (Irving, 2017) can lead to social inclusion for their users and reduce anxiety and constraints.

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Green initiatives towards environmental sustainability: Insights from libraries in Kenya

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Abstract
Environmental protection is an increasingly pressing issue all over the world. Ozone depletion, the greenhouse effect, global climate change and global warming are among the rising environmental concerns. The increasing number of environmentally conscious consumers has resulted in numerous Go Green campaigns and a Go Green movement, along with solutions and calls for consumers, corporations and governments to be more proactive in going green in every aspect. Libraries are no exception. Although it is so important, little is known about the green-library concept in the African context and among Kenyan libraries. Like some other developing countries, Kenya has responded to climate change in various ways because of its adverse impacts. It is important to explore how libraries are planning for a sustainable future. Subsequently, this study aimed to explore the adoption of green-library concepts in Kenya for environmental sustainability with a view to proposing strategies that can be used to guide libraries in going green. The study adopted a qualitative approach. A sample of 12 libraries was purposively drawn from a population of 227 academic, public and special libraries in Kenya. Data was collected using semi-structured interview schedules complemented by observation and a document review, and analysed using grounded theory. The findings show that libraries in Kenya, under their umbrella organizations, have taken advantage of their knowledge of green concepts through adopting and implementing green practices and coming up with strategies to enhance green libraries and promote environmental sustainability. They have done this mainly through redesigning and renovating to meet ever-changing user demands in line with green-library standards. The study concludes that librarians in Kenyan libraries understand green-building concepts and have adopted different green initiatives, albeit partially to reposition and maintain their position globally. The study proposes three strategies for fully going green: active user involvement in green initiatives; improving performance and growth measuring metrics; and maintaining green-library standards in accordance with the IFLA’s Environment, Sustainability and Libraries Section (ENSULIB) green-library checklist.

Keywords
Green libraries, environmental sustainability, green initiatives, Kenyan libraries, going green

Introduction
Climate change is real, and human activity is the leading cause. Notably, since the Industrial Revolution, average global temperatures have been increasing steadily, resulting in climate change threatening
life on Earth. In 2019, for instance, there was extraordinary global heat, retreating ice and record sea levels due to heightened human activity. The average temperatures for 2015–2021 and 2010–2021 are the highest ever recorded, and 2019 was the second hottest year on record (Olhoff and Christensen, 2019). According to NASA Release 22-006, the last eight years have been the hottest ever recorded, with 2021 coming in at sixth place. The latest figures from NASA and the National Oceanic and Atmospheric Administration show that global temperatures are 1.1 °C above pre-industrial levels and creeping ever closer to the 1.5 °C limit set by politicians at the United Nations Climate Change Conference (COP26) in Glasgow in November 2021 (NASA, 2022). Unfortunately, even with the increasing destruction of the environment due to climate change, there are no adequate global commitments to lessen climate change (Nunez, 2019). The 2019 projected that, by 2030, emissions will reach 56 gigatonnes of equivalent carbon dioxide, which is double what they should be. Thus, there is a need to prevent global warming beyond 1.5 °C and reduce emissions by 7.6% annually until 2030 (Christensen & Olhoff, 2019).

Currently, many governmental and non-governmental institutions are endeavouring to address the problem of global warming, which requires urgent attention. Nations agreed to a legally binding commitment in Paris to limit the global temperature rise to no more than 2 °C above pre-industrial levels (UNEP, 2022). They also offered national pledges to cut or curb their greenhouse gas emissions by 2030. The Paris Agreement commitments have been updated as they have become ineffective. The update was reviewed at COP26, resulting in the Glasgow Climate Pact, which is meant to drive action across the globe on mitigation (reducing emissions, adaptation) and help those already affected by climate change financially (enabling countries to deliver on their climate goals) and to work together to deliver even more significant action. The success of this pact will have great significance for the world. If countries cannot agree on sufficient pledges, in another five years, the reduction in emissions necessary will leap to a near impossible 15.5% annually (UNEP, 2022). The unlikelihood of achieving this far steeper rate of decarbonization means that the world is facing a global temperature increase of above 1.5 °C. Every fraction of additional warming above 1.5 °C will bring worsening impacts, threatening lives, food sources, livelihoods and economies worldwide (United Nations Environment Programme, 2020).

Libraries have not been left behind and are engaging in green initiatives to reduce global warming and safeguard the environment (Singh and Mishra, 2019). Librarians are slowly becoming eco-conscious and developing a sense of creating libraries that minimize power consumption and are energy-efficient and environmentally friendly, and are sustainable libraries or green libraries. Green libraries are library structures that are designed, built, renovated, operated or reused in an ecological and resource-efficient manner (Meher and Parabhoi, 2017). Green-library initiatives emerged around 1990 and libraries have since been adopting several practices to reduce the negative impact of libraries on the environment (Fedorowicz-Kruszewsk, 2020).

Aytac (2019) underscores that the opportunity for libraries to be directly involved in environmental sustainability was bolstered by the IFLA’s push for libraries to be joint custodians of the United Nations 2030 Sustainable Development Goals, with specific targets addressing the environmental dimensions of sustainable development (Christensen & Olhoff, 2019). However, there has not been much follow-up to see if all libraries are following the IFLA’s directive. In its 2015 resolution on sustainable libraries, the American Library Association stated:

> libraries that demonstrate leadership in making sustainable decisions that positively address climate change, respect and use natural resources, and create healthy indoor and outdoor environments will stabilize and reduce their long-term energy costs, help build more sustainable communities, and thereby increase community support for the library. (American Library Association, 2015)

However, there is a gap in some countries where no notable resolutions have been made – for instance, Kenya and most African countries – to help address the issue of environmental change.

The environmental changes that are a result of population growth and human activity are altering the world in ways that are threatening the existence of life on Earth. Evidence shows that the threat from environmental changes is bound to increase in the coming years if additional proactive action is not taken (Tong and Ebi, 2019). A press release from the United Nations Environment Programme in 2016 noted that the scenario is even worse in developing countries such as Kenya, where, because of weak governments and environment regulatory systems and a lack of awareness and goodwill on the part of organizations, there is high environmental degradation, which has exposed these countries to severe environmental changes.
According to Cobbinah et al. (2019), climate change has increased in the past three decades, with adverse effects on the poorest countries in the world. Managing environmental change is thus a global concern, requiring not only international bodies and governments, but also action by local institutions, such as libraries, which can intervene to ease or avert the adverse effects of environmental changes. Library institutions, especially in developed countries, have devised environmental sustainability interventions. One of these actions is the green-library initiative. This concept has been embraced within library management with an emphasis on environmental sustainability, the health of library patrons and staff, and providing for the needs and interests of tomorrow’s generation of users (Datta, 2015). The main concern of green libraries is to decrease libraries’ environmental impact (Kurbanoğлу and Boustany, 2014).

Like some other developing countries, Kenya has responded to calls for climate action in various ways because of the adverse impacts of climate change and environmental degradation. It is important to explore how libraries are planning for a sustainable future. However, as much as environmental sustainability is so important, little is known about the adoption of the green-library concept in the African context, and especially among Kenyan libraries. Apart from the United States International University Africa Library, there is little knowledge on how other libraries in Kenya are adopting green concepts and, if they are not doing so, why they are reluctant to participate in environmentally sustainable practices. Consequently, this knowledge gap prompted the current study to explore the adoption of green-library initiatives in Kenya for environmental sustainability, and thereby outline their importance and propose strategies that can be used to guide libraries in going green. Another motivation for the study was the disproportionate impact of climate change on developing nations such as Kenya, caused by environmental degradation, with very little being done to ensure a sustainable future. Recent trends indicate that rainfall is becoming increasingly rare and inconsistent, and communities are already bearing the brunt of climate change in their everyday lives. This study seeks to fill the gap by identifying what can be done by libraries in their small capacity as organizations impacting communities to secure the environment and reduce their carbon footprint.

The objectives of this study were to establish the comprehension and perception of Kenyan librarians with regard to the concept of making libraries green for environmental sustainability; analyse the green methods/practices adopted by Kenyan libraries; determine the factors driving and impeding libraries’ embracement and implementation of the green concept; and propose strategies to guide libraries in transforming into green libraries.

The going-green movement

The green-building movement was inspired by Victor Olgyay’s 1963 book Design with Climate and Ralph Knowles’ publication on form and stability, published in 1967 (Uhl and Anderson, 2001). Green building refers to practices that make buildings sustainable and resource-efficient throughout their life cycles, from siting to design, construction, operation, maintenance, renovation and demolition (Buys and Hurbisson, 2011). Green buildings are designed to have a reduced overall impact on human health and the natural environment. The Go Green movement recognizes that there is only one Earth, and that it should be taken care of. It means protecting the Earth and promoting a healthy environment.

The philosophy of sustainable development was being promoted in the 1980s and, by then, libraries in the developed world had already started to attempt sustainable practices. According to Abbey (2012: 11), several library organizations spearheaded initiatives to respond to ‘concerns about prevalent mismanagement of natural resources and effluence in the United States’ in the 1960s. According to Antonelli (2008): ‘The Green Library Movement emerged in the early 1990s and gained popularity in the library profession around 2003’; it ‘comprised a growing number of librarians, libraries, cities, towns, college and university campuses committed to greening libraries by reducing their environmental impact on the planet’.

Abbey (2012) asserts that the green-library movement focuses on four distinct areas: the sustainability of scholarly communication; measuring and improving sustainability; green libraries and facilities; and green libraries and practices. According to Abbey (2012), the greening of libraries not only calls for greener library spaces, but also for greener library strategies that allow for the integration of ecologically friendly practices in a platform that guides future decisions regarding library buildings, equipment, digitization and the efforts of library networking.

Importance of libraries going green

When thinking about issues like climate change and global warming, libraries do not come to mind, despite their contribution to the problem due to their large consumption of energy in the delivery of services. According to Prasanth and Vasudevan (2019),
having a healthy natural environment is essential for the quality of life and human survival. Librarians have a crucial role to play in ensuring the betterment of the library environment, as it is crucial in minimizing its negative impacts on the natural environment. Moreover, this also improves the internal environment in terms of quality by conserving resources such as energy, water and paper, and using natural and biodegradable products and construction materials (Hauke and Werner, 2013). Greening libraries will help reduce their carbon footprint, which is defined as the total amount of greenhouse gases produced indirectly and directly in support of human activities.

Libraries are community organizations, which gives them a social responsibility to reduce their harmful environmental effects. Shah et al. (2015) are of the opinion that economic benefits can be achieved through greening libraries, recycling waste materials, reusing water and using efficient lighting systems. According to Hauke and Werner (2013), most energy resources are finite, making it necessary to use them with care. It is therefore vital for library budgets and the planet’s health that the available energy resources are used prudently. Khallar (2015) notes that libraries require a significant amount of resources, water and energy; thus, it is necessary to adopt the concept of going green. Notably, this can contribute to tackling the issue of environmental challenges such as energy depletion and climate change.

Kurbanoğlu and Boustany (2014) identified that libraries act as gateways to knowledge, making them particularly responsible for leading by example and disseminating the idea of sustainability. Libraries have a role in providing popular services and communicating a clear green identity. Their improved daily operations and procedures can help educate the community about responsible environmental practices (Choudhury, 2014). Libraries should incorporate ecological sustainability in their marketing plans as socially responsible bodies. According to Hauke and Werner (2012), green libraries are crucial for maintaining the ecological balance in the environment and preserving the planet’s natural resources and systems. Scherer (2014) observes that going green can be influential in bringing environmental awareness to a community by teaching environmental sustainability.

In the quest to go green, libraries have adopted resource recycling strategies and energy-saving practices to recoup the tradition of sustainability. Antonelli and McCullough (2012) assert that having a green image allows a library to improve and strengthen its environmental consciousness. Other steps towards the greening of libraries that have been adopted include: locating the library building centrally in a densely populated area with accessible transportation services (Hauke and Werner, 2013); the adoption of underground parking and vegetative roofs to reduce the heat-island effect; water conservation strategies, including the collection of rainwater and use of waterless urinals and low fixtures (Antonelli and McCullough, 2012); the use of glass technology to reduce the harmful effects of the sun’s ultraviolet rays; and the use of solar energy and wind energy for the conservation of energy (Pangail, 2015).

Similarly, the structural designs of libraries are now consciously being considered along with the going-green concept. Some examples include library designs which ensure that the air is recycled and does not remain stagnant, to avoid trapping harmful toxins in the building (Antonelli and McCullough, 2012); the use of large windows to allow for the entry of both sunlight and fresh air into the building or the use of wide corridors to provide a buffer against the entry of humid and hot air (Pangail, 2015); the use of environmentally friendly, renewable materials such as cork, bamboo, wood and linoleum to renovate existing libraries that are not yet green (Binks et al., 2014); and the continued incorporation of open spaces as well as potted plants, which are eco-friendly.

According to Abbey (2012), the push for building green libraries continues to grow, with cities incorporating environmentally friendly practices in public buildings. The green movement has seen libraries adopt green features such as solar panels, bamboo flooring, natural daylight and shades to filter direct sunlight, among other features. Choudhury (2014) attributes the adoption of green features when building libraries to the perceived benefits, such as reduced costs and making libraries affordable. Choudhury (2014) cites the example of the Delhi University Library in India, which has incorporated broad openings to allow for natural light, resulting in a cool and pleasant environment. The building has coolers made from pads of indigenous materials that help prevent the desert heat from coming inside. Moreover, the library has a lot of greenery, with potted plants and trees both inside and outside the building.

In Kenya, the United States International University Africa Library has a garden with trees and plants that creates a green environment and provides fresh air for staff and library users as part of its enormous green building (Mwanzu, 2018). A flat roof allows for the collection of rainwater to water the garden. According to Ogola (2018), the design of this library indicates that the green-library movement has been
embraced all over the globe and is now used as a benchmark for new buildings.

**Methodology**

This study was founded on two theories and a standard rating system. The two theories are the norm activation model and the value-belief-norm theory of pro-environmental behaviour. The standard rating system is the Leadership in Energy and Environmental Design (LEED) standards.

Schwartz’s (1977) norm activation model explains the altruistic and environmentally friendly behaviour of individuals and organizations. The norm activation model ascertains that individuals may significantly affect the environment through other behaviours, such as influencing the actions of the organizations to which they belong. However, it is not strange that it is taking libraries a long time to become aware of environmental problems, consider the benefits of green initiatives and acknowledge the consequences before they decide to adopt the concept of a green library. This may explain why, in Africa and Kenya in particular, there are not as many libraries adopting the green concept.

The value-belief-norm theory was proposed by Stern et al. (1999) to account for the effect of human values in an environmental context. Proponents of the value-belief-norm theory argue that individuals’ subjective norms and normative beliefs regarding the environment influence their intent to behave ecologically. This proposition stems from an understanding that our environmental values can make us pursue green building. The value-belief-norm theory complements and builds on Schwartz’s norm activation model by holding that altruistic and pro-environmental behaviour occurs in response to personal moral norms that are activated in organizations which believe certain conditions pose threats to others. With such awareness of the unfriendly consequences, institutions and organizations can initiate actions and resolutions, such as acknowledging their responsibilities and forging solutions that could avert those consequences.

The norm activation model speaks to librarians’ awareness of possible detrimental consequences and their acknowledgement of responsibility for not acting pro-environmentally. Pride and guilt cause librarians to act in a manner in line with their personal norms. Environmentally significant behaviour indirectly shapes the context in which choices are made to directly cause environmental change. The value-belief-norm theory informs the behavioural definition of environmentalism, which is the propensity to take actions with pro-environmental intent. In the context of green-library initiatives, environmentalism is the idea that flows from adopting a new environmental or ecological paradigm, within which librarians’ and architects’ actions, designs and environments are perceived as indistinguishably interrelated.

Figure 1 illustrates the conceptual framework of this study. It shows the relationship of the concepts used in the study. The researchers conceptualized that green libraries result from library environmental sustainability practices and strategies that guide libraries to transform into agents and actors of the United Nations Sustainable Development Goals. However, some factors impede libraries’ embrace and implementation of green concepts, which affects the implementation of green libraries.

The study adopted a subjectivism ontology and interpretivism epistemology, and a case study research strategy. Data was collected through face-to-face interviews, observation and a document review. A purposive non-probability sampling technique was employed. Purposive non-probability sampling is congruent with an explanatory research design, allowing the researcher to perform a sound study of a small sample that is selected purposively to provide an information-rich qualitative context to answer the research questions and meet the study’s objectives. The libraries were purposively selected based on their appropriate infrastructure, green architectural design and procedural practice related to environmental sustainability concepts. With this method, the sample selection criteria were based on maximum participant variation in the extent of adoption of new or renovated library buildings that incorporated the green-library concept. Size and their ability to be a fair representation of libraries in Kenya.

The selected libraries were deemed to have met the inclusion criteria as they had recently renovated their buildings or relocated to new buildings incorporating the green-library concept. The libraries included five public university libraries (University of Nairobi Graduate Research Library, Kenyatta University Post-Modern Library, Moi University Margaret Thatcher Library, Masinde Muliro University Library and University of Embu Library); three private chartered university libraries (Catholic University of Eastern Africa Library, United States International University Africa Library and Adventist University Library); two public libraries (Kenya National Library Service – Upper Hill and Kenya National Library Service – Nakuru); and a school library and a special library (Mpesa Foundation Academy Library and International School of Kenya Library).
The researchers viewed this variation as a strength of the research strategy since patterns that arise in the data between different institutions are of great value in drawing conclusions from the entire population. The head librarians of each institution were targeted. The data collected was qualitative, and its validity and the understanding gained from the data had more to do with the researchers' analytical and interpretation skills than the sample size, which is common in the adopted research design of a qualitative explanatory study. Purposive sampling was used since it was the most appropriate for the study to ensure that only libraries that had embraced the green concept participated. Framework analysis was used to analyse the data during the collection process. NVivo, a qualitative data analysis tool, was used to aid the data analysis. In the analysis, the gathered data was sifted, charted and sorted in accordance with the critical issues and themes of the study. Indexing was used, whereby the researchers identified the portions of data that corresponded to the study themes.

Figure 1. The conceptual framework.
Findings

Librarians’ comprehension and perception of the concept of green libraries

The concept of green libraries was adapted from the green movement initiative concerned with environmental sustainability. The green-library movement in local libraries is still taking shape. However, it has been widely embraced in the business world. It is thus critical to understand how librarians comprehend and perceive green libraries. First, the study inquired whether the librarians perceived their library to be green. Most of the librarians considered their library to be green to some extent, as illustrated by some of the green-library practices in their libraries. One of the librarians, while explaining the green concept of their library, stated:

I can say that our library is green because the library building is made with enough lighting to minimize electricity use. We also encourage our users and even the staff during the day to put off lights and only switch on when it is dark.

In another instance, one of the librarians commented: ‘Our library is green as we make use of the available resources – for example, the saving of energy by using the sun, harvesting rainwater, and taking care of ventilation because we don’t have air conditioning in this building’. These librarians’ remarks reflect the observations made of some of the physical library buildings included in the study. The buildings were fitted with adequate windows to allow sunlight into the buildings. The roofs were also provided with translucent sheets that allowed natural light into the libraries. This helps to avoid the reliance on electricity to illuminate the buildings. Figure 2 shows images of some of the library buildings. The first two images show library buildings with adequate windows to let in natural light. In contrast, the third and fourth images show students reading in the library under the natural light from the windows and translucent roof sheets.

With regard to adopting greening aspects in libraries, the interviewees explained the areas where green initiatives were evident. These included environmental elements that involved energy, the harvesting
of water, limiting the use of resources and the use of digital libraries. The concern over the environment was mainly linked to natural lighting, tree planting (Figure 3) and the proper use of the available resources. These environmental factors were considered an integral part of the library model, and there have been many strategies to incorporate greening in all library activities. One librarian said: ‘When this library was being commissioned, the plants to be planted were considered to make it green and make the library more environmentally friendly. We planted some trees here within the library community’.

**Natural light.** The buildings had large windows to allow in natural light and minimize electricity use. The libraries also encouraged users and staff to switch lights off during the day. One librarian pointed out that: ‘The architectural make-up of the buildings is done to allow for natural light, including using more windows and constructing atriums or transparent roofs’. Another stated: ‘I think we have used natural light most of the time by having glass walls and part of the roof roofed using a transparent material. We have more natural light coming in’.

**Planting trees.** Another aspect that was reported was the planting of trees. The interviewees mentioned that libraries planted trees as an aspect of greening (Figures 4).

**Harvesting water.** The harvesting of water included collecting rainwater, dealing with running taps and other aspects. One librarian reported that they put up notices urging users to turn off taps after use. They also had sensor taps that automatically produced water (Figure 5).

Some of the librarians reported collecting water on their roof and using it to irrigate the green gardens around the library: ‘We have water harvesting whereby we have huge water tanks surrounding the library to tap rainwater and irrigate plants. We have put gutters that collect water into our underground tanks’.

**Limiting the use of resources.** With regard to limiting the use of resources, some of the libraries reported that they failed in this respect since they lacked policies that guided the library in resource use. People tend to waste resources when there are no policies on using
natural resources like water and acquired resources like electricity and paper. However, the libraries were trying to minimize the use of power. Various strategies were used – for example, controlled switches where the library official had total control of the lighting system. Another element of the proper utilization of the resources available in a library is minimizing the use of paper:

We do not print on paper; we always encourage working online. We just print when it is essential. We do not encourage printing of everything. Minimizing the usage of paper saves on the resources as libraries use less paper, meaning fewer trees are cut, creating environmental sustainability.

Use of digital libraries. The libraries reported migrating to digital tools. In other instances, old books were being converted to digital formats. This allowed for no further dependence on hard-copy books, which ensured that libraries no longer needed to reprint hard copies, even of old books. Some of the libraries reported that they were now producing more electronic resources than hard-copy books. The libraries were also subscribing to e-journals to offer their
readers a variety of online resources, instead of relying on print versions.

Further probing sought to determine the extent of the greening of the libraries. Some of the participants considered their library to be partly green. One librarian indicated:

I think our library is partially green because of how it was built. Certain things in its structure make it partly green, such as the garden in the middle, the way the roof is built, and the way the building was designed, making me feel that it’s a partially green library. And then also the way the windows let in natural light.

Another librarian stated: ‘I consider our library partially green because we are currently going into the virtual library. We are working towards providing accessibility through online resources, virtual library, e-books and stuff’. Other participants considered their library to be predominantly green. One commented: ‘I would consider the university library largely green, but not completely green. This is because measures have been taken towards environmental sustainability, including policies and procedures, ensuring the sustainability goal is achieved’. However, there was almost unanimous agreement among the interviewees that none of the libraries in Kenya could be considered 100% green as there were always areas for improvement:

I would not, of course, consider our library to be fully green. For our library, I would call it partially green because, from the environmental part, we have managed its appearance. For example, we have a lot of green plants all over, and that really makes our lives very green.

**Green services in Kenyan libraries**

The librarians acknowledged having some green-library services to promote environmental sustainability. Services linked to greening imply specific considerations to ensure that greening occurs. Some of the libraries had established an energy management committee that provided information on environmental sustainability. One of the librarians remarked:

We have an energy management committee comprising of librarians. One of the things that we do through this committee is to offer information on environmental sustainability. Secondly, the librarians also provide environmental literacy services. Once in a while, some of our librarians are called upon to participate in workshops related to environmental literacy.

An energy management committee takes care of the events in a library and always seeks to ensure that only the best practices regarding the greening of libraries are implemented.

Another element related to the services offered by green libraries is designated library staff who train users on best practices in environmental sustainability. One university librarian said: ‘We have a librarian in charge of training users on best practices in environmental sustainability. This librarian prepares programmes for users on how to use the library sustainably and access and use the services sustainably’. In another example, e-library services were considered to be part of green-library services. According to one of the chief librarians: ‘The other service that enables greening is migrating library services to online platforms. This enables librarians to serve their users online, reducing the use of many other resources like energy, water and paper’.

The libraries also conducted targeted training, identifying specific groups with which to share the message of greening initiatives and environmental sustainability. It was stated that: ‘We have an outreach programme that engages the community. In this programme, we teach society about improving their reading culture and integrate tree-planting aspects around the library’. However, some of the libraries did not have any initiatives offering services linked to greening. One reported: ‘Our greening library initiative comes in a tiny aspect where we plant trees, but when it comes to a service, I think that we have not initiated any green services in the library’.

**Libraries’ contribution to eco-friendly/environmental sustainability**

The contribution of Kenyan libraries to eco-friendly/environment sustainability was considered with regard to three components: reusing and recycling materials, reducing waste and toxic products, and developing alternative technologies.

The librarians were questioned about the strategies their libraries adopted to reuse and recycle various materials. Some reported reusing materials while others had not reached that level of reuse and recycling. Libraries have had to go beyond their usual mandate and try to engage with people outside the realms of their parent organizations through conservation. One instance was a library hosting a collection point for recyclers on their premises: ‘We have been encouraging people to put the plastic bottles in one place, where slum dwellers collect them and reuse them to make chairs and lampshades and things like that’. Other libraries reported that they gave used cartridges to recyclers instead of disposing of them where they could be harmful to the environment. One of the
librarians stated: ‘First of all, what we do with spent cartridges is, once we remove them from the machines, we normally give them to someone else who is recycling them instead of throwing them away. We give them out for recycling’.

**Greening practices adopted by Kenyan libraries**

This objective was tested under the libraries’ greening methods and environmental sustainability practices. The results indicate a sufficient understanding of environmental sustainability with greening methods and techniques as part of environmental sustainability. All of the participants, representing different libraries, demonstrated adequate knowledge of ecological sustainability and its diverse facets. Most of the participants understood ecological sustainability as preserving the environment by reasonable use of natural resources while minimizing waste. One of the respondents noted: ‘Environmental sustainability is ensuring the cleanliness of the environment and making use of readily available natural resources’. Another respondent asserted: ‘Environmental sustainability is using, maintaining, and preserving existing natural resources. We should stop degrading the environment and regenerate the resources for the future generation’. Another said: ‘Environmental sustainability ensures no wastage of resources in our daily activities. For example, when the library has water leakages, the water is wasted and not redirected for other uses; hence, we don’t contribute towards sustainability’.

**Libraries’ involvement in environmental sustainability and its practices**

The results confirm that the libraries were fully involved and concerned with environmental sustainability. They show that most libraries adopted different practices in ensuring the greening of libraries as a form of ecological sustainability. It was noted that the methods discussed below were used by most libraries and recognized as the most effective tools for environmental sustainability.

**Architectural design.** The results indicate that the architectural designs that most libraries adopted to ensure environmental sustainability were an atrium and green roofs. An atrium is an elongated roofing design that is transparent and made of fine sheets or glass. An atrium is essential for ensuring that enough natural light enters a building, thereby helping to minimize the use of artificial light and electricity during the day. Most of the libraries reported that they had an atrium, although some did not. One of the participants said: ‘Our library has an atrium. It can be seen immediately after entering the library since it is elongated and transparent. The atrium has been very helpful since the library can access natural lighting all day’.

A few of the libraries had to redesign and replace their old asbestos roofing with an atrium, ensuring that they were being environmentally friendly. One of the respondents from a library with a redesigned roof noted: ‘We had these roofing called asbestos which is not environmentally friendly. Later the library changed them and replaced them with the atrium design, which allows natural light in’. Another noted: ‘Our library currently has a Cano base, which usually looks very beautiful and allows natural light. Before, we used to have the translucent ones, and these were replaced’.

Although not commonly used, the results reveal that several libraries had green roofs for environmental sustainability. A green roof is where there are plants on the top of the building to help maintain the room temperatures and keep the rooms cool. Conversely, some libraries did not have green roofs:

Oh no, we do not have a green roof where the plants are planted on the rooftop. However, I have seen this kind of roof in another library. I think it would be a great idea if we also adopted this since we have sufficient space at the top.

The results also show that most of the participants did not understand the concept of green roofs and what they involve.

**Maintenance-friendly construction.** The results indicate that most of the librarians understood a sustainable library to be one that did not need many resources to maintain it. When libraries are being constructed, it is essential to leave enough space for growth or future upgrades. Many of the libraries were reported to be maintenance-friendly. This was characterized by the way they had been constructed: the walls had large windows, which allowed the light to come in. One of the participants confirmed:

Yes, our library is maintenance-friendly. It is made up of stone with very many aluminum windows. Partitioning was done on the first and second floors and used bolts instead of stone. We are planning to expand in the future, and due to the nature of the building and how it was built, we will not interfere with the floor when removing the partitioning.

Another noted: ‘Since the library building was commissioned, we have done very little on maintenance except on a few adjustments that had to be done; for
example, when the rain used to pass through the window, it was addressed with time’. A further respondent commented: ‘The materials used in the building are no longer timber apart from the shelves. The materials used in our library include aluminium and glass, which can be easily changed during maintenance’.

On the other hand, some of the libraries stated that they rarely carried out maintenance. They replaced items in the library when the need arose:

No, we don’t do maintenance. After a long time, the only thing we have done is the carpet replacement. The carpet was incorporated since it reduces the noise as people walk in or around the library. Therefore, this was the only significant kind of maintenance I could say we have done so far.

**Redesigning.** The results reveal that most of the libraries had been redesigned or planned to redesign using intelligent arrangements to make maximum use of the space available. One of the respondents confirmed: ‘Yes, we have redesigned severally to create and utilize space in our library. For example, the space the tanks have occupied used to be the medical book space. However, we removed them to create space for the tanks’. Another noted: ‘We have redesigned severally. Recently, we rearranged the library into different sections according to users. This was in different sections such as the kids, pre-teen, teen, and adult sections’. A further participant commented: ‘Before, we used to have offices in sections. However, since we redesigned, we now have open area offices, which has helped utilize a lot of previously wasted space’.

**Zoning of lights according to requirements.** According to the results, the component Zoning of lights was also considered among the best practices for environmental sustainability. The results indicate that many libraries incorporated the zoning of lights in line with their requirements. This meant that in cases where there was enough natural light, the replacement of bulbs was minimal, whereas if libraries used artificial lighting, bulbs would be replaced regularly. On the other hand, a few of the libraries reported that they did not do zoning. One of the participants stated:

Yes, we do zoning. Most of the time, we use natural lighting following the big windows that have been fixed in our library. The different bright colours are painted on the walls, enhancing the natural lighting … We have put the energy-saving bulbs and removed the old ones. In sections with natural lighting, we have set more miniature bulbs or none in a standardized manner. Another respondent reported not using the zoning of lighting: ‘I would not say we have practised zoning of lights since we have bulbs in all sections regardless of natural lighting. What has been done is that most bulbs are permanently switched off’.

**Bicycle parking.** The findings show that almost all of the libraries did not have designated spaces to leave bicycles compared to other types of transport, such as cars. A significant percentage of the libraries noted that they had car parking spaces that could be shared with bicycles but did not have a designated space for bicycles. This meant that the most common mode of transport was still cars, which use petrol and have a significant carbon footprint. On the other hand, a few of the libraries confirmed that they did have space for people to leave their bicycles, although it was limited:

Out there, the bicycles are trendy, but apparently, we do not have parking spaces designed for them . . . No, we do not have a parking space designated for bicycles. We had identified a place to set it, but the government procurement procedures and processes are very long and have not approved payments for the rails used to lock the bicycles.

Another respondent noted: ‘Yes, we have designated a place to be bicycles’ parking space. However, we have not installed the rails, and thus the cyclists ought to be creative and find the best way of parking their bikes’.

**Environmental impact on immediate surroundings**

The findings confirm that efforts to go green by libraries majorly affected their surrounding environment, creating a better environment. Efforts to build environmentally friendly buildings affected the surroundings either positively or negatively. As much as there were participants who confirmed that they were affected, others said that they were not aware of any effects resulting from greening activities. The participants noted cleaner air as one of the impacts of greening activities in their library. Air pollution around the library was reduced, creating a more pleasant environment: ‘There is no pollution in the library surroundings; there is clean air’.

The results reveal that the noise from ongoing greening activities, such as renovations and building work, also affected the librarians and library users. One participant revealed: ‘When construction is ongoing, there is a lot of noise and dust’. Additionally, an excessive number of wild trees was noted as one of the effects of greening activities in library surroundings. Others included accidents from falling trees and
cold temperatures: ‘I remember one time there was a storm, and one of our walls was completely brought down. This maybe leads to the question of what type of trees should be planted around the library’.

The findings also show that greening activities were extended to the libraries’ neighbours. Such services included the planting of trees, flowers and even bushes. One participant commented: ‘We have planted in a school a kilometre away...we have been cleaning the roads around us and collecting garbage, and therefore our neighbours enjoy walking on clean roads’.

**Document review**

This study reviewed three key types of library documents: library strategic plans, library-building blueprints, and library budgets. However, apart from the public libraries, which had clear strategic plans, the university libraries, school library and special library did not have a strategic plan document. Nevertheless, some of these libraries had well-articulated visions and mission statements, as well as values. It was widely observed that green-library implementation was missing in these libraries’ visions and mission statements. This could account for the low performance of green-library initiatives, since such plans did not feature in the strategic documents of these libraries.

Regarding the blueprints of the library buildings, most of the libraries provided their blueprint with strict confidentiality conditions. In contrast, others could not offer their blueprint due to their policy, and some could not locate the document at the time of data collection. The blueprint documents that were examined showed that only the modern library buildings were designed with environmental sustainability in mind – for instance, these libraries were designed with provisions for rooftop rain harvesting. The blueprints also included designs for atriums, which ensure that natural light is allowed to enter the building, and help save on the use of electricity during the day. From the blueprints, it was also observed that libraries had designed bicycle parking spaces to encourage their users to use their bicycles instead of cars, thereby reducing carbon emissions. Some of the buildings were also designed with indoor garden spaces, allowing for trees and flowers to grow inside the library.

Regarding the budget documents, it was observed that the libraries were failing to budget for green-library initiatives. The libraries did not have any special funds in their budgets to establish or promote a green library. However, libraries with indoor gardens had some funds set aside for garden maintenance, including watering and removing weeds.

**Insights from the research findings**

The green concept in Kenyan libraries is still taking shape compared to the business world, where it has already become established. Most of the participants described their libraries as partially green in accordance with the practices they were involved in, and revealed that their libraries had many good plans for the future in going fully green while also influencing the mindset of library users and the surrounding communities. The results also reveal that libraries in Kenya offer green services, such as user training on environmental sustainability by designated librarians, green collection and lending services, digital library services, and awareness campaigns spearheaded by energy management committees.

Libraries in Kenya have adopted greening initiatives such as building designs with atriums and green roofing, maintenance-friendly and eco-friendly construction, the zoning of lighting, redesigning in accordance with LEED standards, parking for bicycles, recycling and the reuse of resources. Moreover, the findings confirm that efforts to go green in libraries have majorly affected the surrounding environment by providing a better climate through cleaner air for reading and having a smaller carbon footprint.

Regarding the participation of libraries in greening initiatives, the results reveal that all libraries in Kenya recognize participation in greening initiatives as a good strategy for supporting the United Nations Sustainable Development Goals for preserving natural resources for a sustainable future. However, most of the libraries did not participate in such endeavours. The small percentage that participated in greening initiatives reported to have done so through umbrella organizations such as their parent universities, which had a school of environmental science or climate control. Many libraries had embraced the green concept to be on a par with the world order. In doing so, they ensured that their redesigns and upgrades conformed to LEED standards for green buildings. In Kenya, Vision 2030 was acknowledged as one of the policy factors that influenced libraries to embrace the green concept. Libraries have been embracing and implementing green initiatives in line with the policies of Vision 2030.

While implementing the green concept, some challenges prevented the libraries from effectively going green. These included: inadequate financial support; a lack of awareness and understanding of the green concept; a lack of clear policies and strategic plans
to guide implementation; the organizational culture; and a lack of interest from the library users and management. Some of the projected solutions to these challenges included: increasing green information literacy; emphasizing the role of leadership in setting up eco-friendly buildings; local practical solutions such as improving lighting; the development and adoption of policies and standards such as the LEED building standards; and better waste management.

Notably, many libraries had used strategies such as architectural innovations and renovations to transform into green libraries. The libraries had adopted other methods, such as attending special greening events, setting targets for tree-planting days, and raising awareness while incorporating many stakeholders. The architectural innovations and renovations that guided the libraries in their efforts to achieve greening included green garden spaces, green roofs and provisions for natural lighting. Remarkably, many libraries achieved less energy consumption through natural-lighting provisions enabled by installing large windows, creating open spaces within the library and using atriums on their roofs. Further, the libraries recorded that they were using solar energy and light-emitting diode bulbs to help conserve energy.

The libraries were more intent on finding ways to reduce electronic waste. The Kenyan libraries reported using technology to reduce electronic waste, which has become the hardest type of waste to dispose of. This was characterized by more Internet usage for communication purposes and the use of refurbished computers. To further cut electronic waste, libraries in Kenya reported partnering with companies that refurbish or dispose of outdated computers and machinery.

The libraries in Kenya confirmed that participating in annual greening events aimed at environmental sustainability, such as tree planting and cleaning the nearest towns and marketplaces, contributed to their going-green initiatives. They were also involved in partnerships and networks with international bodies such as the IFLA and United Nations Environment Programme that strategically promote environmental sustainability through green initiatives. The libraries have partnered with local forest service departments to encourage tree planting and international bodies to observe world environment or tree-planting days. According to the results, Kenyan libraries intend to be strategic by incorporating more partnerships in the future that can support them financially and in terms of capacity-building to create more awareness around environmental sustainability.

The libraries in Kenya reported that they had run campaigns to create awareness of their greening initiatives for a sustainable environment. Most libraries reported using information and communications technologies (ICTs) in creating awareness of environmental sustainability. Green information literacy and user education have helped library users understand the direction the libraries are taking globally in using green initiatives. Notably, the green concept is effectively and successfully taking shape in Kenya, specifically in public and academic libraries. As a result, the respondents reported that many libraries that used them as benchmarks had indicated their desire to build fully green libraries or renovate their existing buildings to incorporate environmental sustainability as a standard for measures and quality control. All of the libraries in this study confirmed that they intended to improve their structures and policies to go fully green, like libraries in developed countries. Some of the libraries’ plans to achieve this include adopting solar energy, green roofs, improved water systems, more partnerships on greening and proper waste management.

This takes us back to the theories applied in this study to help achieve the study’s objectives: the norm activation model and value-belief-norm theory. According to the norm activation model, people significantly affect the environment through their behaviours or greatly influence the actions of the organization they represent. This means that managers refuse to adopt greening strategies on behalf of their organization because they do not believe in them. Evidence of the application of the value-belief-norm theory is notable in the beliefs and values of management and individual employees, including users. If they have values and beliefs in environmental sustainability, they will act personally to ensure it is achieved. However, those who do not possess such values tend most often to go against any policies that are proposed.

**Conclusion**

Under their umbrella organizations, libraries in Kenya have taken advantage of their knowledge of greening concepts by adopting and implementing greening practices and developing strategies to enhance green libraries and promote environmental sustainability. They have done this mainly through redesigning and renovating to meet ever-changing user demands in line with the green concept. Therefore, this study concludes that librarians in Kenyan libraries understand the green-building concepts and have embraced and adopted different green
initiatives, albeit partially to reposition and maintain their position globally.

Policies should not be measured and judged by their meaning but by their performance. The traditional assessment system of measurement mainly evaluates the level of adoption of green initiatives rather than the achievement of the results of the objectives that are already in place. This is wrong, and most libraries continue using it. Thus, this study concludes that libraries are not able to determine and show if they have achieved, or not achieved, the full adoption of green initiatives and their end objectives because the metrics being utilized cannot ascertain the level of satisfaction and the impact of going green. The respondents noted that going green through adopting electronic resources was meant to reduce the carbon footprint created during the process of producing print material. However, most online resources are cloud-based and, although their carbon footprint was not investigated by the respondents, the study recommends that libraries need to examine the environmental impact of the cloud technologies being used to power electronic resources and whether they have measures in place such as green technology or ICT to reduce their carbon footprint.

Achieving green libraries is not a distinctive project; rather, different stakeholders should come into play and library users are among these stakeholders. This study concludes that overlooking stakeholders such as library users, for whom the reason for greening libraries is essential, is detrimental to achieving the greening concept. They should be involved through education, creating awareness, and participating in programmes and conferences aimed at environmental sustainability. Despite libraries in Kenya fully or partially adopting the green concept and initiatives that promote it, library users are reluctant to do so. They have persistently shown a lack of awareness concerning greening initiatives. For libraries to achieve their greening objectives, users are stakeholders and have a role to play. Therefore, this study shows that users lack involvement in libraries’ greening practices. This has delayed the efforts made by libraries to achieve green standards fully.

In the process of the adoption of green initiatives in libraries, challenges are anticipated. Most of these challenges stem from the goodwill and buy-in of management and the operations that make up the environmentally sustainable practices of a library. Most of the processes and decisions concerning environmental sustainability adhere to the proposed theories – the norm activation model and value-belief-norm theory – where most decisions are made depending on the beliefs and behaviours of managers and staff and not in the institution’s best interests. Most of the challenges noted are internal, meaning that the organization can devise mechanisms to solve them. The challenges realized did not alter the adoption of the greening initiatives in a significant way. Therefore, the study concludes that challenges encountered are part of any scheme if they are internal. The study proposes three strategies for fully going green: active user involvement in green initiatives, improving performance and growth measuring metrics, and maintaining green-library standards as guided by the IFLA’s Environment, Sustainability and Libraries Section green-library checklist.

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Effects of COVID-19 on sub-Saharan African library associations

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Abstract
Professional associations serve as a backbone for their members in Africa and globally. They promote the welfare of their members and have standards and principles that guide their activities. This is a quantitative study of 10 national library associations in sub-Saharan Africa. The study looks at some of the activities of the national library associations and how they were impacted by the outbreak of COVID-19. The findings show that the majority of the associations had to postpone their annual conferences and continuous professional education programmes. The study recommends that national library associations from sub-Saharan Africa take advantage of technological platforms to reach out to their members in the organization of conferences and training programmes. Also, national library associations should have a policy that can drive their activities in the future in the event of the occurrence of another pandemic.

Keywords
National library associations, professional associations, COVID-19, sub-Saharan Africa, Africa

Introduction
COVID-19 (coronavirus) is believed to have originated in Wuhan, a city in China, in 2019 (Ji et al., 2020). The world has witnessed several pandemics but COVID-19 is one that we can all attest to – it has sent shock waves around the world with devastating effects. The World Health Organization made the announcement that it was a pandemic and a Public Health Emergency of International Concern in March 2020. The pandemic has since been a huge blow to education (Bej, 2020), politics, the climate and environment, economics and culture with its worldwide health issues. According to a study by Kabir et al. (2020), experts have projected the impact of COVID-19 to be even worse than that of the financial crisis which the world faced in 2007–2008, and estimated the cost to be US$1 trillion to world’s economy for 2020. COVID-19 caused serious global socioeconomic disruption as governments imposed increasingly severe shutdowns, quarantines, curfews, closures, cancellations and other restrictive controls on their countries, citizens, institutions, facilities and general daily life in efforts to curb, contain and prevent its ongoing spread (Kosciejew, 2021).

According to Olden (2009), associations on the continent of Africa have evolved over the past seven decades with diverse political and historical underpinnings. Associations in sub-Saharan Africa have also gone through various stages of development, with both failures and successes. These associations include the South African Library Association, the Association for the Development of Public Libraries in Africa.

There are several activities that are organized by national library associations within the contexts they operate in. These include the organization of local and international conferences, library publicity and advocacy programmes, continuing professional development (CPD) programmes, cooperation with other...
international organizations, and the publication of members’ research findings, among others. However, with the outbreak of COVID-19, most of the activities that national library associations were organizing for their members had to be cancelled and rescheduled. This was due to the restrictions imposed by governments on movement, as well as on the organization of public events. It was against this backdrop that the researchers sought to find out the extent to which national library associations were affected in the organization of programmes for their members across sub-Saharan Africa.

**Literature review**

This study, as a way of focusing on the topic under consideration, took a look at various studies related to COVID-19 and national library associations generally. During a pandemic, libraries suffer as their patrons are unable to access the collections housed in their physical structures. In the event where the use of technology is absent in a library, its users are unable to have access to its information resources as the physical libraries have been forced to close. The current outbreak of COVID-19 seriously impacted the operations of libraries as well as the activities of library associations in sub-Saharan Africa. There were a number of responses from library associations as they worked to support the activities of their members during these challenging times, with support at the regional as well as the international level.

Library associations are playing a critical role in the promotion of knowledge, despite the lingering impact of COVID-19 on the library profession (Akullo et al., 2021). Some of the world’s leading library associations issued formal statements, recognizing the pandemic and spelling out their initial responses and some of the measures that could be implemented to overcome the challenges that libraries were likely to go through. These statements exhibited how proactive the international library community was. Again, the statements outlined some of the actions that the library community could initiate to minimize the effects of the pandemic on them (Kosciejew, 2021). Despite the fact that associations at the national and international levels with different memberships and agendas issued different statements, there was a common thematic response to COVID-19. The statements centred on libraries, information provision, effective service delivery and workplace measures during the pandemic (Kosciejew, 2021).

One key support that library associations were engaged in was educating their members on the best ways of managing their set-ups to enhance access to their collections virtually. Globally, during the outbreak of the pandemic, some associations educated their members on the best ways of preparing for reopening following the shutdowns imposed by governments in an attempt to curb the spread of COVID-19.

Also, the creation of enhanced communication channels among library authorities was realized. This was intended to share relevant ideas on best practices geared towards planning for the future in the event of the outbreak of another pandemic. In addition, one major activity that most library associations undertook was ensuring that accurate information was made available to citizens at all times (European Bureau, 2020). Again, some associations provided information about the pandemic to people and enabled access to documents that educated citizens on the best ways of keeping safe (IFLA, 2020; Kosciejew, 2021).

Moreover, some professional associations instituted measures and distributed online training materials in the areas of health, technical, legal and financial aid free of charge for people who needed such materials. Also, links to key information resources online were made available to the public. These efforts by library associations need to be sustained in the post COVID-19 era (IFLA, 2020).

Furthermore, webinars were organized by some library associations on e-books and digital services, as well as preparations for the reopening of libraries. Webinars on how libraries could assist their staff were also organized. Library associations in Finland organized webinars to support libraries and facilitate reopening (European Bureau, 2020; IFLA, 2020).

Another response from library associations was to make health information available on their various websites and set up specific web pages to raise the awareness of information professionals as well as the general public. These pages included guides to clinical resources, education resources, article collections and research data. Some associations also instigated COVID-19 literature search initiatives through the collection of expert searches and policies on diverse COVID-19 topic areas, and developed COVID-19 search banks. Some web pages were devoted to breaking news and developments, and blogs were made available to both information professionals and the general public (Yuvaraj, 2020). The Medical Library Association in China was very instrumental in this regard (Buscher, 2020). The following are links to some of the search banks that were created:

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- Medical Library Association’s (USA) COVID-19 Literature Searches initiative (https://www.mlanet.org/page/covid-19-literature-searching);

At the international level, the IFLA (2020), during the outbreak of the pandemic, also joined the fight and used its website to publish information on the coronavirus pandemic for libraries and how best they could respond to it, especially during the lockdown period.

In a similar vein, the American Library Association published key information on its website on how to prepare for a pandemic, and the coronavirus in particular (Adigun et al., 2020). During the outbreak of COVID-19, the African Library and Information Associations and Institutions also embarked on a strong awareness drive on fake news on its website to curtail the spread of the virus. Several online resources were made available on its platforms for members of the association as well as the general public.

Furthermore, library associations responded by promoting information in their various publications, such as their newsletters and journals. Among these associations were the Cyprus Association of Librarians - Information Scientists (CALIS) and the French Library Association, which used their web pages to promote health-related information. The Portuguese Library Association also innovatively instituted a flip-board-based platform, which promoted newspaper sources on the pandemic and also exposed fake news (European Bureau, 2020).

In addition, most associations across the African continent leveraged the power of social media platforms to reach out to their members in a much more meaningful way. The NLA is still engaging its members even in post Covid-19 pandemic era (Ladan et al., 2020).

Some library associations initiated measures such as designing posters to educate people on the need to adhere to all the safety protocols, such as wearing face masks, hand sanitizing, social distancing and hand washing.

A major challenge following the onset of the pandemic was the cancellation of major library programmes such as conferences, seminars and CPD in Germany, Italy, the Netherlands, Ghana and some countries in sub-Saharan Africa, to name a few (European Bureau, 2020; Roe, 2020). Most of these activities were moved online.

Others were engaged in advocacy programmes with the authorities in their countries to deliberate on measures for preparing for future pandemics should they occur (Buscher, 2020). With the outbreak of COVID-19, there was a shift in terms of library governance to a model that involved extended collaboration with external agencies due to the need to enable access to online content, which had hitherto been unavailable for some institutions. Library associations stepped in and offered support services to their members in this area. Through the intervention of library associations, librarians have built their capacities in the use of digital technologies – skills that will continue to be relevant in the post COVID-19 era (Chisita, 2020).

One major consideration for all associations globally going forward is the sustainability of the telecommunications industry, as well as the provision of a constant power supply to support the smooth delivery of the services offered by libraries (Ortega-Martínez et al., 2021).

Background to national library associations

The mission of library associations is wide-ranging as they seek to promote the welfare of their members. Membership may comprise individuals and institutions, but most of their members are individuals. Most library associations have councils that have governmental support and an underlying interest in libraries and librarianship (Encyclopedia.com, 2019).

Library associations usually have standards and principles that guide their activities. They provide training for their members and also issue them with accreditation certificates (Association of College and Research Libraries, 1996–2021. A major source of funding for these professional bodies is membership fees, proceeds from conferences and seminars, and, in some instances, support from corporate bodies (Karisidappa, 2002).

Governments give attention to this role through financial and infrastructural support that libraries receive in various jurisdictions as libraries serve as learning centres for acquiring knowledge both at the community, regional and national levels.

Library associations, depending on the context within which they are operating, may have one section for elementary and secondary school librarians or other specialized bodies (Encyclopedia.com, 2019). They may also differ with regard to the composition and geographical location of their membership. The professional bodies within a library association are the force behind the professional development of its members in the areas of welfare, research, training and education needs. Library associations on the
African continent are professional bodies that aim to inspire and nurture library development in the face of the developments in emerging technologies, which are having a significant impact on professionals (Karisisappa, 2002).

**Objectives of professional library associations**

The following are some of the objectives for establishing national library associations in sub-Saharan Africa:

- To ensure the maintenance of a high standard of professional practice and conduct;
- To promote and safeguard the professional interests of librarians and information professionals;
- To promote and provide CPD activities for members;
- To produce regular publications on professional and industry issues;
- To provide a forum for networking among members (Ossai-Ugbah, 2013).

**Programmes and activities of library associations**

The nature of the programmes that are carried out by library associations differs from continent to continent. From time to time, these associations may engage with governmental agencies in the drafting of policies that affect the general operation of libraries (American Library Association, 2015). Some of the activities that are carried out by library associations are discussed below.

**Conferences**

Conferences, seminars and lectures are major activities that are carried out and geared towards establishing professional standards among members of library associations. During such programmes, members get the opportunity to share their ideas and also network with key professionals in the library community. Most of these conferences are organized annually in sub-Saharan Africa and globally to provide forums for new viewpoints in the area of librarianship (Baldwin, 1997). In sub-Saharan Africa, the Ghana Library Association collaborated with the Information Technology Section of the Nigerian Library Association in 2014 to organize an international workshop on Librarianship and the Demands for New Leadership Skills.

**Library publicity and advocacy**

Publicity and advocacy are key elements in librarianship. Publicity and advocacy are usually employed to gain economic, social, political and technological support (Chiwanza and Musingaf, 2013). Continual efforts are made to increase the visibility of libraries. Advocacy in the information profession promotes the value of members and well positioned them in terms of their identity formation (Hicks, 2016). Some activities that are used in this direction include the organization of library weeks, reading competitions, and collaboration with book publishers to organize book fairs. Librarians also carry out advocacy to promote the important role that libraries play among relevant stakeholders (Hicks, 2016; Ternenge, 2019). People usually advocate for issues so as to gain the attention needed. Advocacy is therefore considered to be a key measure, and it has been deployed as a powerful tool to protect vital library services in some African countries (Ternenge, 2019).

**Education**

CPD programmes are organized by library associations. These are intended to complement the curriculum taught in library and information science institutions. Librarians will only become relevant if they are able to undertake CPD programmes at either the local, regional or international levels to enhance their skills in the face of changing trends in technology (Ganaie, 2005; Moonasar and Underwood, 2018). According to Lamphey and Corletey (2011) and Genoni and Walton (2005), CPD programmes are key to the professional development of members, and library associations must therefore take the necessary steps to ensure that their members are equipped in this direction. CPD programmes will contribute to shaping the next generation of leaders (Ritchie and Walker, 2007), and it is important that library associations do not lose sight of this fact and put measures in place that will ensure that their members are able to take full advantage of the opportunities that CPD programmes offer. Hyams (1998) has also supported the idea of library associations raising awareness of CPD programmes among their members.

**Publications**

Professional journals and conference proceedings are published by library associations to promote the research output of their members. Other publications include newsletters and reference materials or manuals, which serve as guidelines for practising...
professionals. The library associations in India publish reports as well as conference proceedings (Padhan, 2018). In addition, a survey carried out in California shows that 84% of the academic librarians who took part in the study, wanted to use publication of journals to project the image of librarians (Ossai-Ugbah, 2013).

Cooperation with other international associations

Library associations cooperate with their partner associations across borders to share ideas and promote networking among members (Kofi, 2012). Cooperation can take place on several levels, including resource sharing, networking among professionals or collaborating on dedicated projects (Kofi, 2012; Okeagu and Okeagu, 2008; Onifade and Bridges, 2016). Cooperation among library associations is important as it allows for library associations to spearhead common projects (Mark, 2007).

Formulation of ethics for members

Ethics in the information professions are concerned with the application of moral standards to the conduct of librarians and other individuals involved in information dissemination. Ethical standards are formulated to guide the operations of associations. The standards unify the members within the association (Hansson, 2016). This is a major activity that library associations institute to guide the operations of their information professionals.

There are several codes of ethics that guide some associations in the areas of medicine and law, for example. In the library field, local associations have codes of ethics. On the international scene, several codes of ethics have been formulated for librarianship and these guide the activities of library associations (Hansson, 2016). When members adhere to these standards or codes, it describes their professional status. According to Ferguson (1991), library associations, in most instances, have introduced professional codes that will strengthen the philosophy and behaviour of their members. According to Kofi (2012), ethics have recently been given the attention they deserve, as they facilitate the existence of a professional body.

Objectives of the study

The purpose of this study was to establish the effect of the COVID-19 pandemic on the activities of national library associations from selected sub-Saharan African countries – namely, Botswana, Burundi, Côte d’Ivoire, Ghana, Guinea Bissau, Lesotho, Seychelles, South Africa, Zambia and Zimbabwe. The specific objectives were as follows:

1. To find out the activities that national library associations organized for their members;
2. To identify the communication channels employed by national library associations during the COVID-19 outbreak;
3. To understand the extent to which COVID-19 has impacted the activities of the national library associations in the selected countries;
4. To uncover the plans for how to deal with future pandemics.

Methodology

The study used a descriptive and quantitative survey, which was conducted from April 2020 to May 2021. The study population comprised presidents/executive heads of library associations in sub-Saharan Africa under the umbrella of the African Library and Information Associations and Institutions. An online structured questionnaire using Google Forms was designed and used for data collection. It was pretested and emailed to 20 presidents/executive heads of library associations in sub-Saharan Africa. Ten promptly responded, giving a response rate of 50%. The final data was collected in Microsoft Excel and analysed using the SPSS statistical tool. The results are presented in charts and tables with text explanations.

Results and discussion

The national library associations that were involved in the study are presented in Table 1.

Categories of libraries in national library associations

The researchers sought to find out what types of libraries make up the membership of the library associations in these 10 sub-Saharan African countries (see Table 2). This was a multiple-choice question and the respondents had the option of selecting more than one answer. With the exception of Ghana, the majority of the library associations (nine) have national libraries as members. Considering the important role that national libraries play as repositories for a nation’s publishing output, it is important for the library association in Ghana to liaise with key stakeholders in ensuring that such a structure is established. The library associations in all 10 countries had members that were academic libraries; nine of the associations had public libraries as members; and eight had school libraries. Private and community libraries were the least represented. According to Mark (2007), library associations may be
established according to subject area or professional background. Such associations may comprise academic libraries, special libraries and school libraries, among others. The findings of the present study corroborate Mark’s (2007) research, and it is clear that the library associations in the 10 sub-Saharan African countries have a clear representation of all the library types and will therefore be able to push forward programmes that affect these different categories of library. This is also in agreement with Webster’s (2002) study, where it was established that regional associations in North America have a diverse group of libraries within their associations. Library associations serve as a unified voice for different library types in the event of having an input in legislation for government policy in their respective countries for the promotion of library services. Moreover, library associations are able to get necessary recognition when it comes to the publicity and advocacy of libraries.

Table 1. Participating national library associations.

<table>
<thead>
<tr>
<th>Country</th>
<th>Association</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>Botswana Library Association</td>
<td>Not available</td>
</tr>
<tr>
<td>Burundi</td>
<td>Association des Bibliothécaires, Archivistes et Documentalistes du Burundi</td>
<td>Not available</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>L’Association pour la Promotion des Sciences de l’Information Documentaire en Côte d’Ivoire</td>
<td>Not available</td>
</tr>
<tr>
<td>Ghana</td>
<td>Ghana Library Association</td>
<td><a href="http://www.gla.org.gh">http://www.gla.org.gh</a></td>
</tr>
<tr>
<td>Guinea Bissau</td>
<td>Guinean Association of Librarians, Archivists and Documentaries (AGDAB)</td>
<td>Not available</td>
</tr>
<tr>
<td>Lesotho</td>
<td>Lesotho Library Association</td>
<td>Not available</td>
</tr>
<tr>
<td>Seychelles</td>
<td>Seychelles Library Association</td>
<td>Not available</td>
</tr>
<tr>
<td>South Africa</td>
<td>Library and Information Association of South Africa</td>
<td><a href="https://www.liasa.org.za">https://www.liasa.org.za</a></td>
</tr>
<tr>
<td>Zambia</td>
<td>Library and Information Association of Zambia</td>
<td><a href="http://libraryassociationofzambia.org">http://libraryassociationofzambia.org</a></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Zimbabwe Library Association</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Table 2. Categories of library that make up national library associations.

<table>
<thead>
<tr>
<th>Country</th>
<th>National</th>
<th>Academic</th>
<th>Public</th>
<th>School</th>
<th>Special</th>
<th>Private</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Burundi</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ghana</td>
<td>–</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Guinea Bissau</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Lesotho</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Seychelles</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>South Africa</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Zambia</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>


Library associations’ membership in sub-Saharan Africa

In December 2020, the researchers obtained the latest membership figures of the national library associations in the sub-Saharan African countries from the survey conducted (see Table 3). There were variations in the membership levels of the library associations that took part in the study. The Association des Bibliothécaires, Archivistes et Documentalistes du Burundi, Guinean Association of Documentalists, Archivists and Librarians, and Seychelles Library Association had membership levels of below 100. Such low membership numbers are not unique to the sub-Saharan Africa region but similar to those of the North American region (Webster, 2002). Other associations had membership levels from 100 to 500 – that is, the Botswana Library Association, L’Association pour la Promotion des Sciences de l’Information...
Documentaire en Côte d’Ivoire, Ghana Library Association, Lesotho Library Association, Library and Information Association of Zambia and Zimbabwe Library Association. The Library and Information Association of South Africa had the highest number of members. This could be attributed to the numerous information centres that are currently in place in that country.

Communication channels during the COVID-19 pandemic

How library associations reached out to members. Communication is key during a pandemic. Effective communication allows library associations to interact with their members with regard to the best possible ways of working in their different environments. The majority of the associations (nine) used email to communicate with their members when COVID-19 broke out. It is evident from the literature that email was used extensively during the pandemic (see Chisita, 2020). This is a clear indication that the different library associations took advantage of technology and employed technological platforms to reach out to their members.

Apart from emails, the associations used phone calls, WhatsApp and their websites to communicate with members. Online meeting applications were the least used, with five. These findings are represented in Figure 1.

Organization of meetings. Library associations have different schedules with regard to when they interact with their members. Whereas some meetings are organized virtually, others are carried out face-to-face. It was against this backdrop that the researchers sought to find out how the library associations engaged with their members. The findings show that the majority of the library associations (seven) organized council meetings for executives, whereas three did not. Kosciejew (2021) has stressed the importance of meetings for associations as they boost connectivity within the library profession. There was a question linked to the frequency of meetings. Four held a bimonthly meeting and three had quarterly meetings. The lowest level of engagement was the association that had a meeting every six weeks and arranged other meetings when the need arose. In the midst of the pandemic, although there were several disruptions that affected the engagement of members, library associations in sub-Saharan Africa did not waver and carried on engaging with their members. The findings are represented in Figure 2.

Activities organized for members. There are several types of activities that library associations organize for their members. The study sought to find out from the respondents the nature of the activities that they organized for their members. This was a multiple-choice question and the respondents could select more than one activity. The majority of the respondents (nine) organized CPD programmes for their members. This corresponds with the studies by Genoni and Walton (2005), Lamptey and Corletey (2011), and Moonasar and Underwood (2018). CPD programmes were followed by outreach programmes, with eight. The types of activities that were organized the least were social activities (see Figure 3).

Effect of COVID-19 on activities of library associations

The study also sought to find out whether the activities of the 10 library associations in the sub-Saharan Africa region were in any way affected by the outbreak of COVID-19. The majority of the library associations (nine) indicated that they were greatly impacted by the arrival of COVID-19, whereas one indicated that it was not affected by the outbreak of COVID-19. The effects of COVID-19 in this study are similar to those experienced by library associations in Bulgaria, Cyprus, Denmark, Estonia, Finland and France, among others (European Bureau, 2020). The major area in which the library associations were negatively impacted was the organization of conferences or seminars (33.3%). This was followed by the organization of their biennial congress or annual general meeting (22%), and 11.1% indicated that they

### Table 3. Membership numbers of library associations in sub-Saharan Africa.

<table>
<thead>
<tr>
<th>Association</th>
<th>Number of members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana Library Association</td>
<td>150</td>
</tr>
<tr>
<td>Association des Bibliothécaires, Archivistes, et Documentalistes du Burundi</td>
<td>60</td>
</tr>
<tr>
<td>L’Association pour la Promotion des Sciences de l’Information Documentaire en Côte d’Ivoire</td>
<td>100</td>
</tr>
<tr>
<td>Ghana Library Association</td>
<td>300</td>
</tr>
<tr>
<td>Guinean Association of Documentalists, Archivists and Librarians</td>
<td>67</td>
</tr>
<tr>
<td>Lesotho Library Association</td>
<td>100</td>
</tr>
<tr>
<td>Seychelles Library Association</td>
<td>59</td>
</tr>
<tr>
<td>Library and Information Association of South Africa</td>
<td>1800</td>
</tr>
<tr>
<td>Library and Information Association of Zambia</td>
<td>500</td>
</tr>
<tr>
<td>Zimbabwe Library Association</td>
<td>200</td>
</tr>
</tbody>
</table>

were greatly impacted with regard to the organization of all their activities. The findings from this study clearly show the impact of COVID-19 on the activities of the library associations both at the national and international levels. It is therefore prudent for library associations to explore the best options for implementing their key annual programmes even in the face of a pandemic.

**Figure 1.** Channels of communication. Labeling effected and added as separate image to this document.

**Figure 2.** Frequency of meetings. Labeling effected and added as separate file to this document by mail.
Postponement of activities. With the arrival of the pandemic, several library-related activities both at the local and international levels had to be postponed. The researchers therefore sought to find out from the library associations that took part in the study whether they were obliged to postpone any of their activities. The majority of the library associations (eight) postponed their activities. One did not postpone any of its activities.
activities and one was uncertain and indicated that maybe it did. Moreover, the respondents indicated the types of activities that had to be postponed. Their responses are represented in Figure 4.

