Contents

Original Articles
A study on the knowledge and perception of artificial intelligence 503
A Subaveerapandiyan, C Sunanthini and Mohammad Amees

Copyright literacy of library and information science professionals in Pakistan 514
Ghalib Khan and Muhammad Basir

Identifying trends in information security and privacy concern research 527
Maor Weinberger and Dan Bouhnik

South African academic libraries as contributors to social justice and ubuntu through community engagement 541
Siviwe Bangani and Luyanda Dube

Factors contributing to slow completion rate among postgraduate students of the Information Studies Programme at the University of Dar es Salaam, Tanzania 554
Emmanuel Mkhai

Bibliotherapy by medical librarians for the blind females 564
Maryam Shekofteh, Elaheh Ahmadi, Maryam Kazerani and Sedighe Salabifar

The University of the Free State Neville Alexander Library book club and information-seeking behaviour 573
Dina Mokgadi Mashiyane, Tebogo Agnes Makurpetsi and Thuto Kgosiemang

School library censorship: Looking at the perspective of a school librarian association in Indonesia 587
Apriana Anggraeni Ayuningtyas, Heriyanto, Ana Irhandayaningsih and Roro Isyawati Permata Ganggi

Case Studies
Framework for communicating library training at a South African university 596
Mahlaga J Molepo and Sihle Blose

Review Articles
Library and information services’ reflections on emergency remote support and crisis-driven innovations during pandemic conditions 610
Brenda van Wyk

Abstracts 620

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
A study on the knowledge and perception of artificial intelligence

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Abstract
This study investigated the knowledge and perception of artificial intelligence among library and information science professionals in Zambia by surveying 245 randomly selected participants. The results show that the library and information science professionals had a favourable and encouraging outlook with regard to artificial intelligence but were also concerned about artificial intelligence replacing librarians' roles and the barriers to adopting artificial intelligence technologies in Zambian libraries. The article suggests that libraries should consider the study's findings before implementing artificial intelligence, particularly concerning technology and facilities, librarians' proficiency in artificial intelligence, and leadership positions in artificial intelligence initiatives. The research can be used as a resource by library boards and associations to develop policies for implementing artificial intelligence in academic libraries, and fills a research vacuum in developing nations like Zambia regarding the knowledge of university and college libraries, and their willingness to use artificial intelligence.

Keywords
Artificial Intelligence (AI), digital technologies, intelligent library development, librarian skills, technology adoption, Zambia

Introduction
Artificial intelligence (AI) aims to create machines which can perform tasks that normally require human intelligence, such as problem-solving, decision-making and natural language processing. AI systems are designed to learn from data and adapt to new situations, allowing them to improve their performance over time. However, it is important to note that AI is still in its early stages of development, and many challenges need to be addressed before it can be fully integrated into libraries and information services. These challenges include privacy, security and ethical considerations. Additionally, as AI technologies continue to evolve, it will be important for libraries and information services to keep pace with the latest developments and adapt their services accordingly (Bubinger and Dinneen, 2021; Huang and Rust, 2018; Lund et al., 2020).

ExLibris (2019) argues that machines possess greater intelligence capacity due to their efficient recognition and assimilation of patterns on a significantly larger scale than humans. This capacity for intelligence allows machines to learn and improves their ability to perform tasks without being explicitly programmed. Many of our routine computing tasks are already influenced by AI. AI characteristics are present in most modern computers and smartphones,
and we have undoubtedly used them without realizing they were intelligent devices:

Natural language processing, robotics, self-driving or autonomous vehicles, speech recognition, machine learning, deep learning, and self-driving automobiles are some examples of artificial intelligence in computers. The strength and benefit of artificial intelligence come from the fact that machines can recognize patterns quickly and efficiently on a scale that humans cannot. (Madakam et al., 2022)

Libraries have traditionally been viewed as institutions that promote access to information and knowledge. However, the use of automation and digital technologies in libraries has been slower than in other industries. This has led to the criticism that libraries need to catch up with the times and take advantage of the opportunities presented by digital technologies. However, it is essential to note that libraries have unique challenges in digitization, such as limited budgets, concerns about preserving and digitizing physical collections, and the need to ensure access for patrons who may not have digital literacy skills (Astle and Muir, 2002; Awamleh and Hamad, 2022; Matusiak et al., 2017). Additionally, librarianship has a different approach to knowledge, focused on preservation and access rather than profit, which may explain the slow progress in digitalization. It is important to note that libraries are working to overcome these challenges and finding new ways to provide access to information and knowledge through digital technologies (Alenezi, 2023; Feliciano-Cestero et al., 2023; Lischer-Katz, 2022; Meng et al., 2023).

AI is having a significant impact on libraries and information services. It automates repetitive tasks, such as cataloguing and data entry, and improves search capabilities, providing patrons with more accurate and relevant results. AI-powered chatbots are also being used to assist patrons with their research and answer their questions. Additionally, machine learning algorithms analyse large data sets and make personalized recommendations to patrons. However, the use of AI in libraries also raises some concerns, such as the need for privacy, security and the ethical use of data (Asemi et al., 2020; Panda and Chakravarty, 2022; Smith, 2022). AI is a rapidly evolving field, changing how we interact with technology. It involves the development of intelligent computers that can perceive, think and behave like humans (Goralski and Tan, 2020; Hassani et al., 2020; Popenici and Kerr, 2017).

With the growing use of AI in libraries, there is also an increasing need for data and AI literacy (Laupichler et al., 2022; Mani et al., 2021). The responsibilities of library and information science (LIS) employees in assisting users will need to shift as their context changes due to AI. For instance, newcomers to scientific research will affect scholarly communication and the methods used to support it. For this, library personnel will need a solid understanding of AI technologies and the ability to use them in their work. Many libraries and information services already use AI in their operations (Alam, 2022; Hussain, 2023). In particular, machine learning technologies are being used for activities like automatic resource categorization and classification; collection recognition and weeding; automated cataloguing and data entry; personalized suggestions based on users’ search and lending histories and other data (Cordell, 2020; Gul and Bano, 2019; Pekala, 2017; Yang, 2022); and the application of voice assistants, virtual assistants and chatbots to educational institutes’ library services (Mckie and Narayan, 2019).

Moreover, with the increasing use of AI in libraries, they will need to ensure that these technologies are used ethically and responsibly. LIS professionals will have to work to ensure that AI is used to improve access to information rather than restrict it. Additionally, they must work to ensure that AI-powered systems are inclusive and equitable, and do not perpetuate biases or discrimination.

Libraries utilize Artificial Intelligence (AI) to leverage big data and perform data analysis in their operational and service-oriented domains. However, the full implementation of AI in libraries is difficult without LIS professionals having the relevant knowledge, skills and wisdom. There is a lack of research in the LIS field in Zambia on using AI in libraries. Such research would be beneficial in understanding the perception of library professionals towards AI and how it can be adopted in libraries. This can assist library administrators and tech-savvy professionals in promoting the adoption of AI technology in libraries.

The objectives of this study are to:

1. Assess the knowledge of LIS professionals about AI;
2. Identify the perception of AI among LIS professionals;
3. Determine the skills that LIS professionals require in the AI era.

The research questions for this study are:

1. What knowledge do LIS professionals have of AI?
2. What is the perception of AI among LIS professionals?
3. What skills are required by LIS professionals in the AI era?

Literature review

AI in libraries is not a new area of study; several studies have been conducted on AI. Empirical research, conceptual papers and literature review articles were collected from Google Scholar in 2023 using 'artificial intelligence AND library' as keywords. And to obtain articles related to the knowledge and perception of AI among LIS professionals, manual screening of relevant documents was conducted.

Many conceptual papers on AI in libraries have been published, including on the application of AI for efficient library service delivery in academic libraries in Nigeria (Yusuf et al., 2022). Yusuf et al. (2022) report that implementing AI technology in academic libraries has raised the bar for the effectiveness and efficiency of library service delivery, enabling libraries to enhance and offer dynamic services for library users. It is user-friendly, especially in searching for information, and is also used to direct and assist library activities. The study also points out that, despite AI's advantages, several difficulties still prevent the seamless implementation of the technology in many academic libraries in Africa, including unstable power supplies, increasing skills gaps, job loss and inadequate infrastructure. Massis (2018) found that while AI may be seen as a threat to traditional institutions like libraries, it also has the potential to enhance library services greatly. Mogali (2014) identified various areas of AI, including pattern recognition, expert systems, robots and natural language processing. The author notes that the use of expert systems in library tasks such as cataloguing, categorization and reference services has shown significant promise and has the potential to increase library productivity greatly.

Further, a study by Massis (2018) suggests that while AI may be seen as a threat to traditional institutions like libraries, it also has the potential to enhance library services greatly. Mogali (2014) identified various areas of AI, including pattern recognition, expert systems, robots and natural language processing. The author notes that the use of expert systems in library tasks such as cataloguing, categorization and reference services has shown significant promise and has the potential to increase library productivity greatly.

Grbin et al. (2022) highlight the importance of librarians’ participation in developing and researching automation solutions. They argue that, as information professionals, librarians should be supported and encouraged to collaborate with researchers and contribute to machine learning initiatives, and that librarians bring a unique set of skills and knowledge to the table, such as expertise in information organization, data management and user-centred design, which can greatly benefit the development and implementation of automation solutions. Harisanty et al. (2022) discovered that exploring AI from multiple perspectives, including those of leaders, practitioners, and scientists, provided a comprehensive understanding of the level of awareness among library stakeholders and the necessary knowledge to undertake AI initiatives. Their study highlights the benefits, practicality, and requisite knowledge and skills related to AI, as well as the obstacles and available AI resources in Indonesian libraries.

According to Ajani et al. (2022), librarians’ opinions on whether university libraries can incorporate AI technology into their operations and services are

Cox et al. (2018) interviewed 33 library directors, library commentators, specialists and publishers to gather their perspectives on the future of AI in libraries. They identify several areas where AI could be useful, such as in supporting machine-readable collections, information-finding tools, research creation, scholarly communication, and teaching and learning. McKie et al. (2022) found that the perceived personalities and humanness of voice assistants play a significant role in how users interact with the technology and retrieve information; Yao et al. (2015) discovered that Xiaotu, an AI-based smart talking robot, could be readily tailored to cater to the specific requirements of diverse libraries, thus enabling the provision of virtual reference services in libraries; Kaushal and Yadav (2022) found that integrating chatbot technology with an existing library information system could give a range of services promoting scholarly communication and research; and Modiba (2021) found that records were not effectively managed due to the lack of a reliable records management system, and therefore suggests implementing AI technology such as automated digitization, automated classification, and the quick retrieval and disposal of records, which can be used to manage records services effectively.
divided. The authors argue that integrating AI into library operations and services can enhance libraries by lowering the human error rates associated with repetitive jobs. However, their study also brings to light librarians’ worries about losing their jobs. Wood and Evans (2018) found that most of their respondents believed that AI will significantly impact libraries over the next three decades, with resource discovery and referencing being the most likely areas. Honghai (2020) reports that AI does not take the position of reference librarians but helps them deliver services that meet consumers’ technical expectations. According to Honghai, AI can efficiently analyse vast amounts of data from internal and external repositories to cater to the specific needs of consumers. The author also discusses the employment of an AI-powered ‘knowledge assimilation agent’ to produce knowledge through machine learning from library materials and user–system interactions. This can support researchers who work with a large amount of data and help a library stay relevant within its organization. However, LIS professionals have some concerns about AI, including worries about job losses in libraries, a lack of breakthroughs in AI that are pertinent to libraries, and privacy and data security issues, and believe that libraries should work to ensure that AI is used to benefit society rather than restrict access to information (Cox et al., 2018). Garcia-Febo (2019) emphasizes that libraries should proactively address these concerns by developing policies and procedures which ensure that AI is used ethically and responsibly. She also calls for libraries to invest in developing AI technologies that are aligned with their missions and goals, and support their role as stewards of knowledge and information.

Results

The following are the findings from the primary data obtained through the administration of the questionnaire, which have been analysed following the themes established at the start of the study. The findings are presented in graphs and tables.

Table 1 provides an overview of the theme of ‘awareness of AI’ among the LIS professionals. The majority of the respondents were aware of AI in libraries, as indicated by the various responses in Table 1. This conclusion is derived from the fact that, on average, 44.1% of the respondents agreed that AI is essential for the effectiveness and efficiency of library service delivery, enabling libraries to enhance and offer dynamic services for their users.

Table 2 provides an overview of the ‘perception of AI’ among the LIS professionals. The majority of the respondents indicated that AI could be used to overcome LIS professionals’ performance disparities and could make things easier, with an average of 35.5% of the respondents in agreement. However, most of the respondents indicated that AI made LIS professionals lazy and threatened their employment, with an average of 38.2% in agreement. The respondents also indicated barriers to the adoption of AI in libraries, such as the lack of LIS professionals’ skills in AI, budgetary constraints, high energy requirements, and a scarcity of vendors specializing in AI, with an average of 49.8% in strong agreement.

Table 3 provides an overview of the competencies required by library professionals in the AI era. The majority of the respondents (an average of 65%) were in strong agreement that electronic communication, hardware and software, Internet applications, computing and networking, cyber security and network management, data quality control, data curation, database management systems, designing AI mechanisms, data analysis and algorithms, data handling, and data mining are the necessary competencies required by LIS professionals for them to be proficient in AI – hence the need to integrate education on AI in LIS programmes.
The conclusions of the descriptive data analysis, which highlight the significance of the adoption of AI in libraries for LIS professionals, are covered in this section. Before going on to other issues, the initial focus was to ascertain what essential understanding library professionals had of AI. The respondents were also questioned on their opinions of AI technology, the skills needed and the barriers to AI adoption in libraries.