For the question related to the activities that had to be postponed, there were only eight respondents. This was a multiple-choice question and the respondents could select more than one option. Seven indicated that their council meetings, biennial congress and annual general meeting, respectively, had to be postponed. Eight selected conferences. This corroborates Rafiq et al.’s (2021) study, which states that, for the first time in 75 years, the American Library Association had to cancel its annual conference. Also, Oyelude (2020) mentions some of the conferences that had to be cancelled, including the LD4 Conference and the International Association for Social Science Information Service and Technology Conference, among others. The same can be said of the world conferences of IFLA and the African Library and Information Associations and Institutions.

One major activity that the library associations organized for their members was CPD programmes, which are intended to complement the curriculum taught in library and information science institutions (Moonasar and Underwood, 2018). However, the findings show that six library associations could not organize any CPD for their members. Only four associations engaged in outreach programmes. The postponement of CPD is a clear indication that the members of library associations could not take advantage of programmes that were usually offered. It was hoped that the surge in the pandemic would lessen to allow the resumption of the key activities that the library associations offered to their members.

Future plans to organize programmes in the face of a pandemic

Considering the effects of the pandemic on the activities organized by library associations, the study sought to find out whether the associations had any future plans for the organization of activities in the face of a pandemic. All 10 library associations responded. The majority (eight) stated that they had future plans to carry out activities, whereas two indicated that they did not have any plans to organize future activities.

As a follow-up to this question, the respondents were asked to indicate the nature of the plans that they intended to implement in the face of a future pandemic. This was an open-ended question and the responses from the library associations can be summarized as relying mainly on technology to virtually interact with their members via email, WhatsApp, Google Meet, Zoom, Google Classroom, virtual conferences and webinars.

According to the IFLA Marketing Communication Plan (2017–2021), there is the need for associations to leverage on technology so as to be able to communicate effectively. This corroborates the European Bureau of Library, Information and Documentation Associations’ (2020) study, in which library associations have been urged to pay attention to digital services, as this will impact their policies for libraries.

Thus, for libraries to be able to reach out to their members in the face of future pandemics, they should make full use of the advantages that technology has to offer to sustain the communication links among their members. Again, in the absence of face-to-face meetings among librarians and associations, library associations must keep in touch with their members by using technological platforms. The importance of leveraging technology has also been emphasized by Chisita (2020).

Conclusion

National library associations are professional bodies that seek to promote the welfare of their members through the organization of programmes. The outbreak of COVID-19, which was declared a global pandemic, greatly impacted the activities of associations in sub-Saharan Africa, as it did to those associations beyond the African continent. Considering the enormous challenges that COVID-19 has presented, there is the need for library associations in sub-Saharan Africa and beyond to adopt measures that will enable them to take full advantage of technology in the event of the outbreak of another pandemic, and effectively serve the interests of their members.

Implications

This research will add to the existing literature on COVID-19 among libraries and library associations in sub-Saharan Africa and globally. National library associations serve as the mother bodies of libraries and, currently, there is limited research on the effects of COVID-19 and pandemics on library associations.

The findings from this study will, moreover, serve as a blueprint for national library associations on strategies to be adopted in the event of the outbreak of future pandemics. In addition, the research has raised some policy implications for countries that do not have national library associations, as such associations serve as a backbone for libraries.
Furthermore, the research has highlighted the activities that library associations organize for their members and those that are implementable in the event of the outbreak of a pandemic. Lastly, the research serves as a wake-up call for national library associations to gain new knowledge in the face of the effect of the outbreak of the COVID-19 pandemic on their activities.

**Limitations**

This study was purely quantitative and the findings cannot be generalized to other library associations on the African continent.

**Recommendations**

Although this study concentrated on 24 sub-Saharan countries with national library associations, only 10 library associations responded. Future research should include a study of the countries that did not participate in this study, as well as countries in sub-Saharan Africa without national library associations. Another future study could be carried out using a mixed-methods approach to provide an in-depth analysis of issues with future pandemics among national library associations.

**Declaration of conflicting interests**

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Samuel Bentil Aggrey is past president of the Ghana Library Association (2020–2022) with over 20 years of professional experience. He holds a Master of Arts and Master of Philosophy in Library Studies from the University of Ghana. At the Association level, he has held positions in the following capacities: member of the Education and Research Committee, Newsletter Editor, Vice President and President. He is currently senior librarian at the University of Ghana’s City Campus Library. His research interests include information and media literacy.
Online information seeking during the COVID-19 pandemic: A cross-country analysis

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Cecilia Black Fylking
Research Department, Inland Norway University of Applied Sciences, Norway

Neda Zeraatkar
Emory Libraries, Emory University, USA

Abstract
The aim of this study was to investigate the coronavirus-related web-searching patterns of people from the 10 most affected nations in September 2020. The authors extracted all searches for the sample nations, consisting of the two words ‘COVID-19’ and ‘coronavirus’ and their variations, from Google Trends for the complete year of 2020. The results showed a discrepancy due to the priority of the language used during searches for coronavirus-related information. The time span of the attention level of citizens towards coronavirus-related information was relatively short (about one month). This supports the assumption of the activation model of information exposure that information which generates a negative affect is not welcomed by users. The findings have practical implications for governments and health authorities in, for example, launching information services for citizens in the early months of a pandemic and them remaining as the preferred source of information for citizens.

Keywords
Coronavirus, COVID-19, online information seeking, trends, information avoidance, googling

Introduction
Looking for online health-related information has become an integral part of our digital everyday lives. The current evidence shows that nearly half of European citizens (Eurostat, 2020) and about 73% of US adults (National Cancer Institute, 2019) search online for health-related information. People use the Internet to get information on injuries, sickness, nutrition and general health improvement advice (Eurostat, 2020). However, online health-related information is not always credible or understandable. For instance, a quality assessment of 100 top-ranked health websites in the USA (Devine et al., 2016) showed that more than half of the surveyed websites lacked quality information. Other evidence (Kutner et al., 2006) shows that nearly half of Americans had below-average health literacy skills and that a search engine (mostly Google) was the starting point for about 80% of health-information seekers (Pew Research Center, 2013).

The global outbreak of the novel coronavirus (i.e. the virus that caused the COVID-19 pandemic) and the lack of knowledge about the pandemic triggered an enormous amount of false information and conspiracy theories about the coronavirus in online environments. This phenomenon is called an ‘info-demic’ – that is, ‘too much information including false or misleading information in digital and physical environments during a disease outbreak’ (World
Digitization and social media contribute to the escalating expansion of information. A simple search of ‘coronavirus’ on Google results in more than one billion records (date of search 2 July 2021). As well as being used as a source of information, social media and Google may spread and increase misinformation. Infodemics might well be escalators of the length and severity of an outbreak (Jarynowski et al., 2020).

Islam et al. (2020) showed that infodemics, in the form of rumours, stigma and conspiracy theories, have become widespread during the COVID-19 pandemic. Most of these concern illness, contagion and mortality. Gallotti et al. (2020) stated that online rumours and misinformation on social media before an increase in COVID-19 cases could constitute a severe threat to public health. A real example is the Iranian case of methanol poisoning during the pandemic, where misinformation on social media claimed, among other things, that alcohol could prevent or be a remedy for COVID-19. This then led to several deaths due to methanol poisoning (Delirrad and Mohammadi, 2020).

On 7 and 8 April 2020, the World Health Organization Information Network for Epidemics organized a global meeting of international interdisciplinary experts and sourced ideas for managing the COVID-19 infodemic. The result of this gathering was a framework with five Action Areas for governments and public health authorities. More research on the interactions of users with information and their web-search activities was among the proposed major themes under Action Area 4 (World Health Organization, 2020).

**Googling coronavirus-related information: state of the art**

Data from Google Trends has been used to predict the new and increased recrudescence of COVID-19 among the public, considering the limitation that contextual information (e.g. the language and nationality of the users) is not accessible to researchers (Eysenbach, 2009). Lippi et al. (2020) concluded that Google searches could be a potentially useful tool for predicting and recognizing COVID-19 outbreaks. By analysing the relative search volume in 50 US states, Sun and Gloor (2020) found that the earlier the population starts searching for online coronavirus information, the lower the infection rate will be. Recent studies (Akpan et al., 2021) show that online searches for information about pandemics helped people to learn about the outbreak of SARS-CoV-2 and COVID-19 in the early stages of the pandemic. Although there have been efforts to develop better tools in the surveillance of online users (e.g. Infovigil.com, an open-source infodemiology system at the Consumer Health & Public Health Informatics Lab in Toronto, Canada; Eysenbach, 2011), these tools are not ready or open to researchers yet.

Both Rovetta and Bhagavathula (2020) and Schnoell et al. (2020) analysed data from Google Trends for the first months of 2020 (from 20 February to 6 May, and from 1 January to 19 June, respectively) and showed that countries with a higher number of COVID-19 cases had a higher number of coronavirus-related Google searches. Schnoell et al. (2020) also found that online interest peaked prior to new COVID-19 cases and deaths.

Effenberger et al. (2020) identified national and continental variations in relative-search-volume peaks, and that these peaks were associated with new confirmed COVID-19 cases. From data collected between 31 December 2019 and 1 April 2020 for Europe and the USA, the public interest was on average highest 11.5 days before a peak in new cases. Kurian et al. (2020) found that there was a strong correlation between COVID-19 cases and relative search volume in 16 US states up to 16 days before the first confirmed case in each state.

Szmuda et al. (2020) analysed data from 31 December 2019 to 13 April 2020 and concluded that online searches for coronavirus were not correlated with epidemiology. However, the relative search volume of the European countries was strongly correlated within the sampled countries, and with the international World Health Organization proclamations. Walker and Sulyok (2020), who examined the relative search volume from the date of the first confirmed case in the UK (until numbers reached their peak in April 2020), found that the relative search volume varied but peaks appeared close to events in the development of the pandemic covered by the media. Sousa-Pinto et al. (2020) analysed data from the previous 5 years for 17 countries. Their results showed that (1) there was an increase in relative search volume for symptoms such as ageusia and anosmia in the same week as or one week after official announcements about the symptoms, and (2) there was a stronger correlation between searches for coronavirus-related information and media coverage of epidemiological trends. Jarynowski et al. (2020) explored the data for Poland and revealed that official announcements attracted the highest level of attention among Internet users, especially when they concerned mitigation strategies.

Previous studies show that the public level of attention towards coronavirus and COVID-19 information fluctuates and peaks on dates that correlate with either
official statements or new confirmed cases and deaths. Hu et al. (2020) reported an increase in relative search volume between 31 December 2019 and 24 February 2020, with the highest volume on 31 January 2020 for six major English-speaking countries. There was found to be a slight correlation between relative search volume and confirmed cases of COVID-19. However, the duration of the public attention was brief, and the public’s response time varied across countries. Bento et al. (2020) showed the shortness of attention among the US public, even though public statements were followed by policy measures. However, there were more searches for information on coronavirus (symptoms and prevention) than for information on community-level policies (quarantine, tests, etc.).

Rovetta and Castaldo (2020) studied online search behaviour in Italy and found two initial peaks on 23 February and 9 March 2020. General online interest then decreased, together with the official number of cases per region. However, they found an increase between 20 February and 10 June 2020 in terms of search queries related to hygiene and prevention.

The findings of the previous research can be summarized as follows: first, they show the popularity of googling coronavirus-related information among the world’s population; second, there is evidence that googling coronavirus-related information is positively correlated with new COVID-19 cases or deaths; third, googling coronavirus-related information has been positively correlated with the official announcements of national authorities or the World Health Organization; and fourth, the attention level of the public during searches for coronavirus-related information was short.

Rationale and importance of our research
Although the current literature shows the popularity of googling coronavirus-related information and the shortness of public attention during the search process, it is not clear whether the severity of the COVID-19 infections in a given country might increase the chance of a higher level of public attention during googling coronavirus-related information. Furthermore, the literature shows that the public attention levels vary across countries, but little is known about the general cross-cultural patterns of searching for coronavirus-related information, and the possible explanations for the short attention level of people during online information seeking.

Our research is focused on coronavirus-related information seeking of the public during a pandemic. It is important for this to be explored because the current evidence (Juva and Archer, 2020) shows that health authorities had difficulty in disseminating coronavirus-related information to all residents at an appropriate time. Furthermore, our research examines the possible usefulness of the activation model of information exposure in explaining the information-seeking behaviour of people during a pandemic. Moreover, this research contributes to research on the web-search activities of the public during a pandemic (World Health Organization, 2020). A better understanding of these aspects could provide clues to help (health) authorities communicate health-related information to all citizens and to counter online fake news and misinformation.

Research questions
Our research addresses the following research questions:

- Is the severity of the COVID-19 infections in a given country correlated with the attention level of the public during googling coronavirus-related information?
- Could the general attention level of the public during googling coronavirus-related information be explained by the activation model of information exposure?
- What are the cross-country similarities/differences in searching for coronavirus-related information?

Activation model of information exposure
One possible explanation for the shortness of attention level of the public during googling coronavirus-related information can be provided by the activation model of information exposure (Donohew et al., 1980; Donohew and Tipton, 1973). Donohew et al. (1980: 296) claimed that people operate at certain levels of activation which vary from individual to individual and that if they drop below that level, they seek out stimulation in order to return to their accustomed state. This was based on a statement made by Maddi, who argued:

Whenever the level of activation actually being experienced is lower than this optimal level, the person will engage in behavior designed to increase activation. A notable form of such behavior is the pursuit of variety. And conversely, whenever his actual level of activation exceeds that which is comfortable for him, he will engage in activation decreasing behaviors, notable among which is the pursuit of consistency. (Maddi, 1968: 273)
Donohew et al. (1980) described three generalizations in terms of information exposure: first, individuals have an optimal level of activation where they are most at ease; second, when individuals engage in or are exposed to information, the anticipation is to either continue or attain this level of activation; and third, individuals will experience either a positive or negative affect conditioned by whether this level is attained or not. These generalizations make it possible to predict if a person who experiences a positive affect will continue their information exposure or if a person who has a negative affective experience will terminate their information exposure.

The individual consequence of activation outside this optimal level is often a negative affective state. Donohew and Tipton stated:

the individual operates between boundaries of variety and consistency (or even redundancy), on the one hand tuning out information if it becomes monotonous in favor of something new, and on the other tuning it out if it reaches a certain threat level. (Donohew and Tipton, 1973: 245)

For a person who has a strong need for activation, the significance or value of information is essential to whether the person experiences arousal or not. Information that is perceived as unimportant will not meet their arousal needs and will create a discrepancy that causes a negative affective state, whereas information that is understood to be important creates a significantly more positive affective state (Donohew et al., 1980). On the other hand, persons with a low need for activation have a lesser need for stimuli. Information perceived as unimportant leaves these persons in an almost stable state, while important information provides arousal that surpasses this state, which creates a negative affect (Donohew et al., 1980).

**Methodology**

This study used Google Trends data on online searches for COVID-19/coronavirus in 2020 based on the following inclusion criteria and search strategy.

**Inclusion criteria**

There are various databases that report statistics on COVID-19 globally. However, we selected Johns Hopkins University’s Coronavirus Resource Center because of the credibility of this source. According to the Coronavirus Resource Center (2020), the 10 most affected countries of the world with regard to coronavirus on 3 September 2020 based on daily confirmed new cases of COVID-19 (with a seven-day moving average) were India, Iran, Mexico, Argentina, the USA, South Africa, Russia, Brazil, Colombia and Peru. The profiles of these countries are illustrated in Table 1.

In this research, we have investigated the online information search patterns of the 10 nations listed in Table 1, which had the following commonalities:

- Severity of the coronavirus pandemic – the included nations were listed as the 10 most affected countries on 3 September 2020.
- Relatively inclusive geographical coverage – the included nations are from Asia (Iran and India), North America (Mexico and USA), South America (Argentina, Brazil, Colombia and Peru), Africa (South Africa) and Europe (Russia).
- First registered case of COVID-19 in the first quarter of 2020 – so we based our study and later analysis on the 2020 data. In this way, it was possible to better compare the search patterns of the countries according to their similar COVID-19 situations, allowing us to see the stability/instability of the search interest in later months.

**Search strategy**

We extracted the data from previous Google searches with different alternatives to the keywords/phrases chosen that could be relevant to this study. The included search terms/keywords for each nation in this study are listed in Table 2. We based our data gathering and analysis on two main terms/keywords – ‘coronavirus’ and ‘COVID-19’ – and their variations, resulting in ‘coronavirus disease 2019’, ‘coronavirus’, ‘corona’ and ‘COVID-19 (COVID 19)’ (see Table 2, Terms 1–4). If the popular results included terms that had

<table>
<thead>
<tr>
<th>Country</th>
<th>First reported case of COVID-19 (2020)</th>
<th>Reported cases</th>
<th>Reported deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>3 March</td>
<td>439,172</td>
<td>9118</td>
</tr>
<tr>
<td>Brazil</td>
<td>26 February</td>
<td>3,997,865</td>
<td>123,780</td>
</tr>
<tr>
<td>Colombia</td>
<td>6 March</td>
<td>633,321</td>
<td>20,345</td>
</tr>
<tr>
<td>India</td>
<td>30 January</td>
<td>3,853,406</td>
<td>67,376</td>
</tr>
<tr>
<td>Iran</td>
<td>19 February</td>
<td>378,752</td>
<td>21,797</td>
</tr>
<tr>
<td>Mexico</td>
<td>28 February</td>
<td>610,957</td>
<td>65,816</td>
</tr>
<tr>
<td>Peru</td>
<td>6 March</td>
<td>657,129</td>
<td>29,068</td>
</tr>
<tr>
<td>Russia</td>
<td>31 January</td>
<td>1,001,965</td>
<td>17,365</td>
</tr>
<tr>
<td>South Africa</td>
<td>5 March</td>
<td>630,595</td>
<td>14,389</td>
</tr>
<tr>
<td>USA</td>
<td>22 January</td>
<td>6,113,510</td>
<td>185,720</td>
</tr>
</tbody>
</table>

Source: Coronavirus Resource Center (2020).
Table 2. Search data based on Google Trends for coronavirus-related terms/keywords.

<table>
<thead>
<tr>
<th>Country</th>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
<th>Term 4</th>
<th>Term 5</th>
<th>Term 6</th>
<th>Term 7</th>
<th>Term 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td>Coronavirus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td>Coronavirus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td>Coronavirus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td>کورونا وائرس</td>
<td>کووید-19 کورونا</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td>کوروناکووید</td>
<td>کوروناوىکووید</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>Coronavirus disease 2019</td>
<td>Coronavirus</td>
<td>Corona</td>
<td>COVID-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

alternatives in non-English-speaking countries, they were placed in Columns 5–8 respectively. We have included both the complete and short forms of the terms/keywords because, in some countries, such as Iran, the Persian term ‘کورونا’ (‘corona’) was a widely used keyword among Iranians to get information. In Spanish-speaking countries (e.g. Argentina), the English keyword ‘coronavirus’ was similarly used in Spanish, thus it is not included in Table 2 and the cell for Term 5 is empty for Argentina. It should be mentioned that web searches involving the term ‘coronavirus’ existed before the SARS-Cov-2 outbreak. However, the popularity of searches using this term before 2020 was negligible. Furthermore, we did not include web searches using other terms such as ‘pandemic’ or ‘SARS-CoV-2’, which were not prevalent (see Appendix 1). The extracted data was imported into and visualized in Excel.

Results

The country-level data on the searches for ‘coronavirus’ and the level of attention of the public are analysed and described in this section. For each country, the most popular search keywords are included and the general search pattern for the keywords/terms is described in detail.

The level of attention in this study is operationalized as the rate of interest (or popularity) of a topic (keyword/phrase) relative to the highest point in the figures for the given country and time. The level-of-attention scores range from 0 to 100. A level-of-attention score of 100 is peak interest in the topic and a score of 50 shows a middle level of popularity or interest.

Google Trends uses the normalization of search data based on the time and location of a query to make the results easily comparable. The normalization process of Google Trends is described as follows:

Each data point is divided by the total searches related to the geography and time range that it represents to compare its relative popularity. Otherwise, places with the highest search volume would always be ranked the highest. The resulting numbers are then scaled based on a range of 0 to 100 in terms of a topic’s proportion among all searches on all topics. (Google, 2022)

Argentina

The online searching for coronavirus-related information in Argentina is illustrated in Figure 1. As shown, the first increase in the level of attention in terms of searching for online coronavirus-related information among Argentinians took place on 1 March 2020. This rising level of attention peaked on 15 March (level of attention = 100) then sharply declined. The sharp decline became relatively stable on 3 May 2020 (25). This decreasing trend continued until the end of 2020. Of the five investigated keywords, Argentinians mostly used ‘coronavirus’ while searching for coronavirus-related information on the Web. The other keywords/terms were not as popular among Argentinians.

Brazil

The googling trends for coronavirus-related information in Brazil are shown in Figure 2. As is visible, ‘coronavirus’ and its equivalent in Portuguese (‘coronavirus’) were the two mostly used keywords among Brazilians while searching for online coronavirus-related information. The first rise in the level of attention with regard to online information about ‘coronavirus’ started on 1 March (10) and reached its peak on 15 March (100). The trend declined until 29 March (45), when a second sharp rise in the level of attention began and reached a second peak on 5 April (63). Later, the level of interest decreased and gradually disappeared.

The Brazilian searches for ‘coronavirus’ started on 1 March (3) and reached a first peak on 15 March.
Interest decreased slowly for about one week and then experienced a sharp increase. It reached its highest peak on 19 April (100). There is a visible sharp decline in the level of attention from 19–26 April. At this point, the search interest remained level for about two weeks and, finally, after a relatively sharp decrease, it disappeared.

**Colombia**

The searching for coronavirus-related information on the Web in Colombia is illustrated in Figure 3. Of the investigated keywords, ‘coronavirus’ was the most used keyword by Colombians when searching for online coronavirus-related information. The first rise in the level of attention to online information about the coronavirus started on 1 March (22) and reached its peak on 15 March (100). This trend showed a sharp decline until 29 March and, at that time, a second sharp rise in interest began (67). It grew into a second peak on 5 April (90). Later, the level of attention decreased and slowly vanished.

**India**

The search for coronavirus-related information on the Web in India is displayed in Figure 4. As the
investigated keywords in this research show, ‘coronavirus’ and its equivalent in Hindi (‘कोरोना वायरस’) were the two most popular keywords searched for among Indians. The first rise in the level of attention of Indians in terms of searching for ‘coronavirus’ began on 1 March (3) and it reached a peak on 22 March (100). This trend showed a sharp decline until 5 April. At that time, a second sharp rise in interest began (69), which reached a second peak on 12 April (75). Later, the level of interest lessened and gradually disappeared.

Although the search for ‘कोरोना वायरस’ had two peaks (100) on 29 March and 19 April, the general search pattern was similar to that for the ‘coronavirus’
keyword, declining very quickly and disappearing afterwards.

Iran
The Iranian searching for coronavirus-related information on the Web is illustrated in Figure 5. Of the investigated keywords in this research, ‘coronavirus’ and its short equivalent in Persian (‘کورونا’) were the two most popular keywords among Iranians. The first rise in the level of attention among Iranians in terms of searching for ‘coronavirus’ started on 9 February (2) and reached a first peak on 23 February (62). After a sharp decline, the search trend fluctuated but grew until 15 March. At that time, a second sharp increase in search interest began (47), which reached a peak on 29 March (100). Later, the level of interest lessened and slowly disappeared.

Iranians’ rising level of attention with regard to ‘کورونا’ began on 9 February and was at its highest on 23 February. After a sharp decline, it got more attention again on 21 June (19) and reached a second peak on 5 July (30). Afterwards, the Iranian level of attention was at its lowest level but fluctuating. Three terms/phrases – ‘Coronavirus disease 2019’, ‘کورونا’, ‘کورونا’ – were not used by Iranians and have therefore not been included in Figure 5.

Mexico
The Mexican search for online coronavirus-related information is shown in Figure 6. Of the investigated keywords in this research, ‘coronavirus’ was the most used keyword among Mexicans while searching for online coronavirus-related information. The first increase in the level of attention of Mexicans with regard to ‘coronavirus’ began on 1 March (17) and it peaked on 15 March (85). The trend showed a sharp decline until 29 March and, at that time, there was a second sharp rise in interest (69). This reached a peak on 5 April (100). Later, the level of attention lessened and slowly disappeared.

Peru
The Peruvian search for coronavirus-related information on the Web is reviewed in Figure 7. Of our investigated keywords, ‘coronavirus’ was the most popular among Peruvians. The first rise in the level of attention of Peruvians in relation to the word ‘coronavirus’ started from 1 March (17) and reached a first peak on 15 March (85). This trend showed a sharp decline until 29 March and, at that time, a second sharp rise in interest began (69), which reached a peak on 5 April (100). Later, the level of attention of Peruvians declined and gradually faded away.

Russia
The Russians’ search for online coronavirus-related information is shown in Figure 8. Of the examined keywords in this study, ‘coronavirus’ and its equivalent in Russian (‘коронавирус’) were the two most popular keywords among Russians. The first increase in the
level of attention of Russians in searching for ‘corona-
virus’ began on 1 March (20) and it reached its peak on 29 March (100). Afterwards, the level of attention declined sharply and then gradually vanished.

The Russian search interest in ‘коронавирус’ began, likewise, on 1 March and demonstrated a relatively similar trend to ‘coronavirus’. The other studied keywords were not predominantly used among Russians.

South Africa
The search for coronavirus-related information on the Web in South Africa is illustrated in Figure 9. As shown, of the investigated keywords in this research, ‘coronavirus’ was the most popular among the people of South Africa. The first rise in the level of attention of South Africans in terms of searching for ‘coronavirus’ began on 23 February (9) and peaked on 22 March (100). This trend showed a sharp decline until 5 April. After two weeks with a stable level of attention, there was a second sharp decline of interest. Following this, the interest in searching diminished and gradually disappeared.

USA
The searching for online coronavirus-related information on the Web in the USA is shown in Figure 10. Of
the investigated keywords in this research, ‘coronavirus’ was the most popular among Americans. The first increase in the level of attention of Americans in terms of searching for ‘coronavirus’ began on 16 February (4). After four weeks, the level of attention peaked on 15 March (100). The search trend experienced a sharp decline until 29 March when, after one week at a stable level, there was a second sharp decline. Subsequently, the American interest in searching for coronavirus-related information diminished and gradually disappeared.

As shown in Table 3, the time span of the level of attention of the general public from the nations included in this study in terms of searching for online coronavirus-related information was short ($M = 33.4$ days).

**Discussion**

The aim of this research was (1) to investigate whether the severity of COVID-19 infections in a country could influence people’s level of attention
(2) to examine the activation model of information exposure in explaining the attention level of public during online searching; and (3) to illustrate the cross-country similarities and differences in search patterns.

Although the 10 countries investigated in this study were among the nations that were most affected by COVID-19 in September 2020, the level of public attention with regard to online information about the coronavirus in these countries was at its lowest level on the date mentioned and afterwards. Furthermore, the search patterns of the countries investigated in this study were very similar to the world trends (see Figure 11). This finding answers the first research question: the severity of COVID-19 infections in the countries included in this study did not influence the public level of attention of people during searching for online coronavirus-related information.

The level of attention of the people of the nations included in this study when searching for online coronavirus-related information was short. This is in

<table>
<thead>
<tr>
<th>Country</th>
<th>Keyword</th>
<th>Date of first confirmed case of COVID-19 (2020)</th>
<th>Date of highest (100) level of attention (2020)</th>
<th>Time period (days) between first confirmed case of COVID-19 and highest level of attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Coronavirus</td>
<td>3 March</td>
<td>15 March</td>
<td>12</td>
</tr>
<tr>
<td>Brazil</td>
<td>Coronavirus</td>
<td>26 February</td>
<td>15 March</td>
<td>17</td>
</tr>
<tr>
<td>Brazil</td>
<td>Coronavirus</td>
<td>26 February</td>
<td>19 April</td>
<td>51</td>
</tr>
<tr>
<td>Colombia</td>
<td>Coronavirus</td>
<td>6 March</td>
<td>15 March</td>
<td>9</td>
</tr>
<tr>
<td>India</td>
<td>Coronavirus</td>
<td>30 January</td>
<td>22 March</td>
<td>51</td>
</tr>
<tr>
<td>India (Hindi)</td>
<td>कोरोना वायरस</td>
<td>30 January</td>
<td>29 March</td>
<td>58</td>
</tr>
<tr>
<td>Iran</td>
<td>Coronavirus</td>
<td>19 February</td>
<td>29 March</td>
<td>38</td>
</tr>
<tr>
<td>Iran</td>
<td>کووکورناسا</td>
<td>19 February</td>
<td>23 February</td>
<td>4</td>
</tr>
<tr>
<td>Mexico</td>
<td>Coronavirus</td>
<td>28 February</td>
<td>5 April</td>
<td>36</td>
</tr>
<tr>
<td>Peru</td>
<td>Coronavirus</td>
<td>6 March</td>
<td>15 March</td>
<td>9</td>
</tr>
<tr>
<td>Russia</td>
<td>Coronavirus</td>
<td>31 January</td>
<td>29 March</td>
<td>57</td>
</tr>
<tr>
<td>Russia (Russian)</td>
<td>Coronavirus</td>
<td>31 January</td>
<td>29 March</td>
<td>57</td>
</tr>
<tr>
<td>South Africa</td>
<td>Coronavirus</td>
<td>5 March</td>
<td>22 March</td>
<td>17</td>
</tr>
<tr>
<td>USA</td>
<td>Coronavirus</td>
<td>22 January</td>
<td>15 March</td>
<td>52</td>
</tr>
</tbody>
</table>
accordance with the findings of Bento et al. (2020), who showed that the attention level of US citizens towards general coronavirus-related information was short. A possible explanation for the relatively similar and short level of attention of those nations most affected by COVID-19 can be provided by the activation model of information exposure – that is, during a pandemic, the ‘messages which generate a negative or noxious affect because they induce arousal levels either above or below individual baselines are not likely to be well attended’ (Donohew et al., 1980: 303). Furthermore, the information overload of negative information about the coronavirus could be considered ‘monotonous’ or a ‘threat’ (Donohew and Tipton, 1973). This could make people refuse to continue searching for online coronavirus-related information.

The general cross-cultural patterns of searching for coronavirus-related information can be divided into three clusters: the first is the countries with a bilingual search pattern (e.g. Brazil, India, Russia and Iran); the second began to search in English rather than their national language (e.g. Brazil); and the third started with a search in their national language (e.g. Iran).

In Brazil, searches in Portuguese start later than searches in English. The level of attention for Portuguese reaches 100 on 19 April, more than a month after the same level of attention in English, and 14 days after the second peak (63) in English. For India, the English search peak is a week earlier than the search peak in Hindi, and the search in both languages shows a similar decline (down to a level of attention of 69) on the same date. There is a parallel incline, where the tendency for searches in English declines and the likelihood of searches in Hindi increases momentarily before a rapid decline. India is the only country where the search for coronavirus-related information in Hindi reaches a maximum peak (100) twice.

For Russia, the first peaks of searching for coronavirus-related information in both English and Russian happen simultaneously (on 29 March) with an equal level of attention (100). Russians’ search for coronavirus-related information in English declines steadily (without a second peak) while a second peak for searches in the Russian language happens on 12 April. Afterwards, the Russian searches for coronavirus-related information in both Russian and English decline rapidly. Searching for coronavirus-related information in Russian only shows a decrease in the level of attention between the first and the second peaks.

The searching pattern for Iran differs from the three other countries with bilingual searches in the national and English languages. For Iran, the peaks of both languages (Persian and English) are on 23 February. However, the level of attention to coronavirus-related information in the noted languages differs (the level of attention for searches in Persian is 100 and that for searches in English 62). More than a month later, the Iranian searches for coronavirus-related information in English reach a second peak (100). While the Iranian tendency to search in English is declining, the same search in Persian fluctuates during the spring, with a second (weak) peak on 5 July (30).

According to the Google Trends data, Iran has its first increase in public attention at the beginning of

![Figure 11. Online searching for coronavirus-related information worldwide in 2020.](image)
February 2020. On this date, the level of attention of Iranians in relation to coronavirus-related information in Persian is higher than it is in English. Brazil, India and Russia have their first sharp increase in public attention on 1 March 2020. For later countries, English is the preferred language. However, the level of attention differs both between countries and between English and the national language. In Brazil and India, searching for coronavirus-related information in English peaks (100) before the national languages. For Russia, searches in English and Russian peak concurrently (100), but, for Iran, only English has a second peak (100) on 29 March.

From the first peak to the second peak in English, only Iran has an increase in the level of attention. Brazil, India and Russia all have a decline in the level of attention for searches in English. From the first to the second peak in the national languages, there is an increase in the level of attention (Brazil), the level of attention is stable (India) or there is a decrease (Iran and Russia). There are several explanations for this. Moreover, our findings show that most of the countries had an earlier peak of searches in English than in the national language.

Initially, at the beginning of 2020, the COVID-19 pandemic was a global phenomenon. This may be the reason why it was more natural to search in English, rather than in national languages, to find global news and information about the coronavirus, as most of the available knowledge initially was in English. While evolving, the pandemic became more of a national issue than a global issue, as national precautions and policies were implemented. Another explanation could be rooted in culture. For example, in low-trust, non-English cultures, it could be possible that citizens shift towards English-speaking sources rather than resources in their national language because they do not trust the authorities.

The peaks in the national-language searches may be an effect of national announcements. This is in line with previous findings (Jarynowski et al., 2020; Sousa-Pinto et al., 2020). The research by Jarynowski et al. (2020) showed a similar pattern for Poland.

Another possible reason could be the number of English-speaking inhabitants of a nation. Individuals who are fluent in English might have easier access to information than people who speak only their (one) national language. Furthermore, experts (e.g. healthcare workers in hospitals, epidemiologists or virologists) might have started looking for online information (in English) about the coronavirus earlier than the rest of the population, which could be another reason why, in most cases, the level of attention of the searches in English increased or peaked before that in national languages.

The second sharp increases in public attention and the second peaks may have been more linked to national announcements and internal affairs than the first increases and first peaks. This might be why the patterns became more arbitrary. There are probably both clear and vague reasons for the patterns, and several reasons for the levels of attention, as well as why, in some countries, English seems to be the preferred language when it comes to coronavirus-related information. This is in accordance with previous research indicating that bilingual online information seekers ‘select a language that represents their information need most accurately…rather than choosing their first language’ (Rieh and Rieh, 2005: 249). Other reasons for the fluctuations in the search patterns of the nations included in this study could be to do with, for example, the ease of access to free information and the English-language proficiency of the individuals of a nation.

Conclusion

A major finding of this research is that the level of attention and interest in searching for online coronavirus-related information was short (nearly one month) among the public of all the nations included in this research. This pattern was relatively similar for all of the nations that were greatly affected by COVID-19, and this has been explained by the activation model of information exposure. Furthermore, there was an interest in searching for online information in both the native language and English among the public of the nations investigated in this research.

Practical implications

The shortness of the level of attention of the public when searching for coronavirus-related information online has practical implications for health authorities and professionals in terms of producing as much accurate and updated information as possible in the very early stages of a pandemic and sharing it via various information delivery channels (such as social networks, instant messaging services and websites) to citizens. In this way, those who search for online pandemic-related information can access and use the timely, trustworthy and unambiguous information from health authorities rather than following fake news or messages that could have terrible consequences.

Our findings show that people from some nations searched for coronavirus-related information in at least
two languages (English and the national language). Others started to search in English before searching for coronavirus-related information in their native language. The searching for bilingual information could imply that the national authorities have strived to develop a pandemic information dissemination model that is inclusive and where the related information and messages are accessible and understandable by all citizens in society. Especially in cases where a country is multicultural and diverse, and comprises various ethnic groups, relevant online information must be tailored culturally and linguistically. This is important because, as mentioned earlier (e.g. see Juva and Archer, 2020), health authorities have had difficulty in disseminating coronavirus-related information to all residents of a country (e.g. immigrants) in an appropriate space of time. Secondly, the language barrier of minorities has been an obstacle when it comes to reading and understanding the disseminated information. In addition, language barriers have been reported (e.g. Ingraham et al., 2021) to be a major factor in the hospitalization and deaths of some groups of people during the COVID-19 pandemic. This shows the importance and need for all citizens to be targeted with precise and understandable information.

A pandemic information dissemination model should pay close attention to the active participation of health institutions in providing credible information to citizens on social networks. This is important because most fake news and misinformation have been distributed via social networks. Furthermore, such a model should not be limited to digital environments. There are marginalized groups of individuals (e.g. those with limited Internet use/literacy, elders or newly arrived immigrants) in most countries. It is suggested that a traditional (physical) medium of information dissemination (such as brochures) should supplement online information dissemination.

Limitations and future research

This study had several limitations. First, the demographics (e.g. age, education level, information and communications technology skills, Internet access) of the online information seekers were not available via Google Trends for the researchers. Thus, the Google Trends data included in this research cannot be regarded as representative for all groups of people from a nation. The Google Trends data does not show who (humans or robots) the information seekers were. If it is assumed that the information seekers were individuals who had access to the Internet and were familiar with online search techniques, our findings and speculative conclusion cannot be necessarily generalized to the general public.

Second, our findings are based on the data extracted from Google Trends in 2020 for selected nations. Future researchers could investigate the searching patterns of different or similar nations for the following years to see if people’s level of interest while searching for coronavirus-related information was stable or varied.

Third, although a search engine (mostly Google) has been the starting point for the majority of health information seekers (e.g. see Pew Research Center, 2013), and googling coronavirus-related information has been very popular maybe because of a lack of trustworthy knowledge about the coronavirus, it seems logical that, at some point, a large number of these information seekers will turn away from search engines and instead start their coronavirus-related information-seeking process directly via a trustworthy website that is administered by health professionals.

Lastly, based on the current data, it is not clear why people search for coronavirus-related information via search engines. Health literacy may play a part in why people choose Google as a starting point for accessing health information. In addition, it has been claimed that increasing personal health literacy skills may result in informed decisions and disease prevention (e.g. see Hashemi-Shahri et al., 2020). Users’ poor levels of health literacy may make it more difficult to distinguish between correct and incorrect information, and hence to correctly understand and use information. For instance, Chen et al. (2018) found associations between poor health literacy, distrust in health information from specialists and, surprisingly, increased trust in information from, for example, social media, blogs and friends. Future quantitative and/or qualitative studies could reveal whether people perceive online information as the main source of health-related information or as a supplementary, first or last option, and how health literacy could influence people’s online information seeking and use in a pandemic.

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Supplemental material

The data that supports the findings of this study is openly available via Google Trends: https://trends.google.com

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Appendix 1

Popularity of searches for 'coronavirus', 'SARS-CoV-2' and 'pandemic' during 2004–2022 based on Google Trends data
Spread of misinformation during COVID-19: The case of Mauritius

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Abstract
As COVID-19 continues to spread rapidly across the globe, it is imperative to regulate the content of information such that people have access to accurate information. Nevertheless, there is the fear that governments are abusing legislation to limit freedom of expression and that the pandemic is simply being used as an excuse to further obstruct free speech. As such, it is through the lens of human rights that this research critically examines the approaches undertaken by the Mauritian authorities to deal with misinformation during COVID-19. To achieve this research objective, the related laws on misinformation are critically assessed and a comparative analysis is carried out of international responses to misinformation during COVID-19. It has been noted that the law alone is not sufficient to deal with misinformation, and media literacy among citizens is also essential in this endeavour.

Keywords
Freedom of expression, COVID-19, human rights, freedom of the press, misinformation, fake news

Introduction
As COVID-19 continues to spread rapidly across the globe, it is imperative to regulate the content of the information being shared with a view to ensuring that governments, companies, the medical community and society in general have access to accurate and timely information (Agley and Xiao, 2021). In this regard, various international institutions, such as the World Wide Web Foundation, UNESCO, the Association for Progressive Communications and the World Health Organization, have raised serious concerns over the vast asymmetries in the information being circulated in society, which makes it difficult for civilians to rely on trustworthy sources.

Indeed, the purveyors of fake news are sharing information that has caused unnecessary panic among the public whilst simultaneously slowing the progress of the fight against the pandemic (Mian and Khan, 2020). For instance, there have been rumours spread by the press that drinking whisky can kill the coronavirus (Chen, 2020) or that the virus affects only black people (Collier, 2020), and even racist news that larceny is being committed with regard to Chinese shopowners in Nigeria (Adebayo, 2020). As such, there is a dire need to take the appropriate measures to stop the spread of this incorrect information and, primarily, it is imperative to highlight the various types of inaccurate news, ranging from fake news, misinformation and disinformation to an infodemic. In this regard, in its book Journalism, ‘Fake News’ and Disinformation: A Handbook for Journalism Education and Training, UNESCO (2018) has defined fake news as ‘non-factual information’, but most experts are against the use of this term since it does not consider the intentions of the purveyors of the information and is, rather, used to undermine journalists (Sharpe, 2020). In contrast, disinformation refers to the deliberate propaganda of misleading or biased information, and manipulated narratives or facts, while misinformation refers to the spread of false information but without necessarily involving the mens rea to mislead (Dictionary.com, 2022). On the other hand, an infodemic has been described by the World Health Organization (2020) as an overabundance of information, whether accurate or not, which makes it difficult for...
people to find trustworthy and reliable guidance when they need it.

Undoubtedly, the increase in disinformation, misinformation and infodemics adversely affects the reputation of a country and, more specifically, those targeted by such news. Moreover, it is dangerous to rely on such information to protect public interests. In addition, people’s health may be at stake due to an over-reliance on unverified or unreliable information that is made universally accessible via social media platforms and the Internet in general. Consequently, to address these information issues, which are a frequent source of frustration (Pan American Health Organization, 2020), governments across the world are adopting strict measures such as censorship and warning or arresting those who spread false news. In this context, Mauritius has not been spared and has also fallen prey to false news being shared on social media since 2020 when, immediately on the announcement of the closure of supermarkets and shops, a civilian falsely claimed that there were riots in one particular region of the island. The police force and special squad teams were mobilised to the area, whereupon it was found that the news was fake. Accordingly, to prevent the reoccurrence of such an event, the civilian was arrested under the Mauritius Information and Communications Technology Act of 2001 (Lovina Sophie, 2020).

Nevertheless, there is the fear that governments are abusing libel laws, defamation laws and Internet restrictions to limit the freedom of expression of citizens and the media, and that the pandemic is simply being used as an excuse to further obstruct freedom of expression (Tandoc et al., 2020). Hence, since the outbreak of COVID-19, some international agencies, such as the World Health Organization and Human Rights Watch, have established checklists to ensure the protection of human rights, including the protection of freedom of expression and the broadcasting or sharing of verified, scientific, fact-based news and analysis (Guterres, 2021). As such, it is through the lens of human rights that this research critically examines the approaches undertaken by the Mauritian authorities to deal with misinformation during COVID-19 in the context of domestic laws and international conventions on freedom of expression. To achieve this research objective, a content analysis of international responses – the ‘black letter’ research methodology – is adopted, which relates to a critical analysis of the corresponding laws on misinformation and human rights, and a comparative analysis is made between Mauritian responses and those of other countries to uphold freedom of expression in light of the COVID-19 pandemic.

At present, there is little literature on the researched topic and this study will be amongst the first academic studies on the effectiveness of Mauritian laws concerning freedom of expression. The study has been carried out with the aim of combining a large amount of empirical, theoretical and factual information that will be of use to various stakeholders, not only academics. While the first part of this article has set out the context of the research, including the research objectives and methods, the second part will discuss some of the existing literature, highlighting the main sources of misinformation and its impact during COVID-19, as well as some governmental actions taken across the globe to counter the spread of misinformation. The main international conventions will then be analysed, as well as the laws of Mauritius on freedom of expression in the context of misinformation during COVID-19. The article continues by critically examining the responses of other countries in dealing with misinformation and concludes by critically assessing the various approaches adopted by some countries.

**Literature review**

**Sources of misinformation**

Misinformation is not a new phenomenon, although, in today’s digitalised era, the spread of misinformation is accelerated by, firstly, social media and, secondly, the diversification of actors that produce and disseminate misinformation (Association for Progressive Communications, 2021). Initially, media operators were mostly responsible for sharing disinformation, but now a simple post or hashtag relating to the personal opinion of an individual on social media platforms may become the subject of information that may not be necessarily true or accurate. It is apposite to note that misinformation propagates without constraints, does not entail any curation or peer review, and does not require any professional verifications.

Indeed, in support of the statement that misinformation is gaining popularity due to social media, Brennen et al. (2020) assessed the main types, sources and claims of COVID-19 misinformation in the UK between January and March 2020 published by randomly chosen social media platforms and traditional media institutions. The findings reveal that 59% of the misinformation emanated from three well-known social media platforms – YouTube, Facebook and Twitter – and, in terms of the nature of the misinformation, it was found that misleading or false claims about the actions or policies of public authorities, such as the government, and international bodies, such as the United Nations or the World Health Organization, have established checklists to ensure...
Organisation (WHO), were the largest category of misinformation. Along similar lines, Kouzy et al. (2020) sought to examine the extent of misinformation being spread on Twitter regarding COVID-19 on one particular day in February 2020. The study included 673 tweets and the results show that 153 tweets contained misinformation, while 107 shared unverifiable information. Furthermore, the researchers analysed the Twitter accounts by user category and the results reveal that the disseminators of misinformation were informal personal/group accounts (33.8%), followed by unverified Twitter accounts (31%); formal institutions like the government, press agencies and health-care providers had a lower rate of misinformation (6.1%). Moreover, Twitter has been accused by Pulido et al. (2020) of promulgating information that may hinder efforts in combatting COVID-19. A content analysis methodology was used by the researchers, and the results reveal that out of the 1000 tweets selected, 92% comprised false information, of which 63.3% were retweeted.

Undoubtedly, the ease of access to Internet facilities across the globe has turned online platforms into an accessible and easy tool of communication, but the lack of objective information shared on these platforms has resulted in an unprecedented surge of misinformation and unauthentic news. In this regard, Li et al. (2020) examined the sharing of misinformation during COVID-19 on YouTube on one particular day in March 2020. The researchers found that out of the 145 online videos, 64% contained misinformation elaborating on myths, the discovery of a vaccine and decontextualisation, while more than a quarter of the most viewed YouTube videos contained misinformation that represented millions of viewers worldwide. Consequently, the sharing of videos based on false or unauthentic information may delay the elimination of the coronavirus. As such, to deal with this issue, it becomes imperative to understand the reasons why there is the rising presence of misinformation on social media. Accordingly, a study conducted by Laato et al. (2020) reveals that sharing online information has become typical behaviour nowadays, and the 294 respondents in Bangladesh affirmed that although they were aware that the information was unverified, they still shared it without considering the adverse effects of their actions. In addition, to corroborate the findings of Laato et al. (2020), a study conducted by Pennycooke et al. (2020) used a close-ended survey with 1600 American participants; the findings indicate that more than 50% of the respondents preferred to share information without validation since, for them, information sharing was essential to raise public awareness.

Impact of misinformation

As the WHO has warned in relation to misinformation, people are experiencing difficulties in finding trustworthy sources of information that they can rely on, which is also acting as a barrier to response efforts to mitigate the pandemic. Consequently, several researchers have analysed the potential impacts of misinformation, and Ali (2022) groups these effects in three categories – namely, xenophobia, the violation of LGBT (lesbian, gay, bisexual, transgender) health-care rights and psychological distress.

Primarily, rumours and misinformation have led people to believe that COVID-19 is a result of intentionality and the personal interests of one particular country, which, when riddled with hate speech and racism, has resulted in human societies witnessing unprecedented disruption (Ali, 2022). For instance, a study conducted by Rzymski and Nowicki (2020) suggests that Asian medical students living in Poland are facing discrimination and isolation due to their origins, which is affecting their career development. Likewise, xenophobia towards Chinese people is prevalent in the USA, as confirmed by Reny and Barreto’s (2020) research, which investigated some 4311 Americans’ perceptions of the Chinese. The results reveal a strong association between COVID-19 misinformation and xenophobia towards the Chinese. Their findings confirm that the hate and grudges that people held against people of a particular origin were further accentuated by rumours that the coronavirus emanated from China, and even if this were proven, it was still not substantial grounds to perpetrate xenophobia towards Chinese people. In addition to xenophobia, several international institutions, such as the World Health Organization and United Nations, have declared the LGBT community to be more vulnerable during COVID-19 due to the already prevailing stigmatisation and discrimination of these individuals (Lopez, 2020). Basically, the LGBT community is facing issues with accessing health-care services and they are falling prey to bullying at home and online, which is making it more difficult to move easily due to lockdowns and sanitisation restriction measures (Office of the High Commissioner for Human Rights, 2020).

Apart from xenophobia towards Chinese people and the increase in the vulnerability of the LGBT community, it is believed that misinformation plays a vital role in undermining people’s mental health by inducing fear, anxiety and stress (Ali, 2022). This is because people living in isolation or quarantine often mainly rely on the source of information that is readily available – that is, information shared on social
media platforms. As mentioned earlier, these platforms contain the majority of misinformation, which may cause severe risks to the mental and physical health of vulnerable groups (Brennen et al., 2020). In this regard, Rajkumar (2020) conducted a study to assess the impacts of COVID-19 on people’s mental health. The findings show that anxiety, stress and depression were the main psychological problems encountered during COVID-19, and that the reduction or elimination of mental health issues could be achieved by counteracting misinformation and its potential sources. This psychological distress has a direct causal link to misinformation and it is therefore very important for the generators of information to ensure that they share true and accurate information that is verified by reliable sources, otherwise there will be more hatred and discrimination amongst communities across the globe.

Furthermore, and more alarmingly, a study conducted by Islam et al. (2021) and another carried out by the John Hopkins Center for Communication Programs (Desmon, 2020) have proven that relying on misinformation relating to health matters can be fatal. Their findings suggest that during the first three months of 2020, nearly 6000 people were hospitalised and at least 800 died due to reliance on COVID-19 misinformation. Spreading like wildfire alongside the pandemic, false information is the underlying principle for uncertainty and distrust, which in turn fuels an environment that is vulnerable to fear, anxiety and violent behaviour.

**International instruments and Mauritian laws on freedom of expression**

**International conventions**

Essentially, to narrow the spectrum of the negative impacts of misinformation during COVID-19, it is first and foremost imperative to control the sources of this inaccurate information. In this regard, governments across the world have implemented various strategies to tackle the issue of the distribution of false and misleading information, such as running sensitisation campaigns, holding press conferences, and strengthening existing, or establishing new, regulations on the matter. However, in these attempts, governments are having to negotiate the dichotomy between freedom of expression and people’s right to be safe from the adverse effects of misinformation (Rodrigues and Xu, 2020).

Fundamentally, freedom of expression is guaranteed by several international instruments. For instance, Article 19 of the Universal Declaration of Human Rights empowers every person to have the right to freedom of opinion and expression, and to receive and share information through any media channel, regardless of borders. This particular article is further replicated in Article 19(2) of the International Covenant on Civil and Political Rights (ICCPR; United Nations, 1966) but with a more elaborated explanation of the methods of communication and some restrictions on the exercising of these rights. In particular, Article 19(2) of the ICCPR adds to the corresponding article of the Universal Declaration of Human Rights by stating that communication channels may be either oral, in writing or in print, in the form of art or via any other media of the person’s choice. Indeed, Article 19(2) of the ICCPR differs from Article 19 of the Universal Declaration of Human Rights by mentioning that the right to freedom of expression shall be exercised by respecting the rights and reputation of others, and for the protection of national security, public order, or public health and morals.

Furthermore, under Article 10 of the European Convention on Human Rights, any person is entitled to hold opinions and receive and disseminate ideas and information without interference. Essentially, the ‘ideas’ and ‘information’ referred to in Article 10 of the European Convention on Human Rights not only encompass inoffensive or indifferent content, but also include things that may shock, offend or disturb the state or any sector of the population (see Müller and Ors v. Switzerland (1988)). Similarly, Article 9 of the African Charter on Human and Peoples’ Rights provides for the right to receive information and express and disseminate opinions ‘within the law’. Nevertheless, this legal provision has been criticised by various scholars (see Fielden, 2012; Kas, 2021) on the grounds that it does not provide for freedom of expression as afforded by other international instruments such as the Universal Declaration of Human Rights, the ICCPR and the European Convention on Human Rights. This is because, firstly, there is no corresponding right to impart information and, secondly, the right of expression and dissemination has been curtailed with the proviso ‘within the law’.

Nevertheless, these rights are not absolute since Article 19(3) of the ICCPR outlines some permissible limitations on freedom of expression if required by law or necessary to respect the rights and reputation of others or to protect national security, public order, public health or public morals (United Nations, 1966). Accordingly, these limitations have to be clearly spelt out in terms of their scope, meaning and effect in order to regulate individuals’ behaviour and avoid violations. Also, Article 19(3) of the ICCPR highlights the necessity of domestic laws to the effect...
that any restriction on the exercise of free expression must be proportionate to the threat to national security, public order, public health or public morals. In other words, any restriction of freedom of expression has to be mandated by the exigencies of the situation and must meet the tests of necessity and proportionality with the view of achieving a legitimate objective whilst not undermining the right to expression itself (Pomeranz and Schwid, 2021).

Hence, from the above elaboration on international conventions, in the context of COVID-19, the common consensus is that the onus is on the government that is seeking to limit free expression to establish a direct and immediate link between freedom of expression and the threat, and any restrictions must be the ‘least intrusive instrument’ to protect national security and public health (United Nations Human Rights Committee, 2011). However, there is a gap in the literature as to how countries have complied with their duties under the ICCPR during the pandemic in light of the rising amount of misinformation, especially in the Mauritian context.

**Mauritian laws on freedom of expression**

Primarily, Mauritius, being a sovereign democratic country, has embedded the fundamental right of expression in Section 12 of its constitution, which is the sovereign law of the island. This particular Section 12 has been inspired by Article 10 of the European Convention on Human Rights and, accordingly, the Supreme Court of Mauritius relies on judgments rendered by the European Court of Human Rights when considering disputes regarding freedom of expression.

However, Section 12 of the Mauritian constitution sets out some limitations on the enjoyment of freedom of expression. In particular, it is a limited right and there is the need to strike a balance between the right to freedom of expression and the rights of others. This reasoning has been applied rigorously in Mauritian courts for decades – for instance, in the cases of Cehl Meeah v. Commissioner of Police (2001), Armoogum v. La Sentinelle Liée (2002) and Soornack v. Le Matinale (2013). Essentially, the Supreme Court of Mauritius highlighted in the landmark case of DPP v. Boodhoo (1992) that an abuse of freedom of expression can be a potential threat in a democratic society, which may lead to chaos.

Moreover, apart from respecting the rights of others when expressing an opinion, Mauritian laws have criminalised the publication, distribution or reproduction of false news that has the aim of defaming another person or will disturb public order or peace according to Section 299 of the Mauritian Criminal Code. For instance, a newspaper cannot publish inappropriate, malicious or illegal articles without the required facts or evidence, and this principle was supported in the Mauritian case of Joseph France Michel Favolle v. Advance Publications (Mauritius) Co. Ltd (2017). However, where the facts are true and relevant for public benefit, the court will not prohibit the publication of an article that is defamatory, and this reasoning was upheld in the case of Fraser v. Evans (1969).

Additionally, freedom of expression is limited on the grounds of avoiding a contempt of court. In fact, any person who impedes the fair administration of justice will be guilty of this offence, and this may even apply to journalists. For instance, in the case of DPP v. Ahnee (1992), the media was accused of making insulting remarks in respect of a judge by casting doubts on the latter’s independence and impartiality. The relevant media operator was thus sanctioned for having scandalised the court. Additionally, in the case of Procureur General v. Delaroche (1893), a media operator was found guilty of a contempt of court for having influenced a pending trial, which interfered with the administration of justice in this particular case. The rationale behind this conviction was to avoid ‘trial by media’, which would have negatively affected the right to a fair trial of the accused.

**Misinformation in Mauritius during COVID-19**

Mauritius has been successful in limiting the number of COVID-19 cases owing to the various action plans implemented by the Mauritian authorities, such as quarantine, isolation, contact tracing, mass testing and even restrictions on various points of entry into the country (Musango et al., 2021). Also, the COVID-19 (Miscellaneous Provisions) Act 2020 was passed, which covers various areas to cater for the impact of the coronavirus, such as taxes, employment, insolvency, banking and tourism, among others, but nothing has been prescribed in respect of matters related to misinformation or human rights. Nevertheless, the Mauritian government took a proactive approach to discourage the spread of misinformation on COVID-19 at an early stage. This statement is evidenced by its response to the first attempt to mislead the general population through the sharing of a post on Facebook by a Mauritian citizen just after the prime minister of the country announced the first national lockdown in March 2020. The post read as follows: ‘Rioting right now around the capital Port-Louis, Abercombie and
Roche Bois Police Station under attack,… Jumbo Riche Terre being looted as I write this’.

According to police officials, these words disturbed the public interest since this post was shared by 10,000 individuals, which in turn caused serious panic in civil society due to the fear of food shortages (Lovina Sophie, 2020). Additionally, the police force had to deploy special teams to reach the areas that were allegedly under attack, and this undoubtedly created unnecessary turmoil for those concerned. This particular act was sanctioned as an offence under Section 46(g)(a) of the Mauritius Information and Communications Technology Act of 2001 for having deliberately used telecommunications equipment or services to send, transmit, transfer, post, publish, deliver or show a message that was obscene, indecent, offensive, abusive, threatening, menacing, false or misleading, and was likely to cause harm or caused harm to a person. Consequently, the Mauritian purveyor of the false news was immediately imprisoned, which was a strong message from the Mauritian authorities that they would not tolerate such behaviour. If found guilty by a court of law, the offender will have to serve a term of imprisonment not exceeding 10 years and pay a fine not exceeding 1 million Mauritian rupees (US$22,900).

In addition to the immediate arrest of this purveyor of fake news in Mauritius as a corrective and preventative measure, the country has left no stone unturned in upholding the dissemination of true and accurate information. Accordingly, the Cybercrime Unit of the police force in Mauritius thoroughly scrutinises and monitors any instances of misconduct like the spreading of false information on social media platforms or live radio shows (UN News, 2020). Simultaneously, the government has formed a national communication committee on COVID-19, which has the mandate of addressing rumours, misinformation and fake news, and bringing forth clarifications. Moreover, this committee is the sole official authority recognised by the Mauritian government to communicate information regarding the prevalence of COVID-19 cases in the country, the number of deaths, shopping guidelines and precautionary measures, as well as medical treatment and advice. Laudably, during the early stages of the pandemic, the members of this national committee were present at 6 p.m. every day for a special communication that was broadcast by the national television station of Mauritius for around three months, and this regular and transparent communication proved to be highly effective. Essentially, a decrease in rumours and fake news was observed among the population and on social media, and no serious signs of panic were witnessed among the population, who reacted responsibly and in a disciplined manner, as evidenced by a study carried out by Musango et al. (2021), who collected data through participative observation of key stakeholders involved in the fight against COVID-19 in Mauritius, including the World Health Organization and Ministry of Health and Wellness.

Furthermore, together with these corrective and punitive actions, as well as clear and official communication channels, several media platforms were created to transmit information from decision-makers to the general public. In particular, a specific website; a Facebook page (http://www.COVID-19.mu); the Facebook page ‘Coronavirus Moris’, dedicated to COVID-19 in Mauritius; and a mobile application, beSafeMoris, all of which are still operational, were established. Undeniably, considerable efforts have been made by the Mauritian authorities to deal with misinformation during COVID-19. However, in one particular instance, the Mauritian government was accused of acting illegally by the Centre for Law and Democracy (2020) for having arrested a woman for having spread fake news regarding the prime minister.

In fact, the Mauritian woman was arrested under the Mauritius Information and Communications Technology Act of 2001 for having posted a humorous message, although fake, about the prime minister on Facebook to the effect that the latter would be holding a live interview with several world leaders regarding the success of Mauritius in dealing with COVID-19. Additionally, adding fuel to the fire, this woman’s barristers were charged with breaching a curfew while travelling to visit her without the appropriate work permit, and these actions led to severe criticism of the Mauritian authorities. Thereafter, the woman was granted bail upon payment of a sum of money. In particular, the Centre for Law and Democracy advocated that the charge against the woman in question was unconstitutional and that the sharing of fake news that had no consequence of defamation or fraud had no legitimacy, whilst highlighting simultaneously that the humorous message about the prime minister was not a statement of fact. Ultimately, in September 2021, the court of Mauritius withdrew the provisional charge, indicating that this charge was unconstitutional. To reiterate, international instruments like Article 19(2) of the ICCPR and the constitutional right of freedom of expression are subject to limitations if the rights or reputation of others are at stake or if there is a need to protect public order or interest. Accordingly, critical comments targeted towards political leaders or their positions regarding COVID-19 must not in all instances be the target of a breach of specific legislation on misinformation or the spread of fake news.
However, apart from these two cases, no one else has been incriminated during the period of COVID-19 in Mauritius for having spread misinformation, which is indeed a positive sign, and this success may largely be attributed to both the punitive and corrective actions by the Mauritian government and the vast range of communication campaigns undertaken by the latter to disseminate information on COVID-19. Nevertheless, it is still worth considering the approaches of other countries in dealing with misinformation with the view to compare the functioning of the Mauritian stakeholders’ initiatives with models, benchmarks and examples from outside Mauritius.

**Government interventions across the world**

From an evaluation of government responses to misinformation during COVID-19, four main categories of action can be noted: sensitisation initiatives; increasing access to accurate information; addressing commercial fraud; and criminalising expression. Primarily, being concerned with the gravity of the consequences of misinformation, a subtle approach was taken by the UK government, which, in collaboration with the World Health Organization, launched a series of sensitisation campaigns, one of which was the *Stop the Spread* television programme broadcast by BBC World. The programme aimed to shed light on the mass of misinformation surrounding COVID-19 and the negative impacts thereof. Moreover, this programme aimed to encourage people to check their sources of information and only share it if it was trustworthy. Additionally, as a corrective mechanism, the UK government, again alongside the World Health Organization, launched a digital series, *Reporting Misinformation*, to explain to people how to report any misinformation they come across. This information has been posted by the World Health Organization on its website and shared in five international languages. It is reported to be the second most viewed COVID-19-related page on the World Health Organization’s (2021) website, which implies that the caution surrounding the spread of false information is catching people’s attention in general.

Moreover, with the aim of attracting people’s attention to the dangers of spreading misinformation, especially the young generation, an innovative online game, *Go Viral*, was developed by the UK’s Cabinet Office and the University of Cambridge. This game highlights the importance of fact-checking and gives people an insight into the techniques used to share false information on social media. In particular, players are put in the shoes of a purveyor of misinformation and discover how real news gets distorted by the involvement of fake doctors, inaccurate remedies and false rumours. Indeed, according to a study conducted by Maertens et al. (2021), it was found that by playing the game just once the spread of false information could be reduced for at least three months. Essentially, the success of the UK government’s various initiatives has been applauded by Islam et al. (2021), who believe that the common misconceptions around vaccines have been eliminated and more people now understand the safety of approved COVID-19 vaccines in the UK.

In addition to sensitisation campaigns, governments have increased the general population’s access to accurate information by sharing facts on a continuous basis. For instance, like Mauritius, the government of Taiwan held daily press conferences and issued newsletters on matters related to COVID-19 whilst at the same time establishing the Taiwan FactCheck Center, which is a social media application that can verify the accuracy of information provided online within 60 minutes. Any false news detected is then clarified to the public. Moreover, in Ethiopia, the simple gesture by the governmental authorities of sending an automatic message on COVID-19 prevention when someone makes a phone call has helped to curb misinformation on the pandemic to a large extent. Similarly, stakeholders in South Africa and Nigeria worked with WhatsApp to provide users in these countries with information on the virus and ways of preventing its spread.

There is no doubt that misinformation about COVID-19 is also being spread through false advertisements and commercial fraud, especially regarding prevention and cures. Accordingly, some countries are enforcing their consumer protection laws so that the public is not defrauded in purchasing ineffective, unsafe or harmful products (World Health Organization, 2020). For example, the European Union’s law enforcement agency, Europol, has identified and taken down 2500 online links to COVID-19 websites, marketplaces and advertisements, and seized 4.4 million units of fake pharmaceuticals (Pomeranz and Schwid, 2021). Along the same lines, with the view of protecting the public, governments have adopted a strict approach by making use of cyber misuse laws, penal codes and defamation legislation to prosecute people who share incorrect information on COVID-19. In this context, officials in the Philippines arrested people for allegedly spreading false rumours about COVID-19 in their local neighbourhoods, and the Sri Lankan authorities arrested people for criticising public officials’ response to the pandemic. Journalists have been similarly sanctioned. The Cambodian...
authorities arrested the director of a news site for inaccurately reporting statements made by the prime minister during a press conference. Also, Iraq’s media regulator fined Reuters and suspended its license for reporting COVID-19 statistics in violation of its media broadcasting rules, while in Serbia police arrested a journalist for her article reporting a lack of personal protective equipment, sanitary materials and medicine in a hospital (Pomeranz and Schwid, 2021).