Table 1 provides an overview of the theme of ‘awareness of AI’ among the library professionals. According to Wkiquote, AI is ‘an area of research

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly agree (%)</th>
<th>Agree (%)</th>
<th>Neutral (%)</th>
<th>Disagree (%)</th>
<th>Strongly disagree (%)</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI is used in reference services in libraries</td>
<td>48 (19.6)</td>
<td>108 (44.1)</td>
<td>24 (9.8)</td>
<td>40 (16.3)</td>
<td>25 (10.2)</td>
<td>3.46</td>
<td>1.11</td>
</tr>
<tr>
<td>AI predicts readers’ book search trends</td>
<td>24 (9.8)</td>
<td>130 (53.1)</td>
<td>64 (26.1)</td>
<td>27 (11.0)</td>
<td>0 (0.0)</td>
<td>3.61</td>
<td>0.89</td>
</tr>
<tr>
<td>Al is employed in chatbots to enhance the experiences of readers</td>
<td>45 (18.4)</td>
<td>95 (38.8)</td>
<td>81 (33.0)</td>
<td>14 (5.7)</td>
<td>10 (3.9)</td>
<td>3.61</td>
<td>0.98</td>
</tr>
<tr>
<td>AI is used to detect misinformation</td>
<td>72 (29.4)</td>
<td>115 (46.9)</td>
<td>38 (15.5)</td>
<td>13 (5.3)</td>
<td>7 (2.9)</td>
<td>3.94</td>
<td>0.97</td>
</tr>
<tr>
<td>AI is used to find articles</td>
<td>41 (16.8)</td>
<td>148 (60.4)</td>
<td>38 (15.5)</td>
<td>14 (5.3)</td>
<td>4 (1.6)</td>
<td>3.84</td>
<td>0.90</td>
</tr>
<tr>
<td>AI is used in optical character recognition and the preservation of documents</td>
<td>84 (34.3)</td>
<td>75 (30.6)</td>
<td>42 (16.3)</td>
<td>26 (10.6)</td>
<td>18 (7.3)</td>
<td>3.73</td>
<td>1.11</td>
</tr>
<tr>
<td>AI is used in indexing</td>
<td>75 (30.6)</td>
<td>102 (41.6)</td>
<td>40 (15.1)</td>
<td>22 (8.4)</td>
<td>6 (2.3)</td>
<td>3.88</td>
<td>1.00</td>
</tr>
<tr>
<td>AI is used in weeding library materials</td>
<td>40 (16.3)</td>
<td>121 (49.4)</td>
<td>60 (24.5)</td>
<td>24 (9.8)</td>
<td>0 (0.0)</td>
<td>3.72</td>
<td>0.92</td>
</tr>
<tr>
<td>AI is used in library auditing</td>
<td>65 (26.5)</td>
<td>86 (35.1)</td>
<td>38 (15.5)</td>
<td>25 (9.8)</td>
<td>31 (12.7)</td>
<td>3.52</td>
<td>1.14</td>
</tr>
<tr>
<td>AI is used in the acquisition of library materials</td>
<td>84 (34.3)</td>
<td>112 (45.7)</td>
<td>33 (13.5)</td>
<td>12 (4.9)</td>
<td>4 (1.6)</td>
<td>4.06</td>
<td>0.94</td>
</tr>
<tr>
<td>AI is used in library decision support systems</td>
<td>33 (13.5)</td>
<td>99 (39.4)</td>
<td>83 (31.5)</td>
<td>20 (7.6)</td>
<td>10 (3.9)</td>
<td>3.51</td>
<td>0.97</td>
</tr>
<tr>
<td>AI is used in the circulation of library materials</td>
<td>72 (29.4)</td>
<td>133 (54.3)</td>
<td>14 (5.7)</td>
<td>24 (9.8)</td>
<td>2 (0.8)</td>
<td>4.01</td>
<td>0.96</td>
</tr>
<tr>
<td>AI is used in library security and surveillance</td>
<td>85 (34.6)</td>
<td>110 (44.9)</td>
<td>36 (14.7)</td>
<td>7 (2.9)</td>
<td>2 (0.8)</td>
<td>4.05</td>
<td>0.96</td>
</tr>
<tr>
<td>AI is used in bibliographies and anthologies</td>
<td>95 (38.8)</td>
<td>95 (38.8)</td>
<td>43 (17.5)</td>
<td>10 (4.1)</td>
<td>2 (0.8)</td>
<td>4.10</td>
<td>0.93</td>
</tr>
<tr>
<td>AI is used to find citations</td>
<td>70 (28.6)</td>
<td>95 (38.8)</td>
<td>43 (17.5)</td>
<td>22 (8.4)</td>
<td>15 (5.7)</td>
<td>3.74</td>
<td>1.06</td>
</tr>
<tr>
<td>AI is used in research data management</td>
<td>111 (45.3)</td>
<td>108 (44.1)</td>
<td>8 (3.3)</td>
<td>15 (6.1)</td>
<td>3 (1.2)</td>
<td>4.26</td>
<td>0.93</td>
</tr>
<tr>
<td>AI is used in digital asset management</td>
<td>94 (38.4)</td>
<td>92 (37.6)</td>
<td>25 (10.2)</td>
<td>20 (8.1)</td>
<td>14 (5.7)</td>
<td>3.94</td>
<td>1.07</td>
</tr>
<tr>
<td>AI is used in content summarization</td>
<td>90 (36.7)</td>
<td>115 (47.0)</td>
<td>21 (8.6)</td>
<td>12 (4.9)</td>
<td>7 (2.8)</td>
<td>4.09</td>
<td>0.96</td>
</tr>
<tr>
<td>AI is used in language translation</td>
<td>40 (16.3)</td>
<td>158 (64.5)</td>
<td>42 (17.2)</td>
<td>5 (2.0)</td>
<td>0 (0.0)</td>
<td>3.95</td>
<td>0.80</td>
</tr>
<tr>
<td>AI is used in the writing of systematic literature reviews</td>
<td>74 (30.2)</td>
<td>113 (46.1)</td>
<td>12 (4.9)</td>
<td>36 (14.7)</td>
<td>10 (4.1)</td>
<td>3.83</td>
<td>1.06</td>
</tr>
<tr>
<td>AI is used in search engines</td>
<td>85 (34.7)</td>
<td>160 (65.3)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4.34</td>
<td>0.68</td>
</tr>
<tr>
<td>AI is used in library databases</td>
<td>61 (24.9)</td>
<td>96 (39.2)</td>
<td>38 (15.5)</td>
<td>18 (7.3)</td>
<td>32 (13.1)</td>
<td>3.55</td>
<td>1.13</td>
</tr>
</tbody>
</table>

Discussion
The conclusions of the descriptive data analysis, which highlight the significance of the adoption of AI in libraries for LIS professionals, are covered in this section. Before going on to other issues, the initial focus was to ascertain what essential understanding library professionals had of AI. The respondents were also questioned on their opinions of AI technology, the skills needed and the barriers to AI adoption in libraries.

Table 1 provides an overview of the theme of ‘awareness of AI’ among the library professionals. According to Wkiquote, AI is ‘an area of research
Table 2. Perception of AI among LIS professionals.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly agree (%)</th>
<th>Agree (%)</th>
<th>Neutral (%)</th>
<th>Disagree (%)</th>
<th>Strongly disagree (%)</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI robots can fill librarian shortages</td>
<td>61 (24.9)</td>
<td>47 (19.2)</td>
<td>33 (13.4)</td>
<td>72 (29.4)</td>
<td>32 (13.1)</td>
<td>3.13</td>
<td>1.18</td>
</tr>
<tr>
<td>Librarian roles can be performed more effectively by AI robots</td>
<td>20 (8.2)</td>
<td>75 (30.6)</td>
<td>64 (26.1)</td>
<td>58 (23.7)</td>
<td>28 (11.4)</td>
<td>3.00</td>
<td>1.07</td>
</tr>
<tr>
<td>AI robots can work alongside librarians in the future</td>
<td>47 (19.2)</td>
<td>95 (38.8)</td>
<td>60 (23.7)</td>
<td>22 (8.5)</td>
<td>21 (8.5)</td>
<td>3.51</td>
<td>1.07</td>
</tr>
<tr>
<td>AI can bridge librarian performance gaps</td>
<td>33 (13.5)</td>
<td>117 (47.7)</td>
<td>41 (16.7)</td>
<td>44 (18.0)</td>
<td>10 (4.1)</td>
<td>3.48</td>
<td>1.02</td>
</tr>
<tr>
<td>AI makes library staff lazy</td>
<td>100 (40.8)</td>
<td>112 (45.7)</td>
<td>24 (9.8)</td>
<td>6 (2.5)</td>
<td>3 (1.2)</td>
<td>4.22</td>
<td>0.90</td>
</tr>
<tr>
<td>Budgeting is an issue in adopting AI in libraries</td>
<td>113 (46.1)</td>
<td>45 (18.4)</td>
<td>87 (33.5)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4.10</td>
<td>0.94</td>
</tr>
<tr>
<td>The lack of LIS professionals’ skills and knowledge is the reason for not adopting AI in libraries</td>
<td>42 (17.1)</td>
<td>74 (30.2)</td>
<td>70 (28.6)</td>
<td>34 (12.9)</td>
<td>25 (9.0)</td>
<td>3.30</td>
<td>1.09</td>
</tr>
<tr>
<td>AI is a threat to librarians’ employment</td>
<td>75 (30.6)</td>
<td>69 (28.1)</td>
<td>31 (12.7)</td>
<td>58 (23.7)</td>
<td>26 (10.6)</td>
<td>4.42</td>
<td>1.20</td>
</tr>
<tr>
<td>The scarcity of vendors specializing in AI is the reason for not adopting AI in libraries</td>
<td>115 (46.7)</td>
<td>60 (24.5)</td>
<td>56 (22.9)</td>
<td>5 (2.0)</td>
<td>9 (3.7)</td>
<td>4.08</td>
<td>1.02</td>
</tr>
<tr>
<td>The high energy demand for AI technology is the reason for not adopting AI in libraries</td>
<td>182 (74.3)</td>
<td>37 (15.1)</td>
<td>24 (9.4)</td>
<td>1 (0.4)</td>
<td>1 (0.4)</td>
<td>4.65</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Table 3. AI skills required by librarians in the AI era.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree (%)</th>
<th>Agree (%)</th>
<th>Neutral (%)</th>
<th>Disagree (%)</th>
<th>Strongly disagree (%)</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic communication</td>
<td>205 (83.7)</td>
<td>24 (9.8)</td>
<td>12 (4.9)</td>
<td>4 (0.0)</td>
<td>0 (0.0)</td>
<td>4.75</td>
<td>0.78</td>
</tr>
<tr>
<td>Hardware and software</td>
<td>212 (86.5)</td>
<td>21 (8.6)</td>
<td>11 (4.5)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4.81</td>
<td>0.71</td>
</tr>
<tr>
<td>Internet applications</td>
<td>159 (64.9)</td>
<td>58 (23.7)</td>
<td>24 (9.8)</td>
<td>1 (0.4)</td>
<td>3 (1.2)</td>
<td>4.50</td>
<td>0.88</td>
</tr>
<tr>
<td>Programming skills</td>
<td>156 (63.7)</td>
<td>54 (22.0)</td>
<td>35 (14.3)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4.49</td>
<td>0.85</td>
</tr>
<tr>
<td>Computing and networking</td>
<td>192 (78.4)</td>
<td>17 (6.9)</td>
<td>36 (14.7)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4.63</td>
<td>0.84</td>
</tr>
<tr>
<td>Cyber security and network management</td>
<td>195 (79.7)</td>
<td>45 (18.3)</td>
<td>0 (0.0)</td>
<td>5 (2.0)</td>
<td>0 (0.0)</td>
<td>4.75</td>
<td>0.74</td>
</tr>
<tr>
<td>Data quality control</td>
<td>200 (81.6)</td>
<td>37 (15.1)</td>
<td>8 (3.3)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4.78</td>
<td>0.69</td>
</tr>
<tr>
<td>Data curation</td>
<td>180 (73.5)</td>
<td>64 (26.1)</td>
<td>1 (0.4)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4.73</td>
<td>0.67</td>
</tr>
<tr>
<td>Database management systems</td>
<td>171 (69.8)</td>
<td>28 (11.4)</td>
<td>46 (18.8)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>4.51</td>
<td>0.88</td>
</tr>
<tr>
<td>Designing AI mechanisms</td>
<td>121 (49.4)</td>
<td>30 (12.3)</td>
<td>52 (21.2)</td>
<td>28 (11.4)</td>
<td>14 (5.7)</td>
<td>3.88</td>
<td>1.13</td>
</tr>
<tr>
<td>Data analysis and algorithms</td>
<td>79 (32.2)</td>
<td>85 (34.8)</td>
<td>49 (20.0)</td>
<td>32 (13.0)</td>
<td>0 (0.0)</td>
<td>3.86</td>
<td>1.00</td>
</tr>
<tr>
<td>Data handling</td>
<td>115 (46.9)</td>
<td>80 (32.7)</td>
<td>30 (12.2)</td>
<td>12 (4.9)</td>
<td>8 (3.3)</td>
<td>4.15</td>
<td>1.01</td>
</tr>
<tr>
<td>Data mining</td>
<td>108 (44.1)</td>
<td>94 (38.4)</td>
<td>19 (7.8)</td>
<td>18 (7.3)</td>
<td>6 (2.4)</td>
<td>4.14</td>
<td>1.00</td>
</tr>
</tbody>
</table>
in computer science’. AI aims to make robots capable of thinking like people, including learning, logical thinking and self-correction. One may argue that basic AI expertise is something that librarians already possess. The respondents showed that they understood AI to refer to intelligent devices or robots. Prior research in Pakistan indicates that chief librarians were familiar with voice search, text data mining, big data, cloud computing and Google Assistant, but not robotic AI and chatbots (Ali et al., 2020). According to earlier studies in Canada, librarians characterized AI in terms of how it functioned, its place among other AI goods and technologies, and what it signified (Ajibade and Mutula, 2020; Hervieux and Wheatley, 2021). The respondents in this study showed that they recognized the definition of AI as a machine that imitates human behaviour and that AI’s purpose is to support humans in their jobs, particularly data processing.

From the results, it can be inferred that the respondents thought AI was advantageous for libraries, particularly in terms of its use for routine library tasks such as circulation services, acquisitions, weeding and the registration of new members, among others, which freed up the respondents to work more productively on library development. This is in line with various research projects on how AI technology may be used in catalogues and categorization to classify library resources (Chaoying, 2021). It is clear from the responses that the respondents indicated that several library data sets were not analysed because of a lack of time, resources and energy, and could not be used for service development and decision-making. This supports the need for librarians and library directors to use AI in their data processing.

AI can be useful for research support by providing expertise on study subjects and facilitating the quick and accurate retrieval of relevant information. This has been demonstrated in previous research studies investigating the use of AI in research services. AI can also analyse large data sets, identify patterns and trends, and make predictions, aiding the research process. Additionally, AI-powered tools such as natural language processing and machine learning can help researchers to extract insights from unstructured data sources, such as text and social media data, which can help to enhance the quality and depth of research findings (Fernandez, 2016; Iantovics et al., 2016). Previous research, which discovered that intelligent talking robots were a sensible choice for reference services, provides proof that the benefits of AI may also be realized in the field of information services (Yao et al., 2015).

Research has shown that AI can be used in libraries for a variety of purposes, including cataloguing, classification, indexing, referencing and acquisition processes (Mogali, 2014), search engines in digital libraries (Wu et al., 2015), information literacy (Honghai, 2020; Yueh et al., 2020), library marketing (Omehia and Mmejim, 2020), public relations (Guth and Vander Meer, 2017) and content creation (Hilt, 2017). This study found that adopting AI applications provides benefits, particularly for managing libraries, organizing human resources and career development, and managing physical infrastructure, including buildings, rooms and equipment. Systems for making decisions that are important to this management role can employ AI (Herron, 2017).

Table 2 presents an overview of the perception of AI among library professionals. This is evident from their unanimously positive responses to the items listed ‘AI can overcome librarians’ performance disparities’, the respondents believed that AI could make things easier. According to the respondents, AI has the potential to address performance disparities among librarians, as they believed it could simplify tasks. The findings from the survey indicate that librarians highly value the ease that AI brings. According to earlier studies, AI technology can increase efficiency and production in a variety of industries, including banking (Mor and Gupta, 2021), manufacturing (Long et al., 2020) and agriculture (Lakshmi and Corbett, 2020). Libraries can benefit from the increased adaptability, efficiency and creativity resulting from the application of AI (Chen and Shen, 2020; Yu et al., 2019).