Furthermore, to their merit, some countries have taken strong measures to criminalise the dissemination of misinformation through emergency laws. For instance, in April 2020, Botswana issued the Emergency Powers (COVID-19) Regulations, criminalising the sharing of any information to the public about COVID-19 from a source other than the Director of Health Services, while in Hungary the prime minister has been given additional powers to rule by decree and sanction people who share fake news about the pandemic. Correspondingly, Zimbabwe passed a new regulation giving the government the power to prosecute any person who published or communicated false news about officials during lockdown. It is apposite to note that any breach of the new emergency laws may entail fines and imprisonment for up to 20 years.

Being aware of the gravity of the implications of misinformation, Recital 59 of the European Union’s 2018 Directive on audiovisual media services emphasises the need to educate citizens on their responsibly when using information (European Parliament and European Council, 2018). In particular, to achieve this objective, Recital 59 highlights that civil society needs to possess advanced media literacy skills, which is not only limited to tools and technologies, but should also aim to equip citizens with the critical thinking skills required to exercise judgment and recognise the distinction between opinion and fact. The Directive thus expects media service providers and video-sharing platform providers to cooperate with all relevant stakeholders to promote media literacy, and progress in this regard to be monitored continuously. In turn, this collaboration relies on an urgent need to improve critical thinking, which is an ever-changing process that requires constant reflection and adaptations. This raises the concern as to whether people are ready to adopt critical thinking skills, since sharing and disseminating information without verifying its source has now become the norm. Nevertheless, research conducted by Jones-Jang et al. (2021) reveals the importance and relevance of information literacy, which significantly increases the likelihood of identifying false or incorrect information. Similarly, Kahne and Bowyer (2017) sought to investigate the efficiency of media literacy in detecting fake news, and asked some young participants to rate the accuracy of evidence-based posts and those that contained misinformation. Their results show that those respondents who were media literate were more comfortable with categorising evidence-based posts as accurate than those that contained misinformation.

However, the European Commission is optimistic with regard to the desired change in mentality, which is demonstrated by its issuing of a code of practice on disinformation in May 2021. The code was signed by online platforms such as Facebook, Google, Twitter, Microsoft and Mozilla, and some other marketing websites, and set out various commitments, ranging from transparency in political advertising to the closure of fake accounts and the demonetisation of purveyors of misinformation. To secure its efforts in dealing with misinformation, the European Commission further implemented an annual assessment of the signatories by investigating the efforts made by the latter in carrying out their commitments. The first assessment was published in 2020 and covered the COVID-19 crisis; the online platforms reported on their various endeavours, such as the development of tools to facilitate access to reliable information of public interest, the removal of false or misleading information that will cause physical damage, and the prohibition of advertisements that either exploit the crisis or promote anti-vaccine behaviours. In addition, to make a more robust framework, the European Union is aiming to transform the code of practice into a co-regulatory instrument within the Digital Services Act 2020 (European Commission, 2020).

**Discussion and conclusion**

All of the countries discussed in this research, including Mauritius, have either ratified or signed the ICCPR, which implies their commitment to protect freedom of expression. Undeniably, true and accurate information is a key principle in upholding the transparency and accountability of official authorities and those having control over a community. Nevertheless, if attempts are made to curb the reporting or investigation of true and correct information, this may have negative repercussions on the fundamental rights of freedom of expression. However, despite the existence of international conventions imposing the obligation on countries to guarantee freedom of expression, several countries have deviated from these commitments in the process of addressing COVID-19 misinformation. For instance, the use of
existing or new laws to criminalise expression about the pandemic does not meet the requirements under Article 19(3) of the ICCPR, which is basically to protect the rights and reputation of others or to protect the public interest. Undeniably, governments are acting contrary to international law when they criminalise journalism or prosecute expression that is truthful or criticises the government (United Nations Human Rights Committee, 2011). In fact, these approaches are not necessary to address the public health crisis and are not proportionate to the public health threat, which are two essential elements in seeking the restriction of free expression under Article 19(3) of the ICCPR.

From the research conducted, it is noted that accurate and regular reporting by governmental bodies plays an essential role in fostering public trust in accurate sources of information, which can, in turn, reduce misinformation. As already mentioned, the dissemination of true and accurate information is one method of upholding the fundamental human right of free expression, thereby guaranteeing democracy. Accordingly, one must not undermine the role and function of the press, which has the mandate to expose government malfeasance and share accurate information with the public. Consequently, establishing a law that gives the power to share information only to governmental authorities underestimates the role of the press and, accordingly, it is suggested that governments should avoid any action that interferes with the press’s obligations towards civil society.

Essentially, the number of cases surrounding misinformation on COVID-19 is relatively low in Mauritius compared to other countries. This is largely attributed to the dissemination of official information on the pandemic by the Mauritian authorities either through the media or via mobile applications or official websites, and also to the strict application of the information technology laws with regard to the purveyors of fake news that is likely to disturb public security. However, in one particular instance, it has been noted that the cyber misuse laws were used to restrict the freedom of expression of a woman who was humorously critical towards the government’s response to COVID-19 in Mauritius. Fortunately, the judiciary in the country is independent and this charge was struck off by the court.

Nevertheless, the dangers of spreading misinformation still loom large and this consequently calls for initiatives to sensitise civilians to media literacy. It is undisputable that people need to be equipped with the necessary critical thinking skills to use and create media content responsibly and safely, especially in complex situations like the COVID-19 pandemic. In such efforts, the role of academia, consumer associations, press bodies and social media platforms must be underpinned. For instance, the setting up of a new Media Education Chair at the Lille Graduate School of Journalism in collaboration with Facebook France has been seen as a laudable initiative to show Facebook’s commitment to promoting critical thinking and fighting against false information. In the context of Mauritius, it is noted that the majority of the efforts to combat misinformation surround a strict application of the law and the use of media by governmental authorities to share authentic news. Unfortunately, media literacy has not been given due attention by the Mauritian government, despite the fact that information and media education can help people adopt a critical mindset and differentiate between correct and incorrect information. At present, only journalism courses at the tertiary level include relevant modules pertaining to information and media literacy, but these are not taught at the primary or secondary levels or even in other undergraduate or postgraduate programmes at domestic universities. Although this is a long-term strategy that will take time to materialise and obtain the desired results, it is time for the Mauritian government to include formal information and media literacy modules or syllabi in the school curriculum at the fundamental levels of primary and secondary education.

On a concluding note, from the comparative study conducted in this article, it is imperative to highlight, first, that there is an urgent need for countries to abide strictly by the principles of necessity and proportionality to correspond to the threat being encountered by resorting to libel laws, defamation laws or cyber misuse laws to prosecute those who express their opinion. Second, although misinformation cannot be entirely eradicated, it can still be managed through campaigns and collaboration, especially by showing people how to recognise and report misinformation and improve their media literacy. As such, media literacy is a matter for each and every one of us, and through constant education and robust collaboration among various stakeholders, people’s mindsets are likely to be changed, which will help in eradicating the issue of misinformation. Moreover, the strategies adopted in other countries involve both the private sector, such as journalists and education providers, and public authorities, such as the government, in addressing the spread of misinformation. However, the sociocultural context of Mauritius has to be considered when assessing the extent to which the involvement of private institutions and governmental authorities is warranted. It follows that, in Mauritius, where the crime rate is relatively low, there is justified reason to
believe that more subtle measures such as the sensitisation and education of the public will bring the desired result of curbing the generation and spread of misinformation.

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Accessing special collections during the COVID-19 pandemic in university libraries in Nigeria

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Abstract
The accessibility of special collections during the COVID-19 pandemic was a matter of concern for libraries and their users due to the specific nature of special collections compared to other information sources in libraries. This study therefore investigated the accessibility of special collections in university libraries in the South South zone of Nigeria during the COVID-19 pandemic. The population of the study included 233 librarians in federal, state and private universities in the zone. The study adopted an online questionnaire and there was a total of 197 respondents. The findings show that special collections were accessible to library users through library websites, institutional repositories, CD-ROMs and flash drives during the COVID-19 pandemic in Nigeria. The study reveals some of the challenges affecting the accessibility of special collections during the COVID-19 pandemic in university libraries in Nigeria and recommends ways of enhancing the accessibility of special collections during a crisis such as the COVID-19 pandemic.

Keywords
Special collections, accessibility, COVID-19 pandemic, university libraries, South South, Nigeria

Introduction
The development of special collections in Nigerian libraries dates back to the establishment of the first university in Nigeria – namely, the University of Ibadan in 1948. As, at the time of the establishment of the University of Ibadan, there was no national library in existence and since the University of Ibadan was the highest institution of learning, the University Library was designated as the national repository for Nigerian publications (Apeji, 1986). As a result, it became compulsory for all publishers in Nigeria to deposit two copies of their books, journals, pamphlets, gazettes, sheet music, maps, plans and videos, for example, in the University Library (Apeji, 1986). Later, other universities and libraries were established. The development of libraries in different universities in Nigeria, however, increased the need to develop special collections in the various university libraries to meet the information needs of the library patrons at these universities.

The COVID-19 pandemic, which came as a shock to all sectors of the economy, and particularly university libraries in Nigeria, meant that libraries had to...
shut down physical access to their information sources, special collections and services. Libraries, as custodians of processed knowledge, are vital hubs with regard to accessing and disseminating information for users, irrespective of their location. With the spread of COVID-19 affecting service providers, including libraries, it was impossible for library patrons to access critical information sources such as special collections for learning, teaching, research activities and community services.

According to Apeji (1986), special collections are rare archival materials, manuscripts, government publications and historical records. Similarly, Purdue University (2022) notes that special collections include groups of items, such as rare books or documents, that are either irreplaceable or unusually rare and valuable. Omeje et al. (2016) confirm that special collections contain highly valuable materials that could aid teaching, learning and research. Special collections may be defined as primary information sources that are acquired or produced in a university and stored in the library – including, for example, theses and dissertations, documents, rare books, manuscripts, archival materials, reports, technical papers, presentations, research findings, inaugural lectures, workshop and conference presentations, lecture notes and videos – and can aid the research activities of the university community. Special collections are rare information materials that are only available and accessible within a library and may not be available elsewhere. Special collections have been extremely important for library users for learning, teaching, research activities and community services during the COVID-19 pandemic. Most of them contain records that are of enduring value and information sources that can stimulate further research in a university setting.

Library policies that excluded special collections from loanable materials hindered access to these resources during the COVID-19 pandemic in Nigeria. Special collections are useful for the development of further research since they contain critical information, case studies, scientific findings, reports, archival records and government documents, for example, that could aid research and be helpful in the fight against COVID-19. During the COVID-19 pandemic in Nigeria, all universities and libraries were shut down following an order by the government in order to reduce the spread of the virus. The closure of libraries had a negative effect on the accessibility and dissemination of special collections for library patrons (Omezuor et al., 2022). Some literature has discussed the efforts that were made by libraries and information service providers towards increasing access to information resources during the COVID-19 pandemic (IFLA, 2020; Hinchliffe and Wolff-Eisenberg, 2020; Omeluzor et al., 2022). How these efforts translated into the accessibility of special collections during the COVID-19 pandemic in university libraries in Nigeria was the main reason for this investigation. The study was guided by the following four research questions:

1. What are the information materials that constitute special collections in university libraries in Nigeria?
2. Which of the special collections were accessible to library patrons during the COVID-19 pandemic in Nigeria?
3. Which mediums did libraries adopt to provide access to special collections during the COVID-19 pandemic in Nigeria?
4. What were the challenges of accessing special collections during the COVID-19 pandemic in university libraries in Nigeria?

**Literature review**

In Nigeria, the COVID-19 pandemic was first reported on 27 February 2020, which later led to the shutting down of libraries (Omezuor et al., 2022). The closure of libraries during the COVID-19 pandemic was a pretest to ascertain the ability and readiness of libraries to provide access to critical information sources such as special collections to their library users. Pearson (2020) reports that the spread of COVID-19 led to the shutting down of some libraries, which affected physical access to information and services, with some resorting to online services. For instance, the libraries at the University of the Pacific (2020) and the University of Adelaide (2020) transitioned to remote operations, making online resources and services available through their library websites. These online resources included access to e-books, e-journals, publisher databases and streaming videos, but not special collections. Similarly, Onifade (2020) confirms that the Nimbe Ade-dipe Library at the Federal University of Agriculture, Abeokuta, provided access to reference services, information literacy and electronic resources through social media (WhatsApp) and Zoom during the COVID-19 lockdown. A study by Emasealu and Umeozor (2021), which surveyed 43 academic libraries in Nigeria on the availability and remote accessibility of academic library services during the COVID-19 lockdown, reveals that 33 (76.7%) of the libraries had websites and subscribed to various e-resources with some restrictions using the library Internet protocols, while 10 (23.3%) did not have
functional websites. The findings also show that 17 (39.5%) of the libraries had websites without online information services for remote access to information for users in remote locations. It was evident in the study that 3 (7.0%) of the libraries had very few digital resources and were remotely inaccessible, whereas 13 (30.2%) provided meaningful information sources that were available online and could be accessed remotely during the COVID-19 lockdown. Among these recent studies, there is no evidence of accessibility to special collections during the COVID-19 pandemic in university libraries in Nigeria.

Access to special collections during the COVID-19 pandemic

Accessibility to information resources is a major concern for libraries. It is why libraries adopt several mediums in order to ensure uninterrupted access to information sources and services for their patrons. Information access is the right of everyone. However, because of the importance of special collections, access is usually monitored. It is evident that during the COVID-19 pandemic some libraries allowed access to special collections. For instance, the State Library of New South Wales (2022) was committed in supporting the research work of scholars, students and other members of the public through providing access to its special collection materials. Similarly, Smith College Libraries (2022) provided access to the Special Collections Reading Room during regular hours, which was open on a walk-in basis for Smith students, faculty and staff who were in the campus COVID-19 screening programme and all other visiting researchers by appointment. Furthermore, the Claremont College Library (2022) website provided assistance to library patrons who requested access to special collections. The website has a search tool that enables users to search for information by author, keyword, title or subject in special collections, archives and the online archive of the Claremont Colleges Digital Library. The literature shows that some universities around the world were able to provide access to information sources, including special collections, during the COVID-19 pandemic.

According to Purdue University (2022), some of the special collections in its archives and special collections unit – such as the Bruce Rogers Collection, William Freeman Myrick Goss Library of the History of Engineering, and Indiana collection – including rare books, were accessible to library patrons. Purdue University reports that the special collections were accessible via a repository with structured subject-based access to enable easier access to these resources by users on the library website. In addition, the University of Washington Libraries made rare books, manuscripts, papers, records, photographs, moving images and architectural drawings accessible for library patrons during the COVID-19 pandemic. The special collections unit was open by appointment, and users were expected to make a research appointment with the library to access the resources (University of Washington Libraries, 2022).

In their study of 20 postgraduate students at the Nnamdi Azikiwe Library, Omeje et al. (2016) report that the University of Nigeria, Nsukka, Special Collections Division is one of the four principal divisions of the library and is housed in a closed-access room on the first floor of the main library building. The study reveals that postgraduate students use special collections such as theses and dissertations, materials on Africa, United Nations publications, government documents and archives. According to Omeje et al. (2016), the purposes for using special collections include research, extracting statistical data, gathering information on international perspectives on particular issues, and policy matters. A study by Chukwu et al. (2018) reveals that the Federal University of Technology, Owerri, started a digitization programme to convert all of its special collections into electronically accessible resources through its institutional repository. Similarly, Anunobi and Onyebinama’s (2011) report shows that awareness of the creation of electronic theses and dissertations was developed during the introduction of the Database of African Theses and Dissertations by the Association of African Universities. This effort, as reported by Anunobi and Onyebinama (2011), aimed to provide access to special collections. Some recent studies have also shown that critical information, including special collections and digital materials, was disseminated through university libraries to library patrons during the COVID-19 pandemic (Duke University Libraries, 2020; Ishtiaq et al., 2020; Omeluzor et al., 2022).

A recent survey of academic libraries’ responses to COVID-19 in the USA reveals that access to both technologies and print materials remained largely unaffected by the COVID-19 pandemic (Hinchliffe and Wolff-Eisenberg, 2020). The findings further show that 80% of the libraries did not report any changes to their existing technology lending programmes, while 85% reported providing access to print materials. Emasealu (2019) affirms that as traditional libraries are moving towards providing services in a digital environment, improved access to remote library collections is making the use of electronic information resources more realistic and attractive.
Challenges of accessing special collections during the COVID-19 pandemic

The difficulty of providing access to special collections is revealed in Emasealu and Umeozor’s (2021) study, which shows that 10 of the federal universities in their study did not have online visibility because there were no traceable websites dedicated to the libraries for their services. Their findings further reveal that digitized materials, including special collections, were not accessible to library patrons during the COVID-19 pandemic. Panezi (2014) argues that there should be freedom in accessing and using information resources (orphan and out-of-print works). Panezi insists that such materials should be included in the corpus of works in the public domain. According to Ali and Gattiti (2020), the role of librarians and information specialists in a pandemic is to promote health awareness by creating and disseminating information relating to preventive measures, not restricting access to special collections and thereby supporting research teams, researchers and faculty by providing information regarding the latest developments, research and literature, and meeting the core needs of regular library users.

Kwanya et al. (2015) explain that, with information and communications technologies (ICTs), the world has been transformed into a ‘global college’. Hence, ICTs can be used by university libraries in providing services that extend special collections to users outside the library building, especially during situations such as the COVID-19 pandemic. Emasealu and Umeozor (2021) state that ‘ICT has such magnitude of impact in information delivery system such that libraries are now deeply engaged in digitization of almost all library resources in order to provide fast, interactive and dynamic information services to users’. However, their findings show that ICTs were not used adequately for the delivery of information services, including special collections, in university libraries during the COVID-19 pandemic in Nigeria. In an era when ICTs are being applied in all areas of human endeavour, especially with the spread of the COVID-19 virus, university libraries need to take advantage of ICTs for the creation, accessibility and dissemination of special collections for the benefit of library patrons. Panezi (2014) states that the digitization of information brings new life to works, enhancing access and bringing information closer to users.

The university libraries in Nigeria were not immune to the challenges affecting the accessibility of special collections during the COVID-19 pandemic. According to Emasealu and Umeozor (2021), Nigeria is severely challenged by the lack of basic infrastructure, which has prevented the development of special collections in academic libraries. Similarly, Chukwu et al. (2018) identify the erratic power supply, lack of modern infrastructure, lack of skilled staff and nonchalant attitude of departments as major factors affecting the management of special collections in a Nigerian university of technology. Equally, Yaya and Adeeko (2016) state that the ICT departments in most libraries in Nigeria lack modern computer systems. In addition, Jagboro et al. (2012) identified inadequate training in the use of basic computer programmes among librarians as a challenge in the development of special collections in libraries. Omeluzor and Oyovwe-Tinuoye’s (2016) study reveals that the erratic power supply, insufficient training and inadequate funding are among the challenges facing the use of integrated library system (ILS) for the provision of services and resources, including special collections, in academic libraries in the Edo and Delta States of Nigeria. Omeluzor and Oyovwe-Tinuoye’s (2016) study found that the problems encountered by postgraduate students in the use of special collections are the absence of networks, materials not being up to date, absence of photocopying services and difficulty in using catalogues. These (and more) were some of the challenges that made special collections inaccessible during the COVID-19 pandemic in Nigeria.

Methods

Research approach

The study adopted a descriptive survey design. The descriptive survey design was a reliable means of providing the researchers with the opportunity to use the data collected for a study and has shown some level of reliability in social science research that uses data (Omeluzor, 2020).

Population

The population of the study comprises all the librarians in the libraries at federal, state and private universities in the South South zone of Nigeria. Librarians were selected as the respondents in this study because they have records on the usage of special collections during the COVID-19 pandemic period in the various libraries under study. According to a study by Oyovwe-Tinuoye et al. (2021:5), there is a total of 233 academic librarians in the federal, state and private universities in the South South zone of Nigeria: ‘Among these universities, 95 respondents are from the federal universities, 93 of the respondents are from the state universities while 45 of the
respondents are from the private universities given a total of 233. This study therefore adopted the population of 233 as its sample.

Research instrument

The instrument for data collection was a structured online questionnaire that was designed by the researchers. The researchers adopted an online questionnaire because it was easier to reach out to all the respondents quickly without the risks of travelling by road and spending money on transport. The research instrument was developed using a Google Form to provide answers to the four research questions. The instrument had five sections (see Online Appendix 1). Section A focused on the demographic information of the respondents. Section B had 12 options, which required the respondents to indicate the options that constituted special collections in the various libraries under study. The questions in Section C required the respondents to indicate whether special collections were accessible to library patrons during the COVID-19 pandemic. It had a 5-point Likert scale where 5 was the highest score and 1 the lowest (5 = strongly agree, 4 = agree, 3 = undecided, 2 = disagree, 1 = strongly disagree). Section D focused on the medium that the library adopted to provide access to special collections for patrons during the COVID-19 pandemic, while Section E required the respondents to identify the challenges affecting the accessibility of special collections in their library during the pandemic. Section E had a 5-point Likert scale where 5 was the highest score and 1 the lowest (5 = strongly agree, 4 = agree, 3 = undecided, 2 = disagree, 1 = strongly disagree).

Testing and retesting of the questionnaire

In order to ascertain the validity of the instrument, the researchers used pre-reliability tests such as face, content and construct checks. The researchers used the services of information professionals, who went through the instrument and, after making some minor corrections, certified that it was suitable for collecting data for the study. To verify the content validity, the researchers sent the instrument to 15 librarians at the Imo State University, located in the south-east geopolitical zone of Nigeria, who were not part of the study. The 15 questionnaires were all returned and analysed using the Cronbach’s alpha correlation coefficient at the .5 level of acceptance, which gave a result of $r = .84$. This result indicated that the instrument was reliable and good for data collection for the study, since the test result was above the acceptance point of .5.

Distribution and data collection

The questionnaire was distributed to the respondents via their respective verified WhatsApp/email addresses. The respondents’ emails addresses were retrieved from an earlier attendance sheet of the Nigerian Library Association’s annual conference and general meeting. The use of WhatsApp/email addresses to send out the questionnaire directly to the respondents eliminated responses from unintended respondents. Out of the total population of 233 librarians who received the questionnaire, there were 197 responses, giving an 85% response rate, and these were used for the analysis in this study. The data collected was analysed using a Google Forms analysis tool and SPSS (Statistical Package for the Social Sciences), version 16.0. The results are presented in tables showing frequency, percentages, means and standard deviations for clarity and understanding. In the four tables, the mean scores are rated as follows: a mean of 0.1 to 1.9 is very low, 2.0 to 2.4 is low, 2.5 to 2.9 is high, and 3.0 and above is very high.

Results

Demographic information of the respondents

The results with regard to the respondents’ qualifications reveal that 98 (49.9%) had a Master’s degree and 99 (50.1%) had a PhD in Library and Information Science, while none had a Bachelor’s degree. This shows that the respondents had the necessary qualifications in the profession in their respective university libraries in Nigeria. On the designation of the respondents, the results show that 33.3% were Assistant Librarians and 8.3% were Librarian II and Librarian I, respectively. The results also reveal that the majority (41.7%) of the respondents were Senior Librarians, while a lower percentage (8.3%) were University Librarians. The results show that none of the respondents were Deputy University Librarians. The results indicate that different categories of librarians participated in the study.

The results reveal that the majority (56%) of the respondents who participated in the study were currently working in the special collections unit at their various universities. Twenty-five percent of the respondents served in electronic library units and 10% served in reader services, while 5% and 4% worked in cataloguing and administrative units, respectively. The results on the length of service reveal that the majority (33.3%) of the respondents had worked as librarians for between 6 and 10 years, and 25% had worked for 21 years or more. The results also show that 8.3% of the respondents had worked...
for 1–5 years, while 16.7% had worked for 11–15 years and 16–20 years, respectively. These results may imply that the majority of the respondents who participated in this study had some long-time experience of special collections and library services.

**Findings**

The first objective was to identify the information materials that constitute special collections in the university libraries in the South South zone of Nigeria. The results in Table 1 show that all (100%) of the respondents attested that theses and dissertations, technical papers, government publications and archival materials constituted special collections in their libraries. The results also reveal that the majority of the respondents indicated that rare books (97.4%), Africana (79.1%), video collections (77.1%) and United Nations publications (72.5%) constituted their special collections. The results in Table 1 further show that the respondents identified reports (52%), workshop and conference proceedings (41.6%), and lecture notes and presentations (31.9%) as special collections. These results imply that all the information resources listed in Table 1 constitute special collections of libraries. These materials were relevant for the provision of information to library patrons during the COVID-19 pandemic.

The second objective, as shown in Table 2, was to establish which special collections were accessible to library patrons during the COVID-19 pandemic. The result in Table 2 shows that 19.3% and 32% of the respondents strongly agree and agree that thesis and dissertation were accessible to users during the COVID-19 pandemic; 21.8% and 8.1% of the respondents strongly disagreed and disagreed respectively, while 18.8% were undecided. The result indicates that 18.8% and 40.1% of the respondents strongly agree and agree that reports were accessible to users during COVID-19 pandemic. 32% and 4.6% strongly disagreed and disagreed while 4.6% were undecided. A total of 10.7% and 31.5% of the respondents also agreed and strongly agreed that technical papers were accessible to users, 4.6% and 32% of the respondents strongly disagreed and disagreed with that, while 21.3% were undecided on its accessibility to the library patrons during COVID-19 pandemic. The result in Table 2 also reveals that 24.9% and 6.6% of the respondents strongly agreed and agreed that lecture notes and presentation were accessible to users while 29.9% and 15.2% disagreed and strongly disagreed that it was accessible, and 23.4% were undecided. The result further reveals that 18.3% and 25.4% of the respondents strongly agreed and agreed that inaugural lectures were accessible, 15.2% and 32% disagreed and strongly disagreed that it was

**Table 1. Special collections (N = 197).**

<table>
<thead>
<tr>
<th>Special collections</th>
<th>Number of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archival materials</td>
<td>197 (100)</td>
</tr>
<tr>
<td>Government publications</td>
<td>197 (100)</td>
</tr>
<tr>
<td>Inaugural lectures</td>
<td>197 (100)</td>
</tr>
<tr>
<td>Rare books</td>
<td>192 (97.4)</td>
</tr>
<tr>
<td>Technical papers</td>
<td>197 (100)</td>
</tr>
<tr>
<td>Theses and dissertations</td>
<td>197 (100)</td>
</tr>
<tr>
<td>Africana</td>
<td>156 (79.1)</td>
</tr>
<tr>
<td>Video collections</td>
<td>152 (77.1)</td>
</tr>
<tr>
<td>United Nations publications</td>
<td>143 (72.5)</td>
</tr>
<tr>
<td>Reports</td>
<td>103 (52)</td>
</tr>
<tr>
<td>Workshop and conference proceedings</td>
<td>82 (41.6)</td>
</tr>
<tr>
<td>Lecture notes and presentations</td>
<td>63 (31.9)</td>
</tr>
</tbody>
</table>

**Table 2. Special collections accessible to the library patrons during the COVID-19 pandemic.**

<table>
<thead>
<tr>
<th>Special collections</th>
<th>Strongly agree (%)</th>
<th>Agree (%)</th>
<th>Undecided (%)</th>
<th>Disagree (%)</th>
<th>Strongly disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theses and dissertations</td>
<td>38 (19.3)</td>
<td>63 (32)</td>
<td>37 (18.8)</td>
<td>16 (8.1)</td>
<td>43 (21.8)</td>
</tr>
<tr>
<td>Reports</td>
<td>37 (18.8)</td>
<td>79 (40.1)</td>
<td>9 (4.6)</td>
<td>9 (4.6)</td>
<td>63 (32)</td>
</tr>
<tr>
<td>Technical papers</td>
<td>21 (10.7)</td>
<td>62 (31.5)</td>
<td>42 (21.3)</td>
<td>9 (4.6)</td>
<td>63 (32)</td>
</tr>
<tr>
<td>Lecture notes and presentations</td>
<td>49 (24.9)</td>
<td>13 (6.6)</td>
<td>46 (23.4)</td>
<td>59 (29.9)</td>
<td>30 (15.2)</td>
</tr>
<tr>
<td>Inaugural lectures</td>
<td>36 (18.3)</td>
<td>50 (25.4)</td>
<td>18 (9.1)</td>
<td>30 (15.2)</td>
<td>63 (32)</td>
</tr>
<tr>
<td>Workshop and conference proceedings</td>
<td>49 (24.9)</td>
<td>13 (6.6)</td>
<td>55 (27.9)</td>
<td>30 (15.2)</td>
<td>50 (25.4)</td>
</tr>
<tr>
<td>Government publications</td>
<td>37 (18.8)</td>
<td>70 (35.5)</td>
<td>18 (9.1)</td>
<td>9 (4.6)</td>
<td>63 (32)</td>
</tr>
<tr>
<td>Africana</td>
<td>37 (18.8)</td>
<td>70 (35.5)</td>
<td>9 (4.6)</td>
<td>18 (9.1)</td>
<td>63 (32)</td>
</tr>
<tr>
<td>United Nations publications</td>
<td>37 (18.8)</td>
<td>41 (20.8)</td>
<td>34 (17.3)</td>
<td>22 (11.2)</td>
<td>63 (32)</td>
</tr>
<tr>
<td>Video collections</td>
<td>53 (26.9)</td>
<td>41 (20.8)</td>
<td>8 (9.1)</td>
<td>22 (11.2)</td>
<td>63 (32)</td>
</tr>
<tr>
<td>Archival materials</td>
<td>–</td>
<td>36 (18.3)</td>
<td>46 (23.4)</td>
<td>52 (26.4)</td>
<td>63 (32)</td>
</tr>
<tr>
<td>Rare books</td>
<td>–</td>
<td>36 (18.3)</td>
<td>55 (27.9)</td>
<td>22 (11.2)</td>
<td>84 (42.6)</td>
</tr>
</tbody>
</table>
accessible while 9.1% of the respondents were undecided. The result in Table 2 indicates that 24.9% and 6.6% of the respondents strongly agreed and agreed that workshop and conference proceedings were accessible to users, 15.2% and 25.4% of the respondents disagreed and strongly disagreed while 27.9% were indifferent. The result in Table 2 also shows that 18.8% and 35.5% of the respondents strongly agreed and agreed respectively that government publications and Africana were accessible to the users, whereas 32% and 4.6% strongly disagreed and disagreed that government publication were accessible. It is also reveals that 32% and 9.1% strongly disagreed and disagreed that Africana was accessible to the users. The result in Table 2 also reveals that 18.8% and 20.8% of the respondents strongly agreed and agreed that United Nations publications were accessible to the users; 11.2% and 32% of the respondents disagreed and strongly disagreed, while 17.3% of the respondents were undecided. The result in Table 2 further shows that 26.9% and 20.8% of the respondents strongly agreed and agreed that video collections were accessible to the users while 11.2% and 32% of the respondents disagreed and strongly disagreed that video collections were accessible. On the accessibility of archival materials, 18.3% agreed that it was accessible, 26.4% and 32% disagreed and strongly disagreed that it was accessible to the users, while 23.4% were indifferent. A total of 18.3% of the respondents also indicates that rare books were accessible to library patrons during the COVID-19 pandemic. The results in Table 3 show that 136, 34 and 142 of the respondents, respectively, specified that theses and dissertations, lecture notes and presentations, and workshop and conference proceedings were accessible via the library website for patrons during the COVID-19 pandemic. The results also reveal that 110, 87, 168, 125, 118 and 160 of the respondents, respectively, indicated that theses and dissertations, reports, technical papers, lecture notes and presentations, inaugural lectures, and workshop and conference proceedings were accessible via their institutional repository during the COVID-19 pandemic. The results further show that the majority (167) of the respondents confirmed that video collections were accessible with the aid of CD-ROMs. The results also indicate that 32, 9 and 13 of the respondents, respectively, specified that reports, Africana and video collections were accessible via flash drives, while 36 indicated that archival materials and rare books were accessible on the library shelves. The results in Table 3 show that the university libraries’ social media platforms and blogs were not used to access special collections during the COVID-19 pandemic in the South South zone of Nigeria.

The fourth objective was to find out the challenges in accessing special collections during the COVID-19 pandemic in university libraries in Nigeria. The results in Table 4 reveal that all of the items were basically factors that affected the accessibility of special collections during the COVID-19 pandemic in Nigeria. The results, however, show that the unavailability of current materials ($X = 4.2$) was a major challenge. This is followed by inadequate ICT infrastructure ($X = 3.6$) and an inadequate Internet network. The results in Table 4 also indicate that erratic power supply ($X = 3.4$), inadequate funding

<table>
<thead>
<tr>
<th>Special collections</th>
<th>Library website</th>
<th>Institutional repository</th>
<th>CD-ROM</th>
<th>Flash drive</th>
<th>Library social media platform</th>
<th>Library blog</th>
<th>Library shelf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theses and dissertations</td>
<td>136</td>
<td>110</td>
<td>43</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Reports</td>
<td>–</td>
<td>87</td>
<td>67</td>
<td>32</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Technical papers</td>
<td>–</td>
<td>168</td>
<td>48</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Lecture notes and presentations</td>
<td>34</td>
<td>124</td>
<td>78</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Inaugural lectures</td>
<td>118</td>
<td>54</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Workshop and conference proceedings</td>
<td>142</td>
<td>160</td>
<td>37</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Government publications</td>
<td>–</td>
<td>–</td>
<td>54</td>
<td>9</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Africana</td>
<td>–</td>
<td>–</td>
<td>67</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>United Nations publications</td>
<td>–</td>
<td>–</td>
<td>42</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Video collections</td>
<td>–</td>
<td>–</td>
<td>167</td>
<td>13</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Archival materials</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>36</td>
<td>–</td>
<td>36</td>
</tr>
<tr>
<td>Rare books</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>36</td>
</tr>
</tbody>
</table>
Inadequate ICT infrastructure (X = 3.3), outdated catalogues (X = 3.2) and inadequate ICT skills and inadequate training (X = 3.1) were challenges. An earlier study by Omeje et al.'s (2016) had shown that erratic power supply (X = 3.4), inadequate funding (X = 3.3) and outdated catalogues (X = 3.2) were challenges in accessing special collections in Nigeria. The results show that inadequate ICT skills and inadequate training (X = 3.1) were challenges.

Discussion

The findings of this study capture the holistic response of the participants from various units in university libraries on the accessibility of special collections during the COVID-19 pandemic in the South South zone of Nigeria. The findings in Table 1 identify the information sources that constitute special collections in university libraries in Nigeria, including theses and dissertations, reports, technical papers, lecture notes and presentations, Africana, government publications, United Nations publications and video collections. Omeje et al.'s (2016) study also identifies the sources shown in Table 1 as special collections that contain relevant information for research, teaching and learning in the university. Similarly, Anunobi and Onyebinama (2011) confirm that theses and dissertations constituted the special collections that were converted into digital collections by the Association of African Universities.

The findings in Table 2 show that special collections were accessible to library patrons during the COVID-19 pandemic. For instance, a majority of the respondents confirmed that theses and dissertations (51.3%) and reports (58.9%) were available to them. This means that the libraries were able to provide access to special collections during the COVID-19 pandemic. Other special collections that were accessible during the COVID-19 pandemic included technical papers, lecture notes and presentations, workshop and conference proceedings, government publications and Africana. This finding substantiates the findings of Hinchliffe and Wolff-Eisenberg’s (2020) study, which found that access to special collections was not affected by COVID-19 across libraries in the USA. There is evidence that the State Library of New South Wales, Smith College Libraries, Purdue University Library, University of Washington Libraries and the Nnamdi Azikiwe Library at the University of Nigeria were among the libraries that made their special collections accessible for library patrons during the COVID-19 pandemic.

The findings in Table 2 reveal that some of the respondents disagreed and were undecided in their response, which means that some libraries in Nigeria were unable to provide access to special collections for their patrons during the COVID-19 pandemic. This may be as a result of the closure of libraries around the world (Pearson, 2020) and in Nigeria (Omeluzor et al., 2022), except for those that provided access through electronic mediums.

The findings in Table 3 indicate that library websites, institutional repositories, CD-ROMs and flash drives were the mediums used to provide access to special collections for library patrons during the COVID-19 pandemic in Nigeria. This finding substantiates the assertion by Claremont College Library (2022) that assistance was given to library patrons who requested access to special collections through its website. This finding is also supported by the findings of Emasealu and Umeozor’s (2021) study, which proved that 76.7% of libraries in Nigeria had websites and various e-resources that were used to provide access to meaningful information sources and services during the COVID-19 pandemic. The findings in Table 3 further reveal that special collections such as theses and dissertations, reports, technical papers, lecture notes and presentations, inaugural lectures, workshop and conference proceedings, government publications, Africana, United Nations publications and video collections were accessible during the COVID-19 pandemic.
and video collections were accessible to library patrons through those mediums during the COVID-19 pandemic. The use of websites, institutional repositories and CD-ROMs enhanced access to critical and relevant information sources for patrons who could not access the physical library due to restrictions during the COVID-19 pandemic. The University of the Pacific (2020) and University of Adelaide (2020) were among those libraries that used online resources and their websites to provide services for their patrons. The findings in Table 3, however, reveal that special collections were not accessible via social media platforms, library blogs and the library shelves. However, it is important to state that library blog may serve as online notice-board for sharing unrestricted information with the general public. The inability to access special collections via the library shelves may not be unconnected with the shutting down of libraries in Nigeria in line with government directives as a measure to curb the spread of the COVID-19 virus (Omeluzor et al., 2022).

The findings in Table 4 reveal that inadequate ICT infrastructure, inadequate ICT skills, inadequate training, an erratic power supply, inadequate funding, a poor Internet network, the unavailability of institutional repositories, the unavailability of current materials and outdated catalogues were among the factors affecting access to special collections during the COVID-19 pandemic in Nigeria. These findings corroborate the studies by Emasealu and Umeozor (2021) and Omeje et al. (2016) showing that Nigeria is severely challenged by its lack of basic infrastructure and poor Internet connections, which have prevented the development and use of special collections in academic libraries. Omeje et al. (2016) also confirm that 10 of the federal universities in their study did not have online visibility.

Inadequate training in the handling of ICT tools could have also hindered the provision of access to special collections and other information sources in libraries during the pandemic. This finding agrees with Omeluzor and Oyovwe-Tinuoye’s (2016) and Jagboro et al.’s (2012) studies, which identified inadequate training in the use of basic computer programmes among librarians as a challenge for the development and provision of access to special collections in libraries. The erratic power supply and inadequate funding were also identified as challenges facing the accessibility of special collections in university libraries in Nigeria. This finding is confirmed by Omeluzor and Oyovwe-Tinuoye (2016), who show that these factors are impediments in providing access to special collections in libraries in Nigeria. They remain hindrances in the delivery of information and services to library patrons in the 21st century, and are interrelated for the purpose of enhancing access to information services in libraries. The inadequacy of these factors may have led to poor service delivery during the pandemic.

**Conclusion and recommendations**

The relevance of libraries as storehouses of knowledge came to the fore during the COVID-19 pandemic. This is because access to information sources, including special collections, was restricted, which affecting teaching, learning, research activities and decision-making in different sectors – especially the education sector. Special collections constitute an important part of library information sources and contain information that can help in the development of vital documents by various organs of government. The findings reveal that library patrons had access to and interacted with special collections during the COVID-19 pandemic. It is important to state that library websites, institutional repositories and CD-ROMs were the mediums that libraries used to provide access to special collections for their patrons during the pandemic. The use of online platforms shows an improvement in providing quality access to information resources that helped to break down the barriers to accessing information during the COVID-19 crisis. The support offered by the university libraries in Nigeria in allowing access to their special collections for their patrons during the COVID-19 pandemic is highly commendable. Such efforts need to be improved on to enable regular access to special collections and other information sources and services, and meet the information needs of library patrons during a crisis. The study shows the tenacity of the libraries in Nigeria in being able to provide access to special collections when faced with a number of challenges and daunting issues that had consistently resulted in setbacks in the delivery of information and services in Nigeria. On the basis of the foregoing, the following recommendations are made:

1. Library management teams should prioritize the use of their website and institutional repository to make special collections and other information sources accessible for library patrons during a pandemic such as COVID-19 and other major crises in the future.
2. University and library management teams should source funding for the development of the library infrastructure, including the power supply, Internet connection and ICT
facilities, to enhance access to special collections and other information sources.

3. University libraries should prioritize training programmes for librarians to enable them to perform well in the delivery of quality services to library patrons during a crisis.

4. There is a need for university libraries to provide skeleton services during a crisis to enable the provision of on-the-shelf print sources from special collections for patrons.

5. Library management teams should create awareness and enlightenment campaigns in respect of the available special collections to increase their usage by library patrons.

6. A specialized library blog should be used to enhance information sharing with registered library patrons for the purpose of providing continual access to special collections and other relevant information.

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Supplemental material
Supplemental material for this article is available online.

Note
1. The Google Form is available at: https://tinyurl.com/pxj9cefk 

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Saturday U Omeluzor attended Babcock University, where he received his PhD in Library and Information Science in 2016. He served in various capacities at the Laz Otii Memorial Library at Babcock University. Dr Omeluzor was appointed as the Pioneer University Librarian at Clifford University in 2017 and served until 2019. He is the current head of the Electronic Library at the Federal University of Petroleum Resources, Effurun. He is a member of several library associations, including the Nigerian Library Association, Association for Information Science and Technology, and Association of Seventh-day Adventist Librarians. His research interests include ICT in library science, electronic information resources, user education, training and mentoring. Dr Omeluzor has published a number of articles in international and local journals, and has a book and several book chapters to his credit.

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The legitimacy of Scandinavian libraries, archives and museums as public spheres: Views from the professionals

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Abstract
This article analyses how library, archive and museum professionals legitimize the use of scarce societal resources for maintaining their respective organizations, with a special emphasis on their role as public-sphere infrastructure. Drawing on data from a survey among professionals in libraries, archives and museums in Denmark, Norway and Sweden, the authors investigate whether professionals across these institutions have similar expectations of their organizations to serve as public spheres. The analysis is contextualized with references to current library, archive and museum legislation across the three countries. The authors conclude that there are many similarities across the three countries, although national library, archive and museum legislation differs. This is interpreted in light of new public governance being a dominant regime of governance.

Keywords
Public libraries, library and information science as a profession, society, culture, development, archives and records centres, western Europe

Introduction
Over the past few years, many have argued that libraries, archives and museums (LAMs) are converging due to changes in technology, policy or practice (Audunson et al., 2020a, 2020b; Henningsen and Larsen, 2020; Hvenegaard Rasmussen, 2019; Hvenegaard Rasmussen and Hjörland, 2021; Hvenegaard Rasmussen et al., 2023; Hylland, 2014, 2019; Marty, 2014; Robinson, 2019; Vårheim et al., 2020). Previous research also shows that this process has affected public librarians’ perception of their professional role and the role of the public library in several European countries (Johnston et al. 2022). As memory institutions (Dempsey, 1999) and public-sphere infrastructure (Audunson et al., 2020b; Larsen, 2018), LAMs play important roles as community facilitators. However, due to the changing social and technological landscape surrounding these institutions (Johnston et al., 2023; Larsen et al., 2023; Valtysson et al., 2023), how professionals working within these sectors view the legitimacy of the library, the archive or the museum might be changing. Consequently, we asked professionals employed in LAMs in Scandinavia to rank the importance of their institution in relation to central aspects of the social missions of publicly funded LAMs. We have chosen to focus specifically on how they evaluated the contribution of their institution to the public sphere, as this has emerged as a particularly important aspect of the
social mission of LAMs over the last few years (Audunson et al., 2020a, 2020b). With this article, we seek to answer the following question: How do professionals in LAMs across Scandinavia evaluate the importance of their organizations’ contribution to their community and a sustainable public sphere?

**LAMs as public spheres**

In recent years, library and information science scholars have set out to theorize LAMs as public spheres (Audunson et al., 2019; Larsen, 2018), as well as study them empirically (Audunson et al., 2020b). However, questions have been raised as to whether this has been successful, as there has been more theoretical than experimental work on the relationship between libraries and democracy (Jaeger et al., 2013), and case studies of museums and the public sphere have provided limited analytical or theoretical generalizations (Värheim and Skare, 2021). With the research project ‘Archives, Libraries, Museums, Digitalization, and the Public Sphere’, researchers from a number of European countries set out to investigate empirically the function of public libraries, archival organizations and museums as democratic public spheres – that is, they investigated how such organizations could be said to underpin, be part of and develop sustainable public spheres within local and national settings. This was investigated through a number of quantitative and qualitative studies. As part of this investigation, a survey was distributed to professionals within such organizations in the three countries participating in the project. From this investigation, we have chosen to scrutinize the results from questions related to the organizations’ contribution to community-building and the facilitation of public discussions in Denmark, Norway and Sweden. We find it particularly interesting to investigate such questions in these countries as LAMs in the three countries are regulated in quite similar ways, and seen as part of cultural policies within a Nordic model (Duelund, 2003; Engelstad et al., 2017; Larsen, 2018; Mangset et al., 2008). Still, there are variations in how the three institutions are regulated by law in each country (Rydbeck and Johnston, 2020), making for interesting comparisons.

**Data and methods**

The survey was distributed among professionals working in LAMs in Denmark, Norway and Sweden in 2018. The target group for the survey was employees working in public libraries, archives and museums who carried out professional duties. The employees were reached via the leaders of main libraries and particular archives and museums. Table 1 shows the number of respondents from the three types of institution in the three countries.

The strategy when recruiting the respondents was to distribute the survey as widely as possible within the three sectors in the three countries. As such, this is not a randomized sample from the target population, but instead a sizeable portion of the professionals staffing the organizations within the three sectors. Consequently, the numbers should be interpreted as indicators rather than representing the population of LAM professionals. From the results, we have chosen to focus on elements of relevance to LAMs as community facilitators and public-sphere infrastructure.

In the sample, librarians were defined as all employees in public libraries with a diploma in librarianship or any employee with a professional responsibility for developing and mediating library services for the public. Archivists were defined as directors of archives or employees within archives with a responsibility for archival appraisal, archival and historical outreach programmes, collection management, the curation of exhibitions, mediation, and archival pedagogy and/or research. Museum professionals were defined as leaders of museums or employees with a responsibility for collection management, the curation of exhibitions, mediation, and museum pedagogy and/or research (Audunson, Hobohm and Tóth, 2020: 166–167).

**Results**

Table 2 shows the results from a question concerning how the professionals in the three sectors evaluated whether the public library, archive or museum should serve as an arena for public debate. This dimension was one of several dimensions under the following, more general, question: How do you as a library/archive/museum professional evaluate these different dimensions of the role the library/archive/museum has in your community? (for the presentation of more results from this question, see Audunson, Hobohm and Tóth, 2020).

As we can see from Table 2, there was a strong consensus among the professionals in the three countries that the public library should serve as an arena
for public debate. For libraries, this can be related to recent changes in library laws, where the latest version (2014) of the Norwegian Law on Public Libraries (1985) states that ‘public libraries should be an independent meeting space and arena for public conversation and debate’ (Section 1, Paragraph 2), and the latest version of the Swedish Law on Libraries (2013) states that libraries ‘must work for the development of a democratic society by contributing to the dissemination of knowledge and free formation of opinions’ (Paragraph 2). The Danish Law on Public Libraries (2013) does not have specific statements about the contribution of libraries to the public sphere or democracy, but states that libraries should promote information, education and cultural activity by making various materials available. It further states that the library should be impartial, thus pointing to its contribution to democracy (Rydbeck and Johnston, 2020: 27).

As for archives, there is a strong emphasis on their contribution to serving as arenas for public debate in Norway (even higher than for libraries), while it is not viewed as very important by professionals in Danish (5.9) and Swedish (5.3) archives. The Norwegian Law on Archives (1992) does not state anything about the contribution of archives to democracy, the public sphere or citizens. And neither the Danish Law on Archives (2016) nor the Swedish Law on Archives (1990) states any obligation to contribute to the public sphere or democracy. The latter two laws nevertheless state (among other objectives) that archives should ensure preservation, make archives available for citizens and guide citizens in how to access records. However, a proposal for a new Swedish law on archives was presented in a governmental report in 2019, suggesting that the task of this new archives law should be to ‘contribute to the existence and development of a democratic society’ (SOU 2019, 41, Paragraph 1). The report has not yet resulted in a bill to parliament.

Even for museums, there is a stronger emphasis on their role as arenas for public debate among professionals in Norway (7.8) than in the other countries. Sweden got its first museum law in 2017, and it emphasizes the importance for museums to promote the free formation of opinion – similar to the new Swedish library law (Swedish Law on Museums 2017, Paragraph 4). In Denmark, the museum legislation does not mention the public sphere or democracy, other than a formulation on the ‘general enlightening activity’ of museums (Danish Law on Museums, 2014). Norway does not have a law for museums and, as already mentioned, the Norwegian Law on Archives (1992) does not state anything about the contribution of archives to the public sphere. That the Norwegian archival and museum professionals still view it as important to serve as an arena for public debate can be viewed as an instance of mimetic isomorphism (DiMaggio and Powell, 1983), in that archival and museum professionals mirror recent developments within the library sector. Also, as of 2004, the Norwegian constitution (1814) states that ‘[t]he authorities of the state shall create conditions that facilitate open and enlightened public discourse’ (Article 100), which might have contributed to the professionals perceiving it to be important to serve as an arena for public debate. Furthermore, this revision of Article 100 on freedom of expression was an inspiration for a reformulation of the mission statement of the Norwegian Law on Public Libraries being in effect since 2014.

In Sweden, there is also an element of isomorphism in that the museum law and the proposed new archival law mirror the law on libraries. Still, the professionals did not view serving as an arena for public debate to be as important as their colleagues did in Norway. Nevertheless, serving democracy through providing access to public records and promoting freedom of information is an integral part of the archival profession.

Table 3 contains the results from a question about how public libraries or museums can contribute to building a sustainable public sphere (for more results, see Audunson, Hobohm and Tóth, 2020). The data does not contain the same information for archives.

As can be seen from the results presented in Table 3, the professionals in public libraries and museums in all three countries rated the provision of knowledge to citizens and serving as arenas for physical meetings and discussions as important, while the provision of digital platforms for discussions was...
rated as less important. The contribution of public libraries and museums to a digital public sphere will take a different form than simply providing a digital platform for citizens to interact (although some libraries and museums emphasized this during COVID-19 lockdowns). Through their missions of providing knowledge to citizens, public libraries and museums can nevertheless contribute to citizens making informed choices, which is most certainly a way to contribute to the public sphere in a digital age, regardless of whether the information is accessed in analogue or digital formats.

**Discussion**

The survey results show that the professionals in Danish, Norwegian and Swedish LAMs all thought that it was important that their institution contributed to the public sphere by providing information to citizens. Providing access to information and culture is at the centre of the traditional legitimacy of LAMs. However, the results show that the professionals also considered it important to host public meetings and thereby serve as an arena for public debate. Comparing the three sectors, librarians and museum professionals rated this aspect of the institutions’ social mission to be more important than archivists did. This echoes the scholarly literature, where there are more discussions of libraries (Audunson et al., 2019) and museums (Barrett, 2012; Vårheim and Skare, 2021) as public-sphere institutions than archives. Professionals in both public libraries and museums considered it to be of high importance to provide information to people so they can make informed choices. They also found it to be important to provide arenas where people can engage in discussions within the physical locales of specific libraries or museums. To provide such a space on digital platforms was considered less important.

In order to explain why the professionals in public libraries, archives and museums across the three countries agreed that their institutions should serve as arenas for public debate, even though the national legislation does not explicate it, we must look at how the professionals viewed this as part of the legitimacy of the institution, where legitimacy is defined as a ‘generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions’ (Suchman, 1995: 574).

We view dominating rationales of governance as a ‘socially constructed system of norms and values’ that influence the perception of legitimate LAMs. For many years, the dominating governance regime in the western world has been new public management, the rationale of which is that public institutions can be governed more efficiently if they are treated as private companies. Consequently, performance indicators are set for public-sector organizations. For LAMs, important performance indicators have been visitor numbers and lending figures. In terms of legitimacy, new public management has meant that to appear legitimate as a public-sector institution, LAMs have been met with an imperative to demonstrate a high level of use.

In the Nordic countries, a movement from the new public management paradigm to a paradigm of new public governance is underway (Jensen and Krogstrup, 2017; Kann-Rasmussen and Hvenegaard Rasmussen, 2020; Osborne, 2006; Torfing and Triantafillou, 2013), which means that LAMs are facing an emerging set of values alongside the values of new public management. A difference between new public management and new public governance is that the administrative level (such as the Ministry of Culture or local administration) plays a more facilitating role under new public governance, as opposed to more rule-setting or monitoring roles under new public management. Consequently, public organizations (such as public libraries and museums) must behave more autonomously, and take more responsibility for goal-setting (Andersen and Pors, 2016). Under a new public governance regime, outputs (performance) are no longer the most important factor in legitimation. Rather, new public governance takes its point of departure in the imperative to solve the so-called

**Table 3.** Mean scores, on a scale from 0 to 10, in response to the question: Can public libraries/museums contribute to building a sustainable public sphere?

<table>
<thead>
<tr>
<th></th>
<th>Denmark</th>
<th>Norway</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public libraries (N)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide knowledge people need to make informed choices (M)</td>
<td>9.0</td>
<td>8.8</td>
<td>8.8</td>
</tr>
<tr>
<td>Serve as arenas for physical meetings and discussions (M)</td>
<td>7.6</td>
<td>8.4</td>
<td>7.8</td>
</tr>
<tr>
<td>Provide digital platforms for discussions (M)</td>
<td>6.0</td>
<td>5.8</td>
<td>5.9</td>
</tr>
<tr>
<td>Museums (N)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide access to knowledge people need to make informed choices via exhibitions (M)</td>
<td>8.2</td>
<td>9.2</td>
<td>7.8</td>
</tr>
<tr>
<td>Provide arenas for physical meetings and discussions (M)</td>
<td>7.3</td>
<td>9.0</td>
<td>7.9</td>
</tr>
<tr>
<td>Provide digital platforms for discussions (M)</td>
<td>5.5</td>
<td>7.8</td>
<td>6.5</td>
</tr>
</tbody>
</table>
`wicked problems` of the public sector by trying to mobilize the knowledge, resources and energy of all relevant and concerned parties in the effort to create innovative solutions to urgent problems and challenges (Bommert, 2010; Torfing and Triantafillou, 2013). Where new public management is based on economics, new public governance is more network-oriented.

Fake news (Kalsnes, 2019) and filter bubbles (Pariser, 2011) are `wicked problems` that give LAMs a new possibility to display social responsibility and use their high levels of trust among the population to help underpin a sustainable public sphere (Larsen and Solheim, 2020). Following Suchman’s (1995) definition of legitimacy, contributing to building a sustainable public sphere, not only by providing access to information but also by serving as an arena for public debate, is a desirable, proper and appropriate path to follow for Nordic LAMs. The new public governance regime can explain why the library and museum professionals across the three countries found that their institutions should serve as an arena for public debate, despite the fact that only the Swedish and Norwegian library legislation mentions this function.

### Conclusion

In this article, we have analysed how professionals in LAMs in Denmark, Norway and Sweden perceived their organizations’ contribution to the public sphere, and how this was reflected in the perception of their own professional role. The results show that the ongoing convergence between the library, archival and museum sectors has also resulted in the professionals defining the legitimacy of their organizations in a fairly similar way. According to the professionals in all three countries, LAMs form an important part of the public sphere. By arranging public meetings in which citizens can take part, they are important as independent arenas for free and public debate – one of the foundations of a democratic society. Particularly, the library and museum professionals emphasized this as an important part of the role of public libraries and museums in the community.

The response patterns can only be partly explained by the existing legislation in the three countries defining the societal missions of LAMs. Generally speaking, the newer the legislation, the more emphasis is placed on the task of supporting and developing democracy. This can, in turn, be explained by the current change from a new public management regime based on economics to a network-linked new public governance regime with the aim of solving `wicked problems`, such as the dissolving of public spheres due to increased polarization (Fukuyama, 2018; Hochschild, 2016), fake news (Kalsnes, 2019), echo chambers (Sunstein, 2018) and digitally created filter bubbles (Pariser, 2011).

We argue that the implicit values and expectations of the new public governance regime, regarding taking responsibility for and acting according to society’s requirements, have already been internalized among LAM professionals before they have been ratified in legislation – as illustrated by the proposal for a new Swedish archives law (SOU 2019:58, 41). The need for a sustainable public sphere is a `wicked problem` whose solution is aligned with the traditional values of LAMs and Nordic cultural policy in general. At the same time, it also gives LAMs a possibility to demonstrate their social relevance in new ways that give them legitimacy in the regime of new public governance.

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### Notes

1. The project was funded by the Research Council of Norway between 2016 and 2019. Since the project officially ended, the participants have produced a number of articles based on the data collected.
2. In addition to Denmark, Norway and Sweden, researchers from Germany and Hungary took part in the project and distributed a similar survey among the professionals in their countries.

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Norwegian Constitution (1814) Kongeriket Norges Grunnlov (LOV-1814-05-17).

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How do Asian international students use Australian university libraries? A literature review

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Abstract
The findings of this literature review are applicable to university libraries globally, as students accessing libraries are now more culturally diverse than was the case historically. Prior to the COVID-19 pandemic, this diversity was due to increased numbers of international students attending selected universities in Europe, Australia, New Zealand, the UK and Canada. The literature suggests that the different information seeking, cultural transition, information disruption, English-language challenges and learning styles of Asian international students are not fully understood by western university libraries. Consequently, university libraries may not have strategically aligned to their university’s internationalisation objectives. Lack of understanding of the experiences of Asian international students potentially attenuates their well-being and academic success. Furthermore, this lack of adaption could place universities, such as those in Australia, at risk of not meeting national regulatory compliance expectations. This review examines the literature about the context of Asian international students’ use of Australian university libraries and introduces a research project that explores the lived experience of using Australian university libraries. The review identifies literature regarding the changing profile of Asian international students enrolled in Australian universities, their information-seeking behaviour, cross-cultural dimensions, their communication skills, and the expectations of an Australian university library. The review of this literature also seeks to explore who is studying international students, which methods are being used to do so, and which topics are of particular interest to the researchers. Finally, the review considers new post-COVID-19 pandemic opportunities for both libraries and other service areas to understand the needs of Asian international students as universities competitively recruit for their return.

Keywords
Asian international students, higher education, university library, cross-cultural, student journey, international student recruitment

Introduction
Prior to the COVID-19 pandemic travel restrictions, according to the Organisation for Economic Cooperation and Development’s (2019) international student mobility data, in 2019, Australia had the second highest number of international students worldwide after Europe, followed by New Zealand, the UK and Canada. This review examines the context of Australian university libraries; however, the findings may be relevant to other university libraries around the world with culturally diverse international student cohorts. Literature on how Asian international students use university libraries is not widespread in the library and information science literature. In addition, literature on how university libraries understand and manage the needs of Asian international students is also not as prevalent as might be expected (Click et al., 2017). This is particularly surprising considering that the number of Asian international students studying in Australian universities, as an example, has increased significantly over the last two decades, and they spend a lot of their time in the university library...
space studying, which enables the opportunity to internationalise library services (Munro-Smith, 2019). This student cohort may have unique communication, cultural transition and information-seeking needs. This article considers the various issues, support and services with regard to Asian international students.

The literature review begins by providing a historical overview of the university library in the West and in Asia, where some Australian university libraries are located. This historical context of university libraries in both these locations shows a shared organisational strategic purpose (Garcia, 2020). This purpose was to provide access to knowledge primarily in the form of hard-copy book collections, which included encyclopedias, bibliographies and history collections (Garcia, 2020; Trang, 2016). Books were previously too expensive for students to acquire individually (Garcia, 2020; Quinn, 2014; Trang, 2016; O’Dwyer and Trinh, 2018). The historical literature illustrates that university libraries have adapted to changing environments due to politics, culture, colonisation, economics and technology to meet the learning needs of scholars (Gunapala, 2017).

In the 21st century, there is now a growing number of international students from Asia in Australian higher education. However, university library leadership remains predominantly based in Anglo-Celtic culture (Australian Government, Department of Education, 2019; Blackburn, 2020; Council of Australian University Librarians, 2020). The increasing number of international students presents a cross-cultural challenge for university library leaders to better understand their needs and promote services that meet the expectations of students from a very different Asian collective culture (Khawaja and Stallman, 2011; O’Dwyer and Trinh, 2018). Students from Asia often have high expectations regarding the return on their large economic investment in higher education (Khawaja and Stallman, 2011). These expectations may not be fully met by Australian university library services and the learning support available. The findings of this review support these observations, and identify themes related to how library services are experienced by international students and align with university library leadership approaches.

Other predominant themes in the literature include international students’ transition experiences into higher education. Studies that explore the impact of changing countries and culture on international students’ transitioning to a newly experience educational environment (Burel et al., 2019; Catalano, 2013; Khawaja and Stallman, 2011) are evaluated. The cultural constraints that impair the ability for many international students to ask for help (Catalano, 2013; O’Dwyer and Trinh, 2018; Song, 2005) are described.

A further theme centres on the notion of a disrupted information environment and the underlying stress this places on international students (Crist and Popa, 2020; Hicks and Lloyd, 2016; Hughes et al., 2017, 2018; Mestre, 2010). Next, other literature infers that international students often have low awareness of university library services and support. At the same time, there is literature which asserts that university libraries lack the marketing capability to bridge the information-disruption divide (Cox, 2018; De Mooij and Hofstede, 2011; Knight, 2004; Velasquez and Campbell-Meier, 2018).

The assertion that university library leaders are now operating in a competitive global educational market is another theme found in the literature (Dods- worth, 1998; Gunapala, 2017; O’Dwyer et al., 2017; Thorpe, 2017). Finally, this review examines examples of how university libraries can build cultural diversity capability to meet the high-quality student support expectations of both students and regulators (Crossman and Burdett, 2012; Gunapala, 2017; Hockey, 2016; Hughes et al., 2017).

Positionality

As a qualitative researcher, my own positioning (Creswell and Poth, 2018) is influenced by my varied experience as a senior library manager over the past 25 years, working in both Australia and Asia managing libraries and supporting Asian international students. As a result, this experience has shaped my interpretation of what the challenges are for Asian international students and the Australian university libraries that provide services to them. As a senior library manager undertaking a PhD research project, this is an opportunity to deepen understanding of a cross-cultural student cohort of library users. This includes seeking the ‘international student voice’ in the information management academic literature of Asian international student experiences using libraries (Click et al., 2017).

I am also an autistic researcher, a diagnosis I received late in life after my Confirmation of Candidature in April 2021. As an autistic woman, I have often felt that I do not speak the same language as, or that I am foreign to, the majority neurotypical population. In many ways, this experience parallels that of Asian international students, who may experience cross-cultural differences when using Australian university libraries. These cross-cultural differences may create challenges that domestic students do not face.
As a researcher, I am grateful that my autistic traits of hyper-empathy and heightened pattern recognition will be a strength rather than a disability in investigating how Asian international students can reach their full academic potential using Australian university libraries.

**Methods**

This study uses a qualitative approach to review the library and information management literature and explore how Asian international students experience university libraries. In addition to exploring how university libraries understand Asian international students’ learning needs, the aim is to understand past research and past methods related to the research phenomena.

The review included the following steps:

1. Identifying databases from which literature would be selected;
2. Developing and evaluating inclusion and exclusion criteria to guide the selection of articles from these sources;
3. Developing a qualitative approach to thematically create a coding scheme in NVivo qualitative data management software for analysing the articles; and
4. Applying that coding scheme to the articles.