Library users also benefit from AI applications in terms of convenience, such as obtaining rapid round-the-clock service and swiftly and correctly accessing dependable information sources. A library’s prompt response can enhance community library users’ experiences and help with content production (Nguyen, 2020; Peltonen and Wickström, 2014). The results of past research indicate that, even though a few.

Table 3 provides an overview of the competencies required by library professionals in the AI era. AI has the potential to be used in libraries, but this is not possible without the competence of librarians, which involves both technical and soft skills. The use of information technology in libraries, as well as its evolution, must be understood by librarians. Additionally, they must be proficient in AI, including having an understanding of AI, AI tools and technologies, data analytics, library management, user behaviour and system architecture. It can be challenging to explain AI to those who do not work in information technology, programming or computer science because it has its roots in these fields; yet with the right training,
anybody with or without such a background can use AI in their work (Long and Magerko, 2020).

In addition to competence, soft skills are linked to the adoption of AI, with the idea that if librarians have these skills, the adoption of AI in libraries will be simpler. Soft skills include creativity and innovation, critical thinking, cooperation, communication and an adaptable attitude towards technological advancements. In the information and communications technology era, librarians’ soft skills include communication, leadership, interpersonal and presentation skills (Satishkumar and Machendranath, 2018). In the AI era, librarians must be flexible or able to adapt and open to new technology, rather than rejecting AI because they think it will cost them their job. There have not been many studies on librarians’ soft skills and competency in the age of AI. Still, some have discovered evidence of information and communication technology proficiency (Oyedokun et al., 2018), professional competence in digital libraries (Khan and Bhatti, 2017), and librarians’ professional abilities, such as communication, presentation, marketing and leadership skills (Kulkarni et al., 2017). The results of this study show that, among other things, it is not only essential but also a requirement that modern LIS professionals be information-technology-savvy, have a solid understanding of data analytics, be able to manage a library, understand user behaviour and system design, and be able to think creatively and be adaptable.

Implications
This study was designed to gather statistical information on LIS professionals’ knowledge, perception and skills. The inquiry intended to investigate the relationship between awareness, perception and AI skills in libraries. The goal of this research was to equip policymakers and LIS stakeholders at large with factual information on the study’s outcomes.

The findings show that the LIS professionals were aware of AI in libraries and indicated that AI is essential for the effectiveness and efficiency of library service delivery, enabling libraries to enhance and offer dynamic services for library users. The LIS professionals also indicated that AI could overcome their performance disparities and make things easier. However, there were concerns that AI made LIS professionals lazy and threatened their jobs.

The findings also show that the LIS professionals were aware of the barriers to adopting AI in libraries, such as their lack of AI skills, budgetary constraints, high energy requirements and a scarcity of vendors specializing in AI. Moreover, the LIS professionals were very aware of the necessary competencies required for them to be proficient in AI, such as knowledge of electronic communication, hardware and software, Internet applications, computing and networking, cyber security and network management, data quality control, data curation, database management systems, designing AI mechanisms, data analysis and algorithms, data handling, and data mining – hence the need to integrate education on AI in LIS programmes. The study’s findings will help policymakers and LIS professionals to improve library service delivery and thereby libraries’ effectiveness and efficiency, as well as add to the body of knowledge, as it will contribute to future research in this field of study.

Conclusion
In this study, the LIS professionals who responded to the survey were often early adopters of new information and communications technology, and were quite open to the idea of using AI in library operations. The study shows that LIS professionals were aware of the skills required to adopt AI technologies, hence their eagerness and preparedness to take the lead role, which is contrary to what Cox et al. (2018: 426) suggest when they say that ‘IT [information technology] services might be in a greater natural position to take on some of these [AI management] duties’. However, this study also shows that LIS professionals were concerned that AI could threaten their jobs, with the fear that most of their roles could be replaced by intelligent machines.

As it is frequently these people who assess if an innovation has value, the motivation for the acceptance of an innovation like AI falls entirely on library professionals, who are sensitive, informed and understand the requisite abilities to implement AI technology. There is strong evidence that LIS professionals perceive AI as playing a significant role in library services in the future based on the study’s favourable findings on its usage in various library-related contexts. However, despite this study setting a strong trajectory for future research in this field, it focused on Zambian LIS professionals. This sample is not representative enough to draw general conclusions from the findings. Hence, the study provides a good literal foundation for representative research with a wider sample and more robust research on AI and its applications in LIS.

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References

Subaveerapandiyan et al.: A study on the knowledge and perception of artificial intelligence


Subaveerapandiyan et al.: A study on the knowledge and perception of artificial intelligence


Yusuf T, Adebayo O, Bello L, et al. (2022) Adoption of artificial intelligence for effective library service delivery in academic libraries in Nigeria. *Library Philosophy and Practice (e-journal)* Article 6804. Available at: https://digitalcommons.unl.edu/libphilprac/6804

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Copyright literacy of library and information science professionals in Pakistan

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Abstract
Library and information science professionals are considered to have appropriate skills and competencies with regard to copyright and related issues. Using a quantitative survey at the provincial level (Khyber Pakhtunkhwa), the copyright literacy of library and information science professionals was investigated in Pakistan. Out of 311 respondents, 279 participated in the survey. The results indicate that library and information science professionals are somewhat familiar with copyright and related issues. The majority of them (94%) mentioned that published materials such as books and articles are under the protection of copyright. Similarly, 73% were aware of local copyright laws; however, they were less familiar with international copyright legislation. Library professionals mentioned that the current library and information science curriculum is not providing adequate knowledge about copyright, therefore, most (94%) expressed the need to include copyright legislation and basic concepts of copyright in the library and information science curriculum at all levels. The findings suggest practical measures to enhance the level of the copyright literacy of Pakistani library and information science professionals.

Keywords
Copyright, copyright literacy, intellectual property, library professionals, Pakistan

Introduction
The close relationship between copyright law and the development of library activities has become more intense and complex in recent years due to the impact of the digital setting. For this purpose, library professionals must have adequate knowledge about copyright, whether it be to carry out their own functions and tasks or to help co-workers and users as efficiently as possible (Fernández-Molina et al., 2022). The digital paradigm presents new challenges for the fundamental copyright doctrines that are the legal cornerstones of library services (American Library Association, 2019). At present, intellectual property and copyright issues are increasingly important, among other issues, in the academic arena (Arias Coello et al., 2020). The importance and impact of copyright in the development of academic activities, and therefore in the proper functioning of academic libraries, has grown steadily. This growth is not due to the fact that most intellectual works are copyright-protected but reflects the rapid development of the digital setting, which means an increase in both the relevance and complexity of copyright issues (Fernández-Molina et al., 2022). Traditionally, libraries have been leaders in trying to maintain a balance of power between copyright holders and users, or at the very least have advocated for intellectual freedom and promoted access to information (Nilsson, 2015). But the proliferation of digital information has caused serious issues in information accuracy, relevancy and ethical use. Library professionals...
are continuously facing the problem of maintaining a balance between providing access and protecting authors’ rights (Nawazish and Batool, 2022). These developments have brought with them complications in the roles of library professionals (Fernández-Molina and Muriel-Torrado, 2018).

The diversity and complexity of the relations between copyright and open access has been the main source of uncertainty and conflict among members of the academic community. They range anywhere from the possibilities of using scientific articles already published and whose rights were transferred to publishers – and the possibilities of recovering these rights – to the conflicts between the free availability of theses and dissertations and the justified explanation of their results in other publications, going through the question of ownership and management of research data (Fernandez-Molina et al., 2022).

Resolving such conflicts without copyright infringement or creating obstacles for academic and research activities calls for sound knowledge of copyright legislation.

In the area of copyright protection, library and information science (LIS) professionals are expected to have the appropriate skills in copyright and related issues, and therefore expected to resolve such issues through appropriate knowledge of and literacy in copyright (Eye, 2013; Patel and Hanumappa, 2019).

The studies by Arias Coello et al. (2020), Fernandez-Molina and Muriel-Torrado (2018), and Tella and Oyeyemi (2017) identify that students and even teaching faculty whose knowledge is considered to be at a high level lack copyright literacy. Fernández-Molina et al. (2022) mention that this situation has been acknowledged by library professionals, who have taken on new roles to educate their users, faculty and students about copyright and related issues. In this regard, it is worth underlining the recent appearance of the concept of ‘copyright literacy’, which was coined by Tania Todorova in a multinational survey of the copyright literacy of specialists from libraries and other cultural institutions (Todorova et al., 2017). Secker et al. (2019) regard the term to mean knowledge about copyright. Kortelainen (2015) calls it the ability to identify copyright-protected materials, navigate fair use and fair dealing, obtain permissions and licences where necessary, and recognize infringement of copyright law. The IFLA (2018a) states that copyright literacy includes understanding the structure, functioning and implications of the copyright system as laws, practices and user expectations evolve. As a result of recent developments in information formats and the open access movement, everyday copyright law affects the way libraries provide information to their users, and every outcome can directly affect the future of libraries (American Library Association, 2019).

As the traditional skills and aspects of librarianship have changed – partly due to the complex development of scholarly communication, digital collections, and the demands of new services related to e-resources, publishing and copyright – librarians often do not feel confident in their knowledge about copyright, and are therefore hesitant to take on this new role (Nilsson, 2015). Not only are librarians, as professionals, bound to uphold the values of our profession, of which copyright is one, but it is our role to protect the copyright of those who allow us, as a public service, to lend their property to others (Hossain, 2021). Consequently, librarians and other information management professionals need to be copyright literate in order both to carry out their own functions and duties and to support colleagues and users in the most effective way possible (IFLA, 2018b). Hence, there is a need for basic knowledge and to stay up to date with new developments about copyright, and it is crucial to continue to address the emerging challenges posed at the intersections of technology, society and the law (Hossain, 2021).

The literature suggests that there has been a wide range of international studies undertaken in this area of knowledge (e.g. Arias Coello et al., 2020; Boustanly, 2014; Eye, 2013; Hossain, 2021; Kelly, 2018; Kortelainen, 2015; Fernandez-Molina et al., 2022; Patel and Hanumappa, 2019; Terra, 2016; Todorova et al., 2017), but in Pakistan copyright literacy is a somewhat less-researched area. In this context, the current study has been undertaken to fill this literature gap by investigating the copyright literacy of LIS professionals in Pakistan, which is a potential area of research.

The Pakistani context

In Pakistan, the first law on copyright was the Copyright Act, 1914. It was modelled after the UK Copyright Act, 1911. The Copyright Ordinance, 1962 replaced the earlier Copyright Act, 1914 (Bashir and Khan, 2016a). However, in order to extend the scope of protection to new material and ensure stringent enforcement of copyright, different provisions have been made in the ordinance, which determine when a work is in violation of copyright (Mahmood and Ilyas, 2005).

In Pakistan, registering a work with the registrar of copyrights is not a requirement for obtaining copyright protection. Rather, copyright protection is vested in the original creator as soon as a work is created and recorded.
in a material form. The term of copyright is 50 years after the death of the author (Chaudhry and Iqbal, 2005).

The Constitution of the Islamic Republic of Pakistan gives assurances about the protection of all types of rights (Bashir and Khan, 2015). From time to time, different ordinances and acts have been passed to protect the intellectual property rights of creators (Bashir and Khan, 2017a). The Copyright Ordinance 1962 (III of 1962) is still enforced with many amendments in it since its promulgation in the form of ordinance in Pakistan. (Bashir and Khan, 2015, 2016a, 2016b, 2017a, 2017b; Chaudhry and Iqbal, 2005; Khan and Bashir, 2019).

The Intellectual Property Organization of Pakistan (IPO-Pakistan) was established as an autonomous body on 8 April 2005 under the administrative control of the Cabinet Division for integrated and efficient intellectual property management in the country. On 25 July 2016, the administrative control of IPO-Pakistan was transferred from the Cabinet Division to the Commerce Division. The Trade Marks Registry, Copyright Office, and Patent and Design Office became part of the new organization under a unified and integrated management system.¹

All intellectual property rights laws are administered and managed by three different ministries of the federal government: the Ministry of Education, Ministry of Industries and Production, and Ministry of Commerce. The central Copyright Office is located in Karachi in the province of Sindh, and functions under the administrative control of the Ministry of Education (Chaudhry and Iqbal, 2005).

The international copyright treaties to which Pakistan is a signatory include the Berne Convention for the Protection of Literary and Artistic Works and the Agreement on Trade-Related Aspects of Intellectual Property Rights. Under the protocols of these conventions, Pakistan is bound to comply with the rules and regulations envisaged in their manifestos (Bashir and Khan, 2017a). There has been tremendous pressure from the European Union and USA on Pakistan to look into the issue of piracy, as it is a signatory to international conventions to protect the rights of foreign authors (Khan and Bashir, 2019).

The concept of copyright in Pakistan is not common and is often misunderstood, which results in the violation of copyright laws (Khan et al., 2021). Pakistan is considered to be a hub for book piracy, with certain markets in Karachi and Lahore being the source of most of the pirated books in the country. Although there are various laws in the Copyright Ordinance, 1962, to combat piracy, the enforcement of these laws is weak (Bashir, 2015).

Literature review

In order to collect information on copyright and the copyright literacy of LIS professionals in Pakistan and at the international level, an extensive literature review was carried out using Google, Google Scholar, the Emerald Insight databases, JSTOR, EBSCO Host, Science Direct, IFLA standards, and conference proceedings of national and international library associations (including the Pakistan Library Association, American Library Association, Library Association, and Association of College and Research Libraries), World Intellectual Property Organization, local copyright laws, Publications of IPO-Pakistan, and the Intellectual Property Rights Toolkit of the American Embassy in Pakistan.

Previous literature reports that numerous studies have been conducted at the international level but the concept of copyright literacy remains briefly addressed in the local literature, and there was no identifiable primary literature specifically on the copyright literacy of LIS professionals in Pakistan.

Knowledge of and familiarity with copyright and related rights

A better understanding of copyright can reduce concerns about fair use and fair dealing. Library professionals need to be copyright-aware, given the widespread use and licensing of online contents. This is most important at a practical level, so that they can answer copyright and licence-compliance questions on a daily basis. The literature includes several studies on the copyright literacy of LIS professionals. Nawazish and Batool (2022) investigated the copyright literacy levels and awareness of academic librarians in Pakistan and found that a large number of their respondents were moderately aware of intellectual property rights. The study suggests that intellectual property rights need to be included in the LIS curriculum. In another recent study, Reddy (2021) assessed the copyright trends and level of copyright awareness among academic librarians in India. The study found that the majority of LIS professionals were aware of the copyright law. The findings of the study further show that 63% of the LIS professionals rated their level of awareness as beginner, which indicates a minimum level of knowledge of the law.

Hossain’s (2021) study highlights the need for an applied approach regarding intellectual property and copyright literacy in Bangladesh. He found that the knowledge of LIS professionals was good with regard to copyright law. However, in order to update their knowledge, they were not aware of the many
copyright organizations that could provide training on related issues.