The literature included in this review was identified through the Scopus and Elsevier bibliometric databases and following citation trails. These databases were selected as they feature high-quality peer-reviewed academic literature. In addition, the review included identifying information management PhD theses in RMIT University’s library research repository. The following search strings of relevant subject terms were used:

(information seeking OR information disrupt* OR information lit*) AND (cross cultural* OR Asia* OR international student* OR stereotype OR student support OR intercult*) AND (student suppor* OR student counsel* OR student help*) AND (student satisfact* OR student expectat*)

librar* AND (manage* OR academic librar* OR university librar*) AND (international* or global*) AND (strateg* OR plan* OR evaluat* OR chang*)

**Inclusion and exclusion criteria**

This literature review was designed to include all the scholarly library and information management literature on Asian international students in university libraries in journal articles, theses, conference papers, books and book chapters published between January 1984 and November 2021. The journal articles retrieved were checked for relevance, and those that focused on the support service needs of Asian international students or on the university library were included.

Frequently, the literature described workplace initiatives or projects developed and undertaken in specific university libraries. These publications did not follow research methodologies and were coded as such in NVivo. While they were not based on a research methodology, they did provide experiences and information that explored the research phenomena and therefore were included in the literature review. Book reviews and news reports were excluded, as well as non-English publications.

Most of the literature in relation to university library responses to international student needs and experiences was in US or Australian peer-reviewed literature. The Australian university library literature research on this topic was often reported without a systematic research methodology or theoretical perspective. Instead, the majority of the research was found to comprise literature reviews, personal views or student customer-feedback surveys.

Further relevant research was located by following the citation trails of key authors retrieved in these initial searches. From this process, several chapters from edited books, conference proceedings and theses were added. A total of 79 peer-reviewed articles, 1 conference paper and 7 reports were identified for use in this review.

**Coding the literature**

In addition, I thematically coded the literature identified using computer-assisted qualitative data management software. The aim of the coding was to provide descriptive labels to help understand themes and patterns identified in the literature (Richards, 2009). This qualitative approach generated 392 codes, 4 themes and 12 subthemes. Figure 1 shows the four main themes coded and illustrates that literature reviews are the preferred research method in information management in the literature.

**Historical overview of university libraries in the East and the West**

Apart from differences in religion and culture, the purpose of a university library is not unique to the West and may have a longer history in the East. The first ancient libraries in both the East and the West served to act as repositories that collected,
preserved and provided access to knowledge (Fang, 2013a; Garcia, 2020; Trang, 2016). Libraries in both the East and the West had, over time, various roles and adapted to the changing needs of the societies they served.

The earliest university libraries in Europe, such as the University of Bologna library established in 1259 and the University of Paris libraries established in 1275, developed from the monastic function of preserving and creating religious illuminated texts to support learning, study and research (Garcia, 2020; Quinn, 2014; Thompson, 1980). In Asia, an ancient library’s main purpose was similar to that of the monastic libraries in Europe, which was to collect and preserve ancient literature and contribute to a cultured society (Fang, 2013b; Trang, 2016).

The purpose of eastern and western university libraries has historically transitioned from being repositories of monastic religious and cultural texts to providing access to collections of learning materials to support study, learning and research. Historically, the literature shows that the university library in both the East and the West adapted to the changing service needs of communities of scholars.

**International students: transition experiences**

The literature describes Asian international students’ demographic characteristics and their experiences of cross-cultural transition to a new country. As noted in a number of studies (Belford, 2017; Hughes et al., 2017; Isbell et al., 2018; Khawaja and Stallman, 2011; Munro-Smith, 2019; Organisation for Economic Co-operation and Development, 2019; Perry, 2016), Australia is an attractive and affordable destination for foreign students. International students comprise approximately 25% of the total number of students in Australia, contributing approximately AU$8.5 billion to the education industry each year (Munro-Smith, 2019). The top-five countries that international students studying in Australia originate from are China, India, Nepal, Vietnam and Brazil (Australian Government, Department of Education, 2019). International students originating from culturally diverse countries in Asia make up 76% of the top-five country cohorts and therefore the largest international student cohort in Australia (Australian Government, Department of Education, 2019).

International students often experience difficulties in adapting to their new educational environment as they have been displaced from their home social networks in the transition to a new country (Leong and Lau, 2001; Perry, 2016). Student support is often difficult for international students to understand (Perry, 2016). Compared to western students, Asian students are often unlikely to seek or ask for help face-to-face and place high expectations on themselves so as not to lose face by being seen as not knowing everything (Khawaja and Stallman, 2011; O’Dwyer and Trinh, 2018; Perry, 2016). In addition to these cultural differences in help-seeking style, the challenges experienced by international students include learning styles and language differences (Isbell et al., 2018; Perry, 2016). In particular, students from Asia have been found to be unfamiliar with the concept of academic integrity and have a different interpretation of how to use information in academic writing (Isbell et al., 2018; Perry, 2016). In a qualitative case study, it was suggested that international students’ low level of English fluency can also create an erroneous impression that they are of low intelligence, when they are often amongst the brightest students in their own country (Isbell et al., 2018).

Asian international students often perceive the library as a place to study rather than as a place for accessing resources (Song, 2005). For example, they abstain from asking librarians for help (Catalano, 2013). Furthermore, McLachlan and Justice (2009) note that in some international students’ home cultures, academic underachievement and failure bring shame to both the student and their family, thereby creating pressure to perform well and feelings of anxiety (Hertzum and Hyldegaard, 2019; Perry, 2016). In addition, international students in Australia are expected to be able to succeed in their studies; however, they often fail to engage with university library resources (Belford, 2017; Khawaja and Stallman,
international students often have low awareness of the library services is important as both domestic and international students not to engage with the learning resources and support they need for academic success. In response to these issues, other case study research has similarly noted that Australian university libraries should improve cross-cultural awareness (Blackburn, 2020; Isbell et al., 2018; O’Dwyer and Trinh, 2018; Perry, 2016).

However, despite this engagement barrier with library services, international students do make good use of libraries’ physical spaces, enjoying the security, heating, computer access, quiet study spaces and social atmosphere (Hughes et al., 2017). This often leads to positive student experiences, persistence and retention, as library spaces nurture academic success in collaboration with peers of the same cultural background (Crossman and Burdett, 2012).

University libraries: value and awareness

Some of the literature considers why university libraries are valued and marketed, and how international students improved awareness and access university library services is examined.

University libraries have marketing plans to raise awareness of their collections and services among new students, raise their profile in a competitive environment, and remain viable. However, they often do not show the capability to communicate and market collections and services (Cox, 2018; Velasquez and Campbell-Meier, 2018). Cross-cultural marketing to Asian clients needs to consider the importance of harmony and trust creation in libraries’ persuasive strategies (De Mooij and Hofstede, 2011). However, library marketing plans and approaches often ignore cross-cultural factors and specifically fail to consider international students from Asia. Marketing and promotion are thought to be critical for international students to understand what support is available to them (Knight et al., 2010). Marketing is a critical business activity to ensure that potential new culturally diverse students are fully aware of both library collections and services (Belford, 2017; Cox, 2018; Perry, 2016; Velasquez and Campbell-Meier, 2018).

The promotion and orientation of university library services is important as both domestic and international students often have low awareness of the university library services available to them (Belford, 2017; Hughes et al., 2017; Perry, 2016). First-year domestic students and international students may not be familiar with an Australian university library and that can feel overwhelming (Isbell et al., 2018; Perry, 2016). English may be a student’s second language and they are not asked about how services are designed to meet their needs (Belford, 2017; Hughes et al., 2017; Perry, 2016).

Student support, cross-cultural understanding and expectations

Some of the literature describes factors concerning the acquisition of deeper cross-cultural understanding and how libraries meet the quality student support expectations of regulators such as the Tertiary Education Quality and Standards Agency. Cultural institutions and organisational structures such as universities and libraries in Australia were created and shaped by the Anglo-Celtic culture (Australian Human Rights Commission, 2018; Blackburn, 2020). Anglo-Celtic refers to Australians who have a cultural background that is Irish, English, Scottish or Welsh (Australian Human Rights Commission, 2018; Blackburn, 2020). The term ‘cultural background’ was defined by the Australian Human Rights Commission (2018: 4) in Leading for Change as ‘ethnicity and ancestry that may have shared features such as language, physical appearance, religion, beliefs, customs, symbols and traditions’.

As indicated previously, there is a growing number of international students originating from Asian countries in Australian higher education (Munro-Smith, 2019; Organisation for Economic Co-operation and Development, 2019). However, university library leadership continues to be predominantly based in Anglo-Celtic culture (Australian Government, Department of Education, 2019; Blackburn, 2020; Council of Australian University Librarians, 2020). The increasing numbers of international students can present a cross-cultural challenge for predominantly Anglo-Celtic university libraries in engaging with students who are from very different and diverse Asian cultural backgrounds. These cross-cultural challenges can include communication skill deficits, unresponsive teaching and learning styles, lack of cultural awareness and insufficient marketing to promote services that contribute to student retention and success (Blackburn, 2020; Isbell et al., 2018; Khawaja and Stallman, 2011; Muir et al., 2020; O’Dwyer and Trinh, 2018; Perry, 2016).

Gaining deeper cross-cultural understanding of international students can provide an opportunity for university libraries to inform business improvements.
to both extend the reach of university library services and increase value (Belford, 2017; Blackburn, 2020; Hughes et al., 2017; Perry, 2016). Crossman and Burdett (2012: 223) suggest that ‘auditing and quality accreditation bodies that give registration to higher education organisations in order to conduct business place importance on internationalisation of post-secondary education’. University libraries are also expected to provide high-quality services and facilities with an international orientation (Blackburn, 2020; Hughes et al., 2017; Perry, 2016; Thorpe, 2017). Regulatory bodies such as the Tertiary Education Quality and Standards Agency use panels of inquiry where evidence of library student support is required. If international students’ opinions and preferences are not considered or understood, these regulatory requirements may not be met (Blackburn, 2020; Cox, 2018; Perry, 2016; Thorpe, 2017).

The future of students’ engagement with university libraries

The future of the university library engagement of Asian international students can be examined from the perspective of stakeholder management theory. Stakeholder management theory offers guidance on how university libraries can deepen their understanding of the diverse needs of Asian international students, at the same time adding value to the university organisation that they serve (Freeman, 1984).

Stakeholder management theory (Freeman, 1984; Freeman et al., 2018) provides a theoretical perspective with which to make sense of the disparate literature concerning international students and university libraries, and to view students’ cross-cultural issues within a stakeholder theoretical context. Stakeholder management theory (Freeman, 1984) is significant as it offers a perspective where international students are viewed as key stakeholders rather than outsiders (Marginson, 2012; Smart, 2018). This conceptual reframing creates opportunities for university libraries to better differentiate in a competitive higher education market for international students (Smart, 2018; Sucozhaňay et al., 2014).

In stakeholder management theory, a stakeholder is defined as ‘any group or individual who can affect or is affected by the achievement of an organisation’s purpose’ (Freeman, 1984: 53). According to Freeman’s (1984) stakeholder management theory, there are critical interconnected activities that are relevant to university libraries’ challenges and success. These activities comprise adding value to the organisation, innovation, inclusivity and leading ethically (Freeman et al., 2018). Each of these activities involves key steps, including stakeholder identification, strategy creation, strategy implementation and evaluation of stakeholder management initiatives (Freeman, 1984; Freeman et al., 2018; Marginson, 2012; Smart, 2018; Sucozhaňay et al., 2014). Stakeholder management theory offers the potential for developing further insight into understanding needs and the relevant strategies to actively engage stakeholders in university libraries (Sucozhaňay et al., 2014), including international students.

Conclusion

In conclusion, it was found that literature reviews are the preferred research method in the discipline of information management (Click et al., 2017). The literature on the experiences of how Asian international students use Australian university libraries is somewhat limited. Consequently, Asian international students’ needs, in relation to libraries in particular, are not specifically described in the literature. This lack of research is consistent with Asian international students not being adequately supported by university libraries in a way that suits their learning and cultural styles. In addition, this lack of cross-cultural awareness could potentially affect the reputation of an Australian university library, its funding, and the provision of accessible collections to support scholarship.

Historically, it was found that university libraries in both the East and the West have adapted over time to the changing needs of the scholars they serve (Fang, 2013a; Garcia, 2020; Trang, 2016). Despite this, researchers have often inferred that students from Asia have not experienced university libraries like those in Australia (Hughes et al., 2018). Other untested assumptions are that cultural awareness can somehow be obtained by librarians through cultural competency training (Blackburn, 2020; Mestre, 2010). In addition, the depiction of culture in the literature seems one-dimensional and static rather than dynamic, changing and influenced over time (Australian Human Rights Commission, 2018; Blackburn, 2020; Mestre, 2010). For example, the definition of culture in some of the academic literature excludes the concept of bicultural heritage, where an individual may have two ethnic backgrounds (Australian Human Rights Commission, 2018).

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home country (Smart, 2018), they were very diverse in their needs and experiences, and were not one homogenous cohort (Sucozañhay et al., 2014).

This review has identified three key future opportunities for informing university library advocacy opportunities with Asian international students (Freeman, 1984). The first opportunity is for university libraries to deepen understanding of Asian international students’ needs and expectations to enable access to collections and services (Freeman, 1984; Smart, 2018). The second is to ensure that Asian international students have high levels of satisfaction with their university library experiences to strengthen future university library advocacy, evaluation and government compliance (Tertiary Education Quality and Standards Agency, 2018). And third, the exploration of literature in languages other than English—in particular, literature published by Asian library associations—can broaden the research scope to strengthen cross-cultural awareness between eastern and western university libraries, and enhance future measures to improve the support of the diverse cohorts of Asian students they serve.

Informed by this literature review, a qualitative phenomenological PhD research project is being undertaken. The aim is to understand the first-person point of view of Asian international students and university librarians (Creswell and Creswell, 2018; Garner, 2017; Moustakas, 1990). This presents an opportunity for university libraries to actively give voice to the individual experiences of Asian international students, share that research and support universities’ international student recruitment strategies.

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Clare O’Dwyer has over 25 years’ experience in special and university libraries. She has worked in senior library management roles in both Australia and Vietnam. Clare is a strong leadership professional, a librarian, an economist and a sessional academic. She is currently a PhD candidate focused on phenomenology, university library use, student support, international students, cross-cultural dimensions and qualitative data coding from RMIT University, Melbourne, Australia. In addition, Clare is a proudly autistic qualitative academic scholar, who brings her autistic strengths, which include pattern recognition, creativity, hyper-empathy, kindness and compassion, to her research aims.
Continuing professional development in Cambodia: Perspectives of different stakeholders

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Abstract
The objective of this study was to gather the views of training providers and library employees on the continuing professional development opportunities available in Cambodia and the associated barriers. In total, 26 semi-structured interviews were conducted – 14 with training providers and 12 with library employees. Four key barriers were identified: the lack of continuing professional development opportunities; the inability to meet real training needs; the challenges associated with attending programmes in other cities, such as travel, accommodation and study leave; and a lack of resource personnel to conduct continuing professional development programmes. Four areas of improvement are suggested: offering regular training programmes; conducting a training needs assessment study; organising a national-level meeting to discuss library staff development issues; and developing a library and information science ecosystem to support the continuing professional development framework. The findings of this study are expected to provide some background information for the development of a continuing professional development plan for the library and information science sector in Cambodia.

Keywords
Continuing professional development, skills upgrade, training, career development, school librarians, Cambodia

Introduction
The increasingly digitised library and information ecosystem is redefining the library and information science (LIS) profession, requiring individuals to reskill and upskill, and to learn how to use new tools and technologies to stay relevant and effectively meet users’ growing expectations. The COVID-19 pandemic, where face-to-face interactions were restricted, has demonstrated in no uncertain terms that currently the most viable option for library staff to acquire new skills is through participation in continuing professional development (CPD) activities. The availability of strong CPD programmes is therefore a means to facilitate LIS employees to keep up to date with emerging trends. Several library stakeholders – such as professional associations, employers, library vendors and library donors – play a role in offering CPD programmes. In addition, LIS schools are deemed an important source for CPD programmes as they have pools of highly trained academic staff, resources and facilities (Majid, 2004).

According to Majid (2004), Shonhe (2020) and Varlejs (2016), there has been little research devoted to CPD in the LIS field in South East Asia and it has mostly focused on academic libraries. Two of the studies cited by Varlejs (2016) are doctoral research conducted by Nguyen (2008) and Maesaroh (2012) on academic library staff development in Vietnam and Indonesia, respectively. Examples of more recent
studies out of the region include research conducted in Pakistan by Hamid and Soroya (2017) and Rafiq et al. (2017), a study on Sri Lanka by Masrooﬁa (2021), and a study on CPD for the capacity-building of LIS employees in the Republic of Maldives (De Alwis Jayasuriya et al., 2021a, 2021b). Two studies that discuss the perspectives of LIS CPD providers are those by Majid (2004) and Rafiq et al. (2017). Shonhe (2020) further states that the low research output may inhibit informed decision-making to develop a skilled and relevant LIS workforce to meet the needs of 21st-century users, specifically in developing countries.

Varlejs (1999) observes that most LIS employees lag behind other professions due to the limited CPD opportunities available in several regions of the world. From a South East Asian perspective, Majid (2004) notes that, compared to training needs, the level of CPD activities for LIS professionals in the region is quite low. Given the varying standards of LIS schools in the South Asia and South East Asia regions and the absence of strong national professional associations, the need for CPD programmes is more critical in these countries (Majid, 2004, 2018; Sturgess, 2012). As such, it is desirable to investigate the availability, frequency, adequacy and quality of CPD programmes for LIS employees in these countries.

Cambodia was considered a suitable site for this study due to the lack of research on CPD in the country (Hickok, 2020; Mao, 2011). The only exception is a report by Jarvis et al. (2006), who note that although libraries were included in a 2002 study of the publishing industry, certain useful data collected through a survey and interviews was not adequately analysed or reported due to resource constraints. This article reports selected findings from a study conducted on the status of formal CPD activities available to library employees in Cambodia from the perspective of both library employees and training providers.

The Cambodian LIS sector

The Royal Kingdom of Cambodia, located in South East Asia, has a long and rich history, and is known for the famous ruins at Angkor Wat. Cambodia has undergone significant transition over the last two decades, reaching lower-middle-income status in 2015 and aspiring to attain upper-middle-income status by 2030, thus making it one of the fastest-growing economies in the world (World Bank, 2021). Unfortunately, the COVID-19 pandemic has slowed down the speed of progress. Khmer is the official language and mother tongue of Cambodians. Although English is the most widely learned second language in the country, Cambodia is still ranked 97 out of 112 countries on the English Proficiency Index (Education First, 2021).

The civil war in the 1970s, the Khmer Rouge regime from 1975–1979 and the civil conflict throughout the 1980s were devastating for Cambodia (Chandler, 2008). During the 1990s, the country underwent political, economic and cultural reforms, which included a major overhaul of the education system in 1996 that helped improve literacy and the availability of books (Jarvis et al., 2006). Early in the 2000s, Cambodia experienced a boom in the higher education sector, leading to the growth of a private university industry (Jarvis et al., 2006). Many non-governmental organisations (NGOs) and development partners also started contributing significantly to Cambodia’s primary and secondary education sector. In 2016, the Ministry of Education, Youth and Sport (MoEYS), in collaboration with Kampuche Action to Promote Education (KAPE), launched the New Generation Schools (NGS) reform with the objective of providing 21st-century learning environments in schools (Kampuche Action to Promote Education, 2020; Ministry of Education, 2016, 2020).1

The library sector in Cambodia is still developing and includes the National Library of Cambodia and school, academic and special libraries (Hickok, 2020). The term ‘library’ is used loosely in schools to refer to a collection of books, a single shelf of books or a storage room with a few shelves of books (Hickok, 2019). A positive outcome of the engagement of NGOs in primary and secondary school education is the incorporation of school library development in their programmes (Hickok, 2019; Mao, 2011). The academic libraries in the public and private universities are of varying capacity and quality (Hickok, 2019), although the Accreditation Committee of Cambodia’s (2010) ‘Minimum standards for accreditation of higher education institutions’ stipulates the provision of adequate resources to support teaching, learning and research. However, Hickok (2020) is of the opinion that academic libraries in Cambodia, although still far behind many other South East Asian academic libraries, are more developed than the other types of libraries in the country. The special library sector comprises a large number of libraries in government institutions and NGOs (Suon, 2009). The network also includes around 27 prison libraries and 23 library education centres in garment factories (Sipar, n.d.). A network of temple libraries originated in the 9th and 10th centuries and some of these still hold manuscripts (Mao, 2011; Plathe, 1993).
A government-supported public library system is non-existent in the country (Hickok, 2019, 2020; Plathe, 1993) and the National Library of Cambodia has attempted to address this gap by opening its collections and services to the public (D’Amicantonio, 1997; Hickok, 2019). The Alliance Française Library and the library at the Center for Khmer Studies in Seam Reap also serve as public libraries (Center for Khmer Studies, 2004–2005, 2014–2015; Hickok, 2019; Plathe, 1993). Many NGOs have been actively engaged in addressing the absence of public libraries by establishing a series of library services in the form of community and mobile libraries (Hickok, 2019; Mao, 2011; Sipar, n.d.).

**CPD in Cambodia**

**The beginnings**

During the period from the 1980s to 2010, library professionals and consultants who visited Cambodia on missions for international organisations highlighted the low level of training of library employees and the need for human resource development (D’Amicantonio, 1997; Plathe, 1993). Many funding agencies attempted to address this gap by awarding overseas fellowships (Bywater, 1998; Conference of Directors, 2001; Plathe, 1993). In addition, in-country workshops were conducted by library professionals visiting Cambodia on consultancy or volunteer attachments, and professional librarians working at Alliance Française (Plathe, 1993). Library employees based in Phnom Penh were the main beneficiaries of this training (Conference of Directors, 2006; Jarvis, 1995; Plathe, 1993).

The first training programme organised for library employees in Cambodia was conducted in English and French for National Library of Cambodia staff prior to the library’s reopening in January 1980 (Jarvis, 1995). In 1987, Margaret Bywater (1998), a professional librarian from Australia who was with the Royal University of Phnom Penh (RUPP), conducted a workshop for a small group of librarians with the Ministry of Education. Bywater was later contracted as a library resources advisor by the Asia Foundation to provide training for almost all types of libraries (D’Amicantonio, 1997; Jarvis et al., 2006). These training programmes focused on collection development, and specifically on how to assess donated materials, which was particularly useful for the librarians given that most of the collections were donor-driven. A collaboration with John D’Amicantonio (1997) to hold a workshop on reference services was also useful to address gaps in Cambodia’s service culture. Dean (1999) refers to the training sessions on library preservation conducted under the auspices of the Cornell Library Overseas Conservation project in 1989 and 1991.

Workshops conducted by the IFLA Advancement of Librarianship in Developing Countries Programme (1994) and other related organisations in the region were also avenues that Cambodian academic librarians made use of for exposure to and opportunities to network with librarians in the South East Asia region who faced similar development issues.

The Cambodia country reports of the Conference of Directors of National Libraries in Asia and Oceania (2006, 2007, 2008, 2009) note the training initiatives of the Cambodian Library Association (CLA) and the RUPP. These events are an indication that the LIS profession recognised the importance of CPD and attempts were made to provide training opportunities to library employees despite resource constraints. According to Suon (2009), the only training available to library employees locally was occasional workshops or short courses, and travelling to nearby countries to attend short courses. Overseas training was not an option due to resource constraints.

The CLA, which was established in 1996 as the Cambodian Librarians and Documentalists Association, was relaunched in 2013. The association’s goals recognise the need for the continued capacity-building of library professionals in the country, and it has focused on conducting training programmes locally (see Appendix 1), as well as sending some members overseas for training (Hickok, 2019, 2020; Mao, 2011).

**Training for school library employees**

In the early 1990s, Plathe (1993) noted that appropriate training was not extended to trainee-teachers at teacher training colleges to become school librarians as the library at the Ministry of Education in Phnom Penh lacked trained librarians. A study by the MoEYS (Pedagogical Research Department, 2007) revealed that secondary school libraries were showing little progress in capacity-building. The reasons stated were that some library staff had not received any training as they were appointed after the training was conducted; the duration of the training was less than a week; and, most importantly, the staff’s low educational attainment impacted their ability to learn the needed skills. In 2010, the Hun Sen Ning Lok Chomteav Library (Ministry of Education, 2010) highlighted that although it was mandated to collaborate with development partners to improve school librarians’ and directors’ skills and knowledge through short-term
training programmes, the limited capacities of its staff did not permit it to fulfil this mandate.

Some developments have since been introduced to enhance the school library sector, including the adoption of the 'Standards for primary school libraries' (Ministry of Education, 2011), which incorporated a training component of basic training (nine days), continued training (six days) and special training (of flexible duration), and the ‘Education strategic plan, 2014–2018’ (Ministry of Education, 2014), which identified the need to train school librarians and update the curriculum to support early childhood education.

According to the Cambodia Development Resource Institute, the curriculum for trainee primary school teachers includes 43 hours allocated for library training (Sothy et al., 2015). Despite these developments, a World Vision (2016) study, which assessed the status and use of libraries in public schools through a survey of 20 librarians, highlighted that only a small number of the librarians had received any library-related training and that the duration of this training was confined to just one or two days (compared to the stipulated nine days). The overall conclusion of the study was that most librarians had received inadequate training, which seemed to resonate with the 2007 MoEYS study (Pedagogical Research Department, 2007).

To summarise, CPD training has been ad hoc and informal, except for a few years since the relaunch of the CLA (Hickok, 2020). Although Plathe (1993) highlighted that fellowships for overseas training and training workshops offered locally were useful to nurture a core group of professionals for the short term, a more concerted approach was needed to develop the resource pool. As the government’s priority at that time was on development and the rebuilding of infrastructures following the years of Khmer Rouge rule, and Plathe’s recommendations were not realised (Bywater, 1998; UNESCO Cambodia, 1997).

Current status

The training activities of the CLA appear to have been in a lull since pre-COVID-19 times. The National Library of Cambodia has been unable to take a lead role in training activities for many years.

One organisation that has taken an active role in contributing to the capacity-building of library employees in the last decade has been the Center for Khmer Studies Library. Since 2013, the library has conducted annual workshops targeted at the academic and special library sectors in the country (Center for Khmer Studies, 2021). These workshops, which are held over two to three days, cover a cross section of themes (see Appendix 1). Due to the COVID-19 pandemic, the 2021 workshop was conducted as a hybrid event.

Sipar (n.d.) is the only LIS training provider that currently offers fee-based training programmes in the country. These include Basic Training in Library Management, Level 1 (five days) and Level 2 (four days), targeted at special libraries, which include pre-tests and post-tests to assess the participants’ performance. In addition, it offers training on facilitating reading.

Hickok (2019) underlines the absence of a national training programme for school librarians and highlights that almost all school libraries are run by a teacher or school staff member without any formal library training. However, Hickok hastens to add that the situation in private and international schools may be better as they may have more resources.

Barriers to CPD

The primary LIS continuing education providers in Cambodia are the CLA and the National Library of Cambodia. However, the literature review revealed that the LIS CPD ecosystem in Cambodia has been relatively inactive for several reasons. The CLA has been in hiatus in the recent past and the training of the National Library of Cambodia has been limited for many years due to severe resource constraints – both financial and owing to the unavailability of professionally qualified staff.

Although different stakeholders have at different times sought to establish a professional LIS education programme that could also take up CPD responsibilities in the country, it is yet to materialise (Hickok, 2020; Mao, 2011). As a result, Cambodia is the only country in the South East Asia region that is yet to establish a professional LIS education programme (Sacchanand, 2015). There is hence a severe lack of LIS professionals who can serve as resource persons in the country. In 1997, there were only two librarians in the country with a Master’s in Library Science (D’Amicantonio, 1997). Almost a decade later, in 2010, the number of professionally trained librarians with a Master’s in LIS or equivalent had increased to just four (Hickok, 2019). The only LIS training providers that are actively contributing to the CPD ecosystem are the Center for Khmer Studies, Sipar and NGOs that support school libraries.

The barriers to CPD that school library employees have to cope with include the lack of a component on libraries in the teacher training curriculum; the short duration of training programmes (approximately one
to three days due to the lack of or limited funding); the lack of funding to meet the travelling and accommodation expenses of participating in training programmes; and the need to attend training during one’s vacation as leave is not given to attend training during work hours.

**Research objectives and design**

The literature review suggests an absence of research on the LIS sector overall, as well as the state of CPD opportunities available to LIS employees in Cambodia (Hickok, 2020; Mao, 2011). This study will provide insights into the formal CPD programmes available to library employees in Cambodia, as well as contribute to the sparse body of knowledge on Cambodia’s LIS sector. For the purpose of this study, CPD is defined as follows: learning activities undertaken by individuals to fill knowledge gaps and enhance their professional capabilities to manage their career pathways more effectively.

Cambodia currently does not offer any academic library science programmes and the number of professionally qualified librarians in the country is just five – three hold a Master’s in LIS, one holds a Master’s in Conservation and one is an associate of an overseas national professional body. As the number of professionally trained librarians is limited to five individuals, the population for this study also included library staff who were responsible for library operations but had no formal LIS education. The scope of the CPD activities in this study was limited to formal learning activities offered by different stakeholders.

The purpose of the study was to explore and understand the opinions, thoughts and feelings of the participants. Given the nature of the enquiry, interviewing – a qualitative research approach that involves engagement with participants – was adopted as it would enable the development of a holistic account of the research question.

Following discussions with two local contacts, a short Google Docs survey was sent to six known training providers. The intention was to develop an initial understanding of the local situation to help develop interview questions. Initially, only two local training providers responded. After a few reminders, two more training providers agreed to participate. It was later learned that the other two training providers had initially failed to respond to the Google Docs survey due to Internet bandwidth issues. Thus, a Word document was sent to them and their responses elicited. A follow-up discussion with the contacts revealed that Cambodians mostly use Telegram, a cross-platform instant messaging service. Thereafter, all further communication with the potential respondents was via Telegram.

Two sets of interview questions were prepared for the two groups of participants – that is, the training providers and the library employees. The guiding research question for this study was: What are the views of training providers and library employees of the CPD opportunities available in Cambodia? The semi-structured interview format enabled the interviewer to enter the participants’ space and, through discussion, obtain their perspectives on the research topic. Additionally, the interviews facilitated the interviewees’ reflections on other related issues, especially their views on the benefits of undertaking CPD and possible barriers impacting training providers and library employees. The final question to both groups aimed to solicit suggestions for improving CPD programmes for LIS employees in Cambodia. Probes were used to go deeper into a particular line of enquiry or to bring the participant back to the main line of enquiry. Certain key points raised by some of the participants during the interviews were verified by subsequent interviewees. The purpose was to validate the previous responses as well as seek their input on these points. A simple interview guide was prepared for the school librarians to help them understand the scope and purpose of the study.

The interview schedule was pretested on a professional librarian/trainer via Zoom, which enabled the interviewer to rehearse the interview, assess if the participant was able to understand and respond to the questions appropriately, determine if the questions elicited the intended information, and estimate how long the interview would take (McIntosh and Morse, 2015; Vinci et al., 2017). Based on the pretesting, some questions were rewritten to improve clarity and comprehension.

A purposive sampling technique was used for the selection of the participants to ensure better representation and facilitate in-depth discussion on the research topic. The initial interviewees also provided referrals to additional potential participants, who in turn were encouraged to supply information about other potential participants. The challenge was to ensure adequate representation, as well as find people with sufficient language proficiency to participate in the interviews effectively.

The sample population for the interviews comprised two categories: (1) active LIS training providers – trainers within state organisations, the private sector and NGOs; academic librarians/trainers; library management system consultants; and the chief executive officer of a state organisation – and (2) library employees from institutes of higher education.
and schools, both in the public and private sectors, and special libraries operated by NGOs.

The interview questions were emailed to the participants ahead of their interviews for two reasons: first, to give them sufficient time to reflect on the questions and, second, to allow the individuals who were less proficient in English to first think through their answers in their mother tongue and then try to translate them into English. This was desirable as, initially, some individuals were reluctant to participate due to their limited English proficiency. In addition, a few of the participants said that they would obtain the assistance of a colleague to act as an interpreter to translate and communicate their responses.

In total, 26 one-on-one interviews were conducted by the first author via Zoom from August to October 2021; the interviews typically lasted from 45 minutes to one hour. The interviews included 14 with training providers and 12 with library employees. Two participants, both school librarians, obtained the services of a colleague to act as an interpreter during the interview. A few of the participants prepared written notes, which they used during the interviews.

At the beginning of the interviews, the participants were assured that their identities and responses would remain anonymous and that they were allowed to withdraw from the study at any time without any consequences. None of the participants withdrew. Given the very small number of professionally trained librarians in the country and the fact that the same individuals, in addition to holding a full-time job, could hold office in a few different voluntary organisations, some variations were incorporated into the interview questions to cater for the nature of the organisation(s) represented, offices held and individual experiences. However, each interview was counted as one, regardless of the number of offices held by the interviewee.

With the participants’ permission, the interviews were audio-recorded to help with transcription. The thematic analysis technique was used to categorise and develop common themes from the interview transcripts. However, formal coding practices were not adopted as the study was more in the nature of applied research to understand the landscape and not designed to develop a theory.

### Findings

This section presents the findings from the study and the discussion is substantiated with quotes from the interviews, which are identified by participant number.

The sample of 26 study participants included 14 training providers and 12 library employees. One participant, a library employee, was a non-Cambodian academic librarian who had been researching the LIS sector in South and South East Asia for over 15 years. It was perceived that his perspectives would add value to the research.

An analysis of the participants’ characteristics (see Table 1) reveals that the training providers included 13 individuals with a Master’s degree or higher qualification and one participant with an associateship of a foreign national LIS body. Their years of work experience extended from less than 10 years to over 30. Eight training providers had institutional or personal membership of the CLA. Of the 12 library employees, seven held a Master’s and five a Bachelor’s qualification. Their library experience ranged from less than 10 years to over 30. Membership of the CLA, either personal or institutional, was held by six employees and the remaining interviewees were not CLA members.

#### Availability of CPD programmes

The participants were asked about their views on the state of the CPD programmes available to library employees in the country. Reflecting on the CLA’s role, Participant 2, a chief executive officer at an NGO with over 20 years’ experience, noted that ‘it is the association’s role to develop librarians and provide them training’. Acknowledging the CLA’s role,
Participant 26, a librarian with over two decades of experience, observed: ‘The training workshops arranged by the Cambodia Library Association have been very good’. Several other participants also confirmed that most of the local training or workshops were organised by the CLA.

However, Participant 12, a trainer of many years’ standing, highlighted that: ‘Although there were many different opportunities for CPD provided by numerous groups, it was mostly with little coordination… but at that time each activity was useful for individual libraries and individual staff’. Examples of CPD opportunities offered by other local organisations included short seminars by the Cambodia Development Resource Institute and annual training courses by the Center for Khmer Studies Library since 2013. However, some of the participants also observed that most of the time the training opportunities available were only for academic library employees.

Other training options that were available for the library employees included employers of foreign organisations based in Cambodia sending them for training at the parent organisation overseas. Similarly, senior library staff representing their library at regional library network meetings also attended some follow-up training sessions.

Several of the training providers shared their perspectives on their experiences. Participant 12 revealed:

the first seminar for librarians working in the education sector was held in Phnom Penh in 1987. In 1997, the new purpose-built RUPP library offered a facility for training which was very useful. With Asia Foundation funding, training was extended to staff of all types of libraries for over 10 years. Some of the training was in Khmer and some in English language. Later on, targeted training was provided mostly in the provinces for school librarians, in association with the Ministry of Education. This was followed in 1991 by a series of seminars arranged by Dr Helen Jarvis of the School of Librarianship, University of New South Wales. In 1999, some 20 Cambodian librarians attended the IFLA conference in Bangkok, one of the biggest contingents ever from Cambodia.

Participant 10, the former head of an academic library who had been actively involved in training library employees for the past decade, commented:

many workshops were organised by the Cambodian Library Association between 2010 to 2017 mostly for academic library staff in Phnom Penh. However, since around 2017, there has been less training activity, and it seems to have slowed down or almost stopped. NGOs focused mostly on training school library employees. The duration of these workshops in general varied from two hours to a half day, and on very rare occasions extended to one or two days. The training focused mostly on broad LIS topics.

Participant 11, a senior library professional who was actively involved in the training of library employees, described the type of training offered:

What is taught are basic skills… it is still very hard for the librarian to do advanced-level work. So, we just make sure they can meet their immediate needs. A proper trainer is needed to provide advanced skills. We will have to spend a lot of time on designing the course if we are to teach advanced skills.

The language of instruction was mostly Khmer, except when international visitors offered training in English. Depending on the training provider, the handouts distributed were either in English or translated into Khmer.

In the absence of a professional LIS academic programme and regular CPD training opportunities for library employees, it was refreshing to find one employer who had initiated an innovative approach to ensure that his employees received the necessary training. Participant 9, who had supervised a state-level library for just under two decades, shared the following:

In Cambodia there is no library school. So, since 2016, I have arranged annual staff training as a part of the capacity-building programme for the organisation. I have engaged outside trainers and the training is not only for the library staff, but for all organisational staff. I have also arranged training on soft skills. An memorandum of understanding (MOU) with an organisation helps to sponsor the funding.

When asked if similar capacity-building programmes were in existence in other organisations, he responded: ‘I think NGOs in Cambodia do, but in the state sector only a few. I initiated the capacity-building programme after I was appointed’.

Other training that was available to library employees included programmes initiated by Sipar for garment-factory workers who were serving as library employees for one hour a day during lunch breaks and for prison officers.

The interviews also revealed initiatives undertaken by library employees to overcome the lack of CPD programmes in the country. These included taking up the challenge of joining the coaching programme of the International Association of University Libraries’ Special Interest Group for the Advancement of Library Services in Emerging Countries, which was
channelled through the CLA. Two participants, both heads of academic libraries, had participated in this programme. Two school library employees alluded to accessing YouTube clips to learn about libraries.

**CPD for school library employees**

Recognising the substantial investments that have been made by the government and NGOs in school library development and the training of school library employees, it is imperative that a separate section be allocated to the discussion of CPD for school library employees.

According to the ‘Standards for primary school libraries’ (Ministry of Education, 2011), the teacher or person in charge of a library is required to attend six days of basic training, followed by a six-day refresher course after a period of six months. Many of the participants observed that these workshops covered topics such as the basics of library management and cataloguing, which were perceived to be sufficient and not likely to overburden the school librarians.

The school librarians in some public schools had received library training from local NGOs or donors, and the duration of the training sessions varied based on the available budget. Participant 1, a training provider with over 21 years of training experience, offered more insights into the nature of these NGO-funded training programmes: ‘The NGOs have their budget, their training plan, and when they have to conduct the training, they notify the library at the Department of Curriculum Development, MoEYS, of their training needs’. NGOs collaborate with the MoEYS as it has staff with the library skills needed to conduct the desired training sessions. Three-day training programmes are conducted by two teachers using the ‘Standards for primary school libraries’ (Ministry of Education, 2011). Additionally, they focus on national policy related to promoting reading. However, it was highlighted that the MoEYS’s annual budget allocation is sufficient to only conduct two training sessions per year.

Additional input on the nature of the training offered by NGOs was provided by some of the participants. Two referred to a tripartite agreement that two NGOs signed with the MoEYS in 2018 to have the latter train school librarians. The collaboration also includes guidance on developing a training needs assessment. The training, which is of two days’ duration, is offered to 15–20 core school library employees selected from 200 schools each year. The training that is provided to teachers in the provinces is also limited to two days.

In comparison, Participant 6, a trainer with over 15 years’ experience, stated that his organisation offered a five-day training course on library management that was targeted at school directors and the school librarians in their project, and five days of training to teachers on conducting activities during the library period. In order to support the MoEYS-approved child-friendly library programme, a national team is also scheduled to undergo train-the-trainer sessions to facilitate the delivery of training to school library employees.

Participant 8, who had coordinated a corporate social responsibility project that was launched by a company in Cambodia in 2011 jointly with the MoEYS to support school libraries, provided some insights into the training component of this programme, which incorporates:

- three-year support for each library… as most teachers have only teaching skills, the company partners with MoEYS to provide training for three years, so the librarian has time to learn how to manage operations, how to encourage and motivate students to read, and to prepare the timetable for all the students to have a chance to use the library. Besides the training, they also have follow-up activity to allow the librarian to talk with MoEYS staff if they have a question. So that is also one way to improve the capacity of the librarians.

Participant 11 described an initiative that was launched around two years ago – a joint collaboration with the Faculty of Education at the RUPP. The 45 hour course in Librarianship is equivalent to three credits and is targeted at school librarians, management and information technology (IT) staff working in regional and provincial teacher training colleges around the country. So far, two sessions have been conducted.

The perspective of the beneficiaries was provided by three school library employees (Participants 22, 23 and 24). Participant 24 had received two days of one-to-one training and, as an employee of a New Generation School (NGS) library, visited schools in Thailand to observe their libraries and attend training on the 21st-century library with other schools in the programme. Participant 22, with two years of school library experience, reported receiving eight days of training through an NGO. However, she stated that she had not received any training from the MoEYS. In comparison, Participant 23, who had been employed in a private school for over seven years, had her training confined to a seven-day workshop conducted by her former employer and seven days of training on library management systems, which was offered by an NGO in her province. She had attended
this training as it was an opportunity to learn about the features of library management systems. It was noted that whilst Participants 22 and 24 had received coordinated training through the NGOs supporting their schools, Participant 23 had not received any relevant training since taking up her library position over seven years earlier.

**Benefits of undertaking CPD programmes**

The participants were asked about the possible benefits of undertaking CPD programmes. Several of the participants, while sharing their views on the benefits of training, confirmed that CPD was critical for them to keep up to date. This was especially important considering the impact of digital technologies on libraries and the need for librarians to innovate in the provision of new information products and services to meet changing customer expectations. The benefits identified included the opportunity to acquire basic skills as early career librarians; being given the means to support libraries in promoting reading skills and literacy in the community; networking with like-minded professionals; and learning about the practices and benchmarks adopted by libraries overseas.

From the training providers’ perspective, the key benefit for school librarians was the acquisition of skills to effectively manage their libraries and make them child-friendly. In order to avoid overburdening trainees, they were not provided with comparatively less important skills. It was also noted that teachers were required to complete assessment forms before and after training, and that they mostly rated it as ‘satisfactory’ because they had acquired new knowledge. However, it is doubtful whether the acquired skills were applied.

Whilst recognising that undertaking CPD was beneficial, the library employees were more anxious about the lack of and/or limited LIS-related CPD programmes in the country and the barriers to participating in CPD programmes.

**Barriers to undertaking and organising CPD programmes**

Both the library employees and the training providers were asked about the barriers they faced when undertaking or organising CPD programmes. Tables 2 and 3 reflect the barriers perceived by the library employees and training providers, respectively. Their responses are grouped thematically by category for ease of reference.

The interviews with the library employees revealed that situational barriers, both professional and personal, followed by institutional barriers were the key concerns of the majority of the participants. The

<table>
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<th>Themes</th>
<th>Barriers</th>
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<tr>
<td><strong>Situational</strong></td>
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<tr>
<td>LIS CPD</td>
<td>Lack of CPD topics on latest trends in LIS (Participants 9, 14, 16, 17)</td>
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<td></td>
<td>Not many training activities and the training is mostly the same (Participants 13, 14, 21, 22, 26)</td>
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<td></td>
<td>No proper training schedule and inadequate publicity (Participants 14, 18, 21, 26)</td>
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<td>Not sure about the training needs of LIS employees (Participant 17)</td>
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<td></td>
<td>The CLA, a primary CPD provider, is inactive (Participants 13, 16, 17, 21)</td>
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<td></td>
<td>CPD activities are not offered due to lack of knowledgeable resource persons (Participants 9, 14, 16, 17, 26)</td>
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<td>CPD association</td>
<td>Lack of a professional LIS education programme or school to act as a CPD advisor and training provider (Participants 16, 17, 19, 21, 25)</td>
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<td>Resource constraints</td>
<td>Not convenient as attendance involves travelling (Participants 9, 16, 17, 19)</td>
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<td></td>
<td>Many challenges when trying to learn online (Participants 14, 17, 21)</td>
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<td></td>
<td>Lack of proficiency in English (Participants 14, 17, 19, 21)</td>
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<td></td>
<td>Employer does not fund CPD activities (Participants 4, 21)</td>
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<td></td>
<td>Lack of employer commitment to a formal staff development programme (Participants 9, 14, 21)</td>
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<td>LIS education</td>
<td>Lack of employer recognition of the value of CPD activities as a formal qualification is not awarded (Participants 9, 14, 16, 17)</td>
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<td>Heavy workload in the workplace and inability to get a colleague to cover (Participants 9, 16, 17)</td>
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major concern was associated with the non-availability of CPD programmes. Other important barriers were the seeming hiatus of the CLA and non-existence of a professional LIS education programme or school in the country which can act as a CPD provider and advisor.

Professional barriers: LIS CPD availability. The key barriers identified included the lack of regular CPD training; the limited number of CPD programmes, which were mostly the same, such as courses on the Koha open source integrated library management system; the lack of programmes on the latest trends in LIS; the tendency to focus on traditional topics; the lack of awareness of the training needs of LIS employees; and the lack of a proper training schedule.

During the interviews, the desperate need for CPD resonated in the views of a cross section of the LIS employees. Commenting on the demand for CPD, Participant 19, who was the head of an academic library at a private university and had over 40 years of experience in the library field, stated: ‘at the Workshop on Cataloguing and Information Literacy organised by the Cambodian Higher Education Association in 2019, I was astonished by how many people came from all over Cambodia’.

Some of the participants highlighted their concerns regarding the limited number or lack of CPD programmes available in the country, and observed that
there were many library staff who desperately wanted to get more training. However, these individuals held back as they were not sure of who they needed to approach.

Reference was also made to a lack of CPD programmes on the latest trends in LIS, particularly the challenges faced by library employees due to the evolving library landscape and the need to provide users with access to online resources, including open educational resources. As such, workshops were needed on topics such as how to use, cite and share information, and certain limitations on information use. Many of the participants were also of the opinion that training providers needed to make an effort at the planning stage to evaluate the level of the potential trainees. This would help to make training programmes more effective for the participants.

With regard to the availability of CPD programmes for school library employees, the participants voiced their dissatisfaction with the limited availability of such programmes and expected the MoEYS to offer more training.

**Professional barriers: a LIS CPD association.** The CLA has unfortunately not been able to fulfil its role due to its inactivity. Whilst Participant 16, a senior library officer with over 20 years’ experience, observed that ‘[t]o my understanding, the CLA was very active at the beginning’. Participant 26 noted:

[The] CLA has tried offering CPD programmes. The workshops are very good . . . but these are conducted in Phnom Penh. They do the best they can, but it is frustrating as they do not have the budget and the resources, especially volunteers . . . Too little progress, not enough programmes.

Many of the participants concurred that the key reasons for the CLA’s inactivity were the lack of volunteers with a strong commitment and the lack of an annual budget. Other participants alluded to the lack of publicity when CPD programmes were offered and commented that they saw announcements about workshops only after they had taken place.

**Professional barriers: LIS CPD resource constraints.** The main resource constraints were perceived to be the lack of resource personnel in Cambodia who could conduct CPD programmes and the lack of a professional LIS education programme. Some of the participants attributed the absence of CPD programmes to a lack of resource persons and observed that the few potential trainers available were too busy with their day-to-day responsibilities and thus unable to devote time to training.

**Professional barriers: LIS education.** It is not surprising that there were many comments on the lack of a professional LIS education programme in the country that could also act as a CPD provider and advisor. As such, most employees in libraries have had no proper training and have acquired skills on the job— that is, learning by doing.

One participant observed that in the absence of a professional LIS education programme, there is an extreme shortage of professional librarians in the country. As a result, library employees lack skills and knowledge with regard to the latest library technologies, digital literacy skills and many new trends relating to the LIS field. Many of the participants agreed with the need to establish an accredited and state-recognised LIS academic programme. Similar sentiments were expressed by some of the school library employees.

**Personal barriers.** The personal barriers that were identified were associated with inconvenience and the inability to travel; the various challenges when trying to learn online; and a lack of proficiency in the English language, which impacted not only following programmes online but also face-to-face programmes conducted in English by visiting trainers.

The travel-related barriers encountered included the challenges associated with training programmes held in distant provinces or Phnom Penh. When events are scheduled in Phnom Penh, in addition to a long journey, employees have to cope with issues such as paying for accommodation out of their own pocket. However, a librarian-cum-trainer, who had interacted with many library employees over the years, suggested that financial concerns were associated with a family’s financial status. Since many of the individuals who are employed in the LIS sector are in junior positions, they need to hold more than one job concurrently in order to support their families. As a result, they are unable to devote time or energy to their training and development.

On trying to learn online, some of the concerns alluded to were: a poor Internet connection; the lack of a space that was conducive to learning, such as an office, as it could be very difficult to concentrate at home; the inability to attend live online sessions due to time differences; and the difficulty in understanding foreign accents.

Another major challenge that many of the participants identified was the lack of English-language proficiency. As most of the programmes conducted
oversights are in English, the language barrier is a major obstacle for many Cambodian librarians. The use of many technical terms and the different accents in online training videos make them even harder to understand. The CLA overcame this hurdle when holding in-house programmes by having a professional librarian to act as a translator.

**Institutional barriers.** The institutional barriers included the fact that many employers usually do not fund CPD activities; the lack of employer commitment to formal staff development programmes; the lack of employer recognition of the value of CPD activities; heavy workloads; and the inability to get colleagues to cover when library staff attend CPD activities.

A funding-related concern was the decrease in training budgets during the past one to two years. To overcome the lack of funding, some employees now tend to source free courses. Conversely, it seemed that not all libraries faced funding challenges. For example, Participant 20, who was head of a library in a private institute of higher education, disclosed that her organisation requires all departments, including the library team, to submit an annual staff development plan and training budget. Elaborating on the nature of the training funded to date by her employer, she revealed that the school has sent the library team to participate in local training and workshops on library management, mostly organised by the CLA, and four library staff attended the IFLA 2018 conference and went on a tour of libraries in Singapore, Malaysia and Thailand. The school also pays for membership of the American Library Association and Association of College and Research Libraries. Membership of the International Association of University Libraries helps them to keep up with trends and network with professionals in the field.

The interviews with the training providers revealed that a number of situational and institutional barriers were of major concern (see Table 3).

**Professional barriers: LIS CPD availability.** The barriers associated with the availability of CPD programmes included the non-availability of training; the training providers’ lack of awareness of the training needs of LIS employees; and training programmes being mostly limited to traditional LIS topics, especially given that the MoEYS is advocating for school libraries to create digital libraries.

Several of the participants expressed concerns related to a lack of training opportunities for school library employees. Unfortunately, in the current situation, schools will be considered lucky if they can get even one training session a year for their school librarians. Regrettably, many school librarians do not receive any training at all; if they do, it is very basic.

Participant 26, highlighting the importance of understanding training needs, observed: ‘As much as I enjoyed speaking, I don’t think that’s what the school librarians in the provinces need. They need the basic building blocks, to acquire the fundamentals of librarianship’. Participant 5, with nearly two decades of training experience, also provided some insights into the challenges that training providers must overcome when scheduling training for school library employees:

Some of the school employees are delegated by the school director to oversee the library...most of them have never worked in a library, have never attended library training, and do not know how to manage a library...so they are not motivated and dislike working as librarians. Most Cambodian teachers, when they become a librarian, stay for one to two years and move. Then the school has to select a new teacher and the new teacher needs to be trained again. So, there is no continuity.

**Professional barriers: a LIS CPD association.** A key concern of some of the participants was the inactivity of the CLA and the lack of regular training programmes that would help library employees to improve their knowledge and skills. This was attributed to the lack of volunteers due to its small membership base and a lack of funding for this purpose.

**Professional barriers: LIS CPD resource constraints.** A key barrier that was identified was the lack of resource persons in the country to conduct CPD programmes on the latest LIS trends, which is an understandable outcome of the lack of a professional LIS education programme in Cambodia. The team at the Center for Khmer Studies Library conducted a two-day workshop in 2021 covering topics such as research tools, copyright rules, how to research, how to find open access resources, and how to create a digital library. However, they were challenged when looking for resource persons to cover different topics and had to rely on the same few individuals they brought in every year.

**Professional barriers: LIS education.** One key situational concern was the lack of a professional LIS education programme in the country. Several of the participants expressed their concern that none of the universities were offering a degree in LIS. Due to this, most of the
librarians in Cambodia learn basic library skills like cataloguing, front-desk operations and circulation on the job. The only option available to them to learn the desired skills is through attending workshops and webinars, and other sources. However, these learning opportunities are not sufficient to understand library work in depth and, as a result, library services in Cambodia are still very basic. Hence, it is not surprising that staff working in the libraries and the Department of National Archives of Cambodia are yet to acquire the qualifications to become professional librarians or document curators. Although several of these staff possess degrees in other fields, they work in libraries without any professional qualifications. Participant 1, a training provider who had been associated with school libraries for over 20 years, lamented his lack of a LIS qualification:

I have been working in the library field so many years but I don’t have a diploma in LIS … only one to two weeks’ training … right now, we need to make our library a digital library, but we don’t know how to proceed … We watch clips on YouTube and we ask RUPP library [and others] to help us.

Concern was also expressed about the increasing number of NGOs involved in setting up libraries and providing training, even though their staff did not possess the level of knowledge and skills required to conduct this training.

Several of the participants observed that it was very encouraging that more national leaders, including the current Minister for Education, are very supportive of libraries. It was also promising that one NGO was exploring the possibility of developing a professional LIS education programme, to be offered within the next five years.

**Institutional barriers.** One of the key institutional barriers was associated with funding: the inability of training providers to attract aid agencies and other organisations to fund CPD for LIS employees; the limited financial resources available to training providers; the inability to recruit resource persons from outside the organisation as the honorarium was not attractive; and the inability to get library employees to attend training due to lack of funds for accommodation, travel, etc. Another key institutional barrier was associated with employers and management – that is, the lack of support from employers and library management. Two other barriers of concern were the lack of proficiency in English, which was a drawback when overseas speakers were deployed, and the inability to offer live online learning programmes as well as mobile learning opportunities.

In addition to financial constraints and lack of management support, staff in the state sector need to obtain ministry approval to attend training programmes, which is usually difficult and can take time. Another issue is that, in the higher education sector, the limited recognition of the value of CPD activities was linked to the low demand for training amongst library employees. This is probably due to employers’ low expectations of library jobs.

As already mentioned, a key setback regarding training school library employees was the lack of funding. In the past, NGOs such as Sipar worked directly with schools and their libraries and offered regular training. However, the MoEYS has been unable to offer training due to a lack of funds and resource persons.

The lack of funds impacted not only the frequency of training but also the number of days allocated for most training programmes, which in turn affected the extent of the content covered. According to the MoEYS’s 2011 ‘Standards for primary school libraries’, it is recommended that teacher librarians receive nine days of basic training. However, given the heavy expenses that NGOs incur, this training has since been reduced to six days, and in some instances cut down to two or three days. The training that is offered is therefore basic:

I don’t think they can become librarians with three days’ training. It is not possible. (Participant 2)

They train school librarians in one day. How can a librarian work effectively after training for one day, cover two years’ work in one day? (Participant 4)

Another management-related concern that teachers needed to cope with was having to fit in their training during their vacations as they were unable to do it during the semester.

In addition to facing the challenge of poor English-language proficiency, technical terms were a major concern. One step that was taken to help trainees manage the language barrier was to form trainee groups with at least one person who could translate or summarise the training content. Another option adopted for English-language presenters from overseas was to summarise their points and explanations in the local language.

On the inability to offer online programmes during the COVID-19 outbreak, Participant 7 commented:

We needed to move online, and that too was a challenge for the librarians. They needed to access Telegram to
complete the training needs assessment using the Google Form and then type the list of books... but they were unable to complete this task. So that became a challenge and we had to postpone the library training... and it is adding to the delay in project implementation... it is a big loss to capacity-building of librarians.

It is important to note that although most Cambodian teachers have mobile phones, they lack the necessary skills to use them effectively. Therefore, when providing training, providers also need to consider the trainees’ preparedness to learn technology-related applications.

The setbacks faced due to the outbreak of COVID-19 that delayed project implementation included the inability to meet face-to-face to conduct training and the inability to monitor the construction of a library building, as site visits were not permitted.

Based on these findings, it can be concluded that, during the 1990s, many initiatives were undertaken by individuals and organisations to pioneer the establishment of a CPD ecosystem for library employees in Cambodia. However, these efforts were ad hoc, based more on the availability of resource persons than the needs of the employees. Despite these drawbacks, some employees benefitted from undertaking such programmes. It is also demonstrated that, following its establishment, the CLA was committed to the provision of CPD, particularly from 2010 to 2017, and basically targeted academic library employees. Additionally, the school library employees and training providers provided insights into the training opportunities extended by different NGOs annually to schools within the purview of their projects.

The three barriers that strongly resonated with both the library employees and the training providers were the challenges associated with the lack of and gaps in CPD programmes; the inactivity of the CLA; and the lack of a professional LIS education programme in the country. The latter two barriers were seen as contributing to the inability to maintain a steady CPD offering for LIS employees, mainly due to the lack of a pool of professionally qualified resource persons. Common institutional concerns included the lack of employer or library management support. Two other barriers of common concern were the lack of proficiency in English and school library employees’ inability to use technology for online learning.

Suggestions to improve CPD programmes

The final interview question solicited three suggestions from each participant for improving CPD programmes for LIS employees in Cambodia. Many of the suggestions resonated with earlier interview responses; however, several new suggestions were made. The suggestions are grouped thematically and reflect the frequency of occurrence. Table 4 represents the suggestions targeted at improving CPD for library employees in general and Table 5 is specifically aimed at school library employees.

The suggestions that were targeted at strengthening the CPD needs of school library employees included the identification of one public education institution to coordinate the planning and execution of CPD programmes. Another important suggestion was to encourage and support interested NGOs in developing LIS academic programmes.

The majority of the suggestions were notably focused on addressing gaps to improve CPD programmes in the country to meet the needs of all types of library employees. An important suggestion was the identification of a public higher education institution to take on a leading role in organising CPD activities. Other suggestions included the steps that the national library association could take to strengthen CPD programmes in the country; strategies to develop a LIS resource pool; and the establishment of a professional LIS education programme to offer an accredited and state-recognised qualification.

Discussion

The findings reveal a shortage of training providers and the non-existence or lack of CPD opportunities, which may also be repetitive, restricted to traditional topics and often not meet the real needs of library employees. These are common concerns that the LIS profession in many other countries faces (Alkatheeri, 2019; Chan and Auster, 2005; De Alwis Jayasuriya et al., 2021a; Ma, 2017; Maesaroh, 2012; Nguyen, 2008; Rafiq et al., 2017; Robinson, 2019).

Inactivity or hiatus is a phenomenon that is usually experienced by LIS professional bodies in developing countries, which tend to be weak because of their small membership base (Sturgess, 2012). It seems that Cambodia is no exception as its national library association has faced similar setbacks. The strong presence of the national library association is critical for Cambodia not only because it ‘is one that promotes and supports CPD’ (Sturgess, 2012: 49), but also because it can better advocate for the library profession. Other researchers have also alluded to the important role of professional bodies in the CPD ecosystem and the need for them to work closely with other stakeholders to develop a viable CPD plan (Moonasar and Underwood, 2018). The absence of a lead professional organisation was also seen as the major reason for the unavailability of CPD...
programmes in Vietnam (Nguyen, 2008). At an individual level, membership of professional associations has been deemed a factor that motivates participation in CPD activities (Chan and Auster, 2005).

Previous studies have suggested that library schools can also play an important role in offering CPD programmes as they have the necessary expertise, resources and infrastructure (Majid, 2004; Rafiq et al., 2017). Furthermore, the tendency for alumni to maintain their connections with their alma mater gives library schools a strategic advantage in getting regular feedback and developing appropriate CPD programmes (Rafiq et al., 2017). Therefore, the lack of a professional LIS education programme is perceived as a major barrier to the development of a comprehensive CPD programme (Ocholla, 2008).

The key institutional barrier that Cambodian library employees are confronted with is the lack of employer or library management support for library employees to pursue CPD activities. Previous studies from Ireland, Jamaica, South Africa, Uganda, the United Arab Emirates and Vietnam have found similar barriers. Examples of such barriers include the lack of or limited budget for accommodation and travel, and not granting leave to attend CPD activities.

Table 4. Summary of suggestions for improving CPD programmes in Cambodia from the perspectives of training providers (Participants 1–14) and library employees (Participants 15–26).

<table>
<thead>
<tr>
<th>Themes</th>
<th>Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme development</td>
<td>• Government should assign one public higher education institution to provide regular CPD training for library employees (Participant 10)</td>
</tr>
<tr>
<td></td>
<td>• Conduct a needs assessment to develop a capacity-building framework (Participants 7, 17)</td>
</tr>
<tr>
<td></td>
<td>• Provide training that is appropriate for current needs (Participants 7, 17, 26)</td>
</tr>
<tr>
<td></td>
<td>• Organise regular CPD programmes for librarians in Cambodia (Participants 13, 14, 15, 17, 21, 22, 26)</td>
</tr>
<tr>
<td></td>
<td>• Organise an annual library conference (Participant 11)</td>
</tr>
<tr>
<td></td>
<td>• Offer CPD programmes to LIS employees in other ministries in Cambodia (Participant 15)</td>
</tr>
<tr>
<td></td>
<td>• Conduct CPD programmes in the Khmer language (Participant 11)</td>
</tr>
<tr>
<td></td>
<td>• The CLA should offer regular training programmes to library employees (Participants 5, 9, 13, 14, 15, 16, 17, 21, 22, 26)</td>
</tr>
<tr>
<td>CPD association</td>
<td>• Establish strong partnerships with regional and international LIS-related organisations to offer regular CPD programmes to library employees (Participant 14)</td>
</tr>
<tr>
<td></td>
<td>• Invite external trainers with an understanding of the situation in Cambodia to conduct one-to-three-day training programmes; use overseas-trained librarians who can speak Khmer to help with translation (Participants 9, 14, 21, 26)</td>
</tr>
<tr>
<td>Improve resource base</td>
<td>• Establish a partnership between a university in Asia that has developed strong and effective LIS CPD programmes and RUPP or another university in Cambodia (Participant 3)</td>
</tr>
<tr>
<td></td>
<td>• Offer Cambodian LIS professionals who have the potential to become good trainers scholarships to study abroad (Participant 3)</td>
</tr>
<tr>
<td></td>
<td>• Source international experts to develop train-the-trainer programmes (Participant 14)</td>
</tr>
<tr>
<td></td>
<td>• Train National Library of Cambodia staff so that they can train local library employees (Participant 15)</td>
</tr>
<tr>
<td>Other resource improvements</td>
<td>• Budget to support travel to attend training (Participants 5, 9, 16, 19)</td>
</tr>
<tr>
<td></td>
<td>• Establish a training facility for LIS employees (Participant 15)</td>
</tr>
<tr>
<td>LIS education</td>
<td>• Establish a professional LIS education programme (as a major or a minor) initially and later as an independent department in a university – the establishment of an accredited and state-recognised professional qualification would be a step in the right direction (Participants 2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 14, 16, 17, 19, 21, 25)</td>
</tr>
<tr>
<td>Institutional</td>
<td>• Gain the support of institutional management (Participants 2, 9, 11, 14, 17, 21)</td>
</tr>
<tr>
<td></td>
<td>• Advocate support for and encouragement of employers to motivate their librarians to participate in library training (Participants 9, 16, 17)</td>
</tr>
</tbody>
</table>
The issue of limited English-language proficiency was another barrier to training participation and learning. Varlejs (2016) has also highlighted that poor language skills prevent many from learning and following programmes offered online and in person. Library employees in Vietnam and Indonesia pointed out that English proficiency was one of the most critical learning barriers, thus compelling them to learn the language (Maesaro, 2012; Nguyen, 2008). Elaborating further, Nguyen (2008) suggests that it is useful to improve one’s language proficiency as most of the professional online literature is in English; to learn IT skills; to apply for scholarships to obtain higher professional degrees or attend professional internships overseas; and to connect with professionals overseas.

Another barrier that the findings reveal is the lack of technology skills, which continues to hold school library employees back in their CPD efforts. Although Varlejs (2016) observes that due to technological developments, geographical and financial barriers are no longer hurdles to undertaking CPD activities, many previous studies demonstrate otherwise. The lack of IT and digital literacy has been seen as a key barrier to learning, as well as performing effectively at work (Alkatheeri, 2019; Moonsar and Underwood, 2018; Nguyen, 2008; Rafiq et al., 2017; Robinson, 2019; Warraich and Ameen, 2015). The importance of acquiring IT skills is also underlined in the ‘IFLA school library manifesto’ (IFLA, 2021), which states that school library employees need to be competent in teaching IT and digital literacy.

The primary providers of CPD programmes for library employees are professional associations and educational institutions (Pan and Hovde, 2010, quoted in Corcoran and McGuinness, 2014:181). It is therefore in the interests of the library profession to coordinate CPD efforts in Cambodia and connect with like-minded organisations in the region (Majid, 2004; Rafiq et al., 2017). Improving the CPD ecosystem and encouraging library employees to undertake CPD learning will enhance the quality of libraries in their service delivery. The recent COVID-19 pandemic has acted as a catalyst for change and

<table>
<thead>
<tr>
<th>Themes</th>
<th>Suggestions</th>
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<tbody>
<tr>
<td>Programme development</td>
<td>• The MoEYS should establish a department to support school libraries and school librarians (Participants 5, 14)</td>
</tr>
<tr>
<td>Programme development</td>
<td>• Prepare a training schedule (Participants 1, 5)</td>
</tr>
<tr>
<td>Programme development</td>
<td>• Develop a training manual (Participant 6)</td>
</tr>
<tr>
<td>Programme development</td>
<td>• Start training at a basic level to facilitate the acquisition of fundamental library skills (Participants 11, 25)</td>
</tr>
<tr>
<td>Programme development</td>
<td>• Duration of training should be a minimum of four days, adopting an adult learning approach (Participant 6)</td>
</tr>
<tr>
<td>Programme development</td>
<td>• The approach/model for training should be as simple as possible (Participants 6, 26)</td>
</tr>
<tr>
<td>Programme development</td>
<td>• Introduce a pre-service programme to train school librarians over the next four to five years (Participant 6)</td>
</tr>
<tr>
<td>Programme development</td>
<td>• Provide school librarians with IT skills to facilitate participation in online learning and digital initiatives (Participants 5, 7)</td>
</tr>
<tr>
<td>Programme development</td>
<td>• The CLA or other relevant organisations should consider creating training videos to support library employees based in the provinces; alternatively, recruit volunteers who are willing to make training videos (Participant 26)</td>
</tr>
<tr>
<td>CPD association</td>
<td>• Allow teachers one day off for training rather than asking them to attend training during their vacation (Participant 6)</td>
</tr>
<tr>
<td>CPD association</td>
<td>• Allocate a budget for travel to attend training, including refresher training once a year (Participant 6)</td>
</tr>
<tr>
<td>CPD association</td>
<td>• Announce the training schedule once or twice a year, including refresher training (Participant 5)</td>
</tr>
<tr>
<td>Other resource improvements</td>
<td>• Encourage and support NGOs to develop LIS academic courses (Participant 6)</td>
</tr>
<tr>
<td>LIS education</td>
<td>• Encourage and support NGOs to develop LIS academic courses (Participant 6)</td>
</tr>
</tbody>
</table>

(Alkatheeri, 2019; Corcoran and McGuinness, 2014; Ma, 2017; Moonsar and Underwood, 2018; Nama-ganda, 2019; Nguyen, 2008; Robinson, 2019); the lack of employer commitment to a formal staff development programme (Alkatheeri, 2019; Nguyen, 2008); and the reluctance of management to allow staff time off due to the inability to find colleagues to cover duties (Moonsar and Underwood, 2018).
highlighted the need for library employees to adopt new service models to ensure business continuity (Elize, 2021). The pandemic saw library employees scrambling to sign up for CPD programmes to update their skills – specifically their digital literacy – through self-learning and online CPD programmes.

The findings reveal some commonalities and differences between the opinions of the two participant groups. The common concerns highlighted by both groups included the lack of awareness of the training needs of library employees; a shortage of adequately qualified resource persons to conduct CPD programmes; the unavailability of CPD on current trends; and the inactivity of the CLA in offering regular training programmes. Conversely, the differences of opinion between the two groups were associated with personal and institutional matters. The library employees were more concerned about issues such as a lack of proficiency in English preventing them from benefiting from international online events and limited travel funds to attend CPD programmes in other cities. In comparison, the training providers faced the challenges of attracting funds from donors to hold training sessions; getting funding to provide accommodation and transport support for trainees; the lack of a component on libraries in the trainee teachers’ curriculum; a lack of recognition by employers of the value of CPD programmes; and the inability of employees to attend CPD programmes on weekdays.

The findings also reflect differences in how mid-career Bachelor’s degree holders who were the head of or supervised a library reacted to the existing gaps in CPD compared to older employees whose education was limited to secondary school level. Examples of the efforts made by educated mid-career employees include taking on the training provider’s role to offer an annual two-day workshop for library employees in the country; implementing an annual in-house staff training schedule as part of the capacity-building programme of the organisation; participating in mentoring programmes offered by an international NGO; and utilising free CPD opportunities, such as attending webinars and consulting YouTube video clips to learn new skills. In comparison, a lower demand for CPD programmes was observed amongst older library employees in higher education institutions. Similar behaviour was observed in younger school library employees, who were perceived to be more open to various training opportunities than older school library employees.

More broadly speaking, staff development will lead to organisational development and serve as a conduit to realise the United Nations Agenda 2030 Sustainable Development Goals (European Bureau, 2020; IFLA, 2017; Konrad, 2010; Moonasar and Underwood, 2018). Once library practitioners are able to demonstrate their proficiency and usefulness, society will view the library profession more positively (Nguyen, 2008). It will also enable the LIS profession to get stronger and be recognised by other professions, and, ultimately, be positioned as a promising profession (Hornung, 2013). Eventually, it will lead to a redefinition of the identity of the library profession, eradicating the stigma and low esteem associated with it and serving as a pull factor for employees not to leave the profession for more lucrative jobs elsewhere (Fraser-Arnott, 2019; Nguyen, 2008).

**Limitations of the study**

Due to resource constraints and the unavailability of qualified local researchers, it was difficult to get a local study collaborator. Instead, the researchers relied on a few key individuals who volunteered to provide the requisite support via Zoom meetings. Language limitations may have also hampered the research as the interviews were conducted in English. The interviewer did not speak the local language and, because of resource constraints, it was not possible to recruit a person with proficiency in both languages, as well as the professional competency to assist with interpreting. With regard to the two interviews conducted with the aid of two non-professional interpreters, it is possible that the quality of data might have been compromised during translation. However, given that only two study participants relied on the interpreters, it can be safely concluded that there was no major impact on the study findings. Due to the COVID-19 pandemic, it was difficult for the researchers to travel to Cambodia to establish initial connections and have discussions with key individuals in the LIS sector. Despite these limitations, this study provides the first ever insights into the state of the CPD opportunities available to LIS employees in Cambodia.

**Conclusion and future directions**

This study, the first on CPD for LIS employees in Cambodia, reveals that the CPD ecosystem in the country is sparse and calls for immediate measures to address the many related concerns. The findings of this study are expected to provide some basic data about the current state of affairs, as well as some insights for developing a comprehensive CPD plan for the LIS sector. Based on the findings, the researchers have identified some potential areas for improvement of the CPD ecosystem in Cambodia.
Possible measures for improving CPD activities in the country include conducting regular training programmes for library employees on a wide range of topics with an emphasis on the latest trends; conducting a training needs assessment study to provide relevant and useful training programmes; and organising an annual national-level meeting to discuss library staff development issues. It is also recommended that all library employees be encouraged to take courses to develop an adequate level of proficiency in English (Education First, 2021) and IT skills in order to be able to effectively participate in face-to-face as well as online learning initiatives. The Cambodian government has recognised the need to address the gap in IT human capacity development (Wiley, 2022) and take appropriate measures to address this issue (Korea International Cooperation Agency, 2014; National Economic Council, 2021). Additionally, collaboration is recommended with local trainers to offer training programmes in soft skills such as communication skills, team building and problem solving.

However, the CPD ecosystem in Cambodia cannot be sustained in isolation and is dependent on a strong LIS support system, including the existence of a LIS education programme and a dynamic LIS professional body, and support from the National Library of Cambodia. Additionally, due to limited resources, NGOs are unable to comply fully with the training requirements for school library employees outlined in the MoEYS’s ‘Standards for primary school libraries’ (Ministry of Education, 2011).

One critical criterion for the development of Cambodia’s school library programme is the availability of a pool of well-trained school library employees. This will entail the establishment of a department in the MoEYS to coordinate all matters pertaining to school libraries. Capacity-building through regular training will motivate school library employees to provide a quality school library programme to enhance teaching and learning. The department will need to pay immediate attention to the development of a training and development plan, policies and procedures to support school librarians.

An overarching factor that is needed to ensure that the measures and approaches identified address real needs is buy-in from stakeholders. It is therefore vital that decision-makers in state organisations, as well as user communities, are alerted through education and awareness campaigns to the critical role of libraries in societal growth and transformation. A useful reference point here could be the Republic of Indonesia, where community literacy has been decreed a national priority under the National Medium-Term Development Plan 2020–2024 and implemented through socially inclusive library programmes. Interestingly, the National Library of Indonesia reports directly to the country’s president (Bando, 2019). Given the absence of a government-supported public library system in Cambodia, decision-makers may want to take note of a model adopted by PRASAC Microfinance, which extends school library facilities to the general public in the locales under the library project.

Despite the many gaps revealed in this study, it is encouraging to note that the situation is improving somewhat, with some investment from the government in recent years. For example, the five-year project between Kampuchea Action to Promote Education (2020), the MoEYS and the Asia Foundation to develop school libraries is seen as a definite step in the right direction.

Given that the Cambodian LIS sector has the opportunity to build parts of the CPD ecosystem from scratch, one key area for future research would be to explore the training needs of different levels of staff and for different types of libraries. Other possibilities for future research include exploring the potential for using technology for CPD, the willingness and preparedness of staff with regard to IT-based training, and the adoptability of different training approaches used in other countries. It would also be useful to expand on the current research by conducting interviews in Khmer, which would facilitate the use of a more representative sample.

Acknowledgements

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Gina de Alwis Jayasuriya https://orcid.org/0000-0002-9199-800X

Notes
1. See the Kampuchea Action to Promote Education website at: http://www.kapekh.org/en
2. See the Cambodian Librarians and Documentalists Association website at: https://www.ccc-cambodia.org/en/ngodb/ngo-information/3271
3. See the Center for Khmer Studies Library website at: https://khmers.org/library

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**Author biographies**

Gina de Alwis Jayasuriya is former head of the Singapore Institute of Management library (1991–2018) and an independent LIS researcher. Gina holds a PhD in Information Studies from Nanyang Technological University, Singapore, and her thesis was entitled *Information seeking behaviour of..."
managers in a digital environment. Her research interests include CPD, the evolving roles of librarians and competencies for the 21st century, international librarianship, information-seeking behaviour, and emerging trends and technologies impacting libraries. She conducted the first study on CPD for librarians in the Maldives (2019–2020) and has published the findings in *IFLA Journal* (2021) and the *Journal of Education for Library and Information Science* (2022).

Shaheen Majid is a retired associate professor of Wee Kim Wee School of Communication and Information, Nanyang Technological University, Singapore. His research interests include LIS education, information literacy, CPD, information and knowledge sharing, and information-needs and information-seeking behaviour. He has authored more than 250 research articles, conference papers, book chapters and other publications.

### Appendix 1

**CPD learning activities conducted in Cambodia, 2013–2021**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Organiser</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2013</td>
<td>Workshop on Preservation and Conservation of Archival Material, conducted by Y Dari, deputy director, National Archives of Cambodia</td>
<td>Center for Khmer Studies Library, Siam Reap</td>
</tr>
<tr>
<td>27 November 2013</td>
<td>Beyond Google: Cool Ways to Find Information besides Google, conducted by John Hickok, California State University, Fullerton, USA</td>
<td>US Embassy, Phnom Penh</td>
</tr>
<tr>
<td>8 June 2015</td>
<td>Best Practices of Libraries in South East Asia, conducted by John Hickok, California State University, Fullerton, USA</td>
<td>US Embassy, Phnom Penh</td>
</tr>
<tr>
<td>28–29 June 2013</td>
<td>Basic Library Management</td>
<td>Paññāsāstra University of Cambodia, Phnom Penh</td>
</tr>
<tr>
<td>21 July 2015</td>
<td>Collection Development in Cambodia, conducted by Greg Bem, iSchool, University of Washington, USA</td>
<td>Cambodia Higher Education Association</td>
</tr>
<tr>
<td>2015</td>
<td>Workshop on Library Management and e-Libraries</td>
<td>Center for Khmer Studies Library, Siam Reap</td>
</tr>
<tr>
<td>2016</td>
<td>Role of Libraries in Promoting Reading, conducted by Nancy Perle, former librarian, Seattle Public Library, USA</td>
<td>Center for Khmer Studies Library, Siam Reap</td>
</tr>
<tr>
<td>19 March 2016</td>
<td>e-Journals and e-Books</td>
<td>CLA</td>
</tr>
<tr>
<td>14 January 2017</td>
<td>Sustainable Development Goals</td>
<td>CLA and CamEd School, Phnom Penh</td>
</tr>
<tr>
<td>25–27 March 2017</td>
<td>International Association of University Libraries Directors’ Summit</td>
<td>CLA and International Association of University Libraries</td>
</tr>
<tr>
<td>12 July 2017</td>
<td>Conducting Story Times for Children at Cambodia Children’s Fund (CCF), conducted by John Hickok, California State University, Fullerton, USA</td>
<td>US Embassy, Phnom Penh</td>
</tr>
<tr>
<td>5 August 2017</td>
<td>Workshop on “IFLA The Library’s Role in Quality and Excellence in Higher Education”</td>
<td>CLA and University of Puthisastra</td>
</tr>
<tr>
<td>13 September 2017</td>
<td>Workshop on Global Voice: Together We Create the Future</td>
<td>CLA and Paññāsāstra University of Cambodia, Phnom Penh</td>
</tr>
<tr>
<td>12–16 February 2018</td>
<td>Library study tour, Thailand: Sukhothai Thammathirat University, Chulalongkong University and Kasetsart University</td>
<td>CLA and Thai Library Association</td>
</tr>
</tbody>
</table>

(continued)
### Appendix 1: (Continued)

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Organiser</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 March 2018</td>
<td>Cambodian Network for Electronic Information for Libraries (CamEifl), conducted by Wanna Net</td>
<td>RUPP Library</td>
</tr>
<tr>
<td>March 2019</td>
<td>Workshop on Library Preparedness – How to Protect and Preserve Library Collections (one day)</td>
<td>Center for Khmer Studies Library, Siam Reap</td>
</tr>
<tr>
<td>September 2019</td>
<td>Workshop on The Next Generation in Libraries</td>
<td>Center for Khmer Studies Library, Siam Reap</td>
</tr>
<tr>
<td>24–25 October 2019</td>
<td>Workshop on Cataloguing and Cataloguing Rules and Information Literacy, conducted by Wyn Thomas, Librarian, American University of Phnom Penh and Mao Kolap, VP, CLA</td>
<td>Cambodian Higher Education Association</td>
</tr>
<tr>
<td>22–23 February 2021</td>
<td>Workshop on Open Access and Copyright Issues</td>
<td>Center for Khmer Studies Library, Siam Reap</td>
</tr>
<tr>
<td>23–24 November 2021</td>
<td>The Role of Libraries in the Digital Era</td>
<td>Center for Khmer Studies Library, Siam Reap</td>
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Assessing library and information science graduates’ skills and knowledge against 21st-century employability demands

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Abstract
The demands of graduates, employers and society are changing due to substantial technological advancements. The present study assessed the library and information science skills and knowledge required by employers and society. The study utilized a cross-sectional descriptive research design with both qualitative and quantitative research approaches. The study sample was drawn from Master of Arts in Information Studies students who graduated from the University of Dar es Salaam between 2005 and 2020. Questionnaires, alongside interview guides, were used as instruments for the collection of the required data. Descriptive statistics and thematic methods were used to analyse the data. The findings suggest that the Master of Arts in Information Studies curriculum does not fully fulfil all of the expectations and needs of the graduates, employers and society. The study reveals the mismatch between what the curriculum offers and current job market requirements. The study recommends a regular review of the Master of Arts in Information Studies curriculum to effectively integrate 21st-century competencies that meet the needs of the current job market.

Keywords
Employability skills and knowledge, 21st-century competencies, LIS graduate students, information studies, Tanzania

Introduction
Due to the influence of socio-economic, technological development and innovation factors, among others, the global nature of work is continuously changing (Malik, 2021; Pradhan, 2015). These factors, especially technological development, continue to significantly transform the information landscape (Deng et al., 2012), such that information has become a critical commodity in the knowledge economy and information age (Ismail and Khan, 2021). As a result, there have been changes in the skills and competencies demanded by the labour market (Ismail and Khan, 2021; Malik, 2021). Therefore, to get a job now and be successful in it, graduates need new skills and competencies, which are generally termed 21st-century employability, soft or generic skills. Like in other fields, information and communications technology (ICT) has altered the nature of the skills and competencies demanded by library and information professional practices and services (Mushtaq and Ahmad, 2021; Younus and Sajjad, 2019). In fact, the continuing digital revolution has brought massive changes in
library and information science (LIS; Mushtaq and Ahmad, 2021), thereby changing the skills and competencies demanded from LIS professionals (Warraich, 2008). As a consequence, universities, colleges and schools offering LIS education are increasingly challenged to develop experts who can fit the new and diversified job roles and duties of the changing job market (Mushtaq and Ahmad, 2021). In other words, these institutions are required to adapt their LIS curricula to the contemporary information environment, which ‘calls for a new cadre of skilled and competent professionals to deliver information effectively to all’ (Pradhan, 2015: 106).

In response, many universities, colleges and schools have done a commendable job in modifying LIS education to improve the quality of their graduates (Malik, 2021). Generally, LIS schools are adapting their curricula to the technological and socioeconomic changes taking place. For example, in addition to revising and revitalizing their curricula, some schools are increasing their collaboration with other academic departments to enhance the customizability of their academic programmes (Ismail and Khan, 2021; Warraich and Ameen, 2019). Likewise, schools have changed their names, practices and courses offered (Buarki et al., 2011). For instance, LIS schools in Pakistan have changed their names from ‘librarian-ship’ and ‘apprenticeship’ to ‘library and information science’ or ‘information studies’ schools (Khan, 2021).

In Tanzania, LIS education was introduced in 1972 by the Tanzania Library Services Board. Before then, people wishing to pursue the subject had to go to institutions outside the country, particularly in Europe and the USA (Msuya, 2005; Nawe and Materu-Behitsa, 2016). LIS education started with a certificate course, followed in 1989 by a diploma offered by the School of Library, Archives and Documentation Studies (Majinge and Msonge, 2020; Nawe and Materu-Behitsa, 2016). Following an increase in demand for LIS graduates in the country, several other institutions introduced LIS academic programmes, ranging from certificate to PhD level. These include the University of Dar es Salaam, the Open University of Tanzania, Moshi Co-operative University, Jordan University College, the Tanzania Public Service College, the Tumaini University Dar es Salaam College, Mzumbe University, Sokoine University of Agriculture, St Augustine University of Tanzania, and Ruaha Catholic University (Burnett, 2013; Majinge and Msonge, 2020; Otike, 2017). The fundamental reason for these efforts is to produce LIS graduates who can fit in with the changing employment environment (Mushtaq and Ahmad, 2021). In addition, LIS schools, departments and units contribute to the development of competencies and skilled workforces that meet the changing demands of the digital environment (Warraich, 2008). As a result of the expansion of LIS education, Tanzania has witnessed an increase in LIS graduates in recent years. Another role played by these schools is offering specific in-demand soft skills and competencies (Rani and Sharma, 2021; Saunders and Bajjaly, 2020; Warraich, 2008).

Recently, Tanzania has witnessed an increasing number of students graduating from its various higher learning institutions. However, there has been a long-standing concern about the ability of institutions in developing countries, Tanzania included, to produce workforces that can drive their countries forward (Walker et al., 2014). This concern has been fuelled by evidence in previous studies (e.g. Murdani, 2016; Mwita, 2018; Ndyali, 2016; Nudzor and Ansah, 2020), which shows that there is a mismatch between what higher learning institutions teach and the needs of labour markets. This has seen institutions being blamed for producing graduates who fail to perform in their respective industries (Kalufya and Mwakizinga, 2016; Munyoro and Mutula, 2016; Walker et al., 2014). The mismatch between what higher learning institutions provide to their students and the needs of the labour market calls for these institutions to conduct tracer studies to point out areas that need improvement in their curricula. It is recommended that such studies be conducted at least once every five years to monitor the progress of higher learning institutions’ academic programmes so as to ensure their efficiency, effectiveness and relevance both to their students and to the employers of their graduates (Mkude and Ishumi, 2004; Mwakigonja, 2016; Nudzor and Ansah, 2020).

The Master of Arts in Information Studies (MAIS) at the University of Dar es Salaam was established in 1997 and run as a programme under the then Faculty of Arts and Social Sciences (now the College of Social Sciences). The number of students admitted to and graduating from the programme has been steadily increasing, from 2 in 1997 to over 300 in 2021, thus demonstrating the growth of the programme. However, during the whole period of its existence, its curriculum has not been reviewed. Furthermore, only one study (Msuya, 2005) has been carried out to assess the extent to which the programme’s curriculum matches the demands of the labour market. As such, it should be questioned whether the programme is fit for purpose in relation to the current knowledge economy, characterized as it is by many technological changes. This study has therefore been carried out...
with a focus on identifying the skills gaps in the current MAIS curriculum. The findings of this study are expected to serve as a wake-up call for other LIS schools and colleges to reflect on their curricula’s relevance with regard to LIS employability skills and the knowledge demands of the 21st century. As such, the findings are likely to contribute to the improvement of the quality of the human resources produced by higher learning institutions in Tanzania.

**Literature review**

**Importance of programme evaluation**

Programme evaluation plays an active role in the systematic development of higher learning institutions’ academic programmes (Uksw, 2020). These activities provide decision-makers with information on whether to develop a programme, how best to develop it, and how to modify it in line with the contemporary labour market (Ball, 2017; Uksw, 2020). To evaluate the success of their training programmes, higher learning institutions usually conduct tracer studies once every five years to obtain feedback from their graduates about what is happening in the job market (Mkude and Ishumi, 2004; Mwakigonja, 2016; Nudzor and Ansah, 2020; Shongwe and Ocholla, 2011). These studies help institutions to find out how well they have prepared their graduates for the job market. Based on the results of such studies, institutions can make informed or evidence-based changes to their curricula where necessary. In other words, these studies help institutions ensure that their academic outputs are consistent with both the aspirations of their students and the needs and demands of employers (Mkude and Ishumi, 2004). It has also been noted that these studies enable higher learning institutions to accommodate changes that take place in society, particularly the needs of both actual and potential employers (Lutwama and Kigongo-Bukenya, 2004), and also to explain the link between study programmes and the job market (Badiru and Wahome, 2016).

As with other academic programmes, tracer studies are important in LIS education. This is particularly true in the current information age, which has seen new professional roles and tasks emerge following the commoditization of information in the knowledge economy (Badiru and Wahome, 2016; Ismail and Khan, 2021). Research shows that due to changes in the labour market causing rapid changes in the library profession, LIS schools are faced with the need to constantly update and revitalize their curricula (Ismail and Khan, 2021). In fact, Ismail and Khan (2021) argue that LIS curricula must be versatile and multifaceted, and last longer than those of other professions. This will help LIS schools to produce graduates of the highest calibre, who are equipped with the competencies needed in the rapidly changing and unpredictable information environment. To achieve this, regular reviews and improvements of LIS curricula are, indeed, imperative. As evidence from prior studies suggests, this can be achieved through learning from the graduates of LIS schools (Badiru and Wahome, 2016; Mkude and Ishumi, 2004). As Mkude and Ishumi (2004) put it, the review of a programme’s curriculum not only remedies what has been identified to have gone wrong, but also enhances the programme’s chances of meeting the needs and demands of employers.

**Employability skills and knowledge**

The employability skills and knowledge of LIS graduates have been documented in many previous studies (e.g. see Murdani, 2016; Mwita, 2018; Nikusekela and Pallangyo, 2016; Pradhan, 2015; Rani and Sharma, 2021; Walker et al., 2014). Generally, the skills and knowledge employers are looking for from LIS graduates are diverse and forever changing. Some earlier studies (e.g. Mushtaq and Ahmad, 2021) associate the emergence of new competencies with the substantial development of ICT. ICT has been noted to be behind the existence of new skills and knowledge gaps. While leadership, communication, research and similar competencies remain vital, communication and ICT skills are equally indispensable for LIS graduates (Mthembu, 2019; Pradhan, 2015; Rani and Sharma, 2021; Sanghamitra, 2015; Warraich and Ameen, 2019; Younus and Sajjad, 2019). Moreover, employability competencies such as knowledge of collection development, organization of knowledge (cataloguing and classification), research, specialized subjects, customer care, intellectual property rights and copyright law have been found to be needed for the job market (Mthembu, 2019; Mushtaq and Ahmad, 2021; Rani and Sharma, 2021). Skills such as organization are important soft skills, while skills such as learning, risk-taking, a public service orientation and independence in decision-making are required core behavioural skills (Deng et al., 2012). Similarly, marketing and outreach service skills have the potential of making a graduate fit for the job market (Pradhan, 2015).

In addition, studies conducted by several researchers have outlined a number of employability skills (e.g. Mgaiwa, 2021; Pradhan, 2015; Warraich and Ameen, 2019). In particular, these studies have identified presentation skills, problem-solving aptitude,
report-writing skills, online-searching skills, customer service skills, a positive attitude, time-management capability, teaching skills, learning skills, planning skills and organizational skills as important in the job market. It has also been noted, for instance, that technological changes have increased the demand for a workforce with the capacity for leadership, teamwork and collaboration, which are needed to facilitate the transformation of organizations (Awwad, 2021; Kalufya and Mwakajinga, 2016; Karoly, 2010; Pradhan, 2015; Rani and Sharma, 2021). Furthermore, a study by Rani and Sharma (2021) has highlighted self-confidence, stress management, flexibility, e-resources management, citation management, content development, strategic thinking, budgeting, negotiation, indexing and abstracting as the skills and competencies that are essential for LIS graduates.

Aside from this, it is important to note that hardware and software skills, web page design, database management, info-marketing, storage and retrieval, e-publishing, technical writing, research skills and cloud computing are new ICT skills that LIS graduates should possess (Ismail and Khan, 2021). Along with these, other studies have identified relationship-building, management, and creative and critical thinking as important attributes needed by LIS graduates (e.g. Awwad, 2021; Mgaiwa, 2021; Rani and Sharma, 2021; Walker et al., 2014; Wild and Omingo, 2020). Other sets of skills and competencies that are important for LIS graduates include the ability to use word processing and statistical programmes, system maintenance and computer programming (Deng et al., 2012). On the whole, Rani and Sharma (2021) have categorized the aforementioned employability skills and competencies as professional, technical, managerial and generic.

**Skills and knowledge gaps**

While graduates are presumed to have the requisite knowledge and skills to enable them to thrive in the competitive job market, research shows that most do not possess such qualities (e.g. Murdani, 2016; Mwita, 2018; Nikusekela and Pallangyo, 2016; Walker et al., 2014). Furthermore, like in many other developing countries (Walker et al., 2014), the quality of many graduates is questionable. Research demonstrates that over 60% of graduates are unfit for the jobs available (e.g. Mgaiwa, 2021), which suggests the existence of a mismatch between what is being taught in higher learning institutions and the demands of the labour market. Moreover, the number of graduates with these important qualifications is inadequate as most of them are not fully prepared for the current job market and are unable to market themselves and show evidence of their skills (Kalufya and Mwakajinga, 2016).

Furthermore, it has been noted that, other than good academic performance, most graduates do not possess the soft skills that are salient to the workplace (Mbise, 2016; Mwita, 2018). An examination of graduates’ employability carried out by Warraich (2008) and an assessment of LIS curricula by Ismail and Khan (2021) have documented that LIS curricula in Pakistan did not meet the needs and demands of graduates and employers. This is the same as what has been reported in Kuwait by Mushtaq and Ahmad (2021). The latter have revealed that LIS schools do not teach graduates sufficient competencies to meet job market or employment requirements. Generally, the curricular deficiencies noted include communication, practical and presentation skills. In addition, previous studies have noted that graduates are equipped with theoretical knowledge rather than both theoretical and practical knowledge (Warraich and Ameen, 2019; Younus and Sajjad, 2019). Warraich and Ameen (2019) identified poor interpersonal and communication skills, being unfamiliar with database management, lack of online searching and ICT skills, lack of leadership skills, poor customer care and inadequate research skills as LIS employability skill gaps. Other studies have associated graduates’ low ICT skills with poor ICT facilities in LIS schools, departments or units (e.g. Ismail and Khan, 2021; Younus and Sajjad, 2019). As a result, most graduates struggle to gain employment or secure jobs in public or private institutions (Nikusekela and Pallangyo, 2016). Despite the importance of ICT in library operations and service provision, Younus and Sajjad (2019) disclose that LIS graduates in Punjab have been found to possess only basic ICT skills. This implies that graduates’ ICT skills are not sufficient to meet job market or employment needs. The lack of suitable ICT content in LIS curricula, irrelevant courses and inadequate industrial placements for LIS students are some of the factors that explain the insufficient employability skills and competencies (Ismail and Khan, 2021).

**Design and methods**

This study utilized a cross-sectional descriptive research design with both qualitative and quantitative research approaches. The study involved individuals who graduated between 2005 and 2020 from the MAIS programme at the University of Dar es Salaam, Tanzania. A list of the names and email addresses of 238 graduates was obtained from the office of the coordinator of the programme. To ensure that all of
the potential respondents had an equal chance of participating in the study, their names were assigned numbers on slips, which were then randomly chosen to get a representative sample of 80 graduates. Those selected were sent an email to request their consent to participate in the study.

A questionnaire guide informed by the literature was the main instrument used to collect the data required for the study. After consenting to participate, the study participants were asked to fill in an online questionnaire sent via email. The questionnaire guide contained both open-ended and closed-ended questions to solicit both qualitative and quantitative data. The questionnaire consisted of questions on the demographic characteristics of the study participants, their employment details, and the skills needed in their jobs. The participants were also asked to provide their perceptions on the relevance of the current MAIS curriculum and to offer suggestions on how it could be improved. Of the 80 graduates contacted, 76 responded to the questionnaire, giving a response rate of 95%. This rate is good enough to provide sufficient feedback on a situation in the field (Babbie, 2008). To gain more insight into the current MAIS curriculum, a content analysis was also performed. This was done specifically to establish the skills and knowledge that are offered to MAIS postgraduate students at the university. The study used IBM SPSS (version 21) to analyse the quantitative data and produce descriptive statistics (frequencies and percentages). The interviews were audio-recorded before being transcribed to produce the qualitative data. The transcripts were reviewed and coded by all the researchers to reconcile the codes before being thematically analysed using QSR NVivo (version 12). From the analysis, themes that appeared to be similar were grouped. Whereas the quantitative results are presented in tables, the qualitative results are presented in narrative form.

Results

Socio-demographic characteristics of the study participants

To establish the socio-demographic characteristics of the study participants, the study collected personal information from the respondents. The details of interest were the participants’ age, sex, graduation year, employment status, position and LIS work experience (see Table 1).

The results in Table 1 show that a moderate percentage (44.7%) of the study participants were aged between 31 and 40. Regarding sex, the results show only a slight difference in the number of females

<table>
<thead>
<tr>
<th>Characteristics (N = 76)</th>
<th>Category</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>21–30</td>
<td>4</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>31–40</td>
<td>34</td>
<td>44.7</td>
</tr>
<tr>
<td></td>
<td>41–50</td>
<td>29</td>
<td>38.2</td>
</tr>
<tr>
<td></td>
<td>51–60</td>
<td>9</td>
<td>11.8</td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
<td>36</td>
<td>47.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>40</td>
<td>52.6</td>
</tr>
<tr>
<td>Year of graduation</td>
<td>2005–2010</td>
<td>25</td>
<td>32.9</td>
</tr>
<tr>
<td></td>
<td>2011–2015</td>
<td>30</td>
<td>39.5</td>
</tr>
<tr>
<td></td>
<td>2016–2020</td>
<td>21</td>
<td>27.6</td>
</tr>
<tr>
<td>Employment status</td>
<td>Working full-time</td>
<td>73</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Self-employed</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Position</td>
<td>Librarian</td>
<td>38</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Lecturer/academic staff</td>
<td>31</td>
<td>40.7</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>7</td>
<td>9.3</td>
</tr>
<tr>
<td>Work experience (years)</td>
<td>1–5</td>
<td>18</td>
<td>23.7</td>
</tr>
<tr>
<td></td>
<td>6–10</td>
<td>22</td>
<td>28.9</td>
</tr>
<tr>
<td></td>
<td>11–15</td>
<td>20</td>
<td>26.3</td>
</tr>
<tr>
<td></td>
<td>16–20</td>
<td>11</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td>20+</td>
<td>5</td>
<td>6.6</td>
</tr>
</tbody>
</table>
and males (47.4%) who participated in the study. A moderate percentage of the study participants graduated between 2005 and 2010 (32.9%) and between 2011 and 2015 (39.5%). A very large percentage (96%) of the participants were employed while few were self-employed (4%). Half (50%) of the study participants were working as librarians while a moderate percentage (40.7%) were working as lecturers or academic staff. On the other hand, very few of the study participants reported that they were working in related professions. Among the participants, some were records officers, editors, information and communication experts, and secondary school teachers, while others managed their own businesses. Accordingly, the results indicate that a large proportion of the participants had work experience of between 5 and 20 years. This suggests that the participants had adequate experience as LIS professionals.

Main responsibilities of the respondents
To get background information on their work duties, the respondents were asked to name the main tasks they performed on a daily basis. This question was mainly asked for library officers, library academic staff and other library staff. Their responses are recorded in Table 2.

The results show that the respondents were involved in various tasks. For example, library officers participated in acquiring, processing (accessioning, cataloguing and classification, indexing and abstracting) and disseminating information to library patrons. Also, the results show that library officers and other library staff participated in managing library resources and operations. In addition, the results demonstrate that, like LIS graduates working as academic staff, library officers also conducted information literacy training programmes. The results further illustrate that library officers provided library orientation services for library patrons, supervised all library activities and responded to library patrons’ queries. Library officers and other staff also stated that they prepared annual budgets for different library activities, promoted effective use of e-resources and managed their organization’s records. The participants who were also academics were also responsible for teaching various LIS and records management courses, supervising their students’ research, conducting research and providing consultancy services on various matters related to their field.

Types of skills and knowledge offered to MAIS students
Table 3 summarizes the results of the analysis of the current MAIS curriculum to establish the skills and knowledge offered by the MAIS programme to students at the University of Dar es Salaam. Pedagogical skills include teaching and supervision; generic skills include communication skills, teamwork and information literacy; managerial skills include planning, organizing, control and leadership; technical skills include cataloguing, classification and indexing; professional skills include decision-making, interpersonal skills and analytical skills; and research includes writing proposals and data analysis.
Generally, the results show that the courses included in the curriculum offer various skills to the LIS postgraduate students. In particular, the results suggest that the curriculum is more focused on offering generic and professional skills to LIS students, although technical skills are also emphasized. In contrast, managerial and research skills are offered in only a few courses, while pedagogical skills are not offered at all. These skills and knowledge gaps were also highlighted during the interview sessions with the key informants. One of the key informants remarked:

"In general, the courses offered to LIS postgraduate students in Tanzania do not prepare them to work in a hybrid environment. Skills offered help graduates to work in the traditional working environment. The courses that would help graduates to work in the digital environment are too theoretical. As a consequence, the skills offered do not meet the needs and wants of the employers."

Another key informant stated:

"Most of the courses have relevant content but the infrastructure to facilitate teaching and learning is not adequate. For example, the unit has no computer laboratories to support the teaching and learning of ICT-related courses. This affects the acquisition of skills and knowledge offered."

These comments appear to suggest that the skills and knowledge gaps noted in the MAIS curriculum have already been felt by both academics and employers. This may imply that the graduates are not adequately equipped with the required competencies. Relatedly, the results show that an inadequate ICT infrastructure affects the delivery of some course content.

Skills and knowledge required by the job market

The study participants were also asked to indicate the professional, managerial, generic, research, pedagogical and technical skills and knowledge required by the job market. This was deemed essential in identifying the gaps between what the graduates learned in class and the actual requirements of their current jobs. The participants' responses were thematically analysed and clustered under different types of skills (see Table 4).

The results in Table 4 indicate that diverse professional, managerial, research, generic, pedagogical and technical skills and knowledge are required by the current job market. For example, cataloguing and classification, the management of electronic sources, information packaging and repackaging, and information literacy skills are some of the professional skills needed by the job market. Regarding these skills, one of the key informants commented:

"Skills such as cataloguing, classification and library collection management are necessary to all professionals in library and information science regardless of education level, position and rank. If you want to effectively perform your tasks, these skills are very important. There is no way you can manage a library collection without having these necessary skills."
This suggests that classification and cataloguing are necessary skills for the management of library collections. Moreover, the results indicate that organizational management skills, such as leadership and managerial, planning, project management, customer care, budgeting and marketing skills, and the ability to adhere to professional ethics, are required by the current job market. Also, the results highlight that technical skills, such as computer literacy, library automation, web design and web hosting, open-source technologies, big-data science, digital citizenship, and the development and management of information and security systems, are essential in the current job market.

Furthermore, the results indicate that research skills are also needed by many employers of the MAIS graduates. The specific research skills needed include those involving evidence-based librarianship, research design, writing academic and project proposals, conceptual and analytical skills, and software-
enabled qualitative and quantitative data analysis. The study participants also mentioned the importance of the skills of how to properly cite and reference both academic and non-academic work in their writing, and the use of different reference management software. To reinforce this, one of the key informants had the following to say:

All MAIS graduates are required to have adequate research skills and knowledge to fit in the current working environment. Skills such as grant-proposal writing are necessary at this time when most libraries are constrained by inadequate budgets to effectively run their operations. We have to be very proactive in writing fundable proposals to minimize budgetary challenges.

This observation disclosed that research competencies like writing fundable project proposals are necessary skills ‘to fit in the current working environment’. Furthermore, teaching and instructional skills are two of the pedagogical skills required by employers. In addition, the results show that generic skills, including communication (both oral and written), problem-solving, interpersonal, presentation and networking skills, were listed as necessary in the study participants’ jobs.

Relevance of the MAIS curriculum to current job requirements

To further assess the relevance of the current MAIS curriculum, the study participants were asked in a survey to indicate its relevance to their job requirements. This was deemed important to gauge the relevance of the curriculum in fulfilling the needs and demands of employers. A set of six competencies – professional skills (e.g. decision-making, interpersonal skills, analytical skills); technical skills (e.g. cataloguing, classification, indexing); generic skills (e.g. communication skills, teamwork, information literacy); research skills (e.g. proposal writing, data analysis); management skills (e.g. planning, organizing, control, leadership); and pedagogical skills (e.g. teaching and supervision skills) – were identified for this purpose. These were clearly explained to the respondents to make them aware of what they were required to respond to. Table 5 summarizes the study participants’ responses.

Generally, a significant percentage (64.5%) of the participants were of the opinion that the MAIS curriculum meets the professional skill demands of the current job market. In addition, the results indicate that more than half (52.5%) of the responding LIS professionals thought that the curriculum does not meet the technical know-how required by the current job market, while most (55.3%) agreed that the curriculum offers relevant generic skills. The results further show that a large proportion (84.2%) of the study participants deemed that the curriculum provides learners with relevant research skills. Moreover, the results demonstrate that a large percentage (64.5%) of the respondents concurred that the managerial skills offered by the curriculum are relevant. Finally, the results also highlight that the pedagogical skills offered by the curriculum are not relevant to job market requirements. This finding reflects the finding in the analysis of the MAIS curriculum that pedagogical skills are not offered in the curriculum.

Discussion

This study primarily analysed the skills and knowledge gaps in the MAIS curriculum at the University of Dar es Salaam, Tanzania. The study reveals that despite not having been reviewed for many years, the current MAIS curriculum is fairly relevant to the contemporary work environment because it still equips graduates with diverse relevant professional, technical, generic, research and managerial skills. According to the findings, the skills and knowledge imparted by the curriculum help graduates meet some of the needs and demands of their employers. However, it is apparent from the findings that despite being relevant, the curriculum has some shortcomings. For instance, while it is imperative that theory and practice go hand in hand in LIS curricula (Lutwama and Kigongo-Bukonya, 2004), the findings in this study reveal that

<table>
<thead>
<tr>
<th>Skills (N = 76)</th>
<th>Category</th>
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<tr>
<td>Professional</td>
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<td>49</td>
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</tr>
<tr>
<td></td>
<td>Somewhat relevant</td>
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<td>35.5</td>
</tr>
<tr>
<td></td>
<td>Not relevant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td>Relevant</td>
<td>36</td>
<td>47.5</td>
</tr>
<tr>
<td></td>
<td>Somewhat relevant</td>
<td>40</td>
<td>52.5</td>
</tr>
<tr>
<td></td>
<td>Not relevant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generic</td>
<td>Relevant</td>
<td>42</td>
<td>55.3</td>
</tr>
<tr>
<td></td>
<td>Somewhat relevant</td>
<td>34</td>
<td>44.7</td>
</tr>
<tr>
<td></td>
<td>Not relevant</td>
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<td></td>
</tr>
<tr>
<td>Research</td>
<td>Relevant</td>
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<td>84.2</td>
</tr>
<tr>
<td></td>
<td>Somewhat relevant</td>
<td>12</td>
<td>15.8</td>
</tr>
<tr>
<td></td>
<td>Not relevant</td>
<td></td>
<td></td>
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<tr>
<td>Managerial</td>
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<td>Pedagogical</td>
<td>Relevant</td>
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<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Somewhat relevant</td>
<td>11</td>
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</tr>
<tr>
<td></td>
<td>Not relevant</td>
<td>56</td>
<td>73.7</td>
</tr>
</tbody>
</table>

Table 5. Relevance of the MAIS curriculum to current job requirements.
most of the curriculum’s practical courses, such as ICT and the organization of knowledge (cataloguing and classification), are dominated by theory rather than being practice-oriented. This deprives graduates of practical skills such that their performance in practical tasks may be affected. The findings also suggest that the current MAIS curriculum does not prepare LIS graduates to work in a hybrid environment. This finding is, however, not peculiar to this study as several other studies have documented the same (e.g. Kalufya and Mwakalinga, 2016; Mbise, 2016; Pradhan, 2015; Walker et al., 2014).

Understandably, pedagogical skills such as teaching and supervision are important for graduates involved in teaching. This is because the implementation of any curriculum depends greatly on, among other factors, the pedagogical skills of the instructors. In fact, these skills are central to whether a curriculum is implemented consistently, effectively and efficiently to enable the progress and growth of the students (Lochner et al., 2015). While this is the case, the findings of the present study have revealed that these skills have not been integrated into the current MAIS curriculum. This finding is not similar to what has been documented in other studies (e.g. Mthembu, 2019; Mushtaq and Ahmad, 2021; Rani and Sharma, 2021). The failure of the MAIS curriculum to equip graduates with these skills increases the risk of having to rely on pedagogically inept LIS instructors to implement LIS curricula in the country and beyond. This may translate into late programme completion, poor research output among LIS graduates, and generally poor-quality graduates. In other words, pedagogical skills are important for LIS professionals and, as such, should be integrated into the LIS curriculum. It is also important to note that not all of the skills and knowledge imparted to the graduates are relevant and applicable to the work environment. This is why Walker et al. (2014) are of the opinion that the quality of many graduates is questionable. In particular, this study reveals discrepancies between some of the skills and knowledge that the MAIS curriculum offers and those required by the current job market. For example, the curriculum does not offer courses aimed at teaching skills such as problem-solving, networking, analytical skills, communication and presentation. Similarly, other studies have revealed a mismatch between what is being taught and job market demands (e.g. Kalufya and Mwakajinga, 2016). This suggests that the graduates are not fully prepared for the current job market, as also reported in extant studies (e.g. Kalufya and Mwakalinga, 2016). While research skills have been integrated into the MAIS curriculum, some specific skills, such as writing grant proposals, evidence-based librarianship, academic writing and the use of reference management software, are missing. On the same note, although data analysis is covered by the curriculum, the coverage is narrow. For example, qualitative data analysis is clearly not covered adequately. The other skills and knowledge missing include those that have to do with project management.

Like prior research (e.g. Ismail and Khan, 2021; Rani and Sharma, 2021), the present study has found that skills and knowledge such as web design, database development and management, big-data management, multimedia usage, security systems management, cloud computing, e-publishing, negotiation, budgeting and technical skills are inadequately integrated into the curriculum. Departing from what has been documented by previous studies, this study reveals that new skills, such as digitization, are missing in the curriculum. On the whole, although the current MAIS curriculum has been found to be considered relevant, it does not fulfil all job market expectations and the needs of graduates, employers and society (see also Ismail and Khan, 2021; Warraich, 2008). As such, it needs to be reviewed.

Study limitations
This study had some limitations. Most importantly, it was limited to University of Dar es Salaam MAIS graduates only. It intended to identify the skill gaps in the MAIS curriculum so as to create a basis for improving it to ensure that it caters to the current job market requirements. Therefore, the study’s findings cannot be generalized to all LIS curricula in Tanzania and beyond. It is with this in mind that the present study welcomes other studies to compare various undergraduate and postgraduates LIS curricula in developing and developed countries.

Conclusion and recommendations
While LIS curricula in different schools and colleges have moved towards 21st-century competencies, the MAIS curriculum provides graduates with competencies that allow them to thrive in traditional environments. To a large extent, 21st-century competencies are not integrated into the MAIS curriculum offered by the University of Dar es Salaam. As such, the curriculum limits graduates’ capacity to effectively work in hybrid environments characterized by substantial technological advancements. This study therefore recommends a regular review of the MAIS curriculum to effectively integrate 21st-century competencies that meet the needs and demands of the current job market and society. Also, the study
proposes more practically oriented courses, in addition to courses that focus on the application of ICT to equip graduates with the requisite skills in this field. Finally, the study recommends that the MAIS curriculum should integrate adequate soft and pedagogical skills, which are essential in the contemporary job environment.

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Mushtaq M and Ahmad N (2021) Curriculum based competencies imparted in LIS schools: Outlook of LIS


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Students’ perceptions of the user education programmes at a South African university

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Abstract
First-time university students lack the practical and complex skills to harness, evaluate, use and create information to achieve their educational, occupational, social and personal information goals. The purpose of this study was to explore students’ perceptions of user education programmes at the North-West University, South Africa. A structured questionnaire was used to collect data from 320 students across two faculties. The study’s findings reveal that the majority of first-year students had participated in different user education programmes, with 80.7% of the students indicating that they were satisfied with the content and quality of the programmes. Over 90% of the students who participated in the programmes affirmed that they had enhanced their capacity to make effective searches for information and improved their skills in correctly citing and referencing information sources for their assignments. The majority of the students searched for information and resources independently of librarians. This article draws several conclusions and makes recommendations based on the findings.

Keywords
Information literacy and instruction, services to user populations, reference and information services, LIS education and programmes

Introduction
Students, especially first-year students, enter universities with the enthusiasm of moving from a lower-level to a higher-level academic setting. Some are curious, not knowing what to expect, while others may be better informed (Abah et al., 2016). As a result, user education programmes have evolved in academic libraries because librarians have taken note of the literacy gaps on the part of students who join universities with few intellectual skills, as well as a lack of practical and complex skills to harness, evaluate, use and create information effectively to achieve their educational, occupational, social and personal information goals (Akaakandelwa, 2010; Kumar and Phi, 2009). Studies have shown that despite the availability of different types of user education programmes organized for new students, many still lack the necessary skills to use a library (Abah et al., 2016). Titi Abah et al., 2016 further argue that first-year students lack the basic skills and competencies that are required for the utilization of library resources and services on their entrance into higher institutions of learning. They emphasize the point by attributing the inadequacies of first-year students to the fact that the majority may
never have been to a library, or at least a well-managed library. Observations have shown that such students, when admitted to an institution of higher learning, often ignore library orientation programmes and other library user education programmes because of ignorance, until they have assignments, tests or examinations to complete.

Research has shown that there has been an increase in user education programmes in academic libraries over the past few years. Such programmes have been considered a ‘dire necessity’ for equipping first-year students with the necessary skills to fully utilize libraries and their resources (Busayo, 2013). These programmes have become more important with the overproliferation of information and communications technologies, which have revolutionized today’s libraries and thus make the relevance of user education programmes even more significant (Majumder and Singh, 2007). The aforementioned researchers stress that in order to use automated libraries consisting of various databases and providing access to online databases and other digital collections, users need to be educated on how to use retrieval tools such as open public access catalogues and other techniques of information retrieval. They further argue that user education programmes not only acquaint users with various sources of information, but also help them to be less dependent on library staff, who often provide assistance with how to use a library independently to save their valuable time.

The purpose of this study was to assess the perceptions of first-year students of the user education programmes offered by the library at North-West University (NWU), South Africa, with special focus on the following objectives:

- To examine the types of user education programmes available at the NWU library;
- To determine the frequency with which students attended the available user education programmes;
- To assess the quality of the user education programmes offered at NWU;
- To examine the effectiveness of the user education programmes in improving students’ ability to use the NWU library;
- To examine the role or need for librarians in the provision of user education programmes at NWU.

User education programmes: a brief literature review

According to Abiodun (2013), there are various terms used in the field of library science to describe user education programme. Such terms include ‘information literacy’, ‘user education’ and ‘bibliographic instruction’, among others. As outlined by Abiodun (2013), there are several methods or elements in the user education programmes that are used in academic libraries. These methods include library orientation, which is usually the first method of user education that librarians conduct at the beginning of each year. Other methods include guided tours, basic and more advanced bibliographic instruction, and the use of audio and visual materials. A common denominator of user education programmes is that they apply to the process of educating library users to be independent users of the library and able to use its resources effectively and efficiently.

Chinyere (2014) defines a user education programme as an academic programme that is designed by higher education institutions to educate library users on how to successfully utilize the library and its resources. Uwakwe et al. (2016: 71) highlight some ‘fundamental objectives’ of user education in their definition of it as being to ‘familiarize and instill in the library user, the basic knowledge or understanding and skills which are essential for effective and efficient use of the library services and resources’. One thing that is central to these scholars’ definitions of user education is the ultimate optimum application of library resources. The general consensus is that it does not matter how large the collection of a library is if its facilities and resources are not fully exploited – then, such a library would become a ‘white elephant project’ (Ogunmendetede and Emeahara, 2010; Uwakwe et al., 2016; Wickramanayake, 2015b).

There are various types of user education programmes and they can be categorized into two groups. The first is a traditional user education programme, which includes an orientation programme, an introduction to audiovisual materials, a library tour, lectures, seminars and workshops, and printed guides (Kumar and Phi, 2009), while the second group of the programmes revolve around a modern education system, and focus on online resources. While the latter is flexible, student-centred and low-cost, the former reinforces punctuality, extracurricular activities and face-to-face interactions (Ahmed, 2015). According to Idoniboye-Obu (2017), who conducted a study on user education programmes in four academic libraries in KwaZulu-Natal Province, South Africa, the concept ‘user education programme’ goes by different names, including ‘library orientation’, ‘library instruction’, ‘bibliographic instruction’, ‘reader instruction’ and ‘information literacy’.

User education programmes have been largely documented in developed nations, with developing countries only recently emerging as contributors of
knowledge in this subject domain (Wickramanayake, 2015a). Some of the countries where extensive studies on user education programmes have been made include England, the USA, Sri Lanka, Pakistan, China, Kenya, Ghana, Nigeria and South Africa. Wickramanayake (2015a) stresses that these countries have evolved in terms of their methodology within the area of library science, and the development of the library as a profession. He further writes that other countries, categorized as underdeveloped or developing, have not taken substantial measures to record or study the historical development of user education.

It has been demonstrated that the African continent has made some strides in recent years in its contribution to the growing literature on user education programmes, with most of the studies carried out in Nigeria. There are several studies by African scholars that have looked at the growth and development of user education programmes across selected universities in Africa (see Agyen-Gyasi, 2008; Ahenkorah-Marfo and Teye, 2010; Akakandelwa, 2010; Akalumhe, 2006; Busayo, 2013; Jiyane and Onyancha, 2010; Moyane et al., 2015; Ogunmodede and Emehara, 2010; Phillip, 2015; Abah et al., 2016).

User education programmes in academic libraries have not been without their challenges, and some scholars have indicated that such challenges have been experienced by libraries prior, during and after the establishment and introduction of user education programmes. In their study at the Kwame Nkrumah University of Science Technology library in Ghana, Ahenkorah-Marfo and Teye (2010) found that the guided tours, which had been traditionally used in the library, were not effective and was subsequently by video presentations in the 2006–2007 academic year. In the video presentations, the university librarians and heads of various departments introduced students to the resources in the library and demonstrated how to access them. However, this method also proved not to be fully effective. Ahenkorah-Marfo and Teye (2010) found that a new form of user education (a credit-earning programme), which sought to be more appropriate in an electronic environment, would be part of the university curriculum following approval by its academic board.

Abah et al. (2016) found that the major problem for many academic libraries is how to effectively organize user education programmes to be more inclusive of the university’s diverse student needs and expectations. Their study recommends that library user education should include library tours, which should be offered in the first semester before first-year students use the library. They argue that library orientation should be conducted at the beginning of the year before library instruction to make sure that the latter is built on the former. Gunasekera (2010) found that undergraduate students did not fully utilize library resources simply because they were not aware of these resources or did not consider them to be important for their studies. He recommends that libraries and the wider university community should take responsibility for advertising the library’s resources and services to students.

Aderibigbe and Ajiboye (2013) conducted a study on user education programmes at the Nimbe Adedipe University library in Nigeria, using questionnaires to collect data. The study focused on how to improve the user education programmes at the library with an emphasis on the library’s electronic resources. The findings show that most users suggested that the user education programmes should be computer-based with practical guidance on how to search for, retrieve and evaluate information for research. Looking at the literature on user education, it is evident that there is still a need to review such programmes in terms of their effectiveness and relevance to users. But, most importantly, these programmes should be integrated into the university curriculum to make them compulsory for students to attend (Aderibigbe and Ajiboye, 2011; Agyen-Gyasi, 2008; Wickramanayake, 2015a).

Moyane et al. (2015) conducted a study of user education programmes at the University of KwaZulu-Natal in South Africa and found there was a need to reassess their content, mode, scope, and general significance and appropriateness in line with various user needs. Akakandelwa (2010) states that user education has come of age, but many issues are yet to be resolved. A major issue is the difficulty in integrating it with other aspects of library services in many institutions. This reflects the situation at Vaal Triangle Campus (VTC) at NWU, where the user education programme is not yet part of the university curriculum. To be more effective, user education programmes should be integrated into the curriculum and be a credit-earning course for undergraduate students (Aderibigbe and Ajiboye, 2013; Agyen-Gyasi, 2008; Wickramanayake, 2015a).

Uwakwe et al. (2016) also point out some problems that militate against effective user education programmes – that is, large student numbers, a lack of resources, insufficient and unqualified staff, students’ negative attitude towards the programmes, and a library environment that is not conducive to learning. Mendrinos (1994) stresses that library user education programmes need to be student-centred. He notes that faculties and academic librarians may be the designers and facilitators of user education...
programmes but often it is the students who make the decisions on how to make use of existing resources to solve their research problems. Chen and Lin (2011) argue that to provide maximum benefit to students, faculties and librarians should design well-structured user education programmes that will help them to acquire the skills to search for information, analyse it, evaluate it and be able to distinguish information from true knowledge. Farmer (1992) presents a rather different view in proposing that librarians should have an attitudinal change and see themselves not merely as disseminators of information, but also as facilitators, who empower users to become independent learners through resource-based activities away from the classroom.

The role of librarians in the provision of user education programmes cannot be overemphasized. In a study that was conducted in KwaZulu-Natal Province in South Africa, Idoniboye-Obu (2017) found that subject librarians played a vital role in designing and/or implementing the programmes in universities. Okoye (2013) could not have put it better when he notes that librarians should teach library users (students) how to search for resources whilst bearing in mind that they come from diverse cultural backgrounds and have varying levels of library skills. He goes on to say that such education has benefits as it helps students to achieve better grades because they have acquired the skills to search for relevant and reliable information resources to support their studies. Buckland (1991: p. 75) underscores that ‘giving users physical access to information does not guarantee that they become informed’. Torras and Skagen (2006) argue that the learning objectives of user education should include activities that encourage students to reflect on the information process by choosing their own research questions and formulating and combining their own keywords. They stress that the goal of such activities is to help students identify their information needs and find strategies to meet those needs.

**Research methodology**

This study adopted a quantitative research approach, which Maree (2007) describes as a systematic and objective approach using numerical data from only a chosen subgroup of a population to generalize the findings to the population within a given context. A quantitative approach was used for this study because it had the capacity to provide statistical data on the user education programmes, including the information literacy skills and competencies of first-year students and their assessment of these programmes. The NWU library at the VTC was the unit of analysis in the study. A survey targeting first-year students was conducted to assess the user education programmes that are offered at the library. A survey was deemed an appropriate research design as it enabled the researchers to numerically ‘describe the trends, attitudes, or opinions by studying a sample of a population’ (Quantitative Designs, para. 2) (Creswell and Creswell, 2018:). The survey enabled us to quantitatively study the first-year students’ perceptions of the user education programmes offered at the NWU VTC library.

The study population comprised all of the first-year students (N = 1885) from both the Faculty of Humanities and the Faculty of Economic and Management Sciences and Information Technology. Systematic sampling techniques were used to select a representative sample of students from whom data was collected. A sample size of 320 students was determined using online SurveyMonkey and Raosoft (2017) sample size determination calculators. The use of these two online calculators was meant to validate the sample size. Indeed, the two calculators yielded the same sample size.

A structured questionnaire was prepared in relation to the objectives of the study and distributed to all 320 respondents between January and March 2020 to obtain information about their perceptions of the user education programmes. The questionnaire items were obtained from different sources, including the published literature and our experiences as academic librarians. Of the 320 questionnaires distributed to students, 266 (83.1%) were returned and found to be valid for analysis; a higher number of questionnaires was returned by the Faculty of Humanities (181, 68%), while there were 85 (32%) questionnaires returned from the Faculty of Economic and Management Sciences and Information Technology. The data collected from the first-year students was analysed using frequencies and percentages, and presented in tables and charts. In addition, a weighted mean was computed to determine the variables that most students considered to be more appropriate than others.

**Limitations of the study**

This study was conducted at one of the campuses of the NWU. The study was limited not only to one university campus but also one university in the Republic of South Africa, which has 26 public universities. This article reports the findings obtained from incoming first-year students and excludes the librarians who offer the user education and information literacy programmes. Students in other years of study were not considered. The librarians were not
Results and discussion

Types of user education programmes offered at the NWU library

According to Idoniboye-Obu (2017: 2), user education programmes are given different names in different settings – for example, in some libraries they are called ‘library instruction’, ‘library orientation’, ‘staff guidance’, ‘bibliographic instruction’ or ‘information literacy’. In the USA, they are often referred to as ‘bibliographic instruction’, while in South Africa user education is often called ‘information literacy’. Previous studies have revealed that there has been an increase in user education programmes in academic libraries over the past few years (Busayo, 2013).

The NWU VTC library provides several user education programmes to first-year students (see Table 1). Table 1 shows that most of the students attended a library orientation session as opposed to other forms of user education programmes. With regard to information literacy training, the majority of the students (102, 68%) acknowledged that they had only attended the programme once. Of the 150 respondents who said that they had attended at least one user education programme, all of them reported having attended the library orientation once, while only 29 (19.3%) had attended endnote training and 98 (65.3%) had taken part in a library tour once. The results show that endnote training was the least frequently attended programme, with 105 (70%) students reporting never to have attended such training since they had become a student at NWU.

The study further reveals that library orientation was the most popular user education programme, with the majority of the first-year students attending this programme. It should be noted that library orientation is offered at the beginning of the year just after students have registered. During the library orientation, first-year students are introduced to the various services of the library and given brief training on the library databases and library catalogue. The popularity of this programme is not unique to the NWU VTC library. Nneka and Idoko (2018) also found that it was the most popular form of user education at the National Open University of Nigeria. It does not come as a surprise that most students at VTC attend library orientation because this programme is held at the beginning of the year directly after students have registered and this gives the majority of students an opportunity to attend. However, the findings reveal that the majority of the students did not attend endnote training, and this result is also not surprising considering the fact that the NWU VTC library does not regularly offer this training, particularly for first-year students.

The non-attendance of some of the user education programmes may imply a need for a rigorous re-evaluation of the content and scope of the programme to make sure that it is aligned with the needs of students as an enrichment course in the university curriculum. Moyane et al. (2015) conducted a study on the user education programme at the University of KwaZulu-Natal and found that although there was some sound content in the programme, there was still a need to reconsider its content, mode, scope, and general significance and suitability in line with various user needs. Mendrinos (1994) has also discussed the scope and content of user education programmes in academic libraries, stressing that library courses need to be student-centred. Faculties and librarians may be the designers, creators and facilitators of user education programmes, but it is quite often the students who choose how to utilize the available resources to solve their research problems. Moyane at al. (2015) therefore suggest that what is fundamental to the success of user education programmes is that the users as well as the library must appreciate the value of the programmes. It is only when a user appreciates and understands the value of a user education programme that they will reap the benefits that the programme provides for them.

| Table 1. Frequency of attendance of user education programmes since joining NWU (n = 150). |
| User education programme | Frequency of attendance | f | % |
| Library orientation | Once | 150 | 100 |
| | Twice | 0 | 0 |
| | Three times or more | 0 | 0 |
| | Never | 0 | 0 |
| Information literacy training | Once | 102 | 68 |
| | Twice | 13 | 8.7 |
| | Three times or more | 18 | 12 |
| | Never | 17 | 11.3 |
| Endnote training | Once | 29 | 19.3 |
| | Twice | 13 | 8.7 |
| | Three times or more | 3 | 2 |
| | Never | 105 | 70 |
| Library tour | Once | 98 | 65.3 |
| | Twice | 9 | 6 |
| | Three times or more | 7 | 4.7 |
| | Never | 36 | 24 |
Ultimately, user education has a great impact on undergraduates’ utilization of library resources and essentially makes them aware of the scope of the library (Ahemba and Terwase 2018).

The results in Table 3 indicate that most of the students at NWU VTC were satisfied with the quality of most of the user education programmes they had attended since coming to the university. It can be seen that 42.7% of the students rated the quality of the library orientation as good. The weighted mean reveals that the students placed a higher premium on library orientation ($X = 4.51$) than library tours ($X = 4.20$), information literacy ($X = 4.07$) and endnote training ($X = 2.33$). It seems like the popularity of the programmes is linked to their quality. The library orientation, which was the most popular among first-year students, was considered to be of high quality.

The results also reveal that the majority of the first-year students (80.7%) believed that the training they had received from these programmes had helped them to improve their overall ability to use the library. In their study, Ahemba and Terwase (2018) found that user education programmes helped students to improve their ability to retrieve information from the library. User education programmes have the ability to minimize so-called ‘library phobia’ amongst first-year students. Through these programmes, they acquire the skills that are essential to locate library resources and services, which in turn enhances the visibility and utilization of the resources available in the library (Punchihewa et al., 2018). This assertion is supported by Uwakwe et al. (2016), who found that the provision of user education programmes ultimately helped popularize the library and improved its image and usage among students.