Secker et al. (2019), after giving a detailed account of experiences of copyright literacy in Norway, Turkey, Romania, the UK and Sweden, conclude that the present situation of the librarians in these regions in respect of copyright literacy is not up to the mark. Patel and Hanumappa’s (2019) study found that LIS professionals’ level of understanding about copyright was not ideal, although they were somewhat aware of the issues involved. According to Fernández-Molina et al. (2017), comparatively, librarians have a higher degree of awareness of the validity of copyright, Creative Commons licences and the public domain. However, Naheem’s (2017) research on the copyright literacy levels of Indian LIS professionals notes that the majority were only slightly familiar with copyright-related issues.

Fernández-Molina et al. (2017) assessed the level of awareness of LIS professionals about copyright in their day-to-day business in Brazil. The study found gaps in the knowledge of LIS professionals. In order to bridge these gaps, they suggest the need for the proper training of LIS professionals. In Schmidt and English’s (2015) study, it is revealed that the level of knowledge of LIS professionals about copyright was intermediate. Charbonneau and Priehs (2014) report the results of a national survey of LIS professionals in the USA about their literacy with regard to various copyright policies and training needs. The survey shows that less than 50% of LIS professionals perceived their literacy as appropriate for providing copyright-related information to users. Overall, the review of the literature indicates that most LIS professionals, from both developed and developing countries, lack the required level of knowledge about copyright and related issues.

Copyright in the LIS curriculum

Copyright information is an integral part of the services provided by academic libraries, which indicates the importance of copyright and its related issues in LIS education. There is a continuous increase on the topic of copyright in the LIS literature (Schmidt, 2019). Arias Coello et al. (2020) note several studies that have analysed the inclusion of copyright in the LIS curriculum. Secker et al. (2019) recommend professional development and the inclusion of copyright literacy and correlated knowledge in LIS curricula with the aim of equipping LIS professionals with advanced knowledge and preparing them for future challenges.

Various other studies also indicate that copyright is often not a part of the curriculum in accredited library schools. In a study of 49 American Library Association-accredited library schools, Dames (2006) notes that only two schools were offering copyright-related courses. Similarly, Chu (2010), after analysing the courses of 45 American Library Association-accredited schools, found that none of the required courses were focused on copyright or intellectual property. Cross and Edwards (2011), in their study of American Library Association-accredited Master’s courses, also found that many programmes listed few or even no courses related to copyright. These studies conclude that the instruction related to copyright in the accredited schools was not enough to prepare LIS graduates for the current demands of the workplace.

Several scholars (Adu and Van der Walt, 2021; Arias Coello and Simón Martín, 2018; Kelly, 2018; Naheem, 2017; Todorova et al., 2017) stress that copyright should be included in the LIS curriculum. These researchers argue that knowledge of copyright can enable LIS professionals to deliver information services in a better way.

Sources of information about copyright and related rights

Reddy (2021) discovered that various sources of information were consulted by LIS professionals to enhance their knowledge about copyright issues. These sources included conferences, workshops, seminars, books and articles. Hossain (2021) conducted a survey to investigate the copyright literacy of LIS professionals in Bangladesh. He found that, in most cases, LIS professionals consulted experts from the academic and scientific community (69%), national library and other professional associations (59%), and the International Council of Museums (49%) at a time of need. The findings of the studies by Arias Coello et al. (2020) and Saunders and Estell (2019) reveal that, in Spain and the USA, the majority of LIS students preferred to use websites, books, articles and librarians to learn about copyright and related rights. Patel and Hanumappa (2019) examine copyright and its legal aspects, and discuss the many dimensions of copyright literacy, concluding that the majority of their respondents consulted e-learning sources, journals and their professional counterparts to gain knowledge of legal issues. Gastinger and Landøy (2019), in a study on the copyright literacy of LIS students in Norway, found that they sought copyright-related advice from websites, books and articles. Hatch et al. (2017) carried out a study of copyright specialists in the UK. They discovered that
the majority of their respondents used JiscMail lists, LIS-COPYSEEK, and government websites on copyright and intellectual property as sources of information. The studies by Boustany (2014), Hobbs et al. (2007), Kortelainen (2015), Naheem (2017), Schmidt and English (2015), and Terra (2016) show the tendency of LIS professionals towards the use of websites as a source of information about copyright and related issues.

**Research objectives**

The main objectives of the study are to (1) describe the knowledge and familiarity of LIS professionals with regard to various aspects of copyright and related rights; (2) examine the opinion of library professionals about the inclusion of copyright and related courses in the LIS curriculum; and (3) determine the preferred sources of information that can improve LIS professionals’ knowledge about copyright and related rights.

**Methodology**

To explore the copyright literacy of LIS professionals in Pakistan, a quantitative web-based survey was conducted using a Google Form adapted from the multinational research project ‘Copyright Literacy in Spanish Library and Information Sciences (LIS) Students’ by Arias Coello et al. (2020). Permission to use the questionnaire was sought from the principal author. Major modifications were made to the questionnaire, keeping to the fore the requirements of the local environment.

The data collection instrument was divided into four parts. Each part contained different questions, most of which had closed response options. The first part gathered demographic information, including the age, gender, professional experience and qualifications of the respondents. The second part of the survey aimed to establish the knowledge and familiarity of the respondents with regard to copyright. Part three then explored the opinions of the respondents on various issues of copyright and its inclusion in the LIS curriculum. Finally, the last part dealt with the preferred sources of copyright and related issues. The survey included closed, semi-open (utilizing a 5-point Likert scale) and open-ended questions.

The online questionnaire was then shared with the target population – the LIS professionals of Khyber Pakhtunkhwa, Pakistan – via their mailing addresses, WhatsApp groups and Facebook groups. The completed responses were received, automatically recorded and tabulated through Google Forms. Descriptive statistics were used to analyse the findings. Some of the target population did not participate in the survey \((n = 32)\).

**Study population**

The population of this study was LIS professionals working in male and female colleges in the province of Khyber Pakhtunkhwa, Pakistan. There are 311 colleges in the province, which are under the administrative control of the Higher Education, Archives and Libraries Department of the Government of Khyber Pakhtunkhwa (Table 1). The survey was completed in the second half (June–December) of 2022.

**Results and data analysis**

**Profile of respondents**

The survey, which targeted one person from each institution to avoid duplication, produced 279 responses. Moreover, there was only one budgeted position for a library professional in each college of the province. Therefore, the 279 respondents in this survey represented 279 institutions. A higher number of the survey respondents were male (175) compared to female (104). Many studies (e.g. Hossain, 2017, 2019, 2021) have observed that such figures are opposite to the gender ratio of LIS professionals globally, as library positions are predominantly held by females. However, another possible reason might be the low number of female colleges in Khyber Pakhtunkhwa.

With respect to age, the largest number of respondents \((157, 56\%)\) was in the age range of 31–40. Regarding qualifications, the vast majority held Master's degrees \((244, 87\%)\). Most of the participants had work experience of up to 14 years.

**Knowledge of and familiarity with copyright**

This section of the survey explored the general knowledge of and familiarity with a variety of copyright-protected works (as shown in Table 2). The respondents were asked to comment on their overall familiarity with copyright issues using a 5-point Likert scale ranging from very poor to very good.
Their opinions regarding national and international copyright legislation, agreements and related issues were also explored in this section.

General knowledge of and familiarity with copyright-protected items

In order to check the general knowledge and familiarity of the respondents with regard to different copyright-protected items, they were provided with multiple topics that fall under the legal protection of copyright. The respondents were asked to mark the statements according to their familiarity with and knowledge of copyright-protected items. The data in Table 2 indicates that the highest number of respondents (263, 94.2%) mentioned that ‘published materials such as books and articles’ were under the protection of copyright, followed by ‘computer software’ (248, 88.7%), ‘databases’ and ‘films’ (232, 83.1%). The respondents seemed dubious about the inclusion of ‘dances and written choreography’, ‘caricatures, cartoons and comics’, and ‘photographs, maps and sketches’ in the domain of copyright protection. However, their responses were correct for more than 50% of the topics. The findings indicate that ‘published materials such as books and articles’ were familiar among the LIS professionals because the majority of them gave a correct response in this regard. On the other hand, ‘caricatures, cartoons and comics’ were the least familiar to the respondents because the highest number of incorrect responses was recorded for this item. A possible reason for the poor response of the LIS professionals in this area could be that they are rarely confronted with these topics in their day-to-day work. In a nutshell, the LIS professionals were more familiar with traditional and literary works than emerging items. These results indicate that the LIS professionals’ knowledge of and familiarity with copyright was limited.

Self-reported knowledge level about copyright

The respondents were asked to comment on their overall familiarity with copyright, using a 5-point Likert scale ranging from very poor to very good. Out of the 279 respondents, 32% indicated a good awareness level of copyright, 45% indicated a moderate awareness level and 21% indicated a poor awareness level. It is worth noting that none of the respondents rated their level of knowledge as very good (see Figure 1).

These results once again establish the fact that the level of knowledge of LIS professionals about copyright is not up to the mark. This self-reported survey revealed that the majority of the library professionals rated their level of knowledge about copyright as poor and neutral, which indicates their limited knowledge about copyright. These results may be due to the fact that there was not enough space for
copyright-related issues in their courses, or they may not have received any training on copyright at their colleges that could boost their knowledge to the desired level.

National and international copyright legislation, agreements and related issues

To explore the familiarity of the respondents regarding national and international copyright legislation, agreements and related issues, they were provided with a set of multiple options. The data in Table 3 shows that 73% of the respondents were aware of the Copyright Ordinance, 1962. However, the respondents were less familiar with international copyright legislation like the Berne Convention (18%), Universal Copyright Convention (26%) and World Intellectual Property Organization (28%). It is encouraging to know that the respondents were more familiar with the concepts of book piracy (83%) and plagiarism (75%). Piracy is the deliberate infringement of copyright laws and plagiarism constitutes a breach of academic integrity and represents substandard scholarship. Both piracy and plagiarism can have a lasting impact on the future careers of students and researchers. It is good to know that the respondents were well aware of these concepts. The data in Table 3 also reflects that the respondents were less familiar with new trends and emerging topics like fair use, the public domain and copyright infringement.

Copyright and LIS education

Beyond nurturing creativity and its broad diffusion, which lie at the heart of copyright, there are a number of compelling reasons to support copyright education programmes in libraries and academia. First and foremost, a high level of copyright awareness makes it possible to avoid legal challenges and, when they do arise, to better respond to them (Harris, 2012). Therefore, the survey respondents were asked to give their opinion on LIS education and its connectedness to copyright. In this section, the survey participants’ opinions were sought on, first, the appropriateness of the existing LIS curriculum in providing adequate knowledge and awareness about copyright to students; second, the inclusion of copyright-related topics in LIS education and the appropriate level for introducing copyright topics in LIS programmes; and, third, the importance of librarians’ knowledge about copyright.

The results in Table 4 indicate a serious situation: 193 respondents (69%) were of the opinion that the existing LIS curriculum does not provide adequate knowledge and awareness of copyright for students. It seems that the current instruction related to

Table 3. Opinions regarding national and international copyright legislation, agreements and related issues (N = 279).

<table>
<thead>
<tr>
<th>Statement</th>
<th>No of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copyright Ordinance, 1962</td>
<td>204</td>
<td>73.2</td>
</tr>
<tr>
<td>Copyright Rules, 1967</td>
<td>126</td>
<td>45.1</td>
</tr>
<tr>
<td>Copyright Amendment Act, 1992</td>
<td>79</td>
<td>28.2</td>
</tr>
<tr>
<td>Copyright Amendment Ordinance, 2000</td>
<td>86</td>
<td>31.0</td>
</tr>
<tr>
<td>IPO-Pakistan, 2012</td>
<td>63</td>
<td>22.5</td>
</tr>
<tr>
<td>Berne Convention for the Protection of Literary and Artistic Works</td>
<td>51</td>
<td>18.3</td>
</tr>
<tr>
<td>Universal Copyright Convention</td>
<td>75</td>
<td>26.8</td>
</tr>
<tr>
<td>World Intellectual Property Organization</td>
<td>78</td>
<td>28.2</td>
</tr>
<tr>
<td>Fair use</td>
<td>114</td>
<td>40.8</td>
</tr>
<tr>
<td>Public domain</td>
<td>86</td>
<td>31.0</td>
</tr>
<tr>
<td>Orphan work</td>
<td>78</td>
<td>28.2</td>
</tr>
<tr>
<td>Copyright infringement</td>
<td>71</td>
<td>25.4</td>
</tr>
<tr>
<td>Book piracy</td>
<td>232</td>
<td>83.1</td>
</tr>
<tr>
<td>Plagiarism</td>
<td>208</td>
<td>74.6</td>
</tr>
<tr>
<td>Exceptions for libraries</td>
<td>106</td>
<td>38.0</td>
</tr>
<tr>
<td>Open access, open data</td>
<td>181</td>
<td>64.8</td>
</tr>
<tr>
<td>Protection for published work</td>
<td>169</td>
<td>60.6</td>
</tr>
<tr>
<td>Protection for unpublished work</td>
<td>94</td>
<td>33.8</td>
</tr>
<tr>
<td>Penalties for violating copyright laws in Pakistan</td>
<td>122</td>
<td>43.7</td>
</tr>
<tr>
<td>US Copyright Act, Section 108 (Copyright Exceptions for Libraries and Archives)</td>
<td>31</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Note: Multiple options were permitted.
Copyright in the LIS curriculum is inadequate. This might also be the reason why the majority (263, 94.4%) of the respondents expressed the need to include copyright legislation in the LIS curriculum. Moreover, 96% of the survey respondents also stressed the importance of librarians’ knowledge about copyright-related issues. This would help to respond better to any legal challenge when they arise.

Nowadays, libraries are continuously facing the problem of maintaining a balance between providing information access and protecting authors’ rights. This situation makes it necessary for library professionals to know about, understand and practise copyright law in their day-to-day business.

Copyright-related topics for inclusion in LIS education

In this section, the survey participants’ opinions were sought on the inclusion of copyright-related topics in LIS education. In closed-ended questions, the survey asked which topics should be included in LIS education. The majority of the respondents were in favour of including copyright-related issues in the LIS curriculum. About 87% were in favour of including ‘basic concepts of copyright’, followed by 86% in favour of ‘copyright law and its implications in libraries’. The inclusion of ‘plagiarism’ in the LIS curriculum was suggested by 83% of the respondents. An equal number proposed that ‘fair use’ and ‘open access, open data’ be included. However, the LIS professionals showed the least interest in ‘copyleft’, ‘orphan work’, ‘Creative Commons’ and ‘copyright infringement’ being included in the LIS curriculum (see Table 5).

Table 5. Opinions regarding copyright-related topics for inclusion in LIS education (N = 279).