As shown in Table 4, many of the first-year students (48.7%) affirmed that the programmes had helped them to carry out correct referencing, while many of them thought that the programmes had helped them to search the library catalogue. These results corroborate Mohammadi et al.’s (2008) study, which found that over 76.9% of students in Iran reported that user education was very important in teaching them how to use reference resources. The majority of the first-year students (40.7%) at NWU rated the quality of the library orientation received at the beginning of the year highly when asked about their general perception of these programmes. Many of them (44%) also found the information literacy training they received during the course of the year to be of value in their academic work. The weighted means confirm that the user education programmes

### Table 2. Reasons for not attending user education programmes ($n = 116$).

<table>
<thead>
<tr>
<th>Reason</th>
<th>Response</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not know about it</td>
<td>Yes</td>
<td>79</td>
<td>68.1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>37</td>
<td>31.9</td>
</tr>
<tr>
<td>Was not interested</td>
<td>Yes</td>
<td>45</td>
<td>38.7</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>55</td>
<td>47.6</td>
</tr>
<tr>
<td>Did not have time to attend</td>
<td>Yes</td>
<td>57</td>
<td>49.1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>47</td>
<td>40.4</td>
</tr>
<tr>
<td>Did not need it</td>
<td>Yes</td>
<td>35</td>
<td>30.1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>59</td>
<td>50.8</td>
</tr>
</tbody>
</table>

Note. Students were allowed to pick one or more reasons.

Table 2 reveals that a considerable number of first-year students did not attend the user education programmes for a variety of reasons. There was a total of 116 students who did not attend any user education programmes at NWU VTC library. A total of 79 (68.1%) of the respondents did not attend these programmes because they did not know about the programmes, which reinforces the earlier suggestion that the library should find alternative channels to adequately advertise these programmes so that students are aware of them. The results also show that 55 (47.6%) respondents did not attend the programmes because they were not interested in them. Additionally, 57 (49.1%) did not attend the programmes because of a lack of time. Lastly, the findings reveal that 59 (50.8%) of the respondents did not attend the programmes because they felt that they did not need them. Although the study shows that the majority of the first-year students attended the user education programmes, it is still problematic that a handful of them failed to attend. It is very important for the library to make the programmes visible to all students, as well as develop and make available different platforms to market these programmes so that students are fully aware of their existence.

**Quality of user education programmes offered at NWU**

User education is essential in today’s library environment. It helps publicize library services and improves the image of the library (Chalukya, 2015). Lamptey (2010) emphasizes that by improving awareness, competency and the skills necessary to explore library services and resources, usage and the demand for them will also increase as a result. Uwakwe et al. (2016) stress that user education should teach students to make efficient use of a library by making them aware of the resources available in the widest sense.
had enabled students to, in descending order of impact, search for journal articles ($X = 3.44$), search the catalogue ($X = 3.34$), locate relevant resources ($X = 3.22$) and carry out correct referencing ($X = 2.95$).

Students’ perceptions of the roles of librarians in user education programmes

This section of the questionnaire required students to assess the role of librarians in the provision of user

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**Table 3. Quality of training in user education programmes ($n = 150$).**

<table>
<thead>
<tr>
<th>User education programme</th>
<th>Response</th>
<th>$f$</th>
<th>%</th>
<th>$X$</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library orientation</td>
<td>Excellent</td>
<td>48</td>
<td>32</td>
<td>4.51</td>
<td>141</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>64</td>
<td>42.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>29</td>
<td>19.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>9</td>
<td>6</td>
<td></td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Information literacy training</td>
<td>Excellent</td>
<td>34</td>
<td>22.7</td>
<td>4.07</td>
<td>129</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>60</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>35</td>
<td>23.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>21</td>
<td>14</td>
<td></td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td>Endnote training</td>
<td>Excellent</td>
<td>10</td>
<td>6.7</td>
<td>2.33</td>
<td>67</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>23</td>
<td>15.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>34</td>
<td>22.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>56</td>
<td>37.3</td>
<td></td>
<td>83</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>27</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library tour</td>
<td>Excellent</td>
<td>40</td>
<td>26.7</td>
<td>4.20</td>
<td>130</td>
<td>86.7</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>66</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>24</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>14</td>
<td>9.3</td>
<td></td>
<td>20</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>6</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4. Effectiveness of user education programmes in improving students’ ability to use the library ($n = 121$).**

<table>
<thead>
<tr>
<th>Library usage</th>
<th>Response</th>
<th>$f$</th>
<th>%</th>
<th>$X$</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to search catalogue</td>
<td>Very effective</td>
<td>34</td>
<td>28.1</td>
<td></td>
<td>109</td>
<td>90.2</td>
</tr>
<tr>
<td></td>
<td>Effective</td>
<td>41</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately effective</td>
<td>34</td>
<td>28.1</td>
<td>3.34</td>
<td>109</td>
<td>90.2</td>
</tr>
<tr>
<td></td>
<td>Not effective at all</td>
<td>7</td>
<td>5.7</td>
<td>2.95</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>5</td>
<td>4.1</td>
<td></td>
<td>5</td>
<td>4.1</td>
</tr>
<tr>
<td>Ability to search journal articles</td>
<td>Very effective</td>
<td>14</td>
<td>11.6</td>
<td></td>
<td>95</td>
<td>79.6</td>
</tr>
<tr>
<td></td>
<td>Effective</td>
<td>29</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately effective</td>
<td>52</td>
<td>43</td>
<td>3.44</td>
<td>26</td>
<td>21.4</td>
</tr>
<tr>
<td></td>
<td>Not effective at all</td>
<td>21</td>
<td>17.3</td>
<td>2.95</td>
<td>26</td>
<td>21.4</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>5</td>
<td>4.1</td>
<td></td>
<td>5</td>
<td>4.1</td>
</tr>
<tr>
<td>Ability to perform correct referencing</td>
<td>Very effective</td>
<td>59</td>
<td>48.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Effective</td>
<td>41</td>
<td>33.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately effective</td>
<td>12</td>
<td>10</td>
<td>2.95</td>
<td>112</td>
<td>92.5</td>
</tr>
<tr>
<td></td>
<td>Not effective at all</td>
<td>6</td>
<td>5</td>
<td></td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>3</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to locate relevant resources</td>
<td>Very effective</td>
<td>17</td>
<td>14</td>
<td></td>
<td>86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Effective</td>
<td>21</td>
<td>17.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately effective</td>
<td>48</td>
<td>39.7</td>
<td>3.22</td>
<td>35</td>
<td>28.9</td>
</tr>
<tr>
<td></td>
<td>Not effective at all</td>
<td>33</td>
<td>27.3</td>
<td></td>
<td>35</td>
<td>28.9</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>2</td>
<td>1.6</td>
<td></td>
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</tr>
</tbody>
</table>
education programmes at NWU. The basis for this question was the assumption that librarians play an important role in the delivery of user education programmes in libraries, and that students will more often than not consult librarians for assistance in accessing and using library resources. Students’ perceived importance of the librarians’ role is therefore paramount for their enrolment and/or participation in user education programmes in academic libraries, and particularly at the NWU VTC library. To achieve this objective, the students were asked several questions, including: ‘When you visit the library, do you consult librarians to help you find relevant information?’; ‘If the answer is yes, how often do you consult librarians when seeking information in the library?’; ‘If your module requires you to use the library resources to do your assignment, what would you do?’; ‘How do you rate the role of librarians in your quest to find relevant information in the library?’, and ‘Overall, have librarians performed a great job in teaching students on how to use library resources and services?’.

In responding to the question on whether or not they consulted librarians to help them find relevant information when visiting the library, the majority of the students (142, 53%) said that they did not consult librarians for help in finding relevant information when they visited the library. However, 124 (47%) indicated that they did consult librarians to find relevant information when they visited the library (see Figure 1).

The students who consulted librarians when they visited the library (n = 124) were asked to state how often they consulted librarians. The results show that only 20 (16.1%) of the respondents regularly consulted librarians when they visited the library; 42 (33.8%) of the respondents said that they consulted librarians often, while another 42 (33.8%) said that they consulted librarians sometimes. The other 20 (16.1%) did not specify the frequency of their consultations with librarians (see Figure 2).

All respondents (n = 266) were asked to state what actions they undertook when they searched for information when a module required them to do so. The results show that 115 (43.2%) of the respondents were most likely to research the topic on Google or Wikipedia. It can also been seen that 59 (22.1%) of the respondents were most likely to ask a librarian for help, while 88 (33.1%) were likely to ask a friend for help (see Table 5).

In response to the question on how the students got the information they needed in the library, a high number (184, 69.1%) responded that they consulted library resources independently or asked their friends for help. The results indicate that most of the respondents (53.9%) were not interested in asking a librarian for help. This suggests that either they do not trust librarians or they can find the information they need without the assistance of a librarian.

The results further reveal that 124 respondents consulted librarians when they visited the library. The respondents were then asked to rate the role of the librarians at the NWU VTC library in terms of their helpfulness in their quest to find relevant information in the library (see Figure 3). The results reveal that 44 (35.4%) of the respondents rated the role of the librarians as good and 25 (20.2%) of the respondents rated the role of the librarians as excellent, while 32 (26%) thought that the role of the librarians was fair and 15 (12%) declined to comment. These findings contradict the earlier finding which suggests that the role of the librarians was not overly recognized by the first-year students.

However, the overall feeling among the respondents was that the librarians did a good job in teaching them how to use the library resources and services. Figure 4 shows that 60 (48.4%) of the respondents agreed that the librarians did a good job in teaching students to use the library resources and services and 30 (24.2%) strongly agreed that the librarians did a great job, while 10 (8.1%) disagreed and 20 (16.1%) had no opinion on the overall performance of the librarians.

Evidently, librarians play a huge role in the user education programmes as well as in the provision of related services to students. It is gratifying to note that many of the first-year students (35.4%) were very satisfied with the role librarians played in helping them find relevant information. They believed that the librarians did a good job (48.4%) in teaching them to use the library resources and services. This finding supports that of Mar-Rounds (2011), who observes...
that, in general, academic communities value the services offered by librarians. However, he argues that gratitude for the contribution that librarians make to the educative mission of universities is not always apparent. According to Lindstrom and Shonrock (2000), as the significance of user education develops within academic libraries, so will the importance of the role of librarians as fundamental members of the teaching and learning mission of college and universities.

The published literature, however, has suggested that the librarian’s role will ultimately change in today’s digital age – that is, librarians cannot afford to simply be information providers or information keepers. According to Otiango (2016), the role of the librarian will become more that of information manager, educator, information consultant, information custodian, information provider, information publisher and change agent, as well as custodian of public library facilities. Agyen-Gyasi et al. (2010) write that

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Table 5. What students do when a module requires them to use library resources for an assignment (n = 266).

<table>
<thead>
<tr>
<th>Options</th>
<th>Response</th>
<th>f</th>
<th>%</th>
<th>Simplified answer</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consult library resources independently</td>
<td>Likely</td>
<td>69</td>
<td>25.9</td>
<td>Yes</td>
<td>184</td>
<td>69.1</td>
</tr>
<tr>
<td></td>
<td>Most likely</td>
<td>115</td>
<td>43.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>21</td>
<td>8</td>
<td>No</td>
<td>99</td>
<td>38.2</td>
</tr>
<tr>
<td></td>
<td>Not likely</td>
<td>34</td>
<td>12.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No comment</td>
<td>27</td>
<td>10.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research topic on Google or Wikipedia</td>
<td>Likely</td>
<td>63</td>
<td>23.7</td>
<td>Yes</td>
<td>167</td>
<td>61.8</td>
</tr>
<tr>
<td></td>
<td>Most likely</td>
<td>104</td>
<td>39.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>33</td>
<td>12.4</td>
<td>No</td>
<td>99</td>
<td>38.2</td>
</tr>
<tr>
<td></td>
<td>Not likely</td>
<td>39</td>
<td>14.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No comment</td>
<td>27</td>
<td>10.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ask a friend for help</td>
<td>Likely</td>
<td>88</td>
<td>33.1</td>
<td>Yes</td>
<td>140</td>
<td>52.5</td>
</tr>
<tr>
<td></td>
<td>Most likely</td>
<td>52</td>
<td>19.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>43</td>
<td>16.2</td>
<td>No</td>
<td>126</td>
<td>47.5</td>
</tr>
<tr>
<td></td>
<td>Not likely</td>
<td>53</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No comment</td>
<td>30</td>
<td>11.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ask a librarian for help</td>
<td>Likely</td>
<td>64</td>
<td>24</td>
<td>Yes</td>
<td>123</td>
<td>46.1</td>
</tr>
<tr>
<td></td>
<td>Most likely</td>
<td>59</td>
<td>22.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>66</td>
<td>25</td>
<td>No</td>
<td>143</td>
<td>53.9</td>
</tr>
<tr>
<td></td>
<td>Not likely</td>
<td>49</td>
<td>18.4</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>No comment</td>
<td>28</td>
<td>10.5</td>
<td></td>
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</tr>
</tbody>
</table>

---

Figure 2. Frequency distribution of students’ consultations with librarians when seeking information (n = 124).
the changing roles of academic librarians from information keepers to knowledge managers emphasize the need for librarians to continuously upskill, reskill, upgrade and update, or acquire new skills and knowledge to remain relevant in today’s changing library environment. Moyane et al. (2015) have summed it up eloquently when they say that, for a start, as custodians of user education programmes, it is imperative for librarians to be knowledgeable in pedagogy and instructional design, and they further conclude that, as important as their knowledge is, it is equally important that it should be aligned with the diversity of the university population. Liu et al. (2016:) conclude that ‘the way in which students think about the services of reference/information services librarians could potentially influence the extent to which they are willing to participate in library user education programmes’.

**Conclusion**

The discussion of user education in libraries has continued to attract the attention of scholars and researchers in academia because of its critical role in shaping information retrieval and the ability to conduct independent research. For some years, the pattern has been changing because of the presence of new technologies, which has led to changes in the roles of librarians and information creation, management and dissemination. This study serves as a contribution to the discourse with a focus on the first-year students of NWU in South Africa. Although there are established user education programmes, which are usually targeted at the first-year students in the university, there is evidence of a lack of interest among some students in participating in the programmes, probably because the courses are not examinable and appear to be optional. The students who actively participated in
the programmes confirmed a remarkable improvement in their ability to access and utilize the available information resources in the library for overall improved performance in their academic programmes. It is interesting to note that the majority of the students did not approach librarians for support when seeking information resources in the library – a situation that may imply students’ self-reliance or independence. However, librarians continue to play a central role in assisting students to maximize the use of the academic library, as reported by the students who turned to librarians for assistance in accessing information in the library. The library orientation and tours were the most preferred and popular user education programmes at the library. Given that the current study has focused on one academic library in South Africa and, as such, its results cannot be generalized beyond the NWU VTC library, it is recommended that a similar study be conducted in other sites to investigate and compare user education programmes across South Africa with a view to developing a framework for the provision of such programmes.

Implications of the study

This study has revealed some disparities in the user education programmes offered at NWU in relation to other programmes at the university, as they are optional for students and not examinable. This creates room for some students to ignore the programmes, which obviously affects their academic performance since they will lack the required skills to access and utilize information appropriately. We agree with Moyane et al. (2015), who stress the need to reconsider the content, mode, scope, and general significance and suitability of user education programmes in line with varied user needs. The librarians who coordinate user education programmes should also adopt effective marketing strategies to create awareness of the programmes among students. The fact that students are satisfied with the quality of the user education programmes they attend and ultimately are able to effectively use the library is an advantage the librarians can explore to market the programmes as enrichment courses that should be compulsory for all first-year students. Improved awareness will result in increased demand for and usage of resources, leading to improved competencies and skills among library patrons (Lamptey, 2010). The study’s finding that many students did not consult librarians for support when seeking information in the NWU VTC library is an area that may require further investigation and/or a paradigm shift in the provision of user services in the library and other academic libraries.

It is recommended that user education programmes at NWU should be fully incorporated into relevant courses and subjects. The NWU’s recent exploration of the introduction of a Bachelor’s degree in Library and Information Science will provide the library administration with an opportunity to integrate user education programmes in the proposed qualification. The courses and subjects in which user education programmes are offered should be made signature courses and subjects for first-year students, as is the case with basic communication skills and English-language courses. This approach will also ensure that students will attend and participate in all of the user education programmes.

Declaration of conflicting interests

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Ifeanyi J Ezema is the university librarian at Enugu State University of Science and Technology and has a Bachelor’s and a Master’s degree in Library and Information Science from the University of Nigeria Nsukka. He obtained his PhD in Information Science from the same university. Dr Ezema is a chartered librarian with over 20 years of professional experience as a librarian and information consultant. Dr Ezema is also a research fellow in the Department of Information Science at the University of South Africa. His research interests are bibliometrics, scientometrics, informetrics, digital libraries and social media. He is the current national chairman of the Academic and Research Libraries Section of the Nigerian Library Association (NLA) and the secretary general of the Association of University Librarians of Nigerian Universities. He is also a member of many other professional associations.
The power of information and coping with albinism: An autoethnographic study

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University of Namibia, Namibia

Abstract
This article aims to ascertain the purposes for which the author needed information when her children with albinism were born, as well as explore the mechanisms she used to find information and the challenges she experienced when searching for information. An autoethnography method is used to share her lived experience of albinism, and the data has been collected through the author’s personal memory by recalling events that happened when she gave birth to her daughter in 2013 and her son in 2016. Information played a crucial role in helping the author to understand albinism better and to deal with her predicament. As a librarian and the mother of children with albinism, the author explored different mechanisms to find information. The Internet was the main source of information, as well as organisations such as Support in Namibia of Albinism Sufferers Requiring Assistance and the Namibia Albino Association Trust, which deal with the plight of people with albinism in the country.

Keywords
Information needs, albinism, autoethnography, information sources, disabilities, information seeking

Introduction
From a medical viewpoint, Schühle (2013: 7) describes albinism as ‘the inability of the skin to produce the pigment melanin’. People with albinism have white skin, light-blonde hair, and light-coloured and sometimes reddish eyes. Albinism is regarded as a genetic defect, where the gene that causes albinism is passed on by parents to their children, even though, in most cases, people with albinism are born to parents without albinism (Cruz-Inigo et al., 2011). It has been found that both parents must carry the gene that causes albinism for it to be passed onto their children (Schühle, 2013).

There are different types of albinism, with the most common being oculocutaneous albinism, which affects the skin, hair and eyes (Cruz-Inigo et al., 2011; Franklin et al., 2018). This type of albinism is also the form that is most commonly found in sub-Saharan Africa, and it leaves its subjects particularly noticeable and vulnerable. This is particularly the case in a country like Tanzania, where the skin of its citizens is mainly dark (Under the Same Sun, 2014). Another form of albinism is ocular albinism, which affects only the eyes. This type of albinism is relatively uncommon and is, in most cases, recorded in males. Children with this type of albinism may have skin and hair colour that is normal, but slightly lighter than that of other family members (Under the Same Sun, 2014).

The birth of a child is supposed to be a joyous occasion for any parents. However, when a child is born with complications or disabilities, it is devastating news – and especially when it is a child with albinism, who stands out because of their skin colour. Historically, children with albinism were killed at birth in African countries such as Kenya and Tanzania (Under the Same Sun, 2012). Hence, the birth of a child with albinism is met with many misconceptions, which requires parents to equip themselves with information in order to understand and confront the myths associated with the condition. Folkman and Lazarus (1985: 152) define coping as ‘cognitive
and behavioural effects to master, reduce or tolerate the demands of stressful situations’. Moreover, Uze (2016) discusses two coping mechanisms – namely, information seeking, to reduce the uncertainty that causes stress, and information avoidance, to escape the situation by denial. When people find themselves in a stressful situation, they try to cope by seeking information from different sources in order to reduce the uncertainty they are experiencing. Alternatively, they may opt to cope without further information.

This article is extracted from my Master’s dissertation, where I researched the information needs of people with albinism in the Khomas Region, Namibia. I approached the topic as the mother of an eight-year-old girl and a four-and-a-half-year-old boy, both of whom were born with albinism. Although I received information and support from doctors, I often encountered situations where I needed more information. As a librarian, I would search for such information from the available literature.

On one occasion, I was searching for information for people with albinism, particularly with regard to their information needs, but could not find any studies related to this vulnerable user group. From this experience, I started thinking about how other Namibians, especially those from disadvantaged communities such as the Himba, would manage in the same situation. Taderera and Hall’s (2017) research reinforced my curiosity; they conducted a study in the Kunene Region of Namibia, where the Himba people reside, on the challenges faced by parents of children with learning disabilities. They state that accessing information is difficult for parents of children with learning disabilities because sometimes information needs to be accessed through technology such as the Internet and social media.

Accessing information can also be difficult because, in most cases, people in African society shy away from talking openly about albinism due to the stigma associated with it. Concurring with this, Rohwerder (2018) comments that misconceptions about the cause of disabilities often result from cultural or religious beliefs. Fourie (2008) emphasises that it is not always that patients do not ask for information because they are unaware of it, but because they might be shy or inhibited, or they may not ask questions due to cultural beliefs or a lower education level.

Furthermore, it is equally a challenge for parents of children with albinism to trust other people as sources of information. For instance, when a woman gives birth to a child with albinism, it is often difficult for the community to approach her to share information because they do not know how she is likely to react.

In view of the above, I kept coming back to the question of whether other people really have access to this valuable information, and whether they are aware of the benefits available to people with albinism in Namibia. This curiosity motivated me to research the information needs of persons with albinism, including their parents, and also provided me with the opportunity to narrate my lived experience of albinism.

Contextualisation

When my daughter was born, the paediatrician did not tell me straight that my baby had albinism. He said: ‘Here is the baby; she is fine, but she has problems with her eyes and skin’. I looked at my baby and asked him if she had albinism; he confirmed it with a ‘yes’. The doctor could not say anything further regarding my child’s condition, even though he promised my husband that he would provide me with counselling services and information.

This lack of counselling and support is contradictory to Baker et al.’s (2010) description of when a baby is born with albinism: the genetic nurses talk gently to the mother, recognising first and foremost the joy of the new birth, and then move on to tell her that the baby has albinism. They explain what the condition means, and why the baby’s pigmentation is pale. They try to empower the mother by giving her information on the genetic cause and practical management of albinism, so that she can cope when she returns home with her baby.

I must admit that giving birth to a child with albinism was a shocking experience for me the first time round. My baby had white, blondish hair at birth, so albinism was detected and confirmed immediately. However, there was more confusion when friends and family visited us in the hospital, and they refused to acknowledge that the child had albinism. They indicated that my daughter did not look like she has albinism because she looked different from other children of her age who were born with the same condition. It created more confusion for me because I had never seen a small baby with albinism.

For the first two weeks after the birth of my daughter, I experienced endless uncertainty, since albinism is associated with many myths and beliefs. I thought about the different explanations attached to it, such as the belief that if you laugh at a person with albinism or are rude to them, you will give birth to a child with albinism. This is a common myth that even Lund (2001), who is from a non-African cultural background, confirms by stating that people who scold or laugh at someone with albinism will themselves produce a baby with the condition. I was asking...
myself whether I had ever laughed at somebody with albinism. I had a teacher with albinism, and I have a friend whose aunt has children with albinism, and there was no occasion on which I was rude to them or laughed at them.

All of these questions vanished one day when my aunt explained to me that only people with certain qualities give birth to children with albinism. I also thought that I was not being fair to God for asking him too many ‘why’ questions. I thought of a young lady who was suffering from cancer and was battling the disease with courage and hope. I also gained courage from watching videos of Nicholas James Vujicic, an Australian evangelist and motivational speaker with tetra-amelia syndrome, a rare disorder characterised by the absence of arms and legs. Nicholas believes that, with or without arms and legs, he shall fulfil his mission on earth.

With the birth of my son on 15 December 2016, I was emotionally prepared for a child with or without albinism. The paediatrician was informed that I already had another child with albinism, which he also confirmed with me. This time, I was offered counselling services, with the option to see a psychologist – which I did not find necessary. The doctor was concerned about me having another baby with albinism, thinking that it would devastate me.

The experience of my daughter’s birth has changed over time because I have grown stronger with time. I became a laughing stock for many people, which was shocking because even those whom I thought were close to me were mocking my situation. The story went viral among some of my workmates; they were apparently told that I did not want to accept the child. What is hurtful is that people were busy spreading rumours about me, yet nobody approached me to ask how I was coping.

My children have also experienced name-calling, such as shilumbu, meaning ‘white person’, especially from strangers. I will always correct these people by telling them that the children have a name, and they are not shilumbu, because I find shilumbu discriminatory. Beukes’ (n.d.) study confirms that schoolchildren with albinism are teased and called names such as ‘whitey’.

You meet people who admire your children, and you find those who stare at them to the extent that it makes you feel uncomfortable, especially when you go to public places such as the hospital or church. My daughter narrated to me recently how other children at school tell her that she is a ghost, particularly when their teacher is not in class. As a result, she told me: ‘I do not want to be white, but brown like my mother’. There was a day when she became unruly in church; it became difficult to control her and I left church with tears in my eyes. When we got home, after being quiet for some time, she came to me and we had the following conversation:

**Daughter:** I am sorry Mummy.
**Mother:** What did you do?
**Daughter:** I did not behave at church.
**Mother:** But why did you do it?
**Daughter:** Because I do not want to be white, but brown like my mother.

On the other hand, as a mother, I have become friends with people I did not know personally because of my children.

Nevertheless, I was not spared the myths noted in the literature. My neighbour accused me of cheating on my husband with a white male lecturer from the University of Namibia, where I am employed. Surprisingly, the possibility of such an accusation is confirmed by Thuku (2011), who found that there are still people who believe that a baby is born with albinism because the mother has slept with a white man.

Someone remarked that it was good that God had visited me by giving me a child with albinism because I think I am a Christian. A family member accused me of being cursed or punished by God because I think I am wealthy, and the relative further asked why was I the first one in the family to give birth to a child with albinism. Thuku (2011) explains that there are people who believe that a baby with albinism is a punishment or curse by the gods or ancestral spirits due to wrongdoing in the family. Recently, someone remarked that I should stop having children because I am only giving birth to albinos.

Despite the shaming and lack of emotional support from most of my friends and family members, I vowed never to be ashamed of my children. I have learned to react positively to the negativity associated with albinism and, as such, I am not worried about how people think or feel about them, because God gave them to me for a reason. The experience has made me a very strong person. Lastly, I thank God every day for my blessings, because I love them so dearly.

**Problem and purpose of the study**

Parenting a child with a disability may be a source of significant stress for many parents (Cauda-Laufer, 2017; Nabawy and Moawad, 2012; Taderera and Hall, 2017). In Africa, parents (specifically mothers) of children with albinism have suffered emotionally after the birth of their children because albinism is always blamed on them.
a lack of awareness about albinism negatively impacts parents of children with albinism. The mother often gets the worst of this. She might be blamed for her child’s paleness or for having contracted a curse. The father may accuse her of infidelity and even abandon her. This can lead to an increase in domestic violence against the mother. The community might also isolate, ostracize or expel the mother of a child with albinism to avoid the perceived curse. (Under the Same Sun, 2015: 2)

In addition, the following are examples of the remarks found in the literature that illustrate the suffering of mothers of children with albinism:

Another woman with albinism described how her mother was viewed: ‘Neighbours and relatives thought my mother had an affair with a white priest’. (Amnesty International, 2016: 20)

Nyathi recalls the accusations faced by his own mother, commenting that she was accused of infidelity and of being cursed because of her children with albinism. The consequences of this accusation by members of her husband’s family were that his mother suffered abuse throughout her marriage. (Baker et al., 2010: 172)

There are a number of studies on albinism in Africa in general (Braathen and Ingstad, 2006; Brilliant, 2015; Brocco, 2016; Kapitako, 2018). However, none of the literature was found to have concentrated on how parents of children with albinism cope with their children’s condition and society at large. The scarcity of literature on albinism in Namibia – including information booklets in hospitals – the lack of emotional support from health personnel, curiosity and empathy are some of the issues that triggered this article. The main research question for this study is: How does information support coping with albinism?

Objectives

The study has three objectives: to (1) establish the purpose of information on albinism; (2) establish the mechanisms for information seeking; and (3) identify the challenges experienced during the information-seeking process.

Literature review

According to Adams et al. (2017), understanding autoethnography requires working at the intersection of autobiography and ethnography. However, autoethnography is distinguished from autobiography by its detailed and systematic examination of experiences in the researcher’s own life, and it requires assembling stories from different sources such as photographs, journals and recordings (see also Allen-Collinson and Hockey, 2007).

For Richards (2015), writing auto-ethnographically for him was to demonstrate that by reflecting on some of his own life stories about his identity, he came to a deeper understanding of the research and himself. Chang (2008) concurs, stating that doing, sharing and reading autoethnography can also help transform researchers and readers (listeners) in the process.

In view of the above, the importance of information has been stressed in many studies (Kundu, 2017; Tubachi, 2018). Information gathering has been a key area of support for parents during the first year of their child’s life as it provides a knowledge base for them to take charge of their infant’s care (Douglas et al., 2017: 2603). Similarly, in a study titled ‘Coping with a child with disabilities from the parents’ perspective: The function of information’, Pain (1999) identifies a number of roles that information played in the lives of parents. For example, information contributed to the acceptance process of parents after diagnosis and at a later stage. It also enabled them to manage their child’s behaviour and judge what would maximise their child’s potential. Finally, it enabled them to access services and benefits that eased their task of raising their child, thereby reducing stress and the physical duties of caring to more manageable levels.

People with albinism are not an exception with regard to the importance of information for the reason that they face many challenges compared to normally pigmented people. These include discrimination, a lack of awareness of albinism and disability in general, unemployment, social exclusion, visual impairment, emotional abuse and physical attacks (United Nations, 2015; United Nations, 2017).

The role played by information is noted in Lund’s (2001) study, titled ‘Health and education of children with albinism in Zimbabwe’, which concludes that nearly all of the respondents wanted information on what causes albinism. Similarly, Lynch et al. (2014) found that the children who participated in their study expressed a willingness to find out more about their condition in terms of its genetic origins and learning how to protect their eyes and skin effectively. The participants further expressed their willingness to know more about why they became ‘white and not black’ (7: 229), and to learn about ways to cope with the difficulties they might face at different stages of their childhood and early adulthood. Cruz-Inigo et al. (2011) note that it is a good idea for people with albinism and their parents to understand the causes of albinism, its medical and psychological implications, and how to protect themselves appropriately against ultraviolet radiation. Lund et al. (1997) also
support the view that there is a clear need for affected subjects to have information about albinism in order to enable them to manage and understand their condition better.

On the other hand, the parents of a child with albinism in Brocco’s (2015) study narrated how they looked at their son’s white skin and began to wonder how it could have happened. However, after consulting several family members, they became more relaxed and understood that their son was no different from other people but for his white skin. Douglas et al. (2017) conclude that parents seek information about the types of support and services that are available to assist them in meeting their infants’ needs.

On this note, Kingrey (2005) describes information seeking as a process that involves information searching, retrieval, recognition and the application of meaningful content. Van der Molen (1999) explains that information-seeking behaviour is a strategy that many people use as a means of coping with and reducing stress during their cancer experiences. For Brashers et al. (2002), the term ‘information seeking’ means different things in different contexts. Moreover, Williamson et al. (2000) argue that everyone has a different set of strategies for finding the information they need for their daily life. Life circumstances, such as living alone or having a family, working, being unemployed or retired, and the type of visual impairment involved, as well as individual information-seeking preferences, all influence the ways in which people seek or acquire information (Williamson et al., 2000).

However, information is not always accessible and does not always meet the needs of specific groups, with one such group being the visually impaired (Beverley et al., 2004). Hence, Beverley et al. (2004) explain that patients need appropriate information – for example, relating to their condition and the likely outcomes with and without treatment – at the right time and in an accessible format. This is particularly important for people with visual impairment because the nature of their condition can act as a barrier not only to information but also to an awareness of what information is available.

Methodology

This study adopted an interpretivist paradigm, which supports qualitative data collection methods and analysis. Qualitative methods are usually supported by an interpretivist approach because it ‘portrays the world in which reality is socially constructed, it is complex, and it is ever-changing’ (Thanh and Thanh, 2015: 25). Interpretive researchers do not regard the social world as ‘out there’ but believe that it is constructed by human beings. The interpretive researcher becomes part of the study as a meaning-maker, interacting with other meaning-makers.

Additionally, a qualitative approach attempts to answer why, how and what questions, and is a situated activity that locates the observer in the world (Denzin and Lincoln, 2008). Denzin and Lincoln (2008) further explain that a qualitative approach consists of a set of interpretive material practices that make the world visible. These best practices turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings and memos to oneself.

This study applied autoethnography, a combination of autobiography (inward-looking) and ethnography (outward-looking), to narrate the researcher’s story with regard to the information needs of people with albinism, which was triggered by giving birth to a child with albinism. Thus, this method is both process and product (Ellis et al., 2010). It considers researching about one’s self by recalling memories of past events, reflecting on the past experiences of others, and examining other sources of information such as personal journals, recordings, photographs and so on. According to Fourie (2021), this method came about in order to overcome the challenges presented by existing research approaches. Nevertheless, Deitering (2017) cautions that, unlike other methods in qualitative enquiry, autoethnography should be approached on its own terms because it is a method that does not rely on representative samples, objective analysis or broadly generalisable conclusions. This method has been used in different written forms, including short stories, poems, plays, essays, articles, dialogue, comics and novels (Deitering, 2017).

Autoethnography is a researcher-friendly and reader-friendly method because it assists researchers to understand themselves and others, and, at the same time, researchers and readers can be transformed (Chang, 2008). It may ‘radically alter an individual’s perception of the past, inform their present, and reshape their future if they are aware and open to the transformative effects’ (Custer, 2014: 2). Additionally, the method provides the researcher with easy access to data because they do not have to interview anyone else, but merely recall their own experience as a source for their investigations (Mendez, 2013). As a consequence, researchers are able to overcome issues related to obtaining informants’ consent because they ‘can choose which self-stories to write or present, control the mode of expression and tone, and place
the piece appropriately with the “right” audience’ (Lapadat, 2017: 593).

In view of the above, it can be seen from the literature that an autoethnography research methodology has been adopted in studies where researchers explore their personal life stories and narrate their positive and negative experiences of events that have occurred in their lives. Researchers who use this methodology share stories of people with special needs in their families and lives, such as those with visual impairment, physical disabilities, chronic disease, or rare diseases and conditions.

Lapadat (2017: 594) indicates that ‘autoethnographies explore difficult life events, epiphanies, or turning points such as teenager pregnancy, sexual abuse, coming out, abortion, bulimia or death of a loved one’. Fourie (2021: 6) specifies that ‘personal stories as cautionary tales can assist autoethnographers to move through uncertainty, confusion, pain and anger to promote courageous persistence, self-revelation and therapeutic disclosure’. In consequence, this study was conducted out of empathy and curiosity. Applying autoethnography enriched my understanding of albinism, supported me in dealing with my children’s condition in a prudent manner, and empowered me to assist those who find themselves in the same situation – specifically, other parents of children with albinism and children with other types of disabilities – because ‘without being brave you might end up throwing away the child because of the abuse and insults’ (Amnesty International, 2016: 20).

Ellis et al. (2010) and Kiesinger (2002) acknowledge that writing personal stories can also be therapeutic for both the participants and the readers. For me, applying this methodology helped me to share the emotions of confusion, loneliness and excitement that I experienced after giving birth to a child with albinism, which I could not express through other means, and to deal with the ‘why’ question. Furthermore, it changed my outlook on life and enhanced my understanding of how society still perceives some issues, such as albinism. ‘For me, writing the thesis autoethnographically, to an extent, allowed me to break the silence of the past in the contexts of the research’ (Richards, 2015: 826). Even though it ‘opened old wounds, but also manifested the energy needed to heal them completely’ (Custer, 2014: 9).

In information science, autoethnography is relatively new (Bordonaro, 2020; Michels, 2010). However, Guzik (2013: 275) underscores the relevancy of this methodology in information science on the ‘grounds of its capacity to cut across dichotomised territories of personal stories and social scientific scholarship, but it can also inform practice’. There are several examples of the use of an autoethnographic methodology in information science studies. Collaborative autoethnography was used as a way of seeing the experience of caregiving as an information practice by Anderson and Fourie (2015). They applied this methodology for two reasons: first, as carers for family members with a chronic, life-limiting illness and life-threatening disease, and, second, as information practice researchers. Also, in his study ‘The place of a person in LIS research: An exploration in methododology and representation’, Michels (2010) applied an autoethnography methodology as a doctoral student using an academic library. Furthermore, Guzik’s (2013) study, titled ‘Representing ourselves in information science: A methodological essay on auto-ethnography’, also applied autoethnography. Meanwhile, Fourie’s book, Autoethnography for Librarians and Information Scientists, was published in 2021.

Autoethnography is a very complicated method since it is subjected to ethical questions owing to huge elements of bias. Consequently, autoethnographies have been criticised for being self-indulgent, narcissistic, introspective and individualised (Atkinson 1997 and Coffey 1999 as cited by Mendez, 2013). I made every effort to honestly disclose my reflections and experiences by guarding against being biased about albinism, and have narrated my story as it was experienced. By doing so, both negative and positive experiences are shared. Given that my study takes a qualitative and interpretivist approach, bias is unavoidable, and thus there is a link between the research methods used, the approach and the paradigm.

**Personal memory**

Researchers applying autoethnography can use different tools to gather data. These include ‘participant observation, interviews, conversational engagement, focus groups, narrative analysis, artifact analysis, archival research, journaling, field notes, thematic analysis, description, context, interpretation, and storytelling’ (Poulos, 2021: 5). Researchers such as Ramanayake (2020) have used their diaries as data.

In this study, the data for the autoethnography methodology was collected through my personal memory. Grbich (2013: 123) describes personal memory as ‘the one which may come from notes or merely memories of a powerful event, and the details of which are imprinted in the mind’. I used my memory of the lived experience of albinism as a data collection tool. Through this process, I could use my memory to
recall all the events with regard to my daughter and son, who were both born with albinism in 2013 and 2016, respectively. The recalled events include the doctors informing me about my children’s condition and the confusion I experienced because of the lack of information about albinism at that point in time, especially when my daughter was born. Other events include information provided by different doctors – for example, specialists and general practitioners – which also assisted me in coping with and understanding my children’s condition.

Chang (2007: 5) acknowledges that memory is both a friend and a foe for autoethnographers. It is a friend in the sense that it allows the researcher to tap into a wealth of data to which no one else has access. However, memory also selects, shapes, limits and distorts, and fades as time goes by, blurring the vitality of the details. In this study, giving birth to another child with albinism in 2016 refreshed my memory and built more insights.

Wall (2008) used personal memory as a tool to collect data, and states that her supervisory committee was not satisfied with her employing this type of data collection tool. She thus had to provide a justification for choosing personal memory as a tool for gathering data. Wall (2008: 45) argues that ‘it seems like, unless data about personal experiences are collected and somehow transformed by another researcher, they fail to qualify as legitimate’. She further points out that:

It seems like personal experience data can only be considered legitimate if it has been recorded and transcribed by another researcher, even though both interview transcripts recorded by another researcher or told by the researcher themselves would be based on the same set of memories. (Wall, 2008: 45)

Neyman (2011: 27) explains that memory alone cannot be a single sufficient tool for collecting data as the researcher’s objectivity is challenged. In this study, I narrated my experiences as objectively as possible, and the personal memory data was supplemented with data collected from interviews with other parents of children with albinism, because ‘auto-ethnographic accounts do not consist solely of researchers’ opinions, but they are also supported by other data that can confirm or triangulate those opinions’ (Duncan, 2004: 31). Grbich (2013: 123) states that collecting data through autoethnography is time-consuming and an emotional and complex process that may involve researchers in years of writing and rewriting to gain distance from or be closer to the data.

Findings

**Purposes for which information was required**

Immediately after the birth of my daughter, I started searching for information on albinism because I wanted to absorb as much as I could in order to gain a thorough understanding of the condition. I was more interested in information on albinism in general, especially about her future, and not necessarily on what albinism is or its causes.

This search for information was triggered by my lack of knowledge about albinism, which had left me with the understanding that people with albinism are born with hard skin covered in sores. I did not know that damage to the skin only happens once the skin is exposed to the sun without any sun protection. Douglas et al. (2017) note that parents usually have little understanding of their child’s condition immediately following the birth, and there is a need to acquire information that will acquaint them with their infant’s specific needs and enhance their understanding of how to care for their child. Additionally, Braathen and Ingstad (2006) explain that some people simply do not know that the skin of people with albinism is sensitive to the sun, and some people with albinism do not know that it is the sun that causes their skin to be painful and burn.

I also expected my baby’s eyes to start making movements right away, but I found out from the ophthalmologist that she would only start making eye movements after two to three months. The information that I searched for every day and that I could not obtain was in regard to my daughter’s vision and whether she would be able to see and to live a normal life and go to a normal school. Seeking information on my daughter’s vision was triggered more by the fact that she could not follow objects within the first three months. I sought information on my daughter’s vision from the paediatrician, who referred me to an ophthalmologist, who assured me that my daughter would only start following objects after three months.

With my son, although the experience was the same, I sought information on his vision from the ophthalmologist, but I was not as stressed as I had been with my daughter, even though it took him about five to six months to start following objects. However, I was worried that he might have weaker vision than his sister.

As my daughter grew up, I was interested in searching for information on how to take care of her skin. I wanted to know about what body lotion and sunscreen were suitable for her skin because, initially, I had been using Vaseline petroleum jelly (for babies). I was also interested in what kinds of protective
clothes I should dress her in, and, through researching, I learned that people with albinism need to wear light-coloured clothing because it attracts the sun less than dark colours. I also needed information on why she got small wounds on her lips, even when she had not been exposed to the sun. It has been emphasised that the lips are particularly vulnerable to sunburn, so it is important for people with albinism to apply lip screen with a high sun protection factor (Albinism Society of South Africa, 2014). I sought this information from the dermatologist.

When my daughter was starting school, I sought information on her vision – particularly on how weak or strong her vision was – because, at that time, I had already made the decision that I would enrol her in a mainstream private school. That information was necessary to help me decide if she would need to wear glasses or not.

I am currently interested in information on skin allergies because my children constantly have skin allergies, which I am afraid might permanently damage their skin.

**Mechanisms used to seek information**

I have acquired most of the information on albinism from the Internet. Through searching the Internet, I have gained knowledge about the types of clothes my children are supposed to wear. Currently, I am a board member of Support in Namibia of Albinism Sufferers Requiring Assistance, and I acquire a lot of information from this organisation. I have a good relationship with the president of the Namibia Albino Association Trust, who, when my daughter was born, invited us to his office, where he shared valuable information with us regarding her condition. I have joined various organisations that deal with people with albinism in different countries, such as the National Organization for Albinism and Hypopigmentation, the Albinism Community, Albinos Are Beautiful, the Albinism Society of South Africa and Under the Same Sun, which I joined on Facebook. These organisations provide valuable information and give hope because, in most cases, they offer positive thoughts, organise events, and share the success stories of people with albinism.

Through reading, I have come across various stories told by mothers of their children with albinism, who have been through the same experiences. I was given information about how to take care of my child’s skin by the dermatologist. However, I came to realise that doctors lack specific knowledge on albinism too, so in most cases they tend to generalise. For example, I was told that my child would attend a special school – which is not the case because some people with albinism have stronger vision than others.

Through reading, I came to realise that most people know nothing about albinism, yet they think they know everything. There is potential for the wide circulation of misinformation, therefore one has to be vigilant. The knowledge that people possess about albinism in most instances is based on myths that were created a long time ago.

**Challenges experienced when searching for information**

With my daughter, I did not experience many problems when seeking information on albinism, except for the distances that I had to travel to access information. The lack of relevant literature on albinism in the Namibian context is a challenge, as most of the information is about the situations in other African countries and other parts of the world.

With my son, I received confusing information, especially when I was enquiring about government services for persons with disabilities. Some officials would tell me that my son did not qualify for inclusion because he is not disabled, while others told me the opposite.

**Conclusions and recommendations**

The findings from my study respond to the study’s research objectives, which were to establish the purposes for which information on albinism was required, establish the mechanisms for information seeking, and identify the challenges experienced during the information-seeking process. The findings have several significance implications for applying autoethnography and the role played by information in any situation.

Autoethnography has given me a voice to represent myself and to tell my story with respect to albinism as I have experienced it. It has provided me with the opportunity to share my emotions of confusion and loneliness, and the excitement that I experienced after giving birth to my daughter and son, who were born with albinism in 2013 and 2016, respectively. Additionally, I hope that my study will be inspirational for parents of children with albinism, especially in Africa, where albinism is misunderstood. Their experience in most cases is the same, and this is also supported by the findings from interviews with parents of children with albinism.

Through my research, I have also come to understand and appreciate the role that information plays in any situation. As a librarian and the mother of children with albinism, I have explored different mechanisms to find information, which have helped me to
understand albinism better and to deal with my predicament. By absorbing so much information, I have been able to defy the myths and beliefs attached to the condition, and come to terms with the fact that albinism is a genetic condition.

It is for this reason that this study recommends that hospitals must offer counselling services, with the assistance of the Namibia Albino Association Trust and Support in Namibia of Albinsm Sufferers Requiring Assistance, because they understand albinism and are in a better place to provide accurate information. The Ministry of Health and Social Services should ensure that psychologists and social workers attend to cases of albinism without delay to avoid children being rejected and abandoned by their parents. In addition, the Ministry of Health and Social Services should create a database of children born with disabilities for ease of access and the provision of information and other services. It is vital for Support in Namibia of Albinsm Sufferers Requiring Assistance and the Namibia Albino Association Trust to establish support groups for parents of children with albinism in order to share information and that they may learn from each other. Moreover, their information booklets should be made available in all hospitals countrywide.

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Developing research data management services in a regional comprehensive university: The case of Central Washington University

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Abstract
This study aims to analyze the needs of researchers in a regional comprehensive university for research data management services; discuss the options for developing a research data management program at the university; and then propose a phased three-year implementation plan for the university libraries. The method was to design a survey to collect information from researchers and assess and evaluate their needs for research data management services. The results show that researchers’ needs in a regional comprehensive university could be quite different from those of researchers in a research-intensive university. Also, the results verify the hypothesis that researchers in the regional comprehensive university would welcome the libraries offering managed data services for the research community. Therefore, this study suggests a phased three-year implementation plan. The significance of the study is that it can give some insights and helpful information for regional comprehensive universities that are planning to develop a research data management program.

Keywords
Research data management services, needs assessment and evaluation, regional comprehensive university

Introduction
Today, more data is being created and used in myriad ways than ever before in recorded history. Individuals and businesses use electronic devices and the Internet to generate and consume data (Aaronson and Leblond, 2018). Researchers and academics also produce large data sets in their scholarship (Muellenbach, 2021). Researchers have access to tools to parse information and text-mine data in ways never imagined before by using computers and complex algorithms to examine a corpus of documents or other data sets (Kantardzic, 2011). It is a big challenge for academics, individuals, and businesses to organize, curate, store, share, use, and reuse information and data. Research data management (RDM) services at academic institutions are a systematic resolution for dealing with this challenge.

RDM services have been defined as any concrete programmatic offering that is intended to support researchers (including faculty, postdoctoral researchers, and graduate students) in working with data (Perrier and Barnes, 2018). One of the first schools to see the need for academic institutions to provide RDM services was the Wharton School of Business at the University of Pennsylvania. The Wharton Research
Data Services began in 1993 and have grown over time (Wachowicz, 2020).

Libraries are situated to offer RDM services and play critical roles in managing these services (Tenopir et al., 2014; Yu, 2017). Many research libraries have developed RDM services. RDM services can take many different forms depending on the needs of the institution. The RDM programs at research libraries focus on providing data instruction and consultation services to help researchers with their data management plans, data visualization, and storage solutions so that they can meet funder and publisher requirements for storing, sharing, and reusing data (Borgh and Van Gulick, 2018; Conrad et al., 2017; Dietrich et al., 2012). Some research libraries also offer specific data services with a variety of disciplinary, methodological, and technical focuses (Grajek, 2011; Lembinen et al, 2017).

Most research studies investigating the role of libraries in developing RDM services have been performed in research university contexts (Murray et al., 2019; Tenopir et al., 2014; Yoon and Schultz, 2017; Yu, 2017). To date, few studies have examined the role of libraries in implementing RDM services in a regional comprehensive university context. Compared with research universities, faculty members and researchers in regional comprehensive universities have less of their workload allocated to research and scholarship. They also have fewer opportunities to apply for and receive larger external grants. This implies that their RDM service requirements could be different from those of researchers at research universities.

Given this gap in the research, this study aimed to understand researchers’ data needs at regional comprehensive universities, explore the role of libraries in developing RDM programs, and determine what types of data services should be provided by regional comprehensive university libraries.

**Literature review**

Over the past years, there has been an exponential growth in the amount of data available to researchers and created by researchers (Flannery et al., 2015). Tools are now available for text and data mining and visualizing the vast amounts of data generated by individuals, governments, and corporate entities (Cortés Sánchez, 2018; Hinrichs et al., 2015; Tsai and Chen, 2019). Research activities create large data sets, which was unheard of before the vast computing power of today. The amount of scientific data has doubled every 10 to 15 years (Bornmann et al., 2021). There has also been a trend among granting agencies to require grant recipients to manage and preserve their data (Perrier et al., 2017). As early as 2013, the US Office of Science and Technology Policy began urging researchers to preserve their data and make it available to other researchers (Office of Science and Technology Policy, 2013). Europe has the Open Research Data Pilot Project for participating projects to manage their data and promote data sharing (Watson, 2014). Thus, academics need to be proactive in managing the data associated with their research and scholarship (Willaert et al., 2019). Currently, data is not well managed and the availability to produce data sets associated with research has declined by 17% per year (Vines et al., 2014: 95).

Research data needs to be curated and organized, and can be useable and reusable (Tenopir et al., 2015). Hey and Trefethen (2003: 809) argue that “[t]o be exploited by search engines and data mining software tools, such experimental data needs to be annotated with relevant metadata giving information as to provenance, content, conditions and so on.” Many faculty have difficulty creating simple metadata for their research articles. Creating complex and well-crafted metadata will often involve the assistance of librarians (Whitmire et al., 2015).

Faculty’s lack of comfort with technology may also contribute to a lack of data management (Mancilla et al., 2019). In examining research faculty’s use of technology in other areas, research in Ghana shows that performance anxiety could be a factor in faculty being reluctant to use a learning management system (Bervell and Umar, 2020). Ellis (2000) points out that the time commitments involved in learning to use new technology often prevent faculty from using it. Faculty not only feel that it takes time they do not have to learn about new technology; they also do not know where to go for help. In many research libraries, academic librarians’ roles have evolved from providing traditional reference services to serving as liaisons with academic departments and becoming embedded in the academic research process (Costello, 2020; Ducas et al., 2020).

Librarians also need to be trained in educating researchers on how to use and curate data (Conrad et al., 2017). Research data services are a growing field for academic libraries (Cox et al., 2019; Koltay, 2017; Mannheimer et al., 2019). A survey conducted by the Association of College and Research Libraries showed that most research libraries provided data services to help their researchers meet the National Science Foundation’s requirements for data management plans (Antell et al., 2014: 562).
Librarians have the organizational skills to become excellent stewards of data but often need training and support to provide data services (Davis and Cross, 2015). A survey of the relevant publications on RDM services in academic libraries shows that the most successful providers of RDM services recruit internal and external stakeholders and provide training for library staff to support the services (Tenopir et al., 2017; Yu, 2017). Librarians need training to learn how to curate data and promote RDM services to their institutions. A study of six academic libraries implementing data services found that providing data-service-related educational modules to the librarians was effective and made them feel comfortable with teaching data management classes (Muellenbach, 2021). Librarians often provide RDM services that are integrated with liaison or embedded librarianship duties, such as assistance in finding data portals, writing data management plans, and teaching and promoting data management services (Antell et al., 2014).

A recent survey of user needs at research universities found that researchers needed the most assistance with quantitative analysis and data visualization. The survey also found that researchers rarely used metadata schema but did follow a standard file-naming scheme (Joo and Peters, 2020). While a regulated file-naming system is necessary, applying a good metadata schema makes the data more useful by allowing more in-depth searches and text mining (Medina-Smith et al., 2021).

Another article examining the role of libraries in conducting research data services found that libraries worldwide offer better RDM systems when they take a lead role in developing institutional policy around data. Libraries also enhance their data services by engaging stakeholders on campus and externally (Kim, 2021: 7).

There have been extensive surveys of Chinese libraries in recent years to evaluate the extent of their data services and the need for libraries to provide quality data services. In a survey of 87 academic libraries, 50 offered some form of RDM. It was found that the offerings of the research data services, in order of popularity, were: introduction to research data management, data curation, data management guidelines, data management reference services, resource management, and data management training (Si et al., 2015). A follow-up survey in 2019 of 76 libraries offering RDM services found that the services had seven distinct aspects: RDM, open access, scholarly publishing, research impact measurement, research guides, research consultation, and recommendation of research tools (Si et al., 2019).

<table>
<thead>
<tr>
<th>Categories</th>
<th>f</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenured and tenure track</td>
<td>50</td>
<td>362</td>
<td>14.00</td>
</tr>
<tr>
<td>Non-tenure track</td>
<td>16</td>
<td>341</td>
<td>4.70</td>
</tr>
<tr>
<td>Research associate</td>
<td>1</td>
<td>11</td>
<td>9.09</td>
</tr>
<tr>
<td>Staff</td>
<td>1</td>
<td>1188</td>
<td>0.00</td>
</tr>
<tr>
<td>Graduate student</td>
<td>2</td>
<td>123</td>
<td>1.63</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>2025</td>
<td></td>
</tr>
</tbody>
</table>

This study gained insights from the existing research and articles reviewed above. The study adapted some survey questions from Joo and Schmidt’s (2021) study and redesigned them to collect information from researchers at a regional comprehensive university—Central Washington University (CWU)—in the USA.

**Methods**

**Participants**

The Provost Office sent out the online email survey via the university’s email system to all faculty members, research associates, staff, and graduate students in February 2021. The study set a one-month time frame to collect the survey data by 15 March 2021.

There were 263 tenured faculty members, 99 tenure-track faculty members, 341 non-tenure-track faculty members, 11 research associates, 1188 staff, and 123 graduate students in the 2020–2021 academic year at CWU. Initially, 70 responded to the survey. Among the 70 responses, 50 were tenured and tenure-track faculty members, 16 were non-tenure-track faculty, 1 was a research associate, 1 was a staff member, and 2 were graduate students (see Table 1).

In general, it is mandatory for tenured and tenure-track faculty to conduct research and publish. The response rate of the tenured and tenure-track faculty was approximately 14%. According to Fan and Yan’s (2010: 132) study, the average response rate in a web survey is about 11%, which is lower than that of other survey modes. So, the response rate of the tenured and tenure-track faculty was considered realistic and acceptable.

Non-tenure-track faculty members at CWU have no mandatory scholarship requirements. The response rate of the non-tenure-track faculty group was approximately 5%, which indicated that there were some non-tenure-track faculty actively involved in scholarship and research activities.

Research associates at CWU have scholarship requirements. Two programs have a total of 11 research associates. The response rate of the research associates
was approximately 9%, slightly lower than the average rate found in Fan and Yan’s (2010: 132) study. CWU does not offer doctoral degree programs. Most of the graduate programs are course-based and project-based Master’s degree programs. A few are research-based Master’s degree programs. So, the response rate of the graduate students was low in this study.

The staff at CWU have no research or publishing obligations. The one staff participant completed the first three questions only and did not respond to the rest of the questions. So, this non-valid response was rejected. In total therefore, 69 participants completed the survey. The participants’ ages ranged from under 24 to 65 and older, with a mean age of 41.27 and a standard deviation of 1.11.

Instruments, data collection, processing, and analysis

A survey was designed to collect feedback from researchers at CWU in response to the following questions:

1. What are the data needs at CWU?
2. How will the libraries help in research at CWU?
3. Should the libraries provide RDM services for the CWU research community?
4. If the answer is yes, how will the libraries implement the RDM services?
5. What data services should the libraries provide?

The study adapted questions from Joo and Peters’ (2020) study and purposely redesigned them for the survey of researchers at CWU. Questions 1 to 3 collected information on the participants’ research areas, faculty rank and status, and age; Question 4 covered funding and grants; Question 5 was for the data management plan; Question 6 was about data privacy; Questions 7 to 10 dealt with the types of data assistance researchers received on campus; Questions 11 to 12 were designed to understand the needs of CWU Libraries in providing research data services and researchers’ willingness to receive such services; Questions 13 to 16 treated data formats, back-up strategies, storage solutions, and long-term storage needs; Question 17 asked if the researchers would be willing to share their data or not; and Question 18 was an open question where the researchers could provide suggestions regarding research and data management. A Qualtrics online survey tool was used to collect, process, and analyze the data.

Results

Among the 69 respondents, 18 (26.09%) confirmed that their research funds were from grants. Only 12 (17.39%) confirmed that their funding agencies required them to provide an RDM plan when they submitted their funding applications. Thirty-nine (56.52%) researchers confirmed that they did receive assistance on campus for research and data management; however, only seven (10.15%) reported that they received help from CWU Libraries.

Fifty researchers (72.46%) admitted no concerns about their data privacy; however, 19 (27.54%) expressed concerns, such as remaining anonymous, people’s identities, and approval from a data vendor to share if they purchased from a data vendor. Twenty-five researchers (36.23%) responded that they would like CWU Libraries to provide RDM services. When asked whether they would use such services if they were provided, 42 (60.87%) responded in the affirmative.
Regarding the areas researchers would like to have assistance with from CWU Libraries (which was a multiple-choice question), among a total of 146 answers, finding resources to inform and enhance their research projects was the top answer. Finding existing data sets was the second most frequent answer. Assistance with conducting quantitative data analysis, assistance with data visualization, and finding an appropriate repository for data archives tied for third place (see Table 2).

Regarding data formats, the top-five formats were tabular or spreadsheet data, textual data, images, audio files, and video files (see Table 3).

Table 4 shows where the researchers stored their data. The first choice was to use cloud storage such as Dropbox or Google Drive. Also, many researchers chose external storage, the university server, laboratory computers, and department or college servers.

In summary, the researchers did receive help with their research data from various units on campus. The most needed services at CWU were help with finding information and finding data sets related to their research projects. The research community welcomed CWU Libraries in providing RDM services. Meanwhile, the RDM services should protect the privacy of sensitive and personal data. However, neither a data deposit service nor data management plan support was the most needed service at this time at CWU.

### Discussion

The survey results addressed the research questions proposed in this article, gave CWU Libraries a clear picture of researchers’ RDM service needs, and helped CWU Libraries decide what RDM services it should provide and how they should be implemented.

In this section, some discussion points are presented that the study would like to emphasize.

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**Table 3. Data formats generated by the researchers.**

<table>
<thead>
<tr>
<th>Format</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabular or spreadsheet data (e.g. CSV, Microsoft Excel)</td>
<td>40</td>
<td>25.81</td>
</tr>
<tr>
<td>Textual data (e.g. TXT, Microsoft Word)</td>
<td>27</td>
<td>17.42</td>
</tr>
<tr>
<td>Image files (e.g. JPEG, TIFF)</td>
<td>23</td>
<td>14.84</td>
</tr>
<tr>
<td>Audio files (e.g. WAV, MP3)</td>
<td>18</td>
<td>11.61</td>
</tr>
<tr>
<td>Video files (e.g. AVI, WMV, MP4)</td>
<td>15</td>
<td>9.68</td>
</tr>
<tr>
<td>Geospatial data</td>
<td>14</td>
<td>9.03</td>
</tr>
<tr>
<td>Artifacts, samples, and/or specimens</td>
<td>7</td>
<td>4.52</td>
</tr>
<tr>
<td>Semi-structured format data (e.g. XML, JSON)</td>
<td>7</td>
<td>4.52</td>
</tr>
<tr>
<td>Genomic data</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Other (Python, etc.)</td>
<td>4</td>
<td>2.58</td>
</tr>
<tr>
<td>Total</td>
<td>155</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 4. Where the researchers stored their data.**

<table>
<thead>
<tr>
<th>Location</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud storage (e.g. Dropbox, Google Drive)</td>
<td>26</td>
<td>26.53</td>
</tr>
<tr>
<td>External storage</td>
<td>24</td>
<td>24.49</td>
</tr>
<tr>
<td>University server</td>
<td>12</td>
<td>12.24</td>
</tr>
<tr>
<td>Laboratory computer</td>
<td>11</td>
<td>11.22</td>
</tr>
<tr>
<td>Department or college server</td>
<td>11</td>
<td>11.22</td>
</tr>
<tr>
<td>External data repository</td>
<td>5</td>
<td>5.10</td>
</tr>
<tr>
<td>Library repository</td>
<td>1</td>
<td>1.02</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>8.16</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>100</td>
</tr>
</tbody>
</table>

Yoon and Schultz (2017) analyzed 185 research university library websites and found that data deposit was the top service provided by research libraries. Also, Murray et al. (2019) claim that data repository services were second among the services offered most by research libraries in their survey of the state of RDM in 35 US research university libraries. However, the current survey results show that the data deposit service ranked third (alongside assistance with conducting quantitative data analysis and data visualization) among the most needed services at CWU.

Murray et al. (2019) also found that offering instruction on research data was the most needed service at CWU libraries; however, this is not the case at CWU, and it does not even feature in the top five most needed services. Moreover, Yoon and Schultz (2017) found that data management plan support was the second most offered service at research libraries. This study showed, however, that data management plan support ranked sixth among the most needed services at CWU.

Joo and Peters (2020) found that researchers needed the most assistance with quantitative analysis and data visualization from their study at one public Carnegie R1 (R1: Doctoral Universities - Very high
research activities) university. However, the current survey results show that this type of assistance ranked third among the most needed services at CWU.

The survey results have helped CWU Libraries understand the specific needs of researchers at the university. CWU Libraries should consolidate its current resources, explore other RDM resources and tools, and develop a list of the most needed RDM services and promote them to the CWU research community. Prospectively, the survey results indicate that the provision of RDM services at the libraries is welcomed by CWU researchers. This implies that the libraries are moving in the right direction and should continue moving forward. On the other hand, data privacy could be an issue that the libraries should be aware of when providing RDM services. Meanwhile, librarians and supporting staff should develop their knowledge and skills in RDM services based on Joo and Schmidt’s (2021) study.

**Limitations**

One limitation of this study is that it only examined an individual case at a specific regional comprehensive university. Therefore, the findings cannot represent a pattern for all other regional comprehensive universities in the USA. However, the methods, survey questionnaire, and phased three-year implementation plan described in the following section could be adopted by other regional comprehensive universities that are planning to develop their own RDM programs.

Another limitation is that the results cannot represent the needs of graduate students. From the perspective of the response rates, the survey questions seem not to have been well designed for graduate studies. The study recommends a follow-up study to explore and assess graduate students’ data needs so that CWU Libraries can provide tailored services for them.

**Recommendations**

This study proposes a three-year phased implementation plan for CWU Libraries. Because CWU Libraries has a limited budget and resources, it is suggested that it should submit a business case to the University Enterprise Information Systems Committee to seek funding from the university. The cost estimates should include the salary and benefits for creating a new research librarian position, focusing on data services, purchasing storage for long-term data preservation, and purchasing RDM tools, including data management planning, geographic information systems, geospatial services, data visualization, and presentation and graphics tools.

In Year 1, CWU Libraries should form a working group and create a prototype RDM services model; integrate its current resources (such as institutional repositories, open data resources, research guides, and existing data services) so that it can provide a centralized information platform for researchers and students; create a library faculty position for data services and seek approval from the Provost Office; build an instruction and consultation model to provide essential data services; initiate RDM services by selecting one or two academic departments as data service partners; and establish a collaborative relationship with the School of Graduate Studies and Research, academic colleges and departments, Multi-modal Education Center, University Information Systems, and other campus units to promote RDM services.

In Year 2, CWU Libraries should consider developing the RDM services model; fill the new data librarian position; extend RDM services to the College of the Sciences; concentrate on finding resources and data sets for researchers, and creating more research guides on topics such as RDM, data management plans, and funder requirements; develop classes and drop-in workshops on data services; and collaborate with other university units for an external grant to enhance RDM services.

Finally, in Year 3, CWU Libraries should scale up the RDM services model to reach the entire research community and external researchers who collaborate with CWU faculty and students so that it can provide a full range of data services to a broader scope of researchers.