<table>
<thead>
<tr>
<th>Questions</th>
<th>No of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic concepts of copyright</td>
<td>244</td>
<td>87</td>
</tr>
<tr>
<td>Copyright law and its implications in libraries</td>
<td>240</td>
<td>86</td>
</tr>
<tr>
<td>Recent updates to the law</td>
<td>216</td>
<td>77</td>
</tr>
<tr>
<td>Overview of Pakistan’s copyright legislation</td>
<td>212</td>
<td>76</td>
</tr>
<tr>
<td>Fair use</td>
<td>193</td>
<td>69</td>
</tr>
<tr>
<td>Copyright of specific works, unpublished and related works</td>
<td>173</td>
<td>62</td>
</tr>
<tr>
<td>Copyleft</td>
<td>134</td>
<td>48</td>
</tr>
<tr>
<td>Public domain</td>
<td>149</td>
<td>53</td>
</tr>
<tr>
<td>Orphan work</td>
<td>106</td>
<td>38</td>
</tr>
<tr>
<td>Copyright infringement</td>
<td>130</td>
<td>47</td>
</tr>
<tr>
<td>Book piracy</td>
<td>149</td>
<td>53</td>
</tr>
<tr>
<td>Plagiarism</td>
<td>232</td>
<td>83</td>
</tr>
<tr>
<td>Open access, open data</td>
<td>193</td>
<td>69</td>
</tr>
<tr>
<td>Creative Commons</td>
<td>130</td>
<td>47</td>
</tr>
</tbody>
</table>

Table 4. LIS education, the inclusion of copyright topics and its importance for librarians (N = 279).

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe that the LIS curriculum is providing adequate knowledge</td>
<td>86 (31.0)</td>
<td>193 (69)</td>
</tr>
<tr>
<td>and awareness of copyright for students?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it necessary to include copyright legislation and related issues in</td>
<td>263 (94.4)</td>
<td>16 (6)</td>
</tr>
<tr>
<td>LIS courses?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is it necessary that librarians are knowledgeable about copyright issues?</td>
<td>267 (96)</td>
<td>12 (4.3)</td>
</tr>
</tbody>
</table>

Note: Multiple options were permitted.

Appropriate level to introduce copyright issues in the LIS curriculum

With regard to the appropriate level of LIS education to introduce copyright, the majority of the respondents (42%) considered the Master’s level to be the most appropriate, followed by ‘All’ (undergraduate, Master’s, Master of Science (MS), Master of Philosophy (MPhil) and PhD) LIS education levels (34%), undergraduate (18%) and MS, MPhil/PhD (6%), as illustrated in Figure 2.

Despite its obvious importance, the current study identified that instruction related to copyright in the LIS curriculum is inadequate for the needs of the field. Saunders and Estell (2019) observe that copyright issues affect nearly every aspect of library services, from circulation and reserves of materials to the digitization of materials, negotiating licensing
agreements and establishing institutional repositories. Librarians are routinely called on to answer copyright-related questions, guide patrons in the appropriate use of materials, provide instruction on copyright, and even set local policy. Indeed, Crawford (2005) suggests that no policy area affects libraries and technology as much as copyright, and few policy areas are as complex as copyright. In order to meet the demands of the field, and to ensure that LIS graduates are prepared for their professional roles, LIS programmes must integrate instruction on copyright-related topics in their curricula.

Preferred sources of information on copyright-related issues

The survey explored how the respondents kept themselves up to date with copyright-related issues in the context of their work. The data in Table 6 confirms that, in Pakistan, for copyright-related advice, the LIS professionals primarily relied on ‘websites’ (78%), ‘books and articles’ (63%) and ‘colleagues’ (47%). In general, the respondents seemed to be much more interested in getting advice from websites than lawyers, the World Intellectual Property Organization, IPO-Pakistan, or national and international library associations (such as the Pakistan Library Association, American Library Association, Library Association, Association of College and Research Libraries or IFLA). However, results from other countries like India, the UK and France show that LIS professionals in those countries also used websites as a primary source of information for copyright-related issues (Reddy, 2021; Hatch et al. 2017; Boustany, 2014).

Discussion and comparison with other surveys

The findings of this study reveal that, in general, LIS professionals in Pakistan lack knowledge and awareness about copyright and related issues. The self-reported survey revealed that the majority of the library professionals rated their level of knowledge about copyright laws as poor or neutral, which indicates their lack of knowledge about copyright laws. The data reveals that the respondents were able to identify published materials, computer software, databases, films and music works under the domain of copyright. However, they were unsure about recognizing photographs, maps, sketches, dances, written choreography, cartoons, caricatures and comics as copyright-protected materials. The respondents were somewhat more familiar with national copyright laws than international copyright laws. However, their level of confidence in the various components of national copyright was weak. About 70% of the respondents considered the current LIS curriculum to be inappropriate in meeting the requirements of professionals. They suggested an upgrade of the LIS curriculum at all levels of library education and the inclusion of copyright-related issues like Creative Commons, infringement, piracy and orphan work. The results indicate that LIS professionals in Pakistan used websites as their primary Hossain (2021) narrates that LIS professionals often act as default copyright mavens at their institutions and, therefore, must have an awareness of copyright law and practices. This is the reason why 96% of the survey respondents stressed the importance of librarians’ knowledge of copyright-related issues in order to conduct their day-to-day business.

The results of this study support the findings of Nawazish and Batool (2022) and Arias Coello et al. (2020). The findings of these studies indicate that the majority of the items (except for ‘caricatures, cartoons and comics’) were correctly placed under copyright-protected materials by the respondents. The majority of the respondents in both studies were of the view that librarians must have knowledge of copyright and suggested the inclusion of copyright in LIS courses. The results of this study are also similar to the findings of Kortelainen’s (2015) research, in which the majority of the respondents rated themselves as

<table>
<thead>
<tr>
<th>Source</th>
<th>No of responses</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleagues</td>
<td>130</td>
<td>46.5</td>
</tr>
<tr>
<td>Lawyers</td>
<td>59</td>
<td>21.1</td>
</tr>
<tr>
<td>Websites</td>
<td>216</td>
<td>77.5</td>
</tr>
<tr>
<td>Books and articles</td>
<td>177</td>
<td>63.4</td>
</tr>
<tr>
<td>Pakistan Library Association</td>
<td>51</td>
<td>18.3</td>
</tr>
<tr>
<td>LIS faculty</td>
<td>122</td>
<td>43.7</td>
</tr>
<tr>
<td>IFLA</td>
<td>39</td>
<td>14.1</td>
</tr>
<tr>
<td>Electronic Information for Libraries</td>
<td>55</td>
<td>19.7</td>
</tr>
<tr>
<td>World Intellectual Property Organization</td>
<td>79</td>
<td>28.2</td>
</tr>
<tr>
<td>Blogs and wikis</td>
<td>71</td>
<td>25.4</td>
</tr>
<tr>
<td>Lectures or seminars</td>
<td>83</td>
<td>29.6</td>
</tr>
<tr>
<td>IPO-Pakistan</td>
<td>63</td>
<td>22.5</td>
</tr>
<tr>
<td>LIS course/education</td>
<td>110</td>
<td>39.4</td>
</tr>
<tr>
<td>Social media</td>
<td>86</td>
<td>31.0</td>
</tr>
</tbody>
</table>

Note. Multiple options were permitted.
somewhat familiar with copyright and related issues. Moreover, the same results were found in Terra’s (2016) study, where the respondents were more familiar with national copyright laws than international laws and agreements. ‘Book piracy’, ‘plagiarism’, ‘open access, open data’ and ‘protection for published works’ were the most familiar items, while ‘Section 108 of the US Copyright Act’, ‘copyright infringement’, ‘orphan work’, ‘public domain’, ‘protection for unpublished works’ and ‘fair use’ were the least-known topics among the respondents. These results are also similar to the findings of the study by Hossain (2021).

**Conclusion and recommendations**

The current study provides empirical evidence about the copyright literacy of LIS professionals in Pakistan. The findings suggest the need for improvement and practical measures to enhance the level of copyright literacy among LIS professionals. Viewing copyright as part of information literacy and scholarly communication is significant for LIS professionals, therefore they should regard it as an integral part of their profession. This study also suggests that the level of copyright literacy among Pakistani LIS professionals is far from satisfactory, therefore additional efforts are needed to embed copyright education. This requires the attention of LIS schools, especially faculty across Pakistan, to include copyright education in their curricula in a wider context, both in theory and in practice.

The unprecedented growth in the shape, frequency and reproduction of information has brought with it complex legal issues, as well as complications, for the activities of library professionals. This has had a major impact on how libraries function, the public services they provide and librarians. Today, libraries face more complicated intellectual property and copyright issues than in the past. Practical knowledge of copyright laws provides a sound basis and tactical direction for library professionals. Without adequate copyright training, library professionals cannot fulfill the requirements of the field or users’ needs, since they are the first port of call for advice on copyright. Therefore, there is an emerging need for LIS professionals to know, understand and practise copyright law. The study reflects a general lack of copyright training on the part of LIS professionals, which causes major problems for libraries in fulfilling users’ needs effectively. The digital environment has created multiple opportunities for the inauthentic and illegal reproduction of information, resulting in infringement of copyright. But a copyright-trained and well-versed intellectual-property-literate library professional can avoid such issues. Without copyright and intellectual property training, library professionals in Pakistan cannot fulfill the requirements of the field in emerging areas such as fair use, Creative Commons, open access, the public domain and licensing. For this purpose, the study suggests the development of copyright and intellectual property training programmes for LIS professionals. This training should be organized collaboratively by LIS schools, the National Library of Pakistan and the Pakistan Library Association.

The findings of this study also indicate that LIS professionals were not aware of national and international copyright organizations, including the World Intellectual Property Organization and IPO-Pakistan, which can also provide support and training opportunities. With better marketing, these copyright information organizations can become trusted sources for librarians in Pakistan. The purpose of copyright is not only in protecting the intellectual property rights of authors, but also in building awareness about it. Government organizations (including IPO-Pakistan and the Federal Investigating Agency), the publishing industry, academia, the media and non-governmental organizations can play a major role in national capacity-building and awareness for the effective utilization of the copyright system.

The establishment of the Higher Education Commission’s National Digital Library in 2004 was a milestone in the development of digital libraries in Pakistan. A number of digital library projects have been undertaken, including the United Nations Digital Library, Pakistan Research Repository and Iqbal Cyber Library. However, the digital information paradigm is still in its infancy in Pakistan. Library professionals, academics, higher education authorities and users are confused regarding their perceptions, creation, ownership, content management, collection management, usability, access, needed skills, infrastructure and copyright issues (Ameen and Refique, 2009). A major challenge for digital libraries is complying with copyright, intellectual property rights and related issues like plagiarism (Wairrach and Tahira, 2009). This study suggests the creation of effective copyright literacy instruction for LIS professionals, which will help them to become familiar with digital resource subscription, fair use, open access, scholarly communication, research data-sharing and institutional repositories. This will be equally beneficial for library users, publishers and authors.

The literature produced in Pakistan has only briefly addressed the copyright literacy of LIS professionals, whereas a huge body of literature can be found on this subject in the developed countries of the world. To
keep pace with the current changing environment, there is a dire need for literature on the copyright literacy of library professionals in Pakistan. This study could be replicated at the national level, which would yield more authentic results to guide policymakers in planning effective strategies for library professionals at the national level. The results of this study also provide an opportunity for the Pakistan Library Association to devise copyright literacy standards at the national level.

This research can offer multiple benefits for IPO-Pakistan and stakeholders in the higher education sector— including the Higher Education Commission, provincial higher education departments and higher education regulatory authorities—in the planning of curriculum-based strategies regarding copyright literacy for LIS professionals in Pakistan.

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Note
1. See https://ipo.gov.pk

References
Fernández-Molina J-C and Muriel-Torrado E (2018) Copyright literacy in the academic field: Analysis of the


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Identifying trends in information security and privacy concern research

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Abstract
Text mining is a research method that can be used to detect research trends and developments in various fields. In this study, an automated textual analysis tool (Voyant Tools) is applied to a vast corpus of academic papers to identify research trends in the fields of information security and privacy concern, focusing on the differences between the first two decades of the twenty-first century. Furthermore, the conceptual proximity between the related terms ‘information security’ and ‘privacy concern’ is investigated by identifying textual trends. We discovered that, while the first decade of information security research was not entirely defined, the second decade focused on privacy-related issues. The focus of privacy concern research was on commerce and marketing in the first decade and on the social dimension in the second decade. This study supports the use of textual analysis of academic literature to identify research trends in various fields, including technological fields.

Keywords
Information security, privacy concern, textual analysis, Voyant Tools, comparative study, research trends

Introduction
Information security refers to “the concepts, techniques, technical measures, and administrative measures used to protect information assets from deliberate or inadvertent unauthorized acquisition, damage, disclosure, manipulation, modification, loss, or use” (McDaniel, 1994). This broad term encompasses two fundamental elements that are inextricably linked: information systems security; and computer security. While information systems security, as described above, is based on the concept of information security, computer security is a multi-dimensional component defined by its domains (e.g. physical security, systems security and network security), functions (e.g. prevention, detection and recovery) and concepts (e.g. confidentiality, integrity, control and privacy). Thus, the concept of ‘privacy’ appears to be a component of the broader term: ‘information security’ (Ross, 1999, as mentioned in Rezgui and Marks, 2008).

The right of users to “keep information about themselves from being disclosed to others” is defined as information privacy (Rognehaugh, 1999). Much of the research on information privacy over the last three decades has focused on users’ awareness of the importance of preserving their identity and personal information online, which is broadly referred to as a privacy concern (e.g. Dinev and Hart, 2005; Hong et al., 2021; Paine et al., 2007; Sheehan, 1999; Taddicken, 2014; Wills and Zeljkovic, 2011; Zhong et al., 2022). Therefore, it seems that ‘information security’ and ‘privacy concern’ form a term relationship between ‘grandparent’ and ‘grandchild’ (information security — privacy — privacy concern).

Many studies on privacy concern concluded that most users are concerned about threats posed to their privacy in the online world and are willing to take steps to protect themselves (e.g. Paine et al., 2007;
Wills and Zeljkovic, 2011). Privacy concern has been studied in various fields, such as e-commerce (Dinev and Hart, 2005) and social media (Acquisti and Gross, 2006; Debatin et al., 2009; Thelwall and Vis, 2017). Studies have also investigated research developments in the fields of information security and privacy concern while reviewing the existing academic literature on these subjects (Kim and Kim, 2018; Yun et al., 2019). However, to the best of our knowledge, no study has been conducted using automatic textual analysis tools. The use of these tools is part of the digital humanities research field (Sula, 2013) and these tools are designed to identify trends within the text by observing word frequency and relationships between concepts. Automatic textual analysis tools simplify the detection of these trends and provide useful insights that might have not been obtained by using other methods. This research attempts to demonstrate the efficient use of automatic analysis tools for the study of research trends. In addition, the use of such tools enables the investigation of prevalent issues in a more unbiased environment that is less prone to human intervention.

Research objective
The objective of this study was to identify research trends in the information security and privacy concern fields, focusing on the differences between the two decades: 2000–2009; and 2010–2019. Furthermore, the study aimed to investigate the conceptual proximity between the terms ‘information security’ and ‘privacy concern’ based on the identified trends. An automatic text analysis tool was used for this. This study addressed the following research questions:

1. Are there differences in the themes discussed in academic papers regarding information security between the first and second decades of the twenty-first century?
2. Are there differences in the themes discussed in academic papers regarding privacy concerns between the first and second decades of the twenty-first century?
3. Are there any common themes discussed in the academic papers written about information security and privacy concern?

Literature review
We began by reviewing the relevant literature to provide an adequate theoretical and empirical foundation for this research. The first sub-section focuses on information security research; the second sub-section reviews the research conducted on privacy concerns; and the third sub-section surveys the use of textual analysis tools to identify research trends.

Information security research
Information security research has been conducted over the past 50 years. The concern for the security of information systems was mentioned in academic studies conducted in the 1970s (Rezgui and Marks, 2008). The importance of information security has increased over the years following the use of computers and the Internet; therefore, numerous journals and conferences are dedicated to this field (Siponen and Oinas-Kukkonen, 2007). Evidently, the number of publications from 1977 to 1993 was relatively low, but it has increased significantly since then, primarily due to the birth of the modern Internet (Silic and Back, 2014). Thus, this research focuses only on the two decades that follow this time period (2000–2019).

The field of information security is very broad, and thus the issues investigated in the fields are diverse. Siponen and Oinas-Kukkonen (2007) conducted a review of the literature published in the field up to the year 2000 and classified the research themes into four major groups: access to information systems; secure communication; security management; and development of secure information systems. Each of these subgroups was polled on three different levels: technical; conceptual; and organizational. A later study (Silic and Back, 2014) examined research development between 1977 and 2012 and broadened the number of research themes to: (a) risk assessment; (b) privacy; (c) information security governance; (d) asset management; (e) human resources security; (f) physical and environmental security; (g) communications and operations management; (h) access control; (i) information system acquisition, development and maintenance; (j) information security incident management; (k) business continuity management; (l) compliance; and (m) economics. According to research, the number of publications has increased significantly since the 1990s and the introduction of the Internet. Furthermore, the research themes have shifted and begun to lean toward privacy, trust and identity management, all within the context of business management and information security in organizations. This is consistent with a growing public awareness of the significance of these issues.

Privacy concern research
The notion of privacy is the main research subject in various fields, such as philosophy, law, sociology and psychology. Warren and Brandeis (1890), lawyers, provided a primary definition of the term ‘privacy’
in the late nineteenth century, claiming that privacy is the “right to be left alone”. Others, such as Westin (1967), asserted that privacy is the ability to control when, how and to what extent personal information is disclosed to others. According to studies on public attitudes toward privacy, users are concerned about maintaining their personal privacy (e.g. Paine et al., 2007; Wills and Zeljkovic, 2011). Thus, privacy concern is a major research sub-theme within the general research about information privacy (Dinev and Hart, 2005; Paine et al., 2007; Wills and Zeljkovic, 2011).

Owyang (2016) created a model that categorizes the digital age into four distinct phases: (a) the Internet era, which began in the mid-1990s; (b) the social media age, which began in the mid-2000s; (c) the collaborative economy age, which is the current era and is based on the ability to create and share products and services through the online peer-to-peer economy; and (d) the autonomous world age, which includes the use of autonomous artificial intelligence machines. A later study (Yun et al., 2019) used this as a basis to chronologically map personal information privacy (PIP) research. The authors surveyed the relevant past literature and determined that there are five stages of PIP research: (a) Mainframe age (Prestage)–1990; (b) Internet era (Introduction stage) – 1991–2000; (c) Social media age (Awareness stage) – 2001–2007; (d) Sharing economy age (Development stage) – 2008–2013; and (e) Transitioning to autonomous world age (Extension stage) – 2014–present. They found no clear pattern in the dominant themes in the Introduction stage, but there were recurring themes in the awareness stage, such as privacy concern in electronic commerce and general privacy while using the Internet. In the development stage, the authors found many studies that examined privacy concern among bloggers and social media users and those themes also penetrated the extension stage. At this final stage, the authors still found evidence of e-commerce studies; however, their dominance was less profound than in previous stages.

Before the rise of the Internet, the major interest was in computing systems that gathered information about people and factually set the foundation for the development of the Internet. However, since the advent of home computers, questions have been raised regarding the protection of privacy in the digital age (Vidmar and Flaherty, 1985). Following the introduction of the Internet in the late 1980s and early 1990s, online privacy concerns began to emerge, particularly among electronic commerce websites (e.g. Amazon and eBay), which required the collection of personal information about consumers. Users’ willingness to engage in e-commerce was found to be influenced by their level of privacy concern and trust in online providers. That is, a high level of privacy concern and a low level of trust online negatively affect the intent to make online purchases (Dinev and Hart, 2005). However, it was also found that the willingness to reveal personal details increases as the benefits outweigh the risks (Culnan, 1993; Milne and Gordon, 1993). Thus, new privacy concepts were born, such as the ‘privacy paradox’ that manifests a misalignment between users’ attitudes towards privacy protection and their actual behaviour reflecting the opposite (Barnes, 2006). The issues manifested by the privacy paradox are discussed in the literature; for example, Steinfeld (2015) investigated users’ willingness to provide access to their Facebook profile in exchange for money and discovered that money influences their decisions to disclose personal information. Similarly, Fox (2020) investigated the impact of privacy concern on the acceptance of health technologies and discovered that, while individuals express a strong desire to maintain their privacy, they prefer the benefits associated with forgoing it. Another widely discussed issue that examines the privacy paradox in a narrower perspective is the users’ willingness to partake in the online personalization of the different services that they use at the expense of preserving their privacy, or as termed, the ‘personalization–privacy tradeoff’ (Garcia-Rivadulla, 2016; Weinberger and Bouhnik, 2018).

The beginning of the twenty-first century marked a transition in how people communicate in an online environment. These changes reflect the second wave of network technology development, commonly termed ‘Web 2.0’. This era marks the beginning of user-generated content, blogs, semantic tagging, and most prominently, social networks (Yun et al., 2019). By definition, social networks encourage personal exposure; thus, even if users experience privacy concern on some level, they may not take action to reduce their exposure while also decreasing their activity in social networks. Several studies have found that social media users care about their privacy; however, they also rarely allow their privacy concern to influence their online behaviour (Acquisti and Gross, 2006; Debatin et al., 2009; Thelwall and Vis, 2017). Min and Kim (2015) found that there are behaviour enticements embedded in the use of social networks, such as relationship management and self-presentation and only the combined positive effect of these enticements can surpass the negative effect of privacy concern. Similarly, Wisniewski et al. (2015) discovered that only high levels of privacy concern can prevent users from participating in social media activities (e.g. tagging). McGuinness and Simon (2018) suggested
that social media users would like to protect their privacy, but face problems doing so, due to misleading privacy settings or human errors.

In the twenty-first century, many technological information systems have begun to engage in online collaborative economies, such as cloud computing and collaborative leisure platforms (e.g., Uber and Airbnb). Cloud computing has raised new concerns about user privacy as it expands the limits of information storage and transfers it to the online world (Yun et al., 2019). In this regard, it is worth mentioning the increasing use of big data technologies. Big data has many benefits for organizational systems; however, at the same time, it also poses new challenges related to information security and privacy protection that stem from its unique characteristics (Johnson Ogbuke et al., 2022; Yang et al., 2016). Big data technologies enable large-scale organizations to collect, store and analyse huge amounts of data in a relatively short time and even in real-time. Thereby, organizations can gain a constantly updated status of the tasks at hand, as well as the ability to predict future trends and prepare for these. However, the vast amount of information stored in the organization’s database may be a precious target for hostile entities, such as hackers and crackers. In addition, big data technologies might endanger personal privacy, as they enable effective analysis of human behaviour, by monitoring smart information channels and storing sensitive information that its leakage might jeopardize the organization, its employees and in extreme cases even the whole country from which they operate (Ma and Wu, 2014; Matturdi et al., 2014; Yang et al., 2016).

In recent years, emerging technologies based on artificial intelligence and Internet of Things devices (IoT), such as drones, robots and autonomous cars, have raised new concerns regarding user privacy (Conger et al., 2013). These technological devices harvest information about their users, which can be detected and monitored by remote servers. In addition, their high level of interconnectivity further increases the risk of privacy breaches even further (Yun et al., 2019). For example, Rieks et al. (2020) found that some individuals were concerned about their privacy while using smart electric meters, as they could provide detailed information about their activities at home.

The use of textual analysis tools to identify research trends

Text mining is a research method based on various techniques that originate in the fields of statistics, machine learning and linguistics. Text mining uses interdisciplinary techniques to identify patterns and trends in unstructured data, mostly textual data. The goal of text mining is “to be able to process large textual data to extract ‘high quality’ information, which will be helpful for providing insights into specific scenario to which the text mining is being applied” (Ryan et al., 2014: 4).

This method also aids in the analysis of academic papers (Miller, 2018). Tu and Hsu (2016) surveyed the various applications of text mining and used some of its features in their own research, such as collecting data using collections of words, calculating similarities between articles and identifying keywords. They concluded that text mining can be used to detect research trends and developments in various fields. For example, Hung (2012) used text mining to examine research trends in academic papers on distant learning, and another study used this method to detect trends in studies on machine learning (Sharma et al., 2018), drug use (Chou et al., 2020) and waste recycling (Garechana et al., 2015).

However, few studies have used text mining to investigate information security and privacy concern. Kim and Kim (2018) use this method to map research trends in information security by examining papers published between 1991 and 2016. Fornaciari (2014) used framing and textual analysis techniques applied to American news sources to investigate the evolution of the term ‘privacy’. Yun et al. (2019) studied the research development on PIP by conducting interviews and content analysis. In addition, Del Alamo et al. (2022) used natural language processing methods to analyse privacy policies. However, as mentioned above, no studies have examined these issues using automatic textual analysis tools.

Methodology

This study applies a textual analysis research method based on an automatic tool: Voyant Tools (http://voyant-tools.org/). Stéfan Sinclair, Geoffrey Rockwell and their project team created this free web-based text analysis and visualization tool. This tool is used by researchers to analyse a variety of digital texts that can be uploaded from external files or web pages or copied directly into the tool (Welsh, 2014).

Data collection

Four corpora were created for analysis. The corpora consisted of the 100 most cited academic papers in the Web of Science database (as of June 2020) with at least 50 citations each, relating to ‘information security’ (see Appendix A) and ‘privacy concern’
The Web of Science database was chosen because of its relatively high accuracy and result quality (de Winter et al., 2014; García-Pérez, 2010). The four corpora are as follows:

B. 25 most cited information security academic papers, published between 2010 and 2019.

To narrow the list of papers dealing directly with the themes discussed in this study, the search was limited to the title field only, using the terms: ‘information security’; and ‘privacy concern*’.

The two comparative decades are referred to throughout the paper as Decade 1 (2000–2009) and Decade 2 (2010–2019).

**Analysis procedure**

The four corpora were uploaded separately to the automatic analysis tool, and the output is discussed in the findings section below. First, a comparison of corpora on the same topic was performed (A vs. B, C vs. D). The inner corpora were then unified (A + B and C + D) and an inter-themed comparison was conducted.

Notably, after the file upload, terms that did not reflect the content of the papers were filtered out, such as Hypertext Transfer Protocol, serial numbers and stop words (the, a, to, etc.). Furthermore, the terms ‘information’ and ‘security’ were removed from the information security word frequency list, and the terms ‘privacy’ and ‘concern’ (including variations, e.g. ‘concerns’) were removed from the privacy concern word frequency list.

In addition, as there was no limit on the paper length, there might be bias in the word frequency due to the possible preference for long papers (containing more words) than others. Another bias could stem from the fact that older papers had a longer time to be cited, and thus, there are more papers from the beginning of each decade.

**Results**

First, we examined the differences between information security research papers published in the first (Decade 1) and second (Decade 2) decades of the twenty-first century.

As shown in Table 1, the rather broad terms ‘research’ and ‘management’ ranked second and third on the word frequency lists in both decades, even though the number of occurrences in Decade 2 is nearly twice that of Decade 1. The main distinction is the presence of the terms ‘systems’ and ‘computer’, which appeared first and fifth on the Decade 1 word frequency list, but only eighth and twenty-seventh on the Decade 2 list. Furthermore, three of the top ten terms on the Decade 1 word frequency list are variations on the word ‘use’ that does not appear at all on the Decade 2 list.

Regarding the relations between terms, the automatic tool did not detect any significant correlations with the terms found in the information security Decade 1 and Decade 2 word frequency lists. Second, we examined the differences between the privacy concern research papers published in the first (Decade 1) and second (Decade 2) decades of the twenty-first
century. As shown in Table 2, the term ‘information’ was the leading term in both decades’ word frequency lists, with the terms ‘online’, ‘research’, ‘personal’ and ‘use’ also ranking among the top ten. Interestingly, the term ‘social’ claimed second place in the Decade 2 word frequency list, while it was positioned only at fourteenth place in the Decade 1 list. Another notable difference is the placement of the terms ‘consumers’, ‘marketing’ and ‘consumer’, which are found in the eighth, ninth and tenth positions of the Decade 1 word frequency list, but only in the sixtieth and ninetieth positions of the Decade 2 list. Table 2 shows the most frequently used terms in privacy concern academic papers published between 2000 and 2019.

Furthermore, while reviewing the top terms in the Decade 2 word frequency list, we noticed that the terms ‘data’ and ‘privacy’ are ranked first and sixth, respectively, whereas they are ranked ninth and 300 (approximately) in the Decade 1 word frequency list. The term ‘compliance’, ranked fourth in the Decade 2 list, was also ranked very low (fifty-second place) in the Decade 1 list. Table 1 presents the most frequent terms in information security academic papers published between the years 2000–2009, as well as 2010 and 2019.

Table 2. Most frequent terms in privacy concern academic papers that were published in the decades 2000–2009 and 2010–2019.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Term</th>
<th>Decade 1</th>
<th>Number of occurrences</th>
<th>Term</th>
<th>Decade 2</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Information</td>
<td>2540</td>
<td></td>
<td>Information</td>
<td>2949</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Online</td>
<td>1026</td>
<td></td>
<td>Social</td>
<td>1425</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Internet</td>
<td>991</td>
<td></td>
<td>Research</td>
<td>1032</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Use</td>
<td>809</td>
<td></td>
<td>Online</td>
<td>1007</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Personal</td>
<td>792</td>
<td></td>
<td>Personal</td>
<td>968</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Users</td>
<td>650</td>
<td></td>
<td>Data</td>
<td>951</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Research</td>
<td>643</td>
<td></td>
<td>Use</td>
<td>939</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Consumers</td>
<td>603</td>
<td></td>
<td>Trust</td>
<td>835</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Marketing</td>
<td>583</td>
<td></td>
<td>Self</td>
<td>807</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Consumer</td>
<td>579</td>
<td></td>
<td>Model</td>
<td>782</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9216</td>
<td></td>
<td></td>
<td>11,695</td>
<td></td>
</tr>
</tbody>
</table>

Notably, the higher numbers of term occurrences in the Decade 2 top ten list compared to the Decade 1 top ten list may indicate a broader theme distribution in the Decade 1 papers. This could also be explained by the higher word count in Decade 2 papers (~332,000 in Decade 2 vs. ~199,000 in Decade 1); but these differences are not as significant as the number of occurrences in the top ten lists (7747 in Decade 2 vs. 4037 in Decade 1).

Regarding the relations between terms, the automatic tool did not detect any significant correlations between the terms found in the privacy concern Decade 1 word frequency list. In the Decade 2 list, however, significant correlations were found between the term ‘research’ and several other terms, such as: ‘personal’ ($r = 0.30, P <0.001$), ‘data’ ($r = 0.26, P <0.001$) and ‘behaviour’ ($r = 0.21, P <0.01$). Notably, many of these terms are among the most frequently used terms in this decade’s word frequency list.