**Conclusions**

This study has analyzed the data needs of researchers in a regional comprehensive university; discussed the possibility of developing RDM services for the libraries; and proposed a phased implementation plan for RDM services. Specifically, a survey was designed to collect information and data from researchers at the university. The study has also discussed and explored the possibility of developing an RDM program at CWU Libraries. The study found that researchers’ needs at a regional comprehensive university such as CWU could be quite different from those at a research-intensive university. Therefore, a regional comprehensive university should have a different RDM implementing strategy from a research-intensive university. For example, at the University of California, Berkeley, the central Research Information Technologies unit was primarily responsible for
implementing RDM services (Wittenberg and Elings, 2017).

Moreover, the study found that, with a limited budget and resources, a regional comprehensive university library should make an in-depth assessment and evaluation of researchers’ needs before launching an RDM program. Additionally, a regional comprehensive university library should consolidate its current resources and focus on the services revealed in the assessment and evaluation process. The students and faculty at a regional comprehensive university will benefit if the library can offer managed data services. It is hoped that this study may provide similar libraries with insights and helpful information when planning to launch new RDM services at their institutions.

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IFLA’s role in the implementation of the Marrakesh Treaty

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Abstract
This article critically analyses the significant role of IFLA in the implementation and adoption of the Marrakesh Treaty in member-state libraries. The challenges and hindrances affecting the implementation of the Treaty are also highlighted. The article establishes that, despite signing the Marrakesh Treaty, the implementation of the Treaty by member states has been met with resistance. The article, however, recognises the significant role that IFLA has played in the implementation of the Treaty, including acting as a representative of libraries globally and in its advisory and advocacy roles and outreach services. Finally, the article discusses and offers various suggestions – for example, IFLA should recruit and incorporate more countries in the association; have wide language diversity; develop competency skills and training; and organise frequent conferences and workshops on the Marrakesh Treaty.

Keywords
Marrakesh Treaty, academic libraries, IFLA, copyright, human rights, WIPO

Introduction
The introduction of the Marrakesh Treaty by the World Intellectual Property Organization (WIPO) in 2016 and the subsequent ratification of the Treaty by several countries was seen as a significant milestone by the World Blind Union in ensuring the production and international transfer of specially adapted books for the blind or visually impaired people. However, since its inception, the number of countries that have fully implemented the Treaty is still worrying. According to the World Blind Union, 90% of published materials are not accessible for the visually impaired – a situation that has led to what it terms a ‘book thirst’ or ‘book famine’.

Even though access to information materials has been construed as a fundamental human right, the visually impaired have always been disadvantaged in accessing and utilising information materials in an appropriate format. Martínez Calvo (2014: 2) argues that visually impaired individuals have the same needs and requirements in accessing information for education, leisure and employment purposes, and they should not be denied. Fitzpatrick (2014: 142) is of the opinion that the advancement of technology, market failure and copyright law have created a complex dilemma for the visually impaired in depriving them of fair access to education and civic participation. In developing countries, the issue is considered to be more severe than in developed countries. Initially, there were efforts by individual countries to break down these barriers, but it has proved difficult due to financial constraints. However, the introduction and signing of the Marrakesh Treaty brought some temporary relief to the problem of information access by visually impaired people. The signing of the Marrakesh Treaty meant that there would be an easy flow and sharing of published work globally – for instance, a book published in one country can easily...
be shared by a student in another country. In short, there would be easy cross-border exchange and sharing of information resources without hindrance. Vleugels (2021: 76) notes that the treaty enables member countries to have copyright exemptions therefore publishers and organizations are able to reproduce and distribute books and other information materials across border countries. The Treaty will therefore eliminate the ‘book famine’ experienced by most visually impaired. Temple (2018) notes that the Treaty addresses the dearth of accessible books for those who are blind or visually impaired. However, the uptake of the Treaty has not been smooth; not all of the countries that have signed the Treaty have fully implemented it. This trend is worrying. Statistics globally indicate that very few institutions have implemented the Treaty in their libraries. IFLA has been one of the advocates for free access to information resources using the Marrakesh Treaty. It is as a result of this development that this article seeks to establish the significant role that IFLA is playing in the implementation of the Marrakesh Treaty in libraries.

The Marrakesh Treaty

The Marrakesh Treaty was signed at the end of the WIPO Diplomatic Conference in Marrakesh, Morocco, on 27 June 2013. It has borrowed a lot from the US Copyright Act, specifically the Chafee Amendment to the 1976 Copyright Act – the exception benefitting print-disabled individuals in the USA, which was initially drafted by the US delegation (Band, 2013; Helfer et al., 2017). WIPO initiated the Marrakesh Treaty and the main aim of the Treaty is to ensure that the visually impaired have access to information. Coates et al. observe:

The Marrakesh Treaty ... is an international treaty adopted in 2013 by member states of the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations. The full title is The Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled. (Coates et al., 2018: 10)

Copyright law and the Marrakesh Treaty

The Marrakesh Treaty revolves around copyright issues and the copyright holder. Martínez Calvo (2014: 4) describes the Treaty as the only copyright-related international treaty that was drafted by consumers, is aimed at consumers and is driven by consumers. Copyright law has always been seen as a hindrance to access to information by the print-disabled (Mann, 2001, cited in Were et al., 2021:1). Band (2013) notes that, in many countries, copyright law usually presents a barrier to the dissemination and distribution of copies of information materials in formats that are accessible to the print-disabled. With the advancements in technology, it means that the visually impaired have two options to access information: that is, by using computer-aided gadgets or printed books. However, Mann (2001) notes that this brings two types of access barriers, and publishers and copyright holders need to provide the copyrighted information in accessible formats for the visually impaired. The new technology has changed the whole concept of access to print and computer copyrighted information, with screen readers, large screens and digital audio presentations, for example.
The Marrakesh Treaty includes several exceptions and limitations to accessing information for the countries that are signatories of the Treaty.

**Cross-border export of works in accessible formats**

Under this provision, the Treaty expects governments to allow the export of accessible formats of informational materials subject to certain conditions (Helfer et al., 2017). Initially, due to copyright law restrictions, copyrighted books in accessible formats could not be shared between countries; for accessibility, a book had to be reproduced in another country, which was expensive and also seen as a duplication of effort. This contributed to the ‘book famine’.

In the case of exporting, accessible format copies made under an exception or other law can be exported by an ‘authorised entity’ to a visually impaired beneficiary or an entity authorised to act on their behalf in another country that has signed up to the Treaty. (Oppenheim, 2017: 6)

However, Fitzpatrick (2014: 158) notes that to reduce privacy risks and mitigate publishers’ concerns about copyright, cross-border exchange is only done between authorised entities and beneficiaries.

**Reproduction of copies in accessible formats**

The Treaty allows for the reproduction of copyrighted works in accessible formats without necessarily having to seek permission from the rightful copyright holder. Article 4 of the ‘National Law Limitations and Exceptions Regarding Accessible Format Copies’ states:

Contracting Parties shall provide in their national copyright laws for a limitation or exception to the right of reproduction, the right of distribution, and the right of making available to the public as provided by the WIPO Copyright Treaty (WCT), to facilitate the availability of works in accessible format copies for beneficiary persons. The limitation or exception in national law should permit changes needed to make the work accessible in the alternative format. Helfer et al. (2017: 39)

On reproduction, the Treaty focuses on reproducing books in accessible formats – for instance, converting printed books into audiobooks or even Braille. This can also involve the conversion of books into conventional formats such as speaking books. Fitzpatrick (2014: 158) observes that, according to the Marrakesh Treaty, authorised entities can reproduce, distribute and make publicly available accessible format copies to the defined beneficiaries. These entities must satisfy four conditions: (1) they must lawfully create works in accessible formats – that is, the party converting the work must have ‘lawful access’ to the copyrighted work; (2) only what is needed by the beneficiary much be changed; (3) the accessible works should be the only ones supplied to the beneficiaries; and (4) the activity must be undertaken on a not-for-profit basis. Macharia et al. (2020: 236) observe that the Marrakesh Treaty was established to enable the reproduction of copyrighted works in accessible formats that are useable for persons who are blind, visually impaired or otherwise print-disabled, without necessarily having to consult with the copyright holder. Macharia et al. (2020: 241) further note that, through the removal of reproduction-permission legislation, the Marrakesh Treaty gives the visually impaired an opportunity for timely access to information.

**Import of accessible format copies**

Here, the Treaty allows countries of a contracting party to import copies of accessible format without the right holder’s permission. According to Oppenheim (2017: 6), an ‘important feature of the Treaty is that it requires contracting parties to allow the import and export of accessible format copies’. This implies that the contracting parties, as defined in the Treaty, can freely import accessible format copies from any country for the beneficiaries. Helfer et al. (2017: 56) note that countries which have ratified the Treaty can also import accessible information formats from countries that have not ratified the Treaty. According to Helfer et al. (2017: 56), this is a move to increase and expand the accessibility and availability of accessible formats for the benefit of the visually impaired.

**Distribution/availability**

This refers to the transfer of accessible copies to other authorised entities – for instance, through, ideally non-commercial, lending or donations. The Marrakesh Treaty is mandated to ensure that there is broad access to accessible formats of information for visually impaired people around the globe who have limited access to information. From the research that has been conducted Turner (2019), the majority of disadvantaged people are from developing countries. The Treaty therefore benefits developing countries. Helfer et al. (2017) state that the main objective of the Marrakesh Treaty is to increase the availability of
copyrighted works globally for the nearly 300 million individuals with print disabilities.

**Functionality of the Marrakesh Treaty**

In summary, as shown in Figure 1, the main objective of the Marrakesh Treaty is to break down the barriers that are associated with the accessibility and utilisation of informational materials by visually challenged individuals globally. These barriers include, but are not limited to, production, distribution, cross-border exchange and the importation of accessible formats. The Treaty also aims to increase access and improve the equitability of accessible information formats for the beneficiaries. It is therefore an assumption that the removal of the barriers will be of great benefit to the over 285 million people worldwide who are visually impaired.

**Challenges and shortcomings of the Marrakesh Treaty**

Although the Marrakesh Treaty has been established and ratified by several countries, it is not fully implemented by many member countries. Implementation, as mentioned earlier, is hampered by various interpretations of the law in different countries. Oppenheim (2017) notes that despite many countries having contracted to the Treaty, very few have ratified it and are hence not able to put it into use. According to Turner (2019) observed that only 82 countries have so far ratified the Treaty. Some of the challenges experienced by countries are discussed in the following.

**Role of publishers**

The Marrakesh Treaty does not oblige publishers to make copies of works in accessible formats. As such, most publishers are reluctant to provide accessible formats. According to Stamm and Hsu (2021: 694), publishers are not creating conducive platforms for people with visual impairments. Hua (2017: 9) argues that the emergence of technological protection measures has enabled copyright owners to hinder access to and use of their works. Hua further notes that more copyright owners are adopting technological protection measures to control access to and use of their works, which has become a drawback for the visually impaired in accessing these works.

**Reproduction**

The Marrakesh Treaty legalises the reproduction of works in accessible formats. However, the copyright
holders are not mandated to make the reproductions. The reproduction of such content is usually costly, and the government or state generally relies on non-governmental organisations or well-wishers to do the reproductions. Stamm and Hsu (2021: 694) note that the omission in the Marrakesh Treaty with regard to publishers being obliged to reproduce works in accessible formats significantly undermines the spirit of the Treaty.

**Beneficiaries**

Despite the fact that there are many types of visually impaired people, the Marrakesh Treaty does not strictly specify who the beneficiaries of the accessible formats are supposed to be. As such, the Treaty leaves room for countries to decide who is to benefit. Li and Selvadurai (2019) observe that, the copyright exception in China law is only available for translating a published work into Braille, leaving the majority of print-disabled persons without benefit because they are unable to read Braille (p. 2) in its legislation. IFLA (2020b) indicates that although people with other disabilities are not included in the Treaty, member states should include them as they wish.

**Copyright**

Oppenheim (2017) raises the point that there were allegations by rights-holder groups that the adoption of the Treaty would significantly weaken their copyright-creating industries. As Kaunda and Chizwina (2019: 10) note: ‘One of the challenges of making material accessible to visually impaired people is the reluctance of some countries, particularly in the European Union, to ratify the Marrakesh Treaty’. However, Helfer et al. argue that

the compelling and well-supported claim that individuals with print disabilities are entitled to access books and cultural materials on the same terms as sighted people transformed the negotiations, shifting the debate from concerns about how the Marrakesh Treaty might weaken intellectual property protection to a focus on the fundamental rights of citizenship. (Helfer et al. 2020: 342)

**Remuneration**

The introduction of remuneration in the Treaty complicates it and makes it subject to exploitation. Remuneration, as found in the first clauses of Article 4(4) and Article 4(5), permits a country to ban the creation of accessible format copies if the copyright owner has already made the work commercially available in that particular format. In contrast Article 4(5), the second clause permits a state to require compensation as a condition of creating or distributing accessible format copies. Helfer et al. (2017: 5) argue that implementing this clause impedes the creation and exchange of accessible format works in at least two respects: (1) it introduces unnecessary complexity that could deter beneficiaries and authorised entities from exercising their Marrakesh Treaty rights and (2) remuneration creates a financial burden that may make works effectively unavailable for many print-disabled individuals. Remuneration therefore represents a significant disadvantage for developing and the least-developed countries, as well as for poor people in middle-income and wealthy countries. The broad remuneration requirement also creates the risk of discrimination between print-disabled and non-print-disabled individuals.

**Language diversity and culture**

There are many different cultures and languages globally. According to the Marrakesh Treaty, it allows for the free and easy cross-border exchange of accessible copies of works. Bayan (2016, cited in Olwan, 2017: 184) argues that, in the Arabic world, there are very few books that are published in the Arabic language. As such, the cross-border exchange of accessible copies will be of no value to Arabic-speaking nations. Olwan (2017) also notes that few businesses and non-profit organisations are able to convert these texts into accessible formats.

**Implementation of the Marrakesh Treaty**

The Treaty fails to offer guidance on how it should be implemented in a member country and by whom. This is a major hindrance, bearing in mind that the Treaty needs to be adopted in all types of libraries and
institutions that fall under the remit of various ministries and departments, depending on the member state. It is against this backdrop that IFLA has been trying to champion the implementation of the Treaty among its signatories.

Benefits of the Marrakesh Treaty for individual libraries

The adoption of the Marrakesh Treaty has several benefits for individual libraries:

- It inspires and encourages libraries to engage in library cooperation, inter-lending and partnerships. Libraries are able to share accessible resources, which enables comprehensive access to information resources. Such cooperation and partnership can be on both a national and international level.
- It enables libraries to offer easy and fast access to information in accessible formats. As such, it improves services for people with a print disability or the visually impaired. They are able to have access to more books, which are delivered faster and at a reduced cost.
- It encourages innovation and the application of new technologies in libraries. With the Treaty in place, libraries are encouraged to innovate and adopt new technologies in assisting print-disabled people to have easy access to books and other information resources. Mann (2001) notes that libraries are able to create a virtual world library of alternative formats.
- It encourages libraries to formulate the necessary policies for inclusivity and equality and, as a result, justifies an increase in the library budget.
- It improves the relevance of libraries in providing information for all library users, enabling libraries to achieve their mandate. Martínez Calvo (2014) suggests that, with the Marrakesh Treaty in place, libraries have been given an excellent opportunity to serve their users more effectively.
- It opens up opportunities for libraries to get grants and other donor funding to support the services permitted under the Treaty’s legal framework.

IFLA

IFLA (2001) states that it is a worldwide, independent non-governmental organisation. As stated in IFLA’s statutes, its role is to promote high standards of delivery of library and information services; to encourage widespread understanding of the value and importance of high-quality library and information services in the private, public and voluntary sectors; and to represent the interests of its members throughout the world IFLA (2001).

Brazier (2007: 867) describes IFLA as the leading international body representing the interests of library and information services and their users. Moreover, Brazier (2007: 867) notes that IFLA is the global voice of the library and information profession and an independent, international, non-governmental, non-profit organisation. IFLA is the global voice of libraries, representing the interests of the profession and working to improve services worldwide. Rudasill (2015) states that although IFLA is more widely recognised with regard to issues to do with the World Library and Information Congress (WLIC), it performs other duties that might be invisible to many, including representing the global voice of libraries and the librarian profession, working with international bodies, supporting the development of national associations, negotiations on copyright issues, and being an advocate of cultural heritage. In summary, IFLA is an organisation that aims to represent the voices of libraries and librarians globally. IFLA boasts a strong membership, a vibrant professional community and close collaboration with its partners.

Significance of IFLA and the Marrakesh Treaty in libraries

The role of IFLA in the adoption and implementation of the Marrakesh Treaty in libraries is of great significance. Libraries are classified under various categories, such as academic libraries, public libraries, community libraries, school libraries or special libraries. They depend on funding and support from their parent organisations. As such, implementation of the Marrakesh Treaty independently is impossible. It is in this regard that IFLA’s role is indispensable. The significance of IFLA in the implementation of the Marrakesh Treaty can be summarised under three headings.

Representation of libraries and the voice of librarians

IFLA represents libraries and the library profession in international forums and ensures that libraries’ roles are recognised. It advocates for libraries and their users in international forums. IFLA was involved in the first proposal of the Marrakesh Treaty by the World Blind Union. It strongly supported negotiations for more than five years at WIPO, and participated in
the diplomatic conference in Marrakesh that led to the Treaty’s adoption.

Establishment of IFLA guidelines and standards
IFLA has introduced authoritative guidance and legislation that is not punitive to libraries and library users. The association has been able to develop various policies, guidelines and standards that can assist libraries in the implementation of the Marrakesh Treaty, including ‘IFLA guidelines for library services to persons with dyslexia’ Bolt (2018), ‘Getting started: Implementing the Marrakesh Treaty for persons with print disabilities’ (Coates et al., 2018) and ‘Getting Marrakesh ratification right – a toolkit’ (IFLA, 2020a).

Implementation and monitoring
IFLA encourages the speedy and prompt implementation of the Marrakesh Treaty in member countries. This is done through advocacy programmes with national library associations and also through meetings, workshops and conferences with stakeholders – for instance, countries’ legislative bodies or associations. IFLA equally monitors the progress of the implementation of the Marrakesh Treaty through regular reports so as to ascertain the progress being made and also act as a source of advocacy for other nations to follow suit.

Implementation of the Marrakesh Treaty, 2018–2020
The Marrakesh and monitoring reports are useful information resources that enable countries access the implementation progress of the Treaty (see Figure 2).

IFLA enables countries to make appropriate decisions when implementing the ratification of the Treaty and also offers several forms of guidance.

Advisory role
IFLA offers advisory services to libraries on the implementation process and enactment of policies on the implementation process. IFLA, through its Advisory Committee on Copyright and other Legal Matters, has developed the following to ensure the smooth implementation and adoption of the Marrakesh Treaty: a tool kit offering guidance on the ratification process for member countries (IFLA, 2020a), a ‘Getting started’ guide offering step-by-step guidance for libraries (Coates et al. 2018) and, finally, the Marrakesh Monitoring Report IFLA (2020b), which analyses how various governments and libraries are implementing the Marrakesh Treaty.

Strengthening national associations
IFLA’s role in the Marrakesh Treaty forms the basis and justification for why countries need to have library associations and participate actively. Although a country’s ratification of the Treaty can be done easily and quickly, the lack of a national library association can jeopardise the entire process. As such, the Treaty brings with it the possibility for countries that lacked a library association to establish one, and countries that have undermined their associations to reconsider their decision. The Treaty also forms the basis for why institutions should register and become member institution of IFLA. According to IFLA (2019b), it collects ratification data from individual

Figure 2. Implementation of the Marrakesh Treaty, 2018–2020.
countries’ library associations. As such, countries that lack library associations are not represented and cannot be offered avenues of assistance.

Advocacy

Advocacy is one of IFLA’s main pillars. IFLA engages in various advocacy activities to ensure that the implementation of the Treaty is realised. These include:

- Identifying countries’ concerns about the Marrakesh Treaty and addressing them. For instance, three versions of ‘Getting started: Implementing the Marrakesh Treaty for persons with print disabilities’ (Coates et al., 2018) have been developed: a general version, a US version and a Canadian version.
- Sharing knowledge and coordinating efforts.
- Meeting with stakeholders.
- Mobilising national associations to participate in national and regional conferences and workshops.

General IFLA outreach services

IFLA, as part of its mandate to ensure that it reaches out to all libraries and librarians, has developed other avenues and platforms in which librarians and libraries are able to participate by sharing their ideas, thoughts and experiences. IFLA has created two main avenues in this regard.

The first is the IFLA Global Vision Ideas Store. This is a web page that has been developed by IFLA on its website. Its function is to engage libraries and librarians across the globe in sharing and exchanging ideas and information. Through this web page, libraries are able to share their creative ideas and, equally, learn from others. This concept is useful in the current digital age where there is an increasing reliance on community knowledge across the globe. The strategy of the Global Vision Ideas Store is to ensure that libraries are united so that they can forge a strategic roadmap for the future to address common challenges.

The second avenue is the IFLA Library Map of the World. According to IFLA (2022), the Library Map of the World is a ‘representative source of basic library statistics and a robust tool providing country-level data and a worldwide comparison of different library performance metrics by region’. This website provides various statistics with regard to library activities in each country of the world. Mandl and Ramiresa (2022) state that IFLA’s Library Map of the World is a very resourceful advocacy tool in providing global statistics for libraries. For instance, the tool has statistics metrics on the types of library and number of libraries in each country, global library projects being undertaken under the United Nations Sustainable Development Goals, and selected libraries’ performance. However, despite all of this positive progress, the Library Map of the World lacks accurate statistical metrics data since it relies on national associations to provide the data, and they are at times reluctant to do so.

Discussion and recommendations

IFLA is one of the institutions, alongside WIPO, that has been at the forefront in advocating for the implementation of the Marrakesh Treaty. Its significant role in the implementation of the Treaty has been impressive. However, despite these efforts, very few institutions or countries have adopted the Treaty and put it into practice. Nevertheless, it is hoped that once more countries start the implementation process, more institutions and libraries will see the value of implementing the Treaty in their own countries and organisations. To speed up the implementation of the Marrakesh Treaty in libraries, this article discusses and proposes several measures that might be considered by IFLA.

Conferences and seminars for advocacy

IFLA is more generally acknowledged for organising the WLIC. The WLIC is usually the highlight of the year for IFLA. It is an occasion where high-quality discussions focusing on library professional development services and information access are tabled. As such, the WLIC is a perfect forum for advocacy and lobbying new and innovative ideas among IFLA members. In the wake of the Marrakesh Treaty, this article notes that the WLIC has not been vigorous enough in championing the Treaty among IFLA members. It is therefore recommended that IFLA should consider organising more conferences on the implementation of the Marrakesh Treaty to create wider global awareness. Since the signing of the Treaty in 2013, IFLA has only been able to hold five conferences (in 2014, 2016, 2017, 2018 and 2019). Table 1 lists the conference sessions and papers presented in relation to the Marrakesh Treaty.

Notably, after the signing of the Marrakesh Treaty in 2013, the WLIC 81st IFLA General Conference and Assembly was held in South Africa in 2015, but there were no sessions or papers presented on the Marrakesh Treaty, despite Africa being a region that suffers from a lack of accessibility to information in accessible formats for the visually impaired. The
organisation of more conferences, workshops and seminars will play a great role in advocacy and awareness of the role of IFLA in the implementation of the Treaty among countries. Bedogni et al. (2022) argue that conferences are fundamental avenues for sharing, spreading and communicating new knowledge in all disciplines; they give scholars opportunities to meet and share valuable ideas. In Africa, for instance, it is surprising that even though the Marrakesh Treaty was signed in Marrakesh, Morocco is still not a member of IFLA, which implies that a lot needs to be done to promote advocacy of the Marrakesh Treaty and the role of IFLA in its implementation.

Role of the IFLA Trend Reports

The IFLA Trend Report was first introduced in 2013. It was designed to ensure that there is a constant discussion on various topics that could assist libraries in their future planning. Rudasill (2015) notes that the Trend Reports are not static documents; rather, they discuss topical issues that affect the library environment and systems. The idea behind the Trend Report was to ‘engender discussions about how these trends are likely to affect us and explore new approaches to the expanding information society’ (Rudasill 2015: 162). The Trend Reports are mandated to take a broad approach and identify five high-level trends shaping the information society, from access to education to privacy, civic engagement and transformation. However, it is evident that the Trend Reports have never addressed any issues pertaining to the Marrakesh Treaty. This limits advocacy of the implementation of the Treaty. It is only in the ‘IFLA Trend Report 2019 Update’ that the Marrakesh Treaty is mentioned briefly:

as public libraries become connected to the internet, they can become incubators for local content. As countries implement the Marrakesh Treaty, libraries can lead the drive to realise the right of people with print disabilities to equal access to information. (IFLA Trend Report, 2019)

Table 2 gives a summary of all the IFLA Trend Reports and the themes of discussion. This article is

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<th>Year</th>
<th>Conference</th>
<th>Marrakesh papers and presentations</th>
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<tr>
<td>2014</td>
<td>WLIC 80th IFLA Congress and General Assembly, Lyon, France</td>
<td>The role of libraries in the implementation of the Marrakesh Treaty for persons with a print disability (Martinez Calvo)</td>
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<tr>
<td>2016</td>
<td>WLIC 82nd IFLA General Conference and Assembly, Columbus, USA</td>
<td>Implementing the Marrakesh Treaty and facilitating cross-border exchange (Accessible Books Consortium)</td>
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<tr>
<td>2017</td>
<td>WLIC 83rd IFLA General Conference and Assembly, Wroclaw, Poland</td>
<td>The road to ratification: Experiences in developing and transition countries</td>
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<td></td>
<td></td>
<td>The Marrakesh Treaty for visually impaired people: A focus on (public) libraries in Europe</td>
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<td>From Marrakesh to Murrumburrah: The Australian journey to implement the Marrakesh Treaty</td>
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<td></td>
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<td>Creating a model for advocacy towards ratification: A developing country</td>
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<tr>
<td>2018</td>
<td>WLIC 84th IFLA General Conference and Assembly, Kuala Lumpur, Malaysia</td>
<td>The right guide: Making Marrakesh come to life</td>
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<td></td>
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<td>Impact of the WIPO Marrakesh Treaty on international cooperation for library services to persons with print disabilities</td>
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<td>ABC and implementing the Marrakesh Treaty</td>
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<td>Building capacity for Marrakesh Treaty readiness</td>
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<td></td>
<td></td>
<td>The Marrakesh Treaty and stories of librarians in Latin America</td>
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<tr>
<td>2019</td>
<td>WLIC 85th IFLA General Conference and Assembly, Athens, Greece</td>
<td>How does the European Union promote accessible reading?</td>
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<td>Implementing the Marrakesh Treaty, Web Accessibility Directive and European Accessibility Act</td>
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<td>Marrakesh Treaty in a nutshell</td>
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<td>From Marrakesh to Geelong: An Australian case</td>
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<td></td>
<td></td>
<td>Russia and the Marrakesh Treaty</td>
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of the opinion that, although the IFLA Trend Report Updates have had an impact on certain areas of the library sector, they should also encourage contributors to focus on other pertinent issues, such as the Marrakesh Treaty, so as to increase awareness and advocacy globally among librarians. It is as a result of these developments that this article recommends that the IFLA Trend Report Updates should equally consider focusing on topical issues such as the Marrakesh Treaty so as to make all institutions and countries aware of the trending issues behind the Treaty, and also offer reports on empirical progress and successful achievements among institutions that have fully adopted the Treaty.

**Language diversity of IFLA documents**

IFLA is a global organisation with a diverse membership. It is therefore an international organisation that represents all countries globally. The membership of the association cuts across entire continents, which have diverse languages and cultures. Kapnisi (2009) argues that IFLA, as an international organisation, is focused on ensuring that it embraces language diversity. As such, it is more language-diverse than UNESCO: it is a leading international organisation with more language diversity (seven languages) compared to UNESCO (six). Kapnisi claims that IFLA has always taken language diversity to be a key factor. The official languages that IFLA uses at most of its conferences and in most of its documents are Arabic, Chinese, English, French, German, Russian and Spanish. These are the official languages that IFLA members use in meetings, at the headquarters and in its professional bodies and governance structures (Kapnisi, 2009). On the other hand, Parker (2009) points out that IFLA’s communications and website documentation use approximately 54 languages, making it a rich, language-diverse international body. However, from an analysis of IFLA documents on its website, including the IFLA Trend Reports, Marrakesh implementation and monitoring report, and IFLA repository, it is evident that the language of communication is mainly English, with a few exceptions in the other official IFLA languages mentioned above. Kapnisi (2009) notes that the translation of documents into other languages depends on the volunteers, and this explains why most documents are not translated into the diverse languages spoken globally. As such, it is in the interests of this that this article advocates that IFLA should consider having its documents in all global languages if advocacy for the Marrakesh Treaty is to be effective. Most of IFLA’s documents are in English, with a few exceptions in French and German. For wide access to IFLA documents and advocacy of the IFLA mandate, it is imperative for IFLA to consider diversifying further the official IFLA languages – for instance, the absence of Portuguese, Amharic, Bengali, Indonesian and Hindi, among other languages, is a loss for IFLA advocacy campaigns. However, it should also be noted that the current ‘IFLA Strategy 2019–2024’ (IFLA, 2019a) is available in 15 languages (English, Spanish, French, German, Russian, Chinese, Arabic, Bengali, Czech, Korean, Latvian, Lithuanian, Portuguese, Turkish and Urdu), which is a commendable move. In order for wider outreach and dissemination, a diversity in the languages used should be considered. From Figure 3, it is clear that some of the world’s most spoken languages are not popularly used in IFLA documents, and subsequently in its communications. IFLA should therefore consider being all-inclusive and diversify the languages it uses to cater for the wide range of native languages.

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<th>Report</th>
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<tr>
<td>IFLA Trend Report 2016 Update</td>
<td>It is far better to foresee, even without certainty, than not to foresee at all. Libraries, as community-based institutions, can both shape and be shaped by external forces. If we take the time to understand them, we can be pioneers in pushing for stronger, fairer and more participatory societies.</td>
</tr>
<tr>
<td>IFLA Trend Report 2017 Update</td>
<td>We cannot tell what will come in the next 10 years, but we do know that by combining our intelligence, our forces and our voices, we will be best placed to respond.</td>
</tr>
<tr>
<td>IFLA Trend Report 2018 Update</td>
<td>Our societies are facing unprecedented uncertainty and complexity. To respond, information and the libraries that give access to that information are more vital than ever before.</td>
</tr>
<tr>
<td>IFLA Trend Report 2019 Update</td>
<td>Twenty political, economic, social, cultural and technological trends to shape the future of the library field and the communities that libraries serve, as identified by emerging library leaders.</td>
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<th>Table 2. IFLA Trend Reports.</th>
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Establishment of a Marrakesh Treaty section or advisory committee

For effective service delivery, IFLA has the following units: a Governing Board, Advisory Committees, a Council, Review Groups, Divisions, Sections and, finally, Special Interest Groups (see Figure 4). The duties carried out by these units are discussed in this section.

Governing Board. The Governing Board is in charge of the management of IFLA through the development of key strategic priorities, and equally responsible for monitoring and evaluating their progress.

Advisory Committees. There are four Advisory Committees: the Advisory Committee on Copyright and other Legal Matters, the Advisory Committee on Cultural Heritage, the Advisory Committee on Freedom of Access to Information and Freedom of Expression and the Advisory Committee on Standards (members). The Advisory Committees provide expert advice they assist in decision making across the federation. They also respond to requests and questions.

The Council. The Council oversees and supports the work and mandates of the professional units. It is equally charged with the responsibility of advising the Governing Board. It ensures that IFLA’s work is aligned with the IFLA strategy.


Divisions. There are 14 Divisions, of which 6 are Regional Divisions and 8 are Professional Divisions, which are mandated to perform various tasks stipulated by the Sections. The Regional Divisions are as follows: Asia-Oceania, Europe, Latin America and the Caribbean, Middle East and North Africa, North America and Sub-Saharan Africa.

Sections. There are approximately 42 Sections, which include various library tasks and services. As mentioned above, the Sections are categorised into various professional groups. For more information, see the IFLA website.

Special Interest Groups. There are 12 Special Interest Groups, which are unique Sections that are of interest to a few members – they include, for example, LGBTQ Users; Women, Information and Libraries; and LIS Education in Developing Countries. For more information, see the IFLA website.

However, out of all the units, only two – the Advisory Committee on Copyright and other Legal Matters and the Libraries Serving Persons with Print Disabilities Section – discuss and tackle the Marrakesh Treaty. As such, the Treaty receives divided attention, which probably explains why advocacy and awareness levels are still low. This article therefore recommends that in order to give the Marrakesh Treaty the attention it deserves, IFLA should consider establishing either a stand-alone section for the Marrakesh Treaty or a stand-alone advisory committee.
The advantage of having a stand-alone unit or advisory committee would be that the Marrakesh Treaty would have an international advisory board, which would be able to offer a more holistic and global approach in the formulation of guidelines for implementation across the world. The Marrakesh unit would also be able to be involved in frequent presentations during the annual WLIC. WIPO is a good example in this regard; it has been running a campaign for the implementation of the Marrakesh Treaty. Oppenheim (2017) applauds WIPO for its regular and consistent publication of the list of countries that have adopted the Marrakesh Treaty. Due to its well-defined sections and units, WIPO has been able to organise a regular Marrakesh Treaty Assembly since 2016.

**Figure 4. IFLA governance structure.**
Source: IFLA website (ifla.org).

The advantage of having a stand-alone unit or advisory committee would be that the Marrakesh Treaty would have an international advisory board, which would be able to offer a more holistic and global approach in the formulation of guidelines for implementation across the world. The Marrakesh unit would also be able to be involved in frequent presentations during the annual WLIC. WIPO is a good example in this regard; it has been running a campaign for the implementation of the Marrakesh Treaty. Oppenheim (2017) applauds WIPO for its regular and consistent publication of the list of countries that have adopted the Marrakesh Treaty. Due to its well-defined sections and units, WIPO has been able to organise a regular Marrakesh Treaty Assembly since 2016.

**Increase the number of member states in IFLA**
IFLA, although it is a global and international organisation, does not have all countries across the globe as members. Currently, there are 150 member countries in IFLA, whereas there are 195 countries in the world. For the Marrakesh Treaty to be enjoyed worldwide, and also for IFLA to be visualised as a truly global international organisation, there is the need for IFLA to have every country in the world as a member.

**Publication of case studies on the Marrakesh Treaty**
Research is one of the scientific fields that is recognised for its significance role in either solving problems or explaining existing phenomena. The publication and dissemination of research findings is a
great avenue for advocacy and the creation of awareness. IFLA has been involved in the publication of research and it could take advantage of this avenue to popularise its role with regard to the Marrakesh Treaty. Equally, the role of IFLA is to engage researchers in the publication of case studies on topical issues affecting libraries and the profession. However, since the ratification of the Marrakesh Treaty, only three research papers have been presented at the IFLA WLIC on the topic of the Marrakesh Treaty: ‘The Marrakesh Treaty for visually impaired people: A focus on (public) libraries in Europe’ (Bonnet, 2017); ‘Activities of the IFLA Section on Library Services to People with Special Needs’ (Bolt, 2018); and ‘The role of libraries in the implementation of the Marrakesh Treaty for persons with a print disability’ (Martín Calvo, 2014). It is advised that more research and case studies that are presented at the IFLA WLIC are published so that institutions and governments are able to learn from one another’s experiences.

**Competency-based needs of libraries**

Although the ratification of the Marrakesh Treaty was a good idea, the question here is whether libraries are ready to provide services for the visually impaired? IFLA should advocate for the competency training of libraries and librarians so that the implementation of the Marrakesh Treaty can easily be executed in member countries. Kiruki (2018), in her study on disability and visual impairment in public universities in Kenya, argues that very few librarians have the competency-based skills to deal with the visually impaired.

**Development of a library policy document on the Marrakesh Treaty**

IFLA, having played a key role in the development of the Marrakesh Treaty, could work with individual institutions or working groups to develop a prototype library policy document on the Marrakesh Treaty to be adopted by member institutions. Just like the ‘Getting started’ guide and the tool kit Coates et al. (2018), the Marrakesh policy would play a significant role, especially for institutions in the developing world that have little idea of or knowledge about the Marrakesh Treaty. The policy document could equally serve as an advocacy tool for member institutions for their stakeholders and parent organisations. Kiruki (2018) observes that most university libraries lack a stand-alone policy for people with visual impairments, and it is therefore difficult for them to provide the appropriate services.

**Conclusion**

The Marrakesh Treaty is one of the greatest achievements in enhancing access to information for the blind and visually impaired. IFLA has always been at the forefront in advocacy for and championing the implementation of the Treaty. This is evidenced by IFLA’s Libraries Serving Persons with Print Disabilities Section and the Advisory Committee on Copyright and other Legal Matters. Mann (2001) indicated that the IFLA Libraries for the Blind Section aspired to develop a ‘virtual World library of alternative formats’. It was the hope that if IFLA managed to realise the concept, it would be able to eradicate the national border limitations imposed by different countries’ legislation.

With the Marrakesh Treaty in place, IFLA can continue to work with libraries through its various sections and activities to realise free and easily accessible formats for visually impaired people, thereby eliminating the inequality in the access to information and also enhancing innovation practices in libraries. For great achievements and the realisation of the benefits of the Marrakesh Treaty, libraries and national associations need to collaborate with IFLA in their activities to share experiences and also advance in their roles. IFLA, as the leading international body that represents the interests of libraries, is the only avenue where most library agendas and activities can have global representation. With globalisation and advancements in technology, it is only IFLA that can give libraries true global representation with regard to the development, innovation and application of new technologies.

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Author biographies

Fredrick Otike holds a Master’s in Information Sciences (Library and Information Studies) from Moi University and a Bachelor of Arts in Education from Kenyatta University, Kenya. He has authored more than 20 research papers and presented several research papers at international conferences. His research interests are in innovation practices in academic libraries, reading culture and readership, information literacy, contemporary issues in academic libraries and library research. He was recognised in 2014 as one of the unsung heroes by Research4Life for exemplary work in academic libraries in Kenya in improving access to online research. He has been involved in several international collaboration projects for improving library services and enhancing library readership, including the Lib@web project (University of Antwerp, Belgium, 2012), the UNILEAD Programme (Carl von Ossietzky University, Oldenburg, Germany, 2016), the Digital Reading for Inclusivity, Versatility and Engagement project (Bournemouth University, UK) and a Kenya initiative project (2020). Currently, he is pursuing his PhD at Eötvös Loránd University, Hungary.

Ágnes Hajdu Barát is a professor in the Department of Library Science at Eötvös Loránd University, Hungary. She is president of the Association of Hungarian Librarians, a member of the IFLA Governing Board (2015–2019), an IFLA Regional Division Committee member (Europe) (2021–present), an IFLA KM SC Knowledge Management Section member (2005–present), an IFLA Building Strong Library and Information Science Education (BSLISE Working Group member (2020–present) and a member of the UDCC (Universal Decimal Classification Consortium) Executive Committee and the International Society for Knowledge Organization’s Scientific Advisory Council. Her research interests include the epistemological issues of knowledge organisation, library and knowledge management, librarian education and further education, sustainability, interdisciplinarity, visualisation of information, and the history of public libraries in the 19th and 20th centuries. She has written approximately 280 articles, 18 books and over 200 conference papers in areas ranging from knowledge organisation to library management.
**Abstracts**

**The Dutch library system past, present and future**

نظام المكتبات الهولندية في الماضي والحاضر والمستقبل

Si. ثم كيرمان، والجامعة الوطنية الهولندية المنظمة للمؤتمر العالمي للمكتبات والمعلومات 2023

ملة الإفلا، 49-2

**Academic libraries’ main strategies and services during covid-19 pandemic**

أهم استراتيجيات المكتبات الأكاديمية وخدماتها في أثناء جائحة كوفيد

رياض ديل ك، وسمية أوتيم

ملة الإفلا، 49-2

**“Libraries model sustainability”: Library contributions to UN Sustainable Development Goals**

"نموذج المكتبات: مساهمات المكتبات في تحقيق أهداف التنمية المستدامة"

المملكة للأمم المتحدة

لي ان كوكويا كوكويا، بيروك دويل، وكريستوفر سير، وبيغي غاغر، وجوان كارتر

ملة الإفلا، 49-2

**Green initiatives towards environmental sustainability: Insights from libraries in Kenya**

علومات خضراء من أجل الاستدامة البيئية: رؤى ثاقبة من مكتبات كينيا

أرنولد موانزا، أميلي ك بويريس، داماريس أوديرو

ملة الإفلا، 49-2
البحث عن المعلومات على الإنترنت في أثناء جائحة كوفيد-19: تحليلات قطرية شاملة

المجلة الإلكترونية: 4-9-2

المتلقين: 2-49

المسلخ:

تهدف هذه الدراسة إلى دراسة أوضاع البحث على الإنترنت عن معلومات تتعلق بفيروس كورونا في الدول العربية. هدف الدراسة هو تحليل الحالات المتوقعة من فيروس كورونا في الدول العربية والتأثير على حلقات البحث في جميع أنحاء العالم. ولذلك فان البحث عن المعلومات المتضمنة على الإنترنت عن الفيروس كورونا في المواقع الإلكترونية العربية والعالمية يمكن استخدامه كمصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة. ولذلك فإن البحث عن المعلومات المتضمنة على الإنترنت عن الفيروس كورونا في المواقع العربية يمكن استخدامه كمصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة.

Spread of misinformation during covid-19: The case of Mauritius

انتشار المعلومات المتضمنة في آثار كوفيد-19: حالة موريتius

المسلخ:

نظراً لانتشار كوفيد-19، لم يعد سريعاً في الشتاء، بل تعد هذه الموجة تحمل معها العديد من التحديات والمخاطر. وتعد المعلومات المتضمنة على الإنترنت في بعض الدول العربية مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة. ولذلك فإن البحث على الإنترنت عن المعلومات المتضمنة على الإنترنت يشكل مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة. ولذلك فإن البحث على الإنترنت عن المعلومات المتضمنة على الإنترنت يشكل مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة.

Effects of covid-19 on Sub-Saharan African library associations

آثار كوفيد-19 على جمعيات المكتبات في أفريقيا جنوب الصحراء

المسلخ:

تعد الجماعات المدنية في أفريقيا جنوب الصحراء مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة على الإنترنت. ولذلك فإن البحث على الإنترنت عن المعلومات المتضمنة على الإنترنت يشكل مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة. ولذلك فإن البحث على الإنترنت عن المعلومات المتضمنة على الإنترنت يشكل مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة.

Accessing special collections during covid-19 in university libraries in Nigeria

الوصول إلى المجموعات الخاصة في المكتبات الجامعية في نيجيريا في أثناء كوفيد-19

المسلخ:

بصفة عامة، فإن المعلومات المتضمنة على الإنترنت في المواقع العربية يمكن استخدامها كمصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة. ولذلك فإن البحث على الإنترنت عن المعلومات المتضمنة على الإنترنت يشكل مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة. ولذلك فإن البحث على الإنترنت عن المعلومات المتضمنة على الإنترنت يشكل مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة.

Online information seeking during COVID-19 pandemic: A cross-country analysis

بحث internet عن المعلومات على الإنترنت في فترة كوفيد-19: دراسة متعددة البلدان

المسلخ:

تستخدم المعلومات المتضمنة على الإنترنت في المواقع العربية كمصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة. ولذلك فإن البحث على الإنترنت عن المعلومات المتضمنة على الإنترنت يشكل مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة. ولذلك فإن البحث على الإنترنت عن المعلومات المتضمنة على الإنترنت يشكل مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة.

атор كوفيد-19، ونتوقع أن تؤثر هذه الموجة على حلقات البحث في جميع أنحاء العالم. ولذلك فإن البحث على الإنترنت عن المعلومات المتضمنة على الإنترنت يشكل مصدر موثوق للدلالات أو الاتهامات أو التصريحات المتضمنة.
The legitimacy of Scandinavian LAMs as public spheres: Views from the professionals

Abstracts

Continuing professional development in Cambodia: Perspectives of different stakeholders

How do Asian international students use an Australian university library?
Assessing LIS graduates’ skills and knowledge against 21st century employability demands

Taiman Hashim, University of Delhi

Abstract

This study was carried out to assess the skills and knowledge of LIS graduates against the 21st century employability demands. A descriptive research design was adopted for the study. The sample consisted of 40 LIS graduates of a University in India. The study revealed that LIS graduates are not well equipped to meet the current job market demands.

The power of information and coping with albinism: An auto-ethnographic study

Lusia Musa, University of Zambia

Abstract

The study aimed to explore the lived experiences of albinos and to provide insights into the strategies and coping mechanisms used by albinos. The research utilized an auto-ethnographic approach to analyze data collected from semi-structured interviews with albinos. The findings highlighted the challenges faced by albinos in accessing education and employment, as well as the strategies they employed to overcome these challenges.
**“Libraries model sustainability”: Library contributions to UN Sustainable Development Goals**

“图书馆模式的可持续性”：图书馆对实现联合国可持续发展目标做出的贡献

林恩·康纳威(Lynn S. Connaaway)、布鲁克·道尔(Brooke Doyle)、克里斯托弗·西尔(Christopher Cyr)、佩吉·加拉格尔(Peggy Gallagher)、乔安妮·坎特雷尔(Joanne Cantrell)

IFLA Journal, 49–2, 269-285

**摘要：**

我们对全世界1700多名图书馆工作人员进行了一项调查。调查清楚地显示，高校图书馆在可持续发展目标的采纳、贡献和使用方面存在相似之处。图书馆工作人员围绕选定的五个可持续发展目标展开了大量工作。有些活动是工作人员将可持续发展目标纳入其战略规划的结果；此外，这些活动源于工作人员在履行任务时所制定的规划。大多数受访者尚未将可持续发展目标纳入其战略规划。然而，图书馆对可持续发展目标的支持可以作为参与者的活动和受访者的访谈中体现出来。本文提到的这些活动能够帮助图书馆做出更好的战略规划，并使图书馆工作人员最大限度地扩大图书馆对可持续发展的影响。

**The Dutch library system past, present and future**

荷兰图书馆系统的过去、现在和未来

西奥·坎普曼(Theo C.M. Kemperman)，2023年国际图联世界图书馆和信息大会荷兰组委会

IFLA Journal, 49–2, 263-268

**摘要：**

在本文中，2023年国际图联世界图书馆和信息大会荷兰组委会简要介绍了荷兰图书馆系统的情况，包括它的起源和历史，重点强调了荷兰图书馆——从地方公共图书馆到国家图书馆和高校图书馆等大型机构——在近代发展中的作用。本文还特别关注了荷兰公共图书馆以及书店和教育机构与其他伙伴关系的合作、广泛阅读的运营模式。

我们的图书馆致力于打造一个更加包容的社会，让每个人都能获得参与机会，并得到归属感。我们为自己所取得的进步感到自豪，同时渴望实现对未来的抱负。想了解更多吗？欢迎参加今年8月在鹿特丹举行的2023年国际图联世界图书馆和信息大会。

**Academic libraries’ main strategies and services during covid-19 pandemic**

新冠病毒大流行期间高校图书馆的主要战略与服务

雷扎·拉贾巴利·贝格洛(Reza Rajabali Beglou)、索马耶·阿卡施克(Somaye Akhshik)

IFLA Journal, 49–2, 286-297

**摘要：**

本研究旨在明确和评估新冠病毒大流行期间高校图书馆开展的最重要的活动。本研究利用定性分析方法，探索疫情期间支持教育科研活动以及社会责任的服务。我们从世界顶尖的大学中随机选取了301所并对其进行了分析。研究结果表明，图书馆在支持教育科研活动方面采取了四种战略：开发新的服务和活动、加强以往的服务和活动、改革以往的服务和活动以及支持新冠病毒疫情研究。社会责任领域包含七个子领域：记录事件、创建指南、公众前意识、新冠病毒谣言与现实、身心健康方案、提供有关疫情的实用信息，以及提供有关疫情的医疗信息。随着大流行的持续，本文提供的经验可以帮助图书馆在当前危机
Effects of covid-19 on Sub-Saharan African library associations

新冠病毒疫情期间对撒哈拉以南非洲地区图书馆协会的影响

康福特·阿萨雷(Comfort A.B. Asare)、塞缪尔·本迪尔·阿格里(Samuel Bentil Aggrey)
IFLA Journal, 49–2, 315-327

摘要：
专业协会是会员机构的支柱，旨在为会员谋求福祉，并制定标准和原则来指导其活动。本文针对撒哈拉以南非洲地区的10个国家级图书馆协会开展了定量研究，着眼于国家级图书馆协会开展的活动，以及它们如何受到新冠病毒疫情的影响。调查结果显示，大多数协会不得不推迟其年会和持续开展的职业教育项目。研究建议撒哈拉以南非洲国家的国家级图书馆协会利用技术平台，在组织会议和培训项目时与会员保持更好的沟通。此外，国家级图书馆协会应制定一项政策，确保在未来再次发生大流行时能够继续开展活动。

Green initiatives towards environmental sustainability: Insights from libraries in Kenya

环境可持续性的绿色倡议：来自肯尼亚图书馆的启示

阿诺德·姆万祖(Arnold Mwanzu)、艾米丽·博西尔(Emily K Bosire)、达马里斯·奥德罗(Damaris Odero)
IFLA Journal, 49–2, 298-314

摘要：
环境保护是日益紧迫的全球性问题。臭氧层破坏、温室效应、全球气候变化和全球变暖都是日益严重的环境问题。越来越多拥有环保意识的消费者投身绿色环保活动和绿色运动，提出解决方案并呼吁消费者、企业和政府在各个领域积极主动地加入绿色环保事业。图书馆也不例外。
尽管绿色图书馆的概念非常重要，但在非洲地区，特别是肯尼亚的图书馆，人们对绿色图书馆知之甚少。与其他一些发展中国家一样，由于气候变化带来的不利影响，肯尼亚采取各种方式来应对这一问题。探索图书馆如何规划可持续的未来变得尤为重要。为此，本文旨在探讨肯尼亚采用绿色图书馆概念实现环境可持续性，以期提出指导图书馆走向绿色环保的战略。研究采用了定性方法，有针对性地从肯尼亚227家高校、公共和专业图书馆中抽取了12家作为样本；同时采用半结构化访谈的方式收集数据，辅以观察结果和文件审查，并使用基础理论进行分析。调查结果表明，肯尼亚的图书馆在这个其上级机构的指导下，根据其对绿色概念的理解，通过采纳并实施绿色环保的实践以及制定战略来加强绿色图书馆和促进环境可持续性。他们主要通过更新设计和更新服务来满足不断变化的用户需求，以符合绿色图书馆标准。研究结果表明，肯尼亚图书馆员了解绿色建筑概念，并采取了不同的环保举措。本研究提出了图书馆全面推进绿色发展的三个战略：用户积极参与绿色倡议；完善绩效和增长衡量指标；遵循国际图联环境、可持续发展及图书馆专业组的绿色图书馆清单所述内容开展工作。

Online information seeking during COVID-19 pandemic: A cross-country analysis

新冠病毒大流行期间的在线信息查询：跨国分析

马哈茂德·霍斯罗杰迪(Mahmood Khosrowjerdi)、塞西莉亚·布莱克·菲尔金(Cecilia Black Fyliking)、内达·泽拉特卡尔(Neda Zeraatkar)
IFLA Journal, 49–2, 328-344

摘要：
本文旨在调查2020年9月来自10个国家的用户在网络上搜索与冠状病毒相关的信息的模式。作者从Google Trends获取了2020年全年所有样本国家的搜索结果，关键词包括“COVID-19”(新冠病毒)和“coronavirus”(冠状病毒)两个词及其变体。结果显示，由于搜索冠状病毒相关信息时所使用语言的优先级不同，因此存在差异。民众对冠状病毒相关信息的关注时间跨度相对较短(约一个月)。这个结果支持了信息披露激进模型的假设，即产生负面影响的信息不受用户欢迎。这些发现对政府和卫生机构具有实际意义，例如，在大流行的新几个月为公民提供信息服务，并将其作为公民的首选信息来源。

Spread of misinformation during covid-19: The case of Mauritius

新冠病毒疫情期间错误信息的传播：以毛里求斯为例

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IFLA Journal, 49–2, 345-356

摘要：
新冠病毒疫情期间错误信息的传播：以毛里求斯为例
Accessing special collections during covid-19 in university libraries in Nigeria

关键词：疫情期间；尼日利亚大学；图书馆特藏；获取

塞特德·安威利毕曼泽·奥米卢佐（Saturday Unwelegbemenwe Omeluzor）、菲洛梅纳·格贝米—奥贡莱（Philomena F. Gbemi-Ogunleye）、阿希米·阿基布·阿拉雷普（Asimi Akibu Alarape）、拉蒂夫·阿哈吉·贝洛（Lateef Alhaji Bello）

IFLA Journal, 49–2, 357-367

摘要：

新冠病毒疫情期间，特别是在疫情期间，图书馆特藏的获取便利性是图书馆及其用户关注的问题。与图书馆的其他信息来源相比，特藏的性质较为特殊。因此，本文调查了新冠病毒疫情期间尼日利亚南部地区大学图书馆特藏的获取便利性。研究对象包括该地区联邦、州和私立大学的233名图书馆员。研究采用问卷调查的方式，共有197人填写了问卷。调查结果表明，疫情期间，图书馆可以借助图书馆网站、机构知识库、光盘和云盘等方式访问图书馆特藏。该研究揭示了疫情期间影响尼日利亚大学图书馆特藏获取的一些挑战，并为在新冠病毒疫情期间加强特藏获取的便利性提出了实用建议。

How do Asian international students use an Australian university library?

关键词：国际学生；澳大利亚大学图书馆

克莱尔·欧德威尔（Clare P.O'Dwyer）

IFLA Journal, 49–2, 375-383

摘要：

本文研究发现，亚洲国际学生使用澳大利亚大学图书馆的使用情况与以往相比有所变化。在新冠病毒大流行之前，这种多样性出现的原因在于欧洲、澳洲、新西兰、英国和加拿大的大学国际留学生数量增加。本文指出，西方大学图书馆对亚洲留学生的不同信息需求、文化背景、信息获取习惯和学习风格缺乏全面的了解。因此，大学图书馆可能没有在战略上与大学的国际化目标保持一致。对亚洲留学生的经历缺乏了解可能会削弱他们的幸福感，影响学业成就。此外，这种适应不足可能会使大学，如澳大利亚大学，面临无法满足国家监管合规要求的风险。本文对有关亚洲留学生使用澳大利亚大学图书馆的文献进行了系统的综述，并介绍了一个有关使用澳大利亚大学图书馆的动态体验的研究项目。本文概括了有关在澳大利亚大学就读的亚洲留学生的经历、信息检索行为、跨文化程度、沟通技能以及对澳大利亚大学图书馆的期望的文献，并整理、汇总了研究这些问题的专家、使用的研究方法以及研究主体等。最后，本文还讨论了在积极争取留学生回校的后疫情时代图书馆和其他服务领域了解亚洲留学生需求的新机遇。

The legitimacy of Scandinavian LAMs as public spheres: Views from the professionals

关键词：斯堪的纳维亚图书馆；档案馆；博物馆；公共领域

霍康·拉森（Håkon Larsen）、南娜·坎纳—拉斯穆森（Nanna Kann-Rasmussen）、克里斯汀·吕德贝克（Kerstin Rydebeck）

IFLA Journal, 49–2, 368-374

摘要：

本文分析了图书馆、档案馆和博物馆专业人员如何利用稀缺的社会资源来维护各自的组织，并特别强调了它们作为公共领域基础设施的作用。作者利用丹麦、挪威和瑞典的图书馆、档案馆和博物馆专业人员提供的调查数据，研究这些机构的专业人员对其组织作为公共领域的期望是否相似。分析结合了三个国家现行的图书馆、档案馆和博物馆法律文件。作者得出结论，尽管三个国家在国家层面上针对图书馆、档案馆和博物馆的立法有所不同，但仍然存在许多相似之处。本文是从从公共治理作为一种主导治理制度的角度来进行阐述。

The legitimacy of Scandinavian LAMs as public spheres: Views from the professionals

关键词：瑞典；档案馆；博物馆；公共领域

霍康·拉森（Håkon Larsen）、南娜·坎纳—拉斯穆森（Nanna Kann-Rasmussen）、克里斯汀·吕德贝克（Kerstin Rydebeck）

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Continuing professional development in Cambodia: Perspectives of different stakeholders

柬埔寨的持续职业发展：不同利益相关方的视角

吉娜·德·阿尔维斯·贾亚苏里亚(Gina de Alwis Jayasuriya)、沙欣·马吉德(Shaheen Majid)

IFLA Journal, 49-2, 384-406

摘要：

本文旨在收集提供培训方与图书馆员工对柬埔寨现有的持续职业发展机会和相关障碍的看法。研究共进行了26次半结构化访谈，其中14次面向提供培训方，12次面向图书馆员工。本文共确定了四项关键障碍：缺乏持续的职业发展机会；无法满足真正的培训需求，在其他城市参加培训所面临的挑战，如差旅、住宿和请假；以及缺乏执行持续职业发展计划的人力资源。建议从四个方面加以改进：提供定期培训课程；开展培训需求评估研究；组织国家级会议，讨论图书馆工作人员发展问题；以及开发图书馆情报学系统，以支持持续职业发展框架。本研究的结果预计将为柬埔寨图书馆情报学领域制定持续职业发展计划提供参考。

Assessing LIS graduates’ skills and knowledge against 21st century employability demands

根据21世纪的就业需求评估图书馆情报学硕士毕业生的技能和知识

穆罕默德·卡西姆(Mohamed Kassim)、科库伯瓦·卡图齐·莫莱尔(Kokuberwa Katunzi-Moller)、科莉法·姆万提姆瓦(Kleefa Mwantimwa KM)

IFLA Journal, 49-2, 407-418

摘要：

由于科技的巨大进步，毕业生、雇主和社会的需求正在发生变化。本研究评估了雇主和社会所需的信息资源评估能力与知识。本文采用了定性和定量研究方法的混合面描述性研究设计。研究样本取自2005年至2020年期间从达累斯萨拉姆大学毕业的图书馆情报学硕士。收集数据的方法包括问卷和访谈。作者采用描述性统计和主题分析法对数据进行分析。结果表明，硕士课程并不能完全满足毕业生、雇主和社会的所有期望和需求。但研究显示课程内容与当前就业市场需求之间的不匹配，建议定期评估硕士课程设置，从而有效地整合21世纪所需的能力和素质，满足当前就业市场的需求。

Students’ perceptions of user education programmes at a South African University

南非大学生对用户教育课程的看法

佩特鲁斯·奇亚(Petrus Chiya)、奥姆沃约·邦泽尔·奥尼扬查(Omwoyo Bosire Onyancha)、伊菲阿尼·埃泽马(Ifeanyi Ezema)

IFLA Journal, 49-2, 419-431

摘要：

大学新生缺乏利用、评估、使用和创造信息来实现教育、职业、社会和个人信息目标的实用和复杂技能。本研究旨在探讨南非西北大学学生对用户教育课程的看法。研究采用结构化问卷调查，从两个学院的320名学生中收集数据。研究结果显示，大多数大一新生都参加过不同的用户教育课程，其中80.7%的学生表示他们在课程的内容和质量感到满意。超过90%参与课程的学生表示自己有效搜索信息的能力有所提高，在完成作业的过程中准确引用和查阅信息的技能也有所增强。大多数学生可以在不向图书馆员求助的情况下独立检索信息和资源。本文据此得出了相关结论，并根据研究结果提出了建议。

The power of information and coping with albinism: An auto-ethnographic study

信息的力量与应对白化病：一项自我民族志研究

安娜·恩古拉(Anna K Ngula)

IFLA Journal, 49-2, 432-442

摘要：

本文旨在找出作者在其患有白化病的孩子出生时检索信息的目的，并探讨她检索信息的方法以及面对的挑战。作者用自我民族志的方法分享了她与白化病患者一起生活的经历，这些数据来自她的个人记忆——她回忆了2013年生下女儿和2016年生下儿子时发生的情况。信息帮助作者更好地理解白化病和应对困境方面的至关重要的作用。作为一名图书管理员和白化病儿童的母亲，作者探索了检索信息的不同机制。互联网是信息的主要来源，还有一些组织，如纳米比亚白化病患者援助机构和纳米比亚白化病协会信托基金会，它们为本国的白化病病人解决了很多难题。
Developing research data management services in a regional comprehensive university: The case of Central Washington University

傅平 (Ping Fu)、莫里斯·布莱克森 (Maurice Blackson)、毛拉·瓦伦蒂诺 (Maura Valentino)
IFLA Journal, 49–2, 443-451

摘要：本研究旨在分析区域综合性大学研究人员对研究数据管理服务的需求；讨论在大学开发研究数据管理项目的不同选择，并为大学图书馆提出一个为期三年的阶段性实施计划。研究采用的方法是设计一项调查，对研究人员收集信息，并评估他们对研究数据管理服务的需求。结果表明，区域综合性大学研究人员的需求可能与研究型大学的研究人员截然不同。此外，研究结果验证了一个假设：区域综合性大学的研究人员欢迎图书馆为研究社群提供数据托管服务。因此，本研究提出了一个为期三年的阶段性实施计划。这项研究的意义在于，它可以为计划开发研究数据管理项目的区域综合性大学提供一些见解和实用信息。

IFLA’s role in the implementation of the Marrakesh Treaty

弗雷德里克·奥蒂克 (Frederick Oti)、阿涅斯·哈耶杜·巴拉特 (Agnes Hajdu Barat)
IFLA Journal, 49–2, 452-466

摘要：本文批判性地分析了国际图联在会员国图书馆通过和执行《马拉喀什条约》方面的重要作用，同时强调了影响条约执行的挑战和障碍。文中提到，尽管签署了《马拉喀什条约》，但会员国在执行该条约方面遇到了阻力。不管怎样，本文承认国际图联在执行条约方面发挥的重要作用，包括作为全球图书馆的代表，在咨询和倡导以及外联服务方面发挥的作用。最后，文章讨论并提出了多种建议：例如，国际图联应该吸引更多的国家加入联合会；具有广泛的语言多样性；开发胜任力技能和培训；经常举办关于《马拉喀什条约》的会议和研讨会。

The Dutch library system past, present and future

[Le système bibliothéconomique néerlandais: passé, présent et avenir]

Theo C.M. Kemperman and the Dutch National Organizing Committee for WLIC 2023
IFLA Journal, 49–2, 263-268
Résumé: Dans cet article, le comité national néerlandais du Congrès de l’IFLA WLIC 2023 présente une vue d’ensemble du système bibliothéconomique néerlandais actuel. Il décrit brièvement ses origines avant d’examiner de plus près le rôle des bibliothèques néerlandaises au vingt-et-unième siècle, qu’il s’agisse de bibliothèques publiques locales à travers le pays ou de plus grandes institutions telles que la bibliothèque nationale des Pays-Bas et des bibliothèques universitaires. L’article accorde aussi une attention particulière au modèle néerlandais dans le cadre duquel bibliothèques publiques et librairies collaborent étroitement avec des établissements d’enseignements et d’autres partenaires afin de promouvoir la lecture.

Nos bibliothèques veulent contribuer à une société plus inclusive, dans laquelle chacun a la possibilité de participer et est invité à le faire. Nous sommes fiers des progrès accomplis et désireux de concrétiser nos ambitions pour le futur. Si vous souhaitez en savoir plus, rejoignez-nous en participant au congrès de l’IFLA WLIC 2023 à Rotterdam en août prochain.

“Libraries model sustainability”: Library contributions to UN Sustainable Development Goals

[Modèle de durabilité des bibliothèques: contributions des bibliothèques aux Objectifs de développement durable de l’ONU]

Lynn S Connaway Connaway, Brooke Doyle, Christopher Cyr, Peggy Gallagher, Joanne Cantrell
IFLA Journal, 49–2, 269-285
Résumé: Une étude portant sur plus de 1700 employés de bibliothèques à travers le monde a identifié la façon dont les bibliothèques contribuent à cinq des Objectifs de développement durable de l’ONU. Elle fait apparaître les similarités dans la façon dont les bibliothèques universitaires et publiques ont adopté, utilisé et
contributed to these objectives. The results indicate that the personnel bibliothécaire effectue un travail considérable à l’égard de tous ces cinq Objectifs de développement durable. Dans certains cas, les activités résultent de l’intégration de ces objectifs dans un planning stratégique, alors que dans d’autres, elles résultent d’un programme effectué par le personnel bibliothécaire dans le cadre de leur mission. La plupart des participants à l’étude n’ont pas intégré les Objectifs de développement durable dans leur planning stratégique. Cependant, le fait que les bibliothèques soutiennent ces objectifs est démontré par les activités menées par leur personnel ainsi que par les commentaires des personnes interrogées. Les activités identifiées ici peuvent être utilisées comme base d’informations pour le planning stratégique des bibliothèques et afin d’aider le personnel bibliothécaire à maximaliser l’impact de leur bibliothèque en matière de développement durable.