Finally, we conducted a comparison between all the sampled information security and privacy concern research papers to examine common themes discussed in these papers. Aside from the general terms ‘information’ and ‘research’, which appear among the top ten terms in both word frequency lists (as shown in Table 3), we discovered that ‘privacy’ was ranked sixteenth in the information security word frequency list. However, the term ‘security’ was only around the eightieth position on the privacy concern list. Table 3 lists the terms that appeared the most frequently in information security and privacy concern academic papers published between 2000 and 2019. Figures 1 and 2 show word clouds of the most frequently used terms in each tested field. Notably, the higher number of term occurrences in the privacy concern top ten list compared to the information security top ten list (20,307 in privacy concern vs. 11,018 in information security) may indicate a more diverse theme distribution in information security papers, which cover a broader subject. This cannot be explained by the significantly higher word count in privacy concern papers, as it is negligible (~576,000 in privacy concern vs. ~530,000 in information security).

Discussion and conclusions

This study attempted to identify the research trends in information security and privacy concern. This was
accomplished by comparing two decades of research, 2000–2009 and 2010–2019, using an automated textual analysis tool (Voyant Tools). In addition, we looked at the textual trends for the conceptual proximity of the terms ‘information security’ and ‘privacy concern’.

As for research development in the information security field, it was found that in the first decade of the twenty-first century there was no clear unique research trend, but more focus seemed to be put on information security in the context of computing systems compared to the second decade. However, in the second decade, more emphasis was placed on privacy. This may be explained by the increase in awareness of privacy issues during this period, when there was a substantial increase in the use of home computers and the Internet, as well as smartphones, IoT devices and social networks. Interest in personal privacy has grown over the years along with information security awareness (both personal and organizational) and it seems that academic literature is aligned with this

Table 3. Most frequent terms in the information security and privacy concern academic papers that were published in the decades 2000–2009 and 2010–2019 (accumulated together).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Term</th>
<th>Number of occurrences</th>
<th>Term</th>
<th>Number of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data</td>
<td>1752</td>
<td>Information</td>
<td>5489</td>
</tr>
<tr>
<td>2</td>
<td>Research</td>
<td>1524</td>
<td>Online</td>
<td>2033</td>
</tr>
<tr>
<td>3</td>
<td>Management</td>
<td>1298</td>
<td>Social</td>
<td>1931</td>
</tr>
<tr>
<td>4</td>
<td>Systems</td>
<td>1123</td>
<td>Personal</td>
<td>1760</td>
</tr>
<tr>
<td>5</td>
<td>Model</td>
<td>1001</td>
<td>Use</td>
<td>1748</td>
</tr>
<tr>
<td>6</td>
<td>Compliance</td>
<td>948</td>
<td>Research</td>
<td>1675</td>
</tr>
<tr>
<td>7</td>
<td>Risk</td>
<td>902</td>
<td>Internet</td>
<td>1431</td>
</tr>
<tr>
<td>8</td>
<td>Policies</td>
<td>832</td>
<td>Users</td>
<td>1426</td>
</tr>
<tr>
<td>9</td>
<td>Study</td>
<td>830</td>
<td>Data</td>
<td>1422</td>
</tr>
<tr>
<td>10</td>
<td>Employees</td>
<td>808</td>
<td>Trust</td>
<td>1392</td>
</tr>
<tr>
<td>11</td>
<td>Use</td>
<td>762</td>
<td>Model</td>
<td>1280</td>
</tr>
<tr>
<td>12</td>
<td>Computer</td>
<td>727</td>
<td>Study</td>
<td>1170</td>
</tr>
<tr>
<td>13</td>
<td>Policy</td>
<td>720</td>
<td>Control</td>
<td>1117</td>
</tr>
<tr>
<td>14</td>
<td>Control</td>
<td>718</td>
<td>Self</td>
<td>1044</td>
</tr>
<tr>
<td>15</td>
<td>Privacy</td>
<td>699</td>
<td>Perceived</td>
<td>938</td>
</tr>
<tr>
<td>16</td>
<td>Behaviour</td>
<td>654</td>
<td>Systems</td>
<td>876</td>
</tr>
<tr>
<td>17</td>
<td>Users</td>
<td>651</td>
<td>Behaviour</td>
<td>871</td>
</tr>
<tr>
<td>18</td>
<td>Used</td>
<td>634</td>
<td>Consumers</td>
<td>852</td>
</tr>
<tr>
<td>19</td>
<td>Level</td>
<td>623</td>
<td>Risk</td>
<td>781</td>
</tr>
<tr>
<td>20</td>
<td>Culture</td>
<td>617</td>
<td>Consumer</td>
<td>781</td>
</tr>
<tr>
<td>Total</td>
<td>17,823</td>
<td></td>
<td>30,017</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Visual presentation of the most frequent terms found in information security academic papers.
trend. These findings are compatible with the research of Silic and Back (2014), which saw a shift of the information security research themes towards privacy, trust and identity management, over the “past few years”, that is, the beginning of the second decade of the twenty-first century (or at least the end of the first decade). This trend was also reported to be progressing in this area, so it is safe to assume that a later study (as the current one) would have found an even stronger emphasis on these research themes.

When examining the privacy concern research development over the decades, the differences between the decades become even more apparent. According to Yun et al. (2019), the first decade of the twenty-first century saw a greater emphasis on privacy concern in commerce (most likely electronic), while the end of the first decade and the beginning of the second one saw a greater emphasis on the social dimension. This can be explained by the vast emergence of social networks (e.g. Facebook) in the first decade of the twenty-first century and the research that was conducted in the following decade. Accordingly, research on commerce and marketing in the first decade may be explained by the dramatic increase in the use of e-commerce in the preceding decade (1990–1999) and several years before. The slight incompatibility between our research and the one by Yun et al. (2019) in terms of the ‘social media age’ (2008–2013 in past research vs. 2010–2019 in the current research), may stem from the different cut of investigated research periods, combined with the bias of privacy concern research papers in Decade 2 towards the first half of this decade (naturally, earlier papers produce higher citation rates).

Finally, we obtained conclusive evidence of the conceptual proximity between the terms ‘information security’ and ‘privacy concern’. The term ‘privacy’ was among the top twenty most frequent terms in the information security word frequency list, indicating that privacy concerns are an important part of the information security field, particularly in the second decade of the twenty-first century. Alternatively, the term ‘security’ appeared only near the bottom of the top one hundred most frequent terms in the privacy concern word frequency list, indicating a connection to the field but not an essential one. This is consistent with the literature (Ross, 1999, as cited in Rezgui and Marks, 2008), which discovered that the term ‘privacy’ is a component of the broader term ‘information security’, rather than vice versa.

Thus, automatic textual analysis of academic literature can be an effective tool for identifying research trends in a variety of fields. It can also be used to detect the conceptual proximity of different terms or subjects. Future studies can use this tool to investigate recurring themes and research trends across multiple domains and disciplines in an efficient manner that requires little human intervention. The automatic textual analysis tool has proven its worth in digital humanities research; however, it should be used cautiously and sparingly as a supplement in larger studies. Additional tools should be used for textual and content analysis to obtain a clearer and more comprehensive examination of the subject matter. Future research may apply a smaller breakdown of research periods (e.g. every five years) for gaining more accurate and punctual insights regarding research trends.

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References
Appendix A – Information security corpus


**Appendix B – Privacy concerns corpus**


Ellison NB, Vitak J, Steinfield C, et al. (2011) Negotiating privacy concerns and social capital needs in a social media environment. In: Trepte S and
concerns, internet addiction, and personality between Facebook users and quitters. Cyberpsychology, Behavior, and Social Networking 16(9): 629–634.


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Dr. Maor Weinberger has a PhD from the Information Science Department in Bar-Ilan University, Israel. His professional interests include online privacy and anonymity and information security.

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South African academic libraries as contributors to social justice and ubuntu through community engagement

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Abstract
The purpose of this article is to assess the role of academic libraries as social justice and ubuntu advocates, promoters and contributors within a community engagement framework. This was a qualitative study that utilised interviews with 20 library heads and 8 focus group discussions with librarians from South African university libraries to gather data. The findings reflect that South African academic libraries’ community engagement approaches can be grouped into several themes. These include contributions to quality education, health and wellness, work and employment, food security, addressing the digital divide, environmental concerns, equality and gender equality, the preservation of national heritage and food security. With regard to social justice, there were four themes that emerged from the participants’ narratives: (1) they stated that community engagement is a deliberate social justice action; (2) community engagement was associated with a contribution to the rights to education and information access, among others; (3) they pointed to the social-redress actions of their libraries as contributing to social justice; and (4) they associated community engagement with ubuntu, which they argued is itself a social justice concept. The findings support community engagement activities as a contribution to a socially just society and ubuntu. The results confirm the need for academic libraries (and universities in general) to go beyond their traditional role of teaching, learning and research support, and participate in community engagement not only as an expected social responsibility but also as a contribution to a socially just society and development. Based on the results, this article considers social justice and ubuntu as inherent to, and not an accidental notion of, community engagement.

Keywords
Social justice, community engagement, ubuntu, academic libraries, social redress, human rights

Introduction
South Africa is a country that is still bedevilled by the legacy of its apartheid past, which includes high levels of illiteracy, high rates of crime, racial and gender inequalities, unemployment and poverty (Nkondo et al., 2014). The country remains one of the most unequal societies in the world, with a per-capita-expenditure Gini coefficient of 0.63 in 2015 (World Bank, 2019). On average, the top 10% South African population by income spent 7.9 times more than the bottom 40% of the population by income in 2015 (Statistics South Africa, 2020).

The legacy of apartheid is also reflected in the country’s library services. There remains a debilitating shortage of public and school libraries, especially in poorer areas. There were three public or community libraries per million people by 2007, most of which were concentrated in affluent urban provinces (Nkondo et al., 2014). Only 8% of schools had
functional libraries (Equal Education, 2022). This situation has not significantly altered since Zaaiman et al. (1988: 28) first observed that libraries in poorer black areas were ‘second-rate compared to the opulent buildings and facilities often found in white areas’.

Despite there being disparities even within the academic library sector between affluent (previously white) universities’ libraries and their less endowed (previously black) counterparts, Satgoor (2015) is of the view that all academic libraries in the country are relatively well off compared to their school and community library cousins. This prompted Nkondo et al. (2014) to suggest that academic libraries can help address some of the inequalities within the library sector by identifying points of need and networking with others to address them. They can assist by donating materials to communities, offering training, providing information to informal sectors and small businesses, and setting up libraries or information centres in those communities and opening their doors to members of the public, among other initiatives. In addition, they can share their resources and expertise with schools to address the shortage of libraries in that sector through community engagement (Bangani et al., 2016).

The American Library Association (2020) defines community engagement as ongoing networks, partnerships and relationships formed between university libraries and communities that are utilised to deal with societal problems collectively. According to Nkondo et al. (2014), academic libraries, like all libraries, ought to play a developmental role by alleviating information poverty, building social cohesion, and promoting and contributing to social justice. Lor (2021) is of the view that libraries do indeed promote equality of opportunity and combat information poverty. According to Mahlomaholo (2010): ‘community engagement programmes are perceived to be pillars of social justice’ (quoted in Netshandama et al., 2011: 122). This means that community engagement is a way by which universities and, by implication, academic libraries demonstrate commitment to social justice. The Education White Paper 3 reminds universities to consider past injustices when conducting their community engagement; they should engage in programmes that seek to ‘redress past discrimination and ensure representivity’, and to transform the higher education system to serve a new social order, meet pressing national needs, and respond to new realities and opportunities (Department of Education, 1997: 2).

Social justice is associated with the values of good: ‘fairness, equality, inclusion, and diversity’ (Mathiesen, 2015: 198). Social justice is about giving a ‘greater voice and more representation for the underrepresented or underpowered communities’ (Clark, 2011: 383). It is about equality, solidarity, the eradication of poverty, human rights and human dignity (Osman and Petersen, 2013). It is about empowering the powerless. Rawls (1999; cited in Mathuews, 2016: 10) views social justice as distributive fairness. Morales et al. (2014) demonstrate that the concept encompasses the ability of all members of a society to participate in socio-economic and political activities that strengthen the democratic processes of a country. In the context of this study, social justice is broadly considered as all acts of libraries aimed at fostering human rights and social redress that are underpinned by the ubuntu values. The currency in South Africa is often to draw parallels between social justice and ubuntu (Raju et al., 2020). Ubuntu is an African philosophical concept that delineates humanness or being humane from its literal meaning, and ‘the belief in a universal bond of sharing that connects all humanity’ in the philosophical sense (Mukwedeya, 2022: 221). The concept is associated with the positive human traits of sharing, caring, compassion, empathy, helpfulness, togetherness and reconciliation – hence its appeal to proponents of social justice.

As a result of their inherent mission to contribute to the right to information and education, serve communities on the margins and provide safe spaces for the threatened, there is a growing interest in how libraries advocate for, contribute to and promote social justice (Gorham et al., 2016). In an editorial note for a special issue of Library Quarterly on social justice, Jaeger et al. (2016) point to the growing interest of library journal editors in social justice. They cite the example of three other library journals that had special issues covering the social justice theme in the same year to support their assertion.

Libraries have been called ‘both a site for social justice struggles and a social justice actor’ (Ncube, 2019). In trying to locate the role of libraries in social justice, IFLA (n.d.) also refers to ‘libraries...[as] social justice institutions, committed to giving everyone the opportunity to learn, grow and develop’, while the Committee of Higher Education Libraries of South Africa (2021) exhorts academic libraries in the country to forge partnerships towards the promotion of an inclusivity agenda and social justice, for continued relevance.

However, despite the growing scholarship and evidence of libraries as social justice actors, there remains scant evidence of how academic libraries contribute to social justice beyond their contribution through teaching, learning and research support roles. The aim of this study is to find out if and how
libraries’ community engagement initiatives help libraries to advocate for, promote and contribute to social justice and ubuntu.

**Literature review**

This section seeks to provide an appraisal of relevant literature on academic libraries as contributors to social justice and ubuntu through community engagement initiatives. To provide a balanced view, the literature review covers both the international and national or South African context. Nkondo et al. (2014) aver that libraries can play a role in social cohesion by prioritising services for the marginalised. Ocholla (2006) divides the marginalised into five categories: the poor, the geographically isolated, the culturally and socially disadvantaged, the discriminated and the physically disabled. As in previous times (Zaaiman et al., 1988: 36), ‘a large number of South African populations are economically deprived, geographically isolated, culturally and socially marginalized’ (Ocholla, 2006: 16). Besides Ocholla’s categories, COVID-19 exposed the prominence of another category in South Africa, which can be referred to as the digitally disadvantaged (Jantjies, 2020). This literature review therefore seeks to develop an understanding of how library community engagement programmes are used to address issues that are pertinent to the marginalised as identified by Ocholla (2006) and expanded on by Jantjies (2020).