**Academic libraries’ main strategies and services during covid-19 pandemic**

**[Principales stratégies et principaux services des bibliothèques universitaires durant la pandémie de COVID-19]**

**Reza Rajabali Beglou, Somaye Akhshik**

*IFLA Journal, 49–2, 286-297*

**Résumé:**

Cette étude s’est consacrée à identifier et évaluer les principales activités des bibliothèques universitaires pendant la pandémie de COVID-19. Elle a utilisé une analyse qualitative du contenu pour déterminer quels étaient les services de soutien à l’éducation et à la recherche, ainsi que les responsabilités sociales lors de la crise. Trois cent une universités parmi les plus prestigieuses du monde ont été sélectionnées au hasard et analysées. Les résultats montrent que les bibliothèques ont utilisé quatre stratégies pour soutenir l’éducation et la recherche: la création de nouveaux services et de nouvelles activités, le développement de services et d’activités déjà existants, la modification de services et d’activités en place, et le soutien à la recherche consacrée à la COVID-19. Sept stratégies annexes ont été identifiées en matière de responsabilités sociales: documentation d’événements, préparation de directives, sensibilisation du public, rumeurs et faits réels à propos de la COVID-19, programmes consacrés à la santé physique et mentale, communication d’informations utiles à propos de la COVID-19 et fourniture d’informations médicales à propos de la COVID-19. Alors que la pandémie se poursuit, les expériences présentées dans cet article peuvent aider à proposer des services bibliothécaires pendant la crise en cours et être utilisées lors de futures crises similaires.

**Green initiatives towards environmental sustainability: Insights from libraries in Kenya**

**[Initiatives vertes pour une durabilité environnementale: les expériences de bibliothèques kenyanes]**

**Arnold Mwanzu, Emily K Bosire, Damaris Odero**

*IFLA Journal, 49–2, 298-314*

**Résumé:**

La protection de l’environnement est un problème de plus en plus urgent au niveau mondial. Appauvrissement de la couche d’ozone, effet de serre, changement climatique mondial et réchauffement climatique sont des problèmes environnementaux de plus en plus préoccupants. Le nombre croissant de consommateurs conscients de l’environnement a suscité de nombreuses campagnes et un mouvement écologique, ainsi que des solutions et des appels aux consommateurs, aux entreprises et aux gouvernements afin qu’ils adoptent à tous les niveaux une démarche écologique plus proactive. Les bibliothèques ne font pas exception à la règle. Bien que ce sujet ait une grande importance, on en sait peu à propos de la notion de bibliothèque « verte » dans le contexte africain et au sein des bibliothèques kenyanes. Comme d’autres pays en développement, le Kenya a réagi diversement aux impacts négatifs du changement climatique. Il est important de déterminer comment les bibliothèques font des projets pour un avenir durable. Par ailleurs, cette étude examine l’adoption de la notion de « bibliothèque verte » au Kenya en vue d’une durabilité environnementale, afin de proposer des stratégies pouvant aider les bibliothèques à devenir vertes. L’étude a adopté une approche qualitative. Un échantillon de 12 bibliothèques a été sélectionné intentionnellement parmi 227 bibliothèques universitaires, publiques et spécialisées au Kenya. Les données ont été collectées au moyen d’entretiens semi-structurés, complétées par l’observation et l’examen de documents, puis analysées en utilisant une théorie fondée sur les faits. Les résultats montrent que les bibliothèques au Kenya, sous l’égide des organisations qui les encadrent, ont tiré parti de leurs connaissances des notions d’écologie en adoptant et mettant en œuvre...
Online information seeking during COVID-19 pandemic: A cross-country analysis

[Recherche d’informations en ligne pendant la pandémie de COVID-19: une analyse portant sur plusieurs pays]

Mahmood Khosrowjerdi, Cecilia Black Fylking, Neda Zeraatkar

IFLA Journal, 49–2, 328-344

Résumé:

Spread of misinformation during covid-19: The case of Mauritius

[La diffusion de fausses informations pendant la pandémie de COVID-19: le cas de l’île Maurice]

Ambareen Beebeejaun

IFLA Journal, 49–2, 345-356

Résumé:
Alors que la COVID-19 continue à se répandre rapidement à travers le monde, il est impératif de réguler le contenu des informations, de façon à ce que les personnes aient accès à des informations exactes. Néanmoins, on peut craindre que les gouvernements abusent de la législation pour limiter la liberté des pratiques vertes et en proposant des stratégies pour améliorer les bibliothèques écologiques et promouvoir la durabilité environnementale. Elles l’ont fait principalement grâce à de nouveaux concepts et à la rénovation, afin de répondre à l’évolution des exigences des utilisateurs tout en respectant les normes environnementales pour les bibliothèques. L’étude constate en conclusion que les bibliothécaires kényans comprennent les notions d’éco-construction et ont adopté diverses initiatives vertes, en partie cependant pour se repositionner et maintenir globalement leur statut. L’étude propose trois stratégies pour une stratégie verte intégrale: l’implication active des utilisateurs dans des initiatives écologiques, l’amélioration des performances et le développement des indicateurs de mesure, et enfin la mise en place de normes environnementales pour les bibliothèques, conformément à la check-list de la section de l’IFLA chargée de l’environnement, du développement durable et des bibliothèques (ENSULIB).

Effects of covid-19 on Sub-Saharan African library associations

[Conséquences de la COVID-19 pour les associations bibliothécaires subsahariennes]

Comfort A.B. Asare, Samuel Bentil Aggrey

IFLA Journal, 49–2, 315-327

Résumé:
En Afrique et dans le monde, les associations professionnelles apportent un soutien essentiel à leurs membres. Elles contribuent à leur bien-être et mettent en place des normes et des principes pour guider leurs activités. Il s’agit ici d’une étude quantitative portant sur 10 associations bibliothécaires nationales en Afrique subsaharienne. L’étude s’intéresse à certaines des activités de ces associations et à la façon dont elles ont été impactées par l’épidémie de COVID-19. Les résultats montrent que la majorité des associations ont dû reporter leurs conférences annuelles et leurs programmes de formation professionnelle continue. L’étude recommande que les associations bibliothécaires nationales d’Afrique subsaharienne tirent parti des plateformes technologiques pour s’adresser à leurs membres en organisant des conférences et des programmes de formation. Ces associations devraient aussi mettre en place une stratégie afin de pouvoir poursuivre leurs activités en cas d’une nouvelle pandémie future.

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d’expression et que la pandémie soit simplement utilisée comme une excuse pour entraver encore plus la liberté de parole. C’est donc dans la perspective des droits de l’homme que cette étude examine d’un œil critique les approches adoptées par les autorités mauriciennes pour faire face à la désinformation pendant la pandémie de COVID-19. Dans le cadre de cette étude, les lois portant sur la désinformation sont évaluées de manière critique et une analyse comparative est faite à propos des réactions internationales à l’égard de la désinformation pendant la pandémie de COVID-19. Il est remarqué que la loi seule ne suffit pas à gérer la désinformation, et qu’une bonne compréhension des médias de la part des citoyens est aussi essentielle dans cette démarche.

**Accessing special collections during covid-19 in university libraries in Nigeria**

**[Accès aux collections spéciales pendant la pandémie de COVID-19 dans les bibliothèques universitaires au Nigeria]**

Saturday Unwelegbemenwe Omeluzor, Philomena F. Gbemi-Ogunleye, Asimi Akibu Alarape, Lateef Alhaji Bello

*IFLA Journal, 49–2, 357-367*

**Résumé:**


**The legitimacy of Scandinavian LAMs as public spheres: Views from the professionals**

**[La légitimité des bibliothèques, archives et musées scandinaves en tant que sphères publiques: les opinions des professionnels]**

Håkon Larsen, Nanna Kann-Rasmussen, Kerstin Rydebeck

*IFLA Journal, 49–2, 368-374*

**Résumé:**

Cet article analyse comment les professionnels des bibliothèques, archives et musées justifient l’utilisation de ressources sociétales rares pour maintenir leurs organisations respectives en place. Il accorde une importance particulière à leur rôle en tant qu’infrastructure au sein de la sphère publique. En s’appuyant sur des données provenant d’une étude menée auprès de professionnels des bibliothèques, archives et musées au Danemark, en Norvège et en Suède, les auteurs examinent si les divers professionnels de ces institutions ont des attentes similaires à l’égard de leur organisation pour qu’elle fasse office de sphère publique. Dans le contexte de cette analyse, il est fait référence à la législation actuelle portant sur les bibliothèques, archives et musées dans ces trois pays. Les auteurs concluent qu’il y a de nombreuses similarités entre eux, bien que la législation des bibliothèques, archives et musées diffère. Ceci est interprété en considérant que le nouveau modèle de gouvernance public est un modèle dominant de gouvernance.

**How do Asian international students use an Australian university library?**

**[Comment les étudiants étrangers d’origine asiatique utilisent-ils une bibliothèque universitaire australienne?]**

Clare P ODwyer

*IFLA Journal, 49–2, 375-383*

**Résumé:**

Les résultats de cette analyse documentaire sont applicables aux bibliothèques universitaires à travers le monde, dans la mesure où les étudiants accédant aux bibliothèques ont aujourd’hui des origines culturelles plus diverses que par le passé. Avant la pandémie de COVID-19, cette diversité était due au nombre accru d’étudiants étrangers inscrits dans des
universités sélectionnées en Europe, Australie, Nouvelle-Zélande, Royaume-Uni et Canada. La documentation suggère que les bibliothèques universitaires occidentales ne comprennent pas bien les différentes formes de recherche d’information, la transition culturelle, l’interruption des informations, les défis que représentent la langue anglaise et les styles d’apprentissage des étudiants étrangers d’origine asiatique. En conséquence, il se peut que les bibliothèques universitaires ne soient pas sur la même ligne stratégique que leurs universités en ce qui concerne les objectifs d’internationalisation. Le fait de ne pas comprendre ce que vivent les étudiants étrangers d’origine asiatique est susceptible de nuire à leur bien-être et à leur succès académique. En outre, à cause de cette incapacité à s’adapter, les universités – notamment celles d’Australie – risquent de ne pas remplir les conditions nationales réglementaires.

Continuing professional development in Cambodia: Perspectives of different stakeholders

[Formation professionnelle continue au Cambodge: perspectives de plusieurs parties prenantes]

Gina de Alwis Jayasuriya, Shaheen Majid
IFLA Journal, 49–2, 384-406

Résumé:
L’objectif de cette étude était de rassembler les opinions des formateurs et des employés de bibliothèques à l’égard des possibilités de formation professionnelle continue proposées au Cambodge et des obstacles qui y sont liés. Au total, 26 entretiens semi-structurés ont été menés: 14 avec des formateurs et 12 avec des employés de bibliothèques. Quatre obstacles principaux ont été identifiés: le manque de possibilités de formation professionnelle continue, l’incapacité à répondre aux véritables besoins en matière de formation, les défis pour assister à des programmes de formation dans d’autres villes, par exemple voyage, hébergement et congé pour étude, et le manque de ressources humaines pour mener des programmes de formation professionnelle continue. Quatre domaines d’amélioration sont suggérés: proposer des programmes réguliers de formation, étudier les besoins en matière de formation, organiser une réunion au niveau national pour discuter des problèmes de formation du personnel bibliothécaire, et développer un écosystème de bibliothéconomie en soutien au cadre de formation professionnelle continue. Les constatations de cette étude peuvent constituer des informations fondamentales pour mettre au point un programme de formation professionnelle continue destiné au secteur de la bibliothéconomie au Cambodge.

Assessing LIS graduates’ skills and knowledge against 21st century employability demands

[Évaluer les compétences et les connaissances des diplômés en Bibliothéconomie et Sciences de l’Information au regard des exigences du marché de l’emploi au 21e siècle]

Mohamed Kassim, Kokuberwa Katunzi-Mollel, Kelefa Mwantimwa KM
IFLA Journal, 49–2, 407-418

Résumé:
En raison des importants progrès sur le plan technologique, les exigences des diplômés, des employeurs et de la société évoluent. La présente étude a évalué les compétences et les connaissances en bibliothéconomie et sciences de l’information requises par les employeurs et la société. L’étude a utilisé une structure transversale de recherche descriptive, avec une approche aussi bien qualitative que quantitative.

Students’ perceptions of user education programmes at a South African University

[Comment les étudiants perçoivent les programmes de formation des utilisateurs à l’Université d’Afrique du Sud]

Petrus Chiya, Omwoyo Bosire Onyancha, Ifeanyi Ezema

IFLA Journal, 49–2, 419-431

Résumé:

Ceux qui étudient pour la première fois à l’université ne disposent pas des compétences pratiques et complexes nécessaires pour maîtriser, évaluer, utiliser et générer des informations afin d’atteindre leurs objectifs en matière d’information sur le plan éducatif, professionnel, social et personnel. Cette étude s’intéresse à la façon dont les étudiants perçoivent les programmes de formation des utilisateurs à l’Université du Nord-Ouest en Afrique du Sud. Un questionnaire structuré a été utilisé pour rassembler des données auprès de 320 étudiants répartis dans deux facultés. Les constatations de l’étude montrent que la majorité des étudiants en première année ont participé à différents programmes de formation des utilisateurs, 80,7% des étudiants indiquant qu’ils étaient satisfaits du contenu et de la qualité de ces programmes. Plus de 90% des étudiants ayant participé aux programmes ont affirmé avoir amélioré leur capacité à effectuer des recherches d’informations efficaces ainsi que leur aptitude à faire référence à et à citer correctement les sources d’information dans leurs travaux. La majorité des étudiants ont effectué des recherches d’information et de ressources sans s’adresser à des bibliothécaires. Cet article tire plusieurs conclusions et fait des recommandations basées sur ces constatations.

The power of information and coping with albinism: An auto-ethnographic study

[Le pouvoir de l’information et l’acceptation de l’albinisme: une étude auto-ethnographique]

Anna K Ngula

IFLA Journal, 49–2, 432-442

Résumé:

Cet article vise à déterminer pourquoi l’auteure a eu besoin d’information lorsque ses enfants sont nés atteints d’albinisme. Il s’intéresse aussi aux mécanismes qu’elle a utilisés pour trouver des informations et aux défis rencontrés au cours de sa recherche. Elle a utilisé une méthode auto-ethnographique pour partager son expérience vécue de l’albinisme et rassemblé des données par le biais de ses souvenirs personnels, en se remémorant des faits qui se sont produits lors de la naissance de sa fille en 2013 et de son fils en 2016. L’information a joué un rôle crucial pour aider l’auteure à mieux comprendre l’albinisme et à faire face à cette situation. En tant que bibliothécaire et mère d’enfants albinos, elle a exploré plusieurs mécanismes pour trouver des informations. Internet a été sa principale source d’information, ainsi que des organisations telles que celle de soutien et d’assistance aux personnes atteintes d’albinisme en Namibie (Support in Namibia of Albinism Sufferers Requiring Assistance) et l’Association namibienne pour les personnes albinos (Namibia Albino Association Trust), qui soulage la détresse des personnes atteintes d’albinisme dans ce pays.

Developing research data management services in a regional comprehensive university: The case of Central Washington University

[Développement de services de gestion des données de recherche dans une université polyvalente régionale: le cas de l’Université centrale de Washington]

Ping Fu, Maurice Blackson, Maura Valentino

IFLA Journal, 49–2, 443-451
Résumé:
L’objectif de cette étude est d’analyser les besoins des chercheurs au sein d’une université polyvalente régionale en matière de services de gestion des données de recherche, de discuter des options pour développer un programme de gestion de ces données à l’université, et enfin de proposer un plan échelonné sur trois ans pour mettre en œuvre ce programme à l’intention des bibliothèques universitaires. La méthode a consisté à concevoir une étude pour rassembler les informations auprès des chercheurs, puis à déterminer et évaluer leurs besoins en matière de services de gestion des données de recherche. Les résultats montrent que les besoins des chercheurs dans une université polyvalente régionale peuvent être très différents de ceux de chercheurs dans une université qui se consacrent de façon intensive à la recherche. Les résultats confirment également l’hypothèse que des chercheurs dans une université polyvalente régionale accueilleraient favorables des services de gestion des données proposés par les bibliothèques à l’intention de la communauté de recherche. Par conséquent, cette étude suggère un plan de mise en œuvre échelonné sur trois ans. L’importance de l’étude est de donner des vues intéressantes et des informations utiles aux universités polyvalentes régionales qui ont l’intention de développer un programme de gestion des données de recherche.

IFLA’s role in the implementation of the Marrakesh Treaty

[Le rôle de l’IFLA dans la mise en œuvre du Traité de Marrakech]
Fredrick Otike, Ágnes Hajdu Barát
IFLA Journal, 49–2, 452-466

Résumé:
Cet article fait une analyse critique du rôle important de l’IFLA dans la mise en œuvre et l’adoption du Traité de Marrakech dans les bibliothèques des États membres. Les défis et obstacles qui nuisent à l’application du Traité sont aussi abordés. L’article montre que malgré la signature du Traité de Marrakech, sa mise en œuvre se heurte à une résistance de la part des États membres. L’article reconnaît cependant le rôle important joué par l’IFLA pour faire appliquer le Traité, notamment le fait d’agir au niveau mondial en tant que représentant des bibliothèques ainsi que son rôle de conseiller et de défenseur et ses services de sensibilisation. Pour conclure, l’article fait diverses suggestions – par exemple: l’IFLA devrait recruter et incorporer un plus grand nombre de pays dans l’association, proposer une grande diversité de langues, développer les compétences et la formation, et organiser fréquemment des conférences et ateliers consacrés au Traité de Marrakech.

The Dutch library system past, present and future

(Das niederländische Bibliothekssystem in Vergangenheit, Gegenwart und Zukunft)
Theo C.M. Kemperman und das niederländische nationale Organisationskomitee für WLIC 2023
IFLA Journal, 49–2, 263-268

Zusammenfassung:

Unsere Bibliotheken sind bestrebt, zu einer integrativen Gesellschaft beizutragen, in der jeder die Möglichkeit hat und sich willkommen fühlt, daran teilzuhaben. Wir sind stolz auf die Fortschritte, die wir geschafft haben, und freuen uns darauf, unsere ehrgeizigen Ziele für die Zukunft zu erreichen. Möch-ten Sie mehr erfahren? Dann besuchen Sie uns auf der IFLA WLIC 2023 in Rotterdam im kommenden August.

“Libraries model sustainability”: Library contributions to UN Sustainable Development Goals

(„Bibliotheken als Vorbild für Nachhaltigkeit“: Der Beitrag von Bibliotheken zu den UN-Zielen für nachhaltige Entwicklung)
Lynn S Connaway Connaway, Brooke Doyle, Christopher Cyr, Peggy Gallagher, Joanne Cantrell
IFLA Journal, 49–2, 269-285
Zusammenfassung:

Academic libraries’ main strategies and services during covid-19 pandemic

(Die wichtigsten Strategien und Dienstleistungen wissenschaftlicher Bibliotheken während der Covid-19-Pandemie)

Somaye Akhshik, Reza Rajabali Beglou
IFLA Journal, 49–2, 286-297

Zusammenfassung:

Green initiatives towards environmental sustainability: Insights from libraries in Kenya (Grüne Initiativen für ökologische Nachhaltigkeit: Einblicke aus Bibliotheken in Kenia)

Arnold Mwanzu, Emily K Bosire, Damaris Odero
IFLA Journal, 49–2, 298-314

Zusammenfassung:

**Effects of covid-19 on Sub-Saharan African library associations**

*(Auswirkungen von Covid-19 auf Bibliotheksverbände in Subsahara-Afrika)*

Comfort A.B. Asare, Samuel Bentil Aggrey

*IFLA Journal, 49–2, 315-327*

Zusammenfassung:


**Online information seeking during COVID-19 pandemic: A cross-country analysis**

*(Online-Informationssuche während der COVID-19-Pandemie: Eine Länderübergreifende Analyse)*

Mahmood Khosrowjerdi, Cecilia Black Fylking, Neda Zeraatkar

*IFLA Journal, 49–2, 328-344*

Zusammenfassung:


**Spread of misinformation during covid-19: The case of Mauritius**

*(Verbreitung von Fehlinformationen während Covid-19: Der Fall Mauritius)*

Ambareen Beebeejaun

*IFLA Journal, 49–2, 345-356*

Zusammenfassung:

Da sich COVID-19 weiterhin rasant in der ganzen Welt ausbreitet, ist es unerlässlich, den Inhalt der Informationen so zu regeln, dass die Menschen
Zugang zu genauen Informationen haben. Dennoch besteht die Befürchtung, dass die Regierungen die Gesetzgebung missbrauchen, um die Meinungsfreiheit einzuschränken, und dass die Pandemie lediglich als Vorwand benutzt wird, um die freie Meinungsäußerung weiter zu behindern. Aus diesem Grund werden in dieser Studie die Ansätze der mauritischen Behörden zum Umgang mit Fehlinformationen während des COVID-19 kritisch untersucht. Um dieses Forschungsziel zu erreichen, werden die einschlägigen Gesetze über Fehlinformation kritisch bewertet und eine vergleichende Analyse der internationalen Reaktionen auf Fehlinformation während COVID-19 durchgeführt. Es wurde festgestellt, dass das Gesetz allein nicht ausreicht, um gegen Fehlinformationen vorzugehen, und dass die Medienkompetenz der Bürger*innen in diesem Zusammenhang ebenfalls von wesentlicher Bedeutung ist.

**Accessing special collections during covid-19 in university libraries in Nigeria**

**(Zugang zu Sondersammlungen während des Covid-19 in Universitätsbibliotheken in Nigeria)**

*Saturday Unwelegbemenwe Omeluzor, Philomena F. Gbemi-Ogunleye, Asimi Akibu Alarape, Lateef Alhaji Bello*

IFLA Journal, 49–2, 357-367

Zusammenfassung:


**The legitimacy of Scandinavian LAMs as public spheres: Views from the professionals**

**(Die Legitimität der skandinavischen LAMs als öffentliche Bereiche: Die Sicht von Fachleuten)**

*Håkon Larsen, Nanna Kann-Rasmussen, Kerstin Rydbeck*

IFLA Journal, 49–2, 368-374

Zusammenfassung:


**How do Asian international students use an Australian university library?**

**(Wie nutzen asiatische internationale Studierende eine australische Universitätsbibliothek?)**

*Clare PODwyer*

IFLA Journal, 49–2, 375-383

Zusammenfassung:

Die Ergebnisse dieser Literaturstudie sind auf Universitätsbibliotheken weltweit anwendbar, da die Studierenden, die Bibliotheken besuchen, heute kulturell vielfältiger sind als in der Vergangenheit. Vor der COVID-19-Pandemie war diese Vielfalt auf die

Assessing LIS graduates’ skills and knowledge against 21st century employability demands

(Bewertung der Fähigkeiten und Kenntnisse von LIS-Absolventen im Hinblick auf die Anforderungen an die Beschäftigungsfähigkeit im 21. Jahrhundert)

Mohamed Kassim, Kokuberwa Katunzi-Mollel, Kelefa Mwantimwa KM

IFLA Journal, 49–2, 407-418

Zusammenfassung:


Continuing professional development in Cambodia: Perspectives of different stakeholders

(Berufliche Fortbildung in Kambodscha: Perspektiven der verschiedenen Akteure)

Gina de Alwis Jayasuriya, Shaheen Majid

IFLA Journal, 49–2, 384-406

Zusammenfassung:


Abstracts

Students’ perceptions of user education programmes at a South African University

(Die Wahrnehmung der Studierenden von Nutzerbildungsprogrammen an einer südafrikanischen Universität)
Petrus Chiya, Omwoyo Bosire Onyancha, Ifeanyi Ezema
IFLA Journal, 49–2, 419-431
Zusammenfassung:
Studienanfänger*innen verfügen nicht über die praktischen und komplexen Fähigkeiten, Informationen zu erschließen, zu bewerten, zu nutzen und zu erstellen, um ihre bildungsbezogenen, beruflichen, sozialen und persönlichen Informationsziele zu erreichen. Ziel dieser Studie war es, zu untersuchen, wie die Studierenden an der North-West University, Südafrika, die Programme der Nutzerausbildung wahrnehmen. Anhand eines strukturierten Fragebogens wurden Daten von 320 Studierenden aus zwei Fakultäten erhoben. Die Ergebnisse der Studie zeigen, dass die Mehrheit der Studienanfänger*innen an verschiedenen Nutzerbildungsprogrammen teilgenommen hat. 80,7% der Studierenden gaben an, dass sie mit dem Inhalt und der Qualität der Programme zufrieden waren. Über 90% der Studierenden, die an den Programmen teilgenommen haben, bestätigten, dass sie ihre Fähigkeit zur effektiven Informationssuche und zur korrekten Zitierung und Referenzierung von Informationsquellen für ihre Aufgaben verbessert haben. Die Mehrheit der Studierenden suchte unabhängig von den Bibliothekaren nach Informationen und Ressourcen. In diesem Artikel werden mehrere Schlussfolgerungen gezogen und auf der Grundlage der Ergebnisse Empfehlungen ausgesprochen.

The power of information and coping with albinism: An auto-ethnographic study

(Die Macht der Information und die Bewältigung des Albinismus: Eine auto-ethnographische Studie)
Anna K Ngula
IFLA Journal, 49–2, 432-442
Zusammenfassung:

Developing research data management services in a regional comprehensive university: The case of Central Washington University

(Entwicklung von Diensten zur Verwaltung von Forschungsdaten in einer regionalen Volluniversität: Der Fall der Central Washington University)
Ping Fu, Maurice Blackson, Maura Valentino
IFLA Journal, 49–2, 443-451
Zusammenfassung:
Ziel dieser Studie ist es, den Bedarf von Forschern einer regionalen Volluniversität an Dienstleistungen für das Forschungsdatenmanagement zu analysieren, die Optionen für die Entwicklung eines Programms für das Forschungsdatenmanagement an der Universität zu erörtern und dann einen stufenweisen Dreijahresplan für die Universitätsbibliotheken vorzuschlagen. Die
Methode bestand darin, eine Umfrage zu entwerfen, um Informationen von Forschenden zu sammeln und ihren Bedarf an Forschungsdatenmanagementdiensten zu ermitteln und zu bewerten. Die Ergebnisse zeigen, dass sich die Bedürfnisse der Forschenden an einer regionalen Volluniversität von denen an einer forschungsunteniversität unterscheiden können. Die Ergebnisse bestätigen auch die Hypothese, dass Forschende an der regionalen Gesamthochschule die Bibliotheken begrüßen würden, die verwaltete Datendienste für die Forschungsgemeinschaft anbieten. Daher wird in dieser Studie ein stufenweiser Dreijahresplan für die Umsetzung vorgeschlagen. Die Bedeutung der Studie liegt darin, dass sie einige Einblicke und hilfreiche Informationen für regionale Gesamthochschulen liefern kann, die die Entwicklung eines Forschungsdatenmanagementsprogramms planen.

IFLA’s role in the implementation of the Marrakesh Treaty

(Die Rolle der IFLA bei der Umsetzung des Vertrags von Marrakesch)
Fredrick Otike, Ágnes Hajdu Barát
IFLA Journal, 49–2, 452-466
Zusammenfassung:

The Dutch library system past, present and future

Прошлое, настоящее и будущее голландской библиотечной системы

Theo C.M. Kemperman and the Dutch National Organizing Committee for WLIC 2023
Тео К.М. Кемперман и Голландский национальный организационный комитет WLIC 2023
IFLA Journal, 49–2, 263-268
Аннотация:
В данной статье Голландский национальный комитет IFLAWLIC2023 представляет обзор текущего состояния библиотечной системы Нидерландов. Мы кратко опишем его происхождение, прежде чем перейти к роли голландских библиотек в XXI веке, от местных публичных библиотек по всей стране до более крупных учреждений, таких как Национальная библиотека и университетские библиотеки. Мы также уделяем особое внимание голландской модели, в рамках которой публичные библиотеки и книжные магазины тесно сотрудничают с учебными заведениями и другими партнерами с целью популяризации чтения.

Наши библиотеки стремятся внести свой вклад в создание более инклюзивного общества, в котором каждый имеет возможность участвовать и чувствует себя желанным гостем. Мы гордимся достигнутыми результатами и стремимся реализовать свои амбиции на будущее. Хотели бы вы узнать больше? Тогда добро пожаловать к нам на конгресс IFLAWLIC2023 в Роттердам в августе этого года.

“Libraries model sustainability”: Library contributions to UN Sustainable Development Goals

“Библиотеки моделируют устойчивость”: Вклад библиотек в достижение целей устойчивого развития ООН

Lynn S Connaway Connaway, Brooke Doyle, Christopher Cyr, Peggy Gallagher, Joanne Cantrell
IFLA Journal, 49–2, 269-285
Аннотация:
Опрос более 1700 библиотечных сотрудников по всему миру выявил, каким образом библиотеки вносят вклад в достижение пяти целей Организации Объединенных Наций в области устойчивого развития. Сообщается о сходстве между достижением целей устойчивого развития
Academic libraries’ main strategies and services during covid-19 pandemic

Reza Rajabali Beglou, Somaye Akhshik

IFLA Journal, 49–2, 286-297

An annotation:

The aim of this study is to identify and evaluate the most important types of services and activities of academic libraries during the COVID-19 pandemic. The study was conducted using a content analysis of services provided by academic libraries. The researchers identified seven sub-strategies and services that are considered important for libraries in response to the pandemic.

Green initiatives towards environmental sustainability: Insights from libraries in Kenya

Arnold Mwanzu, Emily K Bosire, Damaris Odero

IFLA Journal, 49–2, 298-314

Annotation:

Important to study the green initiatives of libraries in Kenya during the COVID-19 pandemic. The study found that libraries in Kenya have taken various measures to promote environmental sustainability during the pandemic. The study highlighted the role of libraries in educating the public about environmental issues and promoting green initiatives.
Effects of covid-19 on Sub-Saharan African library associations

Последствия covid-19 для библиотечных ассоциаций стран Африки к югу от Сахары

Comfort A.B. Asare, Samuel Bentil Aggrey

Комфорт А.Б. Асаре, Самуэль Бентил Аггрей

IFLA Journal, 49–2, 315-327

Аннотация:

Профессиональные ассоциации служат опорой для своих членов как в Африке, так и во всем мире. Они способствуют благосостоянию членов этих организаций и имеют стандарты и принципы, которыми рекомендуется руководствоваться в своей деятельности. Данное количественное исследование включает 10 национальных библиотечных ассоциаций в странах Африки к югу от Сахары. В нем рассматриваются некоторые виды деятельности национальных библиотечных ассоциаций и то, как на них повлияла вспышка COVID-19. Результаты показывают, что большинству ассоциаций пришлось отложить свои ежегодные конференции и программы непрерывного профессионального образования. В этом исследовании высказываются рекомендации с целью использования технологических платформ для привлечения своих членов к организации конференций и учебных программ в национальных библиотечных ассоциациях стран Африки к югу от Сахары. Кроме того, национальным библиотечным ассоциациям рекомендовано проводить политику, которая будет способна стимулировать их деятельность в будущем в случае возникновения другой пандемии.

Online information seeking during COVID-19 pandemic: A cross-country analysis

Онлайн-поиск информации во время пандемии COVID-19: межстрановой анализ

Mahmood Khosrowjerdi, Cecilia Black Fylking, Neda Zeraatkar

Махмуд Хосровджерди, Сесилия Блэк Филкинг, Неда Зерааткар

IFLA Journal, 49–2, 328-344

Аннотация:

Целью данного исследования было изучение связанных с коронавирусом моделей поиска в Интернете людей из 10 наиболее пострадавших стран в сентябре 2020 года. Авторы извлекли все результаты поиска по выборке стран, состоящие из двух слов “COVID-19” и “коронавирус” и их вариаций из Google Trends за весь 2020 год. Результаты показали несоответствие из-за приоритета языка, используемого при поиске информации, связанной с коронавирусом. Временной промежуток уровня внимания граждан к информации, связанной с коронавирусом, был относительно коротким (около одного месяца). Это подтверждает предположение модели активации информационного воздействия, состоящего в том, что информация, вызывающая негативное воздействие, не приветствуется пользователями. Полученные результаты имеют практическое значение для правительств и органов здравоохранения, например, при запуске работы информационных служб для граждан в первые месяцы пандемии, при этом они остаются...
Spread of misinformation during covid-19: The case of Mauritius

Распространение дезинформации во время covid-19: случай Маврикия

Амбарин Бибиджон

**IFLA Journal, 49**–2, 345-356

**Anнотация:**

Поскольку COVID-19 продолжает быстро распространяться по всему миру, крайне важно регулировать содержание новостей таким образом, чтобы люди имели доступ к точной информации. Тем не менее, существует опасение, что правительства злоупотребляют законодательством для ограничения свободы выражения мнений и что пандемия просто используется как предлог для дальнейшего ограничения свободы слова. Таким образом, именно глядя через призму соблюдения прав человека, исследователь критически рассматривает подходы, предпринятые властями Маврикия для борьбы с дезинформацией во время COVID-19. Для достижения цели исследования проводится критическая оценка соответствующих законов о дезинформации, а также сравнительный анализ международных мер регулирования на дезинформацию во время COVID-19. Из данного исследования явствует, что одного закона для борьбы с дезинформацией недостаточно, и стремление граждан к медиаграмотности также имеет важное значение.

Accessing special collections during covid-19 in university libraries in Nigeria

Доступ к специальным коллекциям во время covid-19 в университетских библиотеках Нигерии

Сэтердэй Анвелегбеменвэ Омелузор, Филомена Ф. Гбеми-Огунлея, Асими Акибу Аларапе, Латейф Алхаджи Белло

**IFLA Journal, 49**–2, 357-367

**Anнотация:**

Доступность специальных коллекций во время пандемии COVID-19 была предметом озабоченности библиотек и их пользователей из-за их специфики по сравнению с другими источниками информации в библиотеках. Таким образом, в этом исследовании проводилось изучение доступности специальных коллекций в университетских библиотеках в южной зоне Нигерии во время пандемии COVID-19. В исследовании приняли участие 233 библиотекаря из федеральных, государственных и частных университетов в регионе. В данном исследовании использовалась онлайн-анкета, в которой приняли участие в общей сложности 197 респондентов. Результаты показывают, что специальные коллекции были доступны пользователям библиотек через библиотечные веб-сайты, институциональные хранилища, компакт-диски и флэш-накопители во время пандемии COVID-19 в Нигерии. В исследовании раскрываются некоторые проблемы, влияющие на доступность специальных коллекций во время пандемии COVID-19 в университетских библиотеках Нигерии, а также высказываются рекомендации относительно способов повышения доступности специальных коллекций во время кризиса, такого как пандемия COVID-19.

The legitimacy of Scandinavian LAMs as public spheres: Views from the professionals

Законность скандинавских законов как публичной сферы: мнения профессионалов

Хэкон Ларсен, Нанна Канн-Расмussen, Керстин Ридбек

**IFLA Journal, 49**–2, 368-374

**Anнотация:**

Данная статья представляет собой анализ того, как библиотечные, архивные и музеиные работники узаконивают использование ограниченных общественных ресурсов для поддержания своих соответствующих организаций, уделяя особое внимание их роли в качестве инфраструктуры общественной сферы. Опираясь на данные опроса среди специалистов библиотек, архивов и музеев в Дании, Норвегии и Швеции, авторы исследуют, имеют ли профессионалы в этих учреждениях схожие ожидания от своих организаций в общественной сфере. Анализ дополнен ссылками на действующее библиотечное, архивное и музеинное законодательство этих трех стран. Авторы приходят к выводу, что в этих трех странах существует много общего, хотя законодательство
How do Asian international students use an Australian university library?

Clare P. O'Dwyer

IFLA Journal, 49–2, 375-383

Abstract

The purpose of this research was to investigate the use of 26 Australian university libraries by students from Asia in the event of the COVID-19 pandemic and what methods were used to overcome the barriers they encountered. The research was conducted using semi-structured interviews with respondents who were staff and library personnel. A total of 26 interviews were conducted.

In this review, new possibilities after the pandemic are examined. The purpose of this is to understand the needs of international students from Asia, and why universities at this level are recruiting them for further education. It is also of interest to researchers that different countries have their own programs aimed at improving student recruitment.

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Assessing LIS graduates’ skills and knowledge against 21st century employability demands

Mohamed Kassim, Kokuperwa Katunzi-Mollel, Kelefa Mwantimwa KM

Mohamed Kassim, Kokuberwa Katunzi-Mollel, Kelefa Mwantimwa KM

IFLA Journal, 49–2, 407-418

Annotation:
Tребования выпускников вузов и работодателей и общества меняются в связи со значительными технологическими достижениями. В настоящем исследовании оценивались навыки и знания в области библиотечного дела и информатики, требуемые работодателями и обществом. В исследовании использовался сквозной описательный исследовательский дизайн с использованием статистических методов для сбора требуемых данных. Для анализа данных использовались описательная статистика и тематические методы. Полученные результаты свидетельствуют о том, что учебная программа магистратуры по информационным исследованиям не в полной мере отвечает всем ожиданиям и потребностям выпускников, работодателей и общества. Данное исследование выявляет несоответствие между тем, что предлагает учебная программа, и текущими требованиями рынка труда, рекомендуется регулярно пересматривать учебную программу магистратуры по использованию в области информационных наук с целью эффективной интеграции в компетенции 21 века, которые бы отвечали потребностям текущего рынка труда.

The power of information and coping with albinism: An auto-ethnographic study

Anna K Ngula

IFLA Journal, 49–2, 432-442

Annotation:
Суть этой статьи - выяснить, для каких целей автору понадобилась информация, когда родились ее дети с альбинизмом, а также изучить механизмы, которые она использовала для поиска информации, а также обозначить проблемы, с которыми она столкнулась при поиске информации. Метод автотропографии применяется для того, чтобы поделиться своим жизненным опытом альбинизма, причем данные были собраны при

Students’ perceptions of user education programmes at a South African University

Мохаммед Кассим, Кокуберва Катунзи-Моллель, Кефела Мвантимва KM

Mohamed Kassim, Kokuberwa Katunzi-Mollel, Kelefa Mwantimwa KM

IFLA Journal, 49–2, 407-418

Annotation:
Студентам, впервые поступающим в университет, не хватает практических и сложных навыков для сбора, оценки, использования и выработки информации для достижения своих образовательных, профессиональных, социальных и личных информационных целей. Сутью данного исследования явилось изучение восприятия студентами программ обучения пользователей в Северо-Западном университете, Южная Африка. Для сбора данных от 320 студентов двух факультетов была использована структурированная анкета. Результаты исследования показывают, что большинство студентов первого курса участвовали в различных программах обучения пользователей, при этом 80,7% студентов указали, что они удовлетворены содержанием и качеством программ обучения. Более 90% студентов, участвовавших в программах, подтвердили, что они расширили свои возможности по эффективному поиску информации и улучшили свои навыки правильного цитирования источников информации и ссылок на них при выполнении заданий. Большинство студентов искали информацию и ресурсы независимо от библиотекарей. В этой статье делается несколько выводов и даются рекомендации, основанные на полученных результатах.
поддержке личных воспоминаний автора, памяти о событиях, которые имели место, когда она родила свою дочь в 2013 году и сына в 2016 году. Информация сыграла решающую роль в том, чтобы помочь автору лучше понять суть альбинизма и вместе с тем справиться с этой сложной ситуацией. Как библиотекарь и мать детей с альбинизмом, автор исследует различные механизмы поиска информации. Основным источником информации был Интернет, а также такие организации, как “Поддержка в Намибии лиц, страдающих альбинизмом и нуждающихся в помощи” и “Фонд Намибийской ассоциации альбиносов”, которые в этой стране занимаются поддержкой людей с альбинизмом, нуждающихся в помощи.

Developing research data management services in a regional comprehensive university: The case of Central Washington University

Разработка услуг по управлению исследовательскими данными в региональном многопрофильном университете: пример Центрального Вашингтонского университета

Ping Fu, Maurice Blackson, Maura Valentino

Пин Фу, Морис Блэксон, Маура Валентино

IFLA Journal, 49–2, 443-451

Аннотация:

Цель данной статьи - проанализировать потребности исследователей регионального комплексного университета в услугах по управлению данными научного анализа; обсудить варианты разработки программы управления исследовательскими данными в университете; а затем предложить поэтапный трехлетний план их внедрения в университетские библиотеки. Метод заключался в разработке опроса для сбора информации от исследователей и оценки их потребностей в услугах по управлению исследовательскими данными. Результаты показывают, что потребности исследователей в региональном многопрофильном университете могут сильно отличаться от потребностей исследователей в университете с интенсивной научной базой. Кроме того, результаты подтверждают гипотезу о том, что исследователи регионального комплексного университета привыкли быть библиотеки, предлагающие услуги по управлению данными для исследовательского сообщества. Таким образом, данный подход предлагает поэтапный трехлетний план внедрения программы. Важность этой статьи заключается в том, что она может дать некоторое представление и полезную информацию для региональных комплексных университетов, которые планируют разработать программу управления исследовательскими данными.

IFLA's role in the implementation of the Marrakesh Treaty

Роль ИФЛА в осуществлении Марракешского договора

Fredrick Otike, Ágnes Hajdu Barát

Фредрик Отике, Агнес Хайду Барат

IFLA Journal, 49–2, 452-466

Аннотация:

В данной статье критическому анализу подвергается значительная роль ИФЛА в реализации и принятии Марракешского договора в библиотеках его государств-членов. Также подчеркаются проблемы и препятствия, влияющие на осуществление Договора. В данной статье утверждается, что, несмотря на подписание Марракешского договора, выполнение Договора государствами-членами встретило сопротивление. В статье, однако, признается значительная роль, которую ИФЛА сыграла в выполнении Договора, в том числе выступая в качестве представителя библиотек по всему миру, а также выполняя консультативные и пропагандистские функции и оказывая аутрич-услуги. Наконец, в статье обозначаются и обсуждаются различные предложения – например, ИФЛА должна привлекать и включать в ассоциацию больше стран; иметь широкое языковое разнообразие; развивать профессиональные навыки и подготовку кадров; а также организовывать частые конференции и семинары по тематике Марракешского договора.

The Dutch library system past, present and future

(Pasado, presente y futuro del sistema de bibliotecas neerlandés)

Theo C.M. Kemperman and the Dutch National Organizing Committee for WLIC 2023

IFLA Journal, 49–2, 263-268

Resumen:

En este artículo, el Comité Nacional Neerlandés de IFLAWLIC2023 presenta una visión general del estado actual del sistema de bibliotecas neerlandés.
Se describen brevemente sus orígenes, antes de centrase en la función de las bibliotecas neerlandesas en el siglo XVI, desde las bibliotecas públicas locales de todo el país hasta instituciones más grandes, como la Biblioteca Nacional y las bibliotecas universitarias. También se presta especial atención al modelo neerlandés en el que las bibliotecas públicas y las librerías cooperan estrechamente con las instituciones educativas y otros agentes para promover la lectura.

Nuestras bibliotecas se esfuerzan por contribuir a una sociedad más inclusiva en la que todos tengan la oportunidad de participar y se sientan bienvenidos. Estamos orgullosos de los avances logrados y lucharemos por cumplir nuestras aspiraciones para el futuro. ¿Quiere saber más? Únase a IFLAWLIC2023, que se celebrará en Róterdam este próximo mes de agosto.

“Libraries model sustainability”: Library contributions to UN Sustainable Development Goals

(<Sostenibilidad del modelo de bibliotecas>: contribuciones de las bibliotecas a los Objetivos de Desarrollo Sostenible de las Naciones Unidas)

Lynn S Connaway, Brooke Doyle, Christopher Cyr, Peggy Gallagher, Joanne Cantrell

IFLA Journal, 49–2, 269-285

Resumen:

Una encuesta de más de 1 700 empleados de bibliotecas de todo el mundo ha analizado la forma en que las bibliotecas contribuyen a cinco de los Objetivos de Desarrollo Sostenible de las Naciones Unidas. Se comunican las similitudes relacionadas con la adopción, la contribución y el uso de los Objetivos de Desarrollo Sostenible entre bibliotecas académicas y públicas. Los resultados indican que el personal bibliotecario realiza un trabajo sustancial en torno a los cinco Objetivos de Desarrollo Sostenible seleccionados. A veces, las actividades son el resultado de una integración de los Objetivos de Desarrollo Sostenible en la planificación estratégica, pero otras veces, lo son de la programación que el personal bibliotecario realiza en el marco de su misión. La mayoría de los encuestados no han incorporado los Objetivos de Desarrollo Sostenible en su planificación estratégica. Sin embargo, el apoyo de las bibliotecas a los Objetivos de Desarrollo Sostenible se demuestra a través de las actividades que realiza el personal bibliotecario y de los comentarios de los encuestados. Las actividades identificadas aquí se pueden usar para basar la planificación estratégica de las bibliotecas y ayudar a su personal a maximizar el impacto de estas sobre el desarrollo sostenible.

Academic libraries’ main strategies and services during covid-19 pandemic

(Estrategias y servicios principales de las bibliotecas académicas durante la pandemia de COVID-19)

Reza Rajabali Beglou, Somaye Akhshik

IFLA Journal, 49–2, 286-297

Resumen:

Este estudio tenía por objeto determinar y evaluar las actividades más importantes de las bibliotecas académicas durante la pandemia de COVID-19. Esta investigación se realizó utilizando un análisis de contenido cualitativo para descubrir los servicios que respaldaron las responsabilidades sociales, educativas y de investigación en tiempos de crisis. Se seleccionaron al azar y se analizaron trescientas una de las mejores universidades del mundo. Los resultados revelan que las bibliotecas aplicaron cuatro estrategias para apoyar la educación y la investigación: creación de actividades y servicios nuevos, desarrollo de actividades y servicios previos, modificación de actividades y servicios previos y respaldo de la investigación sobre la COVID-19. Se determinaron siete subestrategias en relación con las responsabilidades sociales: documentación de acontecimientos, preparación de directrices, sensibilización del público, rumores vs. realidad de la COVID-19, programas de atención a la salud física y mental, suministro de información útil sobre la COVID-19 y suministro de información médica sobre la COVID-19. Mientras la pandemia continúa, las experiencias presentadas en este artículo pueden ayudar a prestar servicios bibliotecarios durante la crisis actual y utilizarse en crisis similares en el futuro.

Green initiatives towards environmental sustainability: Insights from libraries in Kenya

(Iniciativas ecológicas para la sostenibilidad ambiental: perspectivas de las bibliotecas de Kenia)

Arnold Mwanzu, Emily K Bosire, Damaris Odero

IFLA Journal, 49–2, 298-314

Resumen:

La protección medioambiental se está convirtiendo en una cuestión apremiante en todo el mundo. El
agotamiento de la capa de ozono, el efecto inverna-
dero, el cambio climático mundial y el calentamiento
global destacan como algunas de las preocupacio-
nes ambientales más urgentes. El creciente
úmero de consumidores comprometidos con el
medio ambiente ha dado lugar a numerosas campa-
nas Go Green y a un movimiento Go Green, junto
con soluciones y llamadas a los consumidores, las
empresas y los gobiernos para que se muestren más
proactivos a la hora de ecologizar todos los aspectos.
Las bibliotecas no son la excepción. A pesar de su
importancia, poco se sabe del concepto de «bibli-
teca ecológica» en el contexto africano y entre las
bibliotecas de Kenia. Como algunos otros países en
desarrollo, Kenia ha respondido de varias
formas al cambio climático debido a sus efectos
adversos. Es importante analizar la forma en que
las bibliotecas están planificando un futuro sosten-
ible. Posteriormente, este estudio tenía por objeto
explorar la adopción de conceptos de biblioteca
ecológica en Kenia para la sostenibilidad ambiental
con vistas a proponer estrategias que se puedan
usar para ayudar a ecologizar las bibliotecas. El
estudio adoptó un enfoque cualitativo. Se extrajo
una muestra de 12 bibliotecas de entre un grupo de
227 bibliotecas académicas, públicas y especia-
des de Kenia. Se recogieron datos utilizando
modelos de encuesta semiestructurada complemen-
tados con la observación y una revisión documental,
y se analizaron empleando una teoría
fundamentada. Los resultados revelan que las bib-
liotecas de Kenia, bajo sus organizaciones para-
guas, han aprovechado sus conocimientos sobre
conceptos ecológicos mediante la adopción y la
aplicación de prácticas ecológicas y la propuesta
de estrategias para mejorar las bibliotecas ecoló-
gicas y promover la sostenibilidad ambiental. Lo han
hecho principalmente mediante el rediseño y la
renovación para satisfacer las demandas siempre
cambiantes de conformidad con las normas de las
bibliotecas ecológicas. El estudio concluye que los
bibliotecarios de las bibliotecas de Kenia entienden
los conceptos de ecologización y han acometido
diversas iniciativas ecológicas, aunque en parte
para repositionarse y mantener su posición a escala
mundo.

El estudio propone tres estrategias para la
ecologización completa: participación activa de los
usuarios en iniciativas ecológicas; mejora de los
indicadores de medición del rendimiento y el cre-
cimiento; y mantenimiento de las normas de bib-
liotecas ecológicas de acuerdo con la lista de la
Environment, Sustainability and Libraries Section
(ENSULIB) de IFLA.

Effects of covid-19 on Sub-Saharan African
library associations

(Efectos de la COVID-19 en las asociaciones de bibliotecas del África subsahariana)

Comfort A.B. Asare, Samuel Bentil Aggrey
IFLA Journal, 49–2, 315-327

Resumen:
Las asociaciones profesionales sirven para articular a sus miembros en África y a escala internacional. Promueven el bienestar de sus miembros y cuentan con normas y principios que guían sus actividades. Este es un estudio cuantitativo de diez asociaciones bibliotecarias nacionales del África subsahariana. En el estudio se analizan algunas de las actividades de estas asociaciones y el modo en que se vieron afectadas por la pandemia de COVID-19. Los resultados revelan que la mayoría de las asociaciones se vieron obligadas a posponer sus congresos anuales y sus programas de educación profesional continua. El estudio recomienda a las asociaciones bibliotecarias nacionales del África subsahariana que aprovechen las plataformas tecnológicas para llegar a sus miembros en la organización de congresos y programas de formación. Además, estas asociaciones deben contar con una política capaz de promover sus actividades en el futuro en caso de que se produzca una nueva pandemia.

Online information seeking during COVID-19 pandemic: A cross-country analysis

(Búsqueda de información online durante la pandemia de COVID-19: un análisis nacional)

Mahmood Khosrowjerdi, Cecilia Black Fylking, Neda Zeraatkar
IFLA Journal, 49–2, 328-344

Resumen:
El objetivo de este estudio era investigar los patrones de búsqueda online de información relacionada con el coronavirus por parte de personas procedentes de los diez países más afectados en septiembre de 2020. Los autores extrajeron todas las búsquedas para los países de la muestra, que incluían las dos palabras «COVID-19» y «coronavirus» y sus variantes, de Google Trends para todo el año 2020. Los resultados revelaron una discrepancia debida a la prioridad del idioma utilizado durante las búsquedas de información relacionada con el coronavirus. La
duración del nivel de atención de los ciudadanos en lo relativo a la información sobre el coronavirus fue relativamente corta (alrededor de un mes). Esto respalda la hipótesis del modelo de activación de exposición a la información de que la información que genera un efecto negativo no es bien acogida por los usuarios. Los resultados tienen implicaciones prácticas para los gobiernos y las autoridades sanitarias, por ejemplo, en el lanzamiento de servicios de información para los ciudadanos en los primeros meses de la pandemia y su permanencia como fuente predilecta de información para los ciudadanos.

**Spread of misinformation during covid-19: The case of Mauritius**

*(Divulgación de desinformación durante la COVID-19: el caso de Mauricio)*

Ambareen Beebeejaun

IFLA Journal, 49–2, 345-256

Resumen:

A medida que la COVID-19 continúa propagándose rápidamente por todo el mundo, es esencial regular el contenido de la información a la que las personas tienen acceso. Sin embargo, existe el miedo de que los gobiernos abusen de la legislación para limitar la libertad de expresión y de que la pandemia se utilice como excusa para limitarla aún más. Por tanto, este estudio examina de manera crítica a través de la lente de los derechos humanos los enfoques adoptados por las autoridades de Mauricio para abordar la desinformación durante la pandemia de COVID-19. Para conseguir este objetivo de investigación, se evalúan de forma crítica las leyes relativas a la desinformación y se realiza un análisis comparativo de las respuestas internacionales a la desinformación durante la pandemia. Se ha observado que solo la ley no es suficiente para abordar el problema de la desinformación y que la alfabetización mediática entre los ciudadanos también es esencial en esta iniciativa.

**Accessing special collections during covid-19 in university libraries in Nigeria**

*(Acceso a colecciones especiales durante la pandemia de COVID-19 en las bibliotecas universitarias de Nigeria)*

Saturday Unwelegbemenwe Omeluzor, Philomena F. Gbemi-Ogunleye, Asimi Akibu Alarape, Lateef Alhaji Bello

IFLA Journal, 49–2, 357-367

Resumen:

La accesibilidad a colecciones especiales durante la pandemia de COVID-19 fue una fuente de preocupación para las bibliotecas y sus usuarios debido a la naturaleza específica de estas colecciones en comparación con otras fuentes de información de las bibliotecas. Por tanto, en este estudio se investigó la accesibilidad de las colecciones especiales en las bibliotecas universitarias de la zona sur de Nigeria durante la pandemia de COVID-19. La población del estudio incluía a 233 bibliotecarios de universidades federales, estatales y privadas de la zona. El estudio utilizó un cuestionario online y se obtuvieron un total de 197 respuestas. Los resultados revelan que las colecciones especiales eran accesibles para los usuarios a través de los sitios web de las bibliotecas, los repositorios institucionales, CD-ROM y unidades flash durante la pandemia de COVID-19 en Nigeria. El estudio revela alguno de los retos que afectaron a la accesibilidad de las colecciones especiales durante la pandemia en las bibliotecas universitarias de Nigeria y recomienda métodos para mejorar esta accesibilidad durante una crisis de este tipo.

**The legitimacy of Scandinavian LAMs as public spheres: Views from the professionals**

*(La legitimidad de las bibliotecas, archivos y museos escandinavos como esferas públicas: perspectivas de los profesionales)*

Håkon Larsen, Nanna Kann-Rasmussen, Kerstin Rydebeck

IFLA Journal, 49–2, 368-374

Resumen:

En este artículo se analiza el modo en que los profesionales de bibliotecas, archivos y museos legitiman el uso de los escasos recursos sociales para mantener sus respectivas organizaciones, haciendo especial hincapié en su papel como infraestructuras de la esfera pública. A partir de los datos de una encuesta realizada entre profesionales de bibliotecas, archivos y museos de Dinamarca, Noruega y Suecia, los autores investigan si los profesionales de estas instituciones albergan expectativas similares de sus organizaciones para actuar como esferas públicas. El análisis se contextualiza con las referencias a la legislación actual en materia de bibliotecas, archivos y museos de estos tres países. Los autores concluyen que existen muchas similitudes entre los tres países, aunque la legislación en estas áreas sea distinta. Todo
ello se interpreta a la luz de un nuevo régimen de gobernanza pública que es dominante.

**How do Asian international students use an Australian university library?**

(¿Cómo utilizan los estudiantes internacionales asiáticos una biblioteca universitaria australiana?)

*Clare P ODwyer*

*IFLA Journal, 49–2, 375-383*

**Resumen:**

Los resultados de esta revisión bibliográfica son aplicables a las bibliotecas universitarias a escala internacional, ya que los estudiantes que acceden a las bibliotecas son hoy en día más diversos culturalmente que en el pasado. Antes de la pandemia de COVID-19, esta diversidad se debía al aumento del número de estudiantes internacionales que asistían a universidades europeas, australianas, neozelandesas, británicas y canadienses. La bibliografía indica que las universidades occidentales no comprenden bien las diferencias en la búsqueda de información, la transición cultural, la disrupción de la información, los retos del idioma inglés y los estilos de aprendizaje de los estudiantes internacionales asiáticos. En consecuencia, las bibliotecas universitarias no pueden estar estratégicamente alineadas con los objetivos de internacionalización de las universidades. La falta de comprensión de las experiencias de los estudiantes internacionales asiáticos puede reducir su bienestar y su éxito académico. Asimismo, la falta de adaptación podría representar un riesgo para las universidades, como ocurre con las australianas, de no cumplir las expectativas de cumplimiento normativo nacionales. En esta revisión se examina la bibliografía sobre el contexto del uso de bibliotecas universitarias australianas por parte de estudiantes universitarios asiáticos y se presenta un proyecto de investigación que explora la experiencia en el uso de las bibliotecas universitarias australianas. La revisión identifica bibliografía relacionada con el perfil cambiante de los estudiantes internacionales asiáticos matriculados en universidades australianas, su comportamiento en relación con la búsqueda de información, dimensiones interculturales, habilidades comunicativas y las expectativas de una biblioteca universitaria australiana. Esta revisión bibliográfica también tiene por objeto explorar quién estudia a los estudiantes internacionales, qué métodos se utilizan para hacerlo y qué temas son de especial interés para los investigadores. Por último, la revisión considera las nuevas oportunidades que se presentan después de la pandemia de COVID-19 para las bibliotecas y otras áreas de servicios para entender las necesidades de los estudiantes internacionales asiáticos.

**Continuing professional development in Cambodia: Perspectives of different stakeholders**

(Desarrollo profesional continuo en Camboya: perspectivas de diversas partes interesadas)

*Gina de Alwis Jayasuriya, Shaheen Majid*

*IFLA Journal, 49–2, 384-406*

**Resumen:**

El objetivo de este estudio era recopilar los puntos de vista de los proveedores de formación y los empleados de bibliotecas sobre las oportunidades de desarrollo profesional continuo en Camboya y los obstáculos asociados. En total, se llevaron a cabo 26 entrevistas semiestructuradas: 14 a proveedores de formación y 12 a empleados de bibliotecas. Se detectaron cuatro obstáculos principales: la falta de oportunidades de desarrollo profesional continuo; la incapacidad para satisfacer las necesidades de formación reales; los retos asociados a la asistencia a programas en otras ciudades, como viajes, alojamiento y permiso de estudios; y la falta de personal para impartir programas de desarrollo profesional continuo. Se sugieren cuatro áreas de mejora: oferta de programas de formación regulares; realización de un estudio de evaluación de las necesidades de formación; organización de una reunión nacional para debatir problemas relacionados con el desarrollo del personal bibliotecario, y desarrollo de un ecosistema de biblioteconomía y documentación para respaldar el marco de desarrollo profesional continuo. Se espera que los resultados de este estudio proporcionen información básica para la elaboración de un plan de desarrollo continuo para el sector de biblioteconomía y documentación en Camboya.

**Assessing LIS graduates’ skills and knowledge against 21st century employability demands**

(Evaluación de las capacidades y los conocimientos de los graduados en biblioteconomía y documentación en relación con las demandas de empleabilidad del siglo XXI)

*Mohamed Kassim, Kokuberwa Katunzi-Mollel, Kelefa Mwantimwa KM*

*IFLA Journal, 49–2, 407-418*
Resumen:

Las demandas de los graduados, los empleadores y la sociedad están cambiando debido a los sustanciales avances tecnológicos. En este estudio se evaluaron las capacidades y los conocimientos de biblioteconomía y documentación exigidos por los empleadores y la sociedad. El estudio utilizó un diseño de investigación descriptivo transversal con enfoques cualitativos y cuantitativos. La muestra del estudio se componía de estudiantes de estudios de información que se graduaron en la Universidad de Dar es Salaam entre 2005 y 2020. Para recoger los datos necesarios se utilizaron cuestionarios, junto con las guías de la encuesta. Los datos se analizaron por medio de estadísticas descriptivas y métodos temáticos. Los resultados indican que el programa de estudios de información no cubre plenamente las expectativas y las necesidades de los graduados, los empleadores y la sociedad. El estudio revela un desajuste entre lo que ofrece el programa y los requisitos del mercado de trabajo. El estudio recomienda una revisión periódica del programa de estudios para integrar de forma efectiva las competencias del siglo XXI que satisfagan las necesidades del mercado laboral actual.

The power of information and coping with albinism: An auto-ethnographic study

(El poder de la información y abordaje del albinismo: un estudio autoetnográfico)

Anna K Ngula

IFLA Journal, 49–2, 432-442

Resumen:

Este artículo tiene por objeto determinar los propósitos para los que la autora necesitó información cuando nacieron sus hijos con albinismo, y explorar los mecanismos que utilizó para hallar la información y los retos que hubo de afrontar en la búsqueda de dicha información. Utiliza un método autoetnográfico para compartir su experiencia con el albinismo, y los datos se han recogido a través de la memoria personal de la autora recordando lo que ocurrió cuando dio a luz a su hija en 2013 y a su hijo en 2016. La información desempeñó un papel crucial para ayudar a la autora a entender mejor el albinismo y afrontar su difícil situación. Como bibliotecaria y madre de hijos con albinismo, la autora exploró diversos mecanismos para encontrar información. Internet fue la principal fuente de información, además de organizaciones como Support in Namibia of Albinism Sufferers Requiring Assistance y el Namibia Albino Association Trust, que ayudan a las personas con albinismo a superar sus dificultades en el país.

Developing research data management services in a regional comprehensive university: The case of Central Washington University

(Desarrollo de servicios de gestión de datos de investigación en una universidad integral regional: el caso de la Central Washington University)

Ping Fu, Maurice Blackson, Maura Valentino

IFLA Journal, 49–2, 443-451
Resumen:

Este estudio tiene por objeto analizar las necesidades de servicios de gestión de datos de investigación que tienen los investigadores en una universidad integral regional; se debaten las alternativas para el desarrollo de un programa de gestión de datos de investigación en la universidad; y se propone un plan de implantación escalonada en tres años para las bibliotecas universitarias. El método consistió en diseñar una encuesta para recabar información de los investigadores y evaluar sus necesidades de servicios de gestión de datos de investigación. Los resultados revelan que las necesidades de los investigadores en una universidad integral regional podrían ser muy distintas de las de los investigadores de una universidad de investigación. Además, los resultados confirman la hipótesis de que los investigadores de las universidades integrales regionales acogerían con satisfacción bibliotecas que ofrezcan servicios de datos gestionados para la comunidad investigadora. Por tanto, este estudio propone un plan de implantación escalonada en tres años. La importancia del estudio radica en que puede ofrecer información útil para las universidades integrales regionales que tienen previsto desarrollar un programa de gestión de datos de investigación.

IFLA’s role in the implementation of the Marrakesh Treaty

(El papel de la IFLA en la aplicación del Tratado de Marrakech)

Fredrick Otike, Ágnes Hajdu Barát

IFLA Journal, 49–2, 452-466

Resumen:

Este artículo analiza desde un punto de vista crítico el importante papel de la IFLA en la aplicación y adopción del Tratado de Marrakech en las bibliotecas públicas asociadas. También se destacan los retos y los obstáculos que afectan a la aplicación del Tratado. El artículo establece que, a pesar de la firma del Tratado de Marrakech, su aplicación por parte de los estados miembros ha encontrado resistencia. Sin embargo, en el artículo se reconoce el importante papel que la IFLA ha desempeñado en la aplicación del Tratado, ya que incluso ha actuado como representante de las bibliotecas a escala mundial y en sus funciones de asesoramiento y defensa y servicios de extensión. Por último, el artículo debate y ofrece varias sugerencias; por ejemplo, que la IFLA debe reclutar e incorporar más países en la Federación, gozar de mayor diversidad lingüística, desarrollar competencias y formación, y organizar conferencias y talleres frecuentes sobre el Tratado de Marrakech.