Gustina and Guinnee (2017) are of the view that libraries contribute to social justice through running community engagement programmes that are inclusive. These enhance academic libraries’ standing in society. Putnam (1993: 175) believes that ‘networks of civic engagement that cut across social cleavages nourish wider cooperation’ and contribute to the development of mutually beneficial networks. This means that by cooperating or targeting people across class, gender, colour and sexual orientation lines in their community engagement activities, academic libraries can enhance their partnerships and increase their social capital while also contributing to social justice (Bangani and Dube, 2022). Most academic libraries’ community engagement activities show an inclination towards contributing to social justice.

There are plenty of studies that demonstrate the commitment of libraries to social justice. They include Akpom et al.’s (2020) research, where it is reported that Nigerian university librarians contribute to climate change issues in line with the IFLA’s stance, which supports activist librarians in climate change through the IFLA Green Library Award. These librarians create awareness about environmental sustainability and support educational programmes to increase the environmental literacy levels of Nigerian communities.

In the case of Zimbabwe, Mataranyika and Mlalazi (2016) profess that the community engagement initiatives undertaken at the University of Zimbabwe were necessitated by a crisis or circumstances. They report that to achieve maximum impact, community engagement approaches at the University of Zimbabwe were targeted at the marginalised, ‘incarcerated, the visually impaired and the displaced’ (p. 1). This is in line with Nkondo et al.’s (2014) appeal for libraries to direct community engagement at the marginalised. The University of Zimbabwe Library held a literacy fun day at a children’s home, donated and set up a primary school library, installed assistive technologies for the blind at a school for the blind, and donated books to a maximum-security prison. These community engagement initiatives led to new strategic partnerships between the university library and the surrounding communities. This seems to confirm Putnam’s (1993) assertion that community engagement can assist institutions in developing mutually beneficial partnerships or relationships with the marginalised, closing the ‘social cleavages’ between the haves and the have-nots.

Many African countries are faced with a shortage of libraries (Kinyanjui, 2010; Mataranyika and Mlalazi, 2016) and widening poverty gaps, some of which are caused by the digital divide (Kinyanjui, 2010). In Kenya, Kinyanjui (2010) notes that there is a shortage of children’s libraries. A children’s library section was created at Kabarak University so that children can access material in the university library. According to Kinyanjui (2010), this has enhanced the status, reputation and visibility of the library in the surrounding communities. Further, it has led to a good relationship between the library and the community. In an effort to close the digital divide and improve the literacy levels of children residing in slums, a community engagement project was carried out at the Kenyan Kibera Community Library in collaboration with the Electronic Information for Libraries Public Library Innovation Programme. The project involved preloading tablets with educational content and then giving them to children for use in the library. This resulted in improved marks and performance among the schoolchildren who received such assistance.

Other forms of community engagement employed by African academic libraries include offering health literacy (Kamau and Gichohi, 2018) and information literacy (Mwesigwa, 2013) programmes to the general public. Health illiteracy is a reality in many African
countries. This prompted the Kenya Methodist University to offer consumer health information literacy sessions to public librarians in Central and Upper Eastern Kenya, with the aid of a grant obtained from the Elsevier Foundation. The aim of this relationship was to assist the community and public librarians in advising community members on making informed health decisions. According to the Kamau and Gichohi (2018), after the sessions, many of the targeted public and community libraries established health corners, and there was a noticeable increase in the number of health-related queries, which attested to the new-found confidence of the librarians in answering such queries.

Another example of how libraries have contributed to social justice through community engagement is reported by Bantham (2020) at South Africa’s North-West University Library and Information Service, which partnered with the North-West Department of Arts, Culture, Sport and Recreation and the South African Library for the Blind to improve reading access for the blind through offering them access to assistive technologies in the libraries in the North-West Province. The project also serves as redress for inequalities in the library and information sector and enables ‘local communities to have access to information to broaden their knowledge and in turn improve their socio-economic conditions’ (Bantham, 2020).

South African university libraries also provide training for library assistants in school libraries. A partnership between the University of Cape Town’s Library and Information Studies Centre, The Bookery and a group of schools in Khayelitsha Township resulted in the training of library assistants by University of Cape Town lecturers based at the Centre (Silbert and Bitso, 2015). The library assistants in partner schools in Khayelitsha were empowered to run functional school libraries. While the University of Cape Town brought its theoretical and academic know-how and expertise to this initiative, the communities gained practical experience, pointing to the mutuality of the community engagement project. Similarly, the University of Johannesburg has identified the sharing of information with schools as part of its community engagement initiatives (University of Johannesburg Library, 2020). The University of Johannesburg Library organises annual seminars to empower and share knowledge with teacher librarians. It is hoped that these seminars will improve teacher librarians’ digital literacy skills. According to Ocholla and Ocholla (2020), digital literacy skills are critical in the Fourth Industrial Revolution. The empowerment of teacher librarians can also be thought of as closing the prevailing digital divide in South Africa. The digital literacy skills offered by the University of Johannesburg Library empower teacher librarians to undertake online learning, which is more prevalent post-COVID-19. Interestingly, the University of Johannesburg Library’s initiative does not appear to be unique. Carlito (2009) also mentions offering teacher workshops as one of the ways in which the University of Alabama at Birmingham in the USA contributes through community engagement. This is a reflection of how academic libraries can learn from the community engagement initiatives of others, irrespective of whether the initiatives emanate from underdeveloped or developed countries, and adapt them to their own environments.

These projects are a demonstration of how academic libraries have exploited community engagement partnerships with local communities and non-governmental organisations to contribute to social justice (Bangani and Dube, 2022). It has already been pointed out that South Africa continues to be afflicted by a high number of social maladies, which are often genderised and racialised. Most of these challenges are often ascribed to the history of segregation in the country, which led to opportunities being provided along racial and gender lines. As early as 1988, Zaaiman et al. argued that South Africa was a country of two communities. The white community was (and still is) mainly privileged, with better libraries and other facilities, while many members of the black population did not have access to libraries. This situation has not entirely changed since the 1980s. As a result of the prevailing social inequalities, Shawa (2020) concurs that, in the South African context, all community engagement should be driven by social justice principles.

Very few studies in South Africa discuss social justice without juxtaposing it with the concept of ubuntu. In library and information science (Hart, 2007; Nkondo et al., 2014; Raju et al., 2020; Vann, 2013) and other disciplines (Du Plessis, 2019; Gustina and Guinnee, 2017; Lim et al., 2022; Lim et al., 2022), studies associate ubuntu with social justice. Vann (2013) holds the view that, in the context of South Africa, social justice is often associated with ubuntu. Similarly, while discussing open access as a social justice action, Raju et al. (2020) confirm Hart’s (2007) assertion by associating ubuntu with social justice and the moral obligation to distribute a university’s intellectual output, thus demonstrating solidarity with the information poor.

Despite many examples of academic libraries contributing to social justice through community engagement, as outlined above, there is a scarcity of
scholarly literature that explicitly discusses how community engagement contributes to social justice. Most studies of this nature can be found on the Web and in unaccredited conference publications. This study is therefore an attempt to bring this phenomenon to the forefront of academic discourse.

Methodology

This study is extracted from a PhD thesis. It was qualitative in nature and relied on multiple methods of data collection: online interviews with 20 library heads in South Africa, complemented by eight online focus group discussions with librarians and five telephone interviews with community members. However, for the purposes of this part of the study, the latter group’s data has not been used to avoid unevenness in the findings and discussion. The community members could not provide deeper insights into the community engagement approaches of libraries besides those in which they participated, and therefore could not provide rich data on the contribution of the approaches to social justice. The study employed a census sampling approach for the library heads, meaning that the entire population of South African public university library heads was enumerated. The snowball sampling technique was used for the focus group discussions as the investigator relied on referrals from the library heads.

Regarding the procedure, the study began with sending emails to all 26 public university library heads in South Africa, informing them about the study and requesting their participation. The email further asked the library heads to provide information on the process of acquiring permission from their universities’ gatekeepers to interview them and other staff should they be interested. Ultimately, 20 library heads were interviewed between July and December 2021, although the last interview was in February 2022 owing to delays in issuing permission from one institution. The interview guide was divided into seven sections. The interest of this study is in Section C of the guide, which sought to determine community engagement approaches in South African public universities and their contribution to social justice (for the exact questions that were asked, see Appendix 1). On completion of the interviews, each library head was asked if they would be willing to allow focus group discussions to be held with some of their staff and, if possible, to recommend staff to the researcher who had been involved in community engagement approaches in their libraries. Eleven of the 20 library heads gave their permission to the researcher to hold a focus group discussion with their staff. Eventually, only eight focus group discussions involving 33 librarians were held.

Due to its qualitative nature, the study relied on qualitative data analysis methods – specifically, thematic analysis. The online interviews and focus group discussions were automatically transcribed into a verbatim written format using the in-built mechanisms of the two software programmes (Microsoft Teams and Zoom in one instance). However, in downloading and reading the transcripts, the investigator realised that the transcriptions were not 100% accurate due to differences in the voice accents and other external factors. Together with a research assistant, the investigator listened afresh to the recordings from the interviews and focus group discussions and corrected the transcripts where necessary. Once the investigator was satisfied with the quality of the transcripts, they were uploaded to ATLAS.ti. To avoid confusion, all responses addressing a particular objective were grouped together in a single folder. Keywords and themes were identified and grouped together according to similarities. The data was then presented in the form of visual maps, tables, narratives and verbatim quotations from the participants.

Background and characteristics of participants

There were 53 participants in this study (see Tables 1 and 2). Forty-four were female and nine were male. Table 1 further shows that 20 of the participants were either heads of libraries or their designates. There were 15 actual heads of libraries with various titles such as library director, senior director, executive director and chief director. Five library heads decided to designate the interview to either their deputies (whose titles were director or deputy
director in three instances), a manager or a senior manager. However, these are collectively referred to as library heads in this study, irrespective of the nomenclature.

In terms of institutional profile, six of the library heads were from universities of technology, five were from comprehensive universities and nine were from traditional universities. Traditional universities are theory-based universities that offer degrees at the undergraduate, Master’s and doctoral level. Comprehensive universities provide a mix of programmes, including career-oriented and professional degrees, research masters and doctoral programmes, while universities of technology offer vocational education both at degree and undergraduate levels’ (Council on Higher Education, 2009: 8). South Africa has 12 traditional universities, eight universities of technology and six comprehensive universities.

Eight focus groups with 33 participants formed part of the discussions, as shown in Table 2. Twenty-seven of the focus group participants were female while six were male.

### Findings and discussion

In the first instance, the library heads and librarians were asked to share their community engagement initiatives with the researcher. These were grouped into several themes: quality education, health and wellness, work and employment, food security, addressing the digital divide, environmental concerns, equality and gender equality, the preservation of national heritage and food security. Some of the main initiatives shared included: the establishment and setting up of libraries in marginalised schools and communities; support for reading and writing skills; hosting visits by school learners; the donation of books and various items to schools and communities; and recycling and participation in environmental projects. The interest of this section of the study lies in whether the participants viewed any or some of the initiatives as a contribution to social justice, and in what way they thought these initiatives helped them fulfil social justice.

#### Contribution of community engagement approaches to social justice and ubuntu

All of the participants (library heads and librarians) were asked the following question: ‘Would you say university libraries’ community engagement initiatives fulfil social justice?’ The view expressed by most of the library heads and librarians was that the contribution of their community engagement initiatives towards a socially just society speaks for itself, as the targeted people emanate from sectors of society that are marginalised or are, in one way or another, social outcasts. These include the incarcerated, institutionalised, poor, homeless, genderised, discriminated or historically disadvantaged.

There were various ways in which the participants contended that the community engagement initiatives of their university libraries contribute to social justice. The themes that emerged included: targeting the marginalised; contributing to the realisation of access to information; a form of social redress; ensuring equality; and empowerment of the marginalised. Despite the assertions from the participants that the projects speak for themselves in terms of their role in a socially just society, the investigator encouraged them to conceptualise this contribution.

#### Community engagement as a deliberate social justice action

The first theme was that of community engagement as a deliberate social justice action. Library Head 13 chose to be philosophical, insisting that assisting the vulnerable, who may feel rejected and outcasts in society, is itself a socially just action. They linked social justice to the concept of ubuntu by stating that involvement in such initiatives can awaken a sense of responsibility, the need for solidarity and ubuntu within oneself. So, the action is socially just not only to a member of a vulnerable group but also to the library staff member who participates in such an action because ‘it is the right thing to do’. It may mean that a librarian is more willing to participate in such action in the future due to the fulfilment that comes with it. Library Head 2’s response was telling: ‘For us, the satisfaction, the intrinsic rewards that come with it [participation in community service]...’

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<th>University type</th>
<th>Number of focus groups</th>
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<td>Technology</td>
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engagement ], should be enough. It teaches good citizenship, ubuntu and the value of working without expecting anything in return’. Ramsey (2016) agrees with these sentiments in identifying the sense of fulfilment from participating in activities that contribute to the public good and developing an image of a library that cares as benefits of community engagement.

The participants emphasised the intentionality of their actions towards social justice. They used the word ‘deliberate’ in describing the contribution of their community engagement approaches to social justice. In fact, Library Head 4 described their community engagement actions’ bias towards the vulnerable members of society as ‘not co-incidental . . . but deliberate’. Library Head 9 described their actions as ‘meaningful . . . conscious, deliberate and well thought out’.

In support of the theme of social justice as an intentional action, Library Head 4 commented:

"going to an old-age home, which itself demonstrates social consciousness and responsibility . . . by helping those people, it’s showing commitment to social justice, these are the people that may feel discarded . . . by the society. This is the kind of people we deliberately target as the library."

Library Head 16 added: ‘I think our projects speak for themselves. In most cases we go deep in the townships and villages . . . that speaks to social justice’. These are communities that are on the fringes of society or have poor backgrounds, which again demonstrates the social justice imperatives of the universities’ community engagement activities.

In agreement with this, two members of Focus Group 8 added that community engagement is a demonstration of the spirit of ubuntu because it teaches library staff the value and merit of giving to others. Another librarian added that it embodies our caring nature as human beings towards others. Concurring with the library heads, the librarians also emphasised the intentionality of their community engagement initiatives towards social justice. Focus Group 1 conceptualised this as follows: ‘we went there conscious of who we want to target, which are the vulnerable communities . . . it’s a matter of conscience . . . collecting food, knitting clothes for the homeless; it’s first-level awareness towards being socially just’. In line with this study’s results, Mills et al. (2012) found that their participants talked about community engagement as a deliberate approach to incorporating equity. Further, their participants referred to a sense of purpose in participating in community engagement. This reflects that, like the participants in this study, Mills et al.’s (2012) participants were being deliberate in their contribution to social justice through community engagement. Moreover, Morales et al. (2014) refer to participation in socio-economic and political activities that strengthen the democratic processes of a country as a socially just action.

In fact, Mills et al. (2012) refer to community engagement as a key concept of social justice in libraries. Therefore, where there is community engagement, there is a deliberate intent towards social justice. For Jaeger et al. (2015; cited in Saunders, 2017: 56), libraries are themselves social justice institutions, meaning that whatever action they deliberately take has to be socially just in one way or another. According to Closson and Mullins Nelson (2009), merely being involved in community engagement can be a way of teaching social justice and consciousness. Kodikara et al. (2013) articulate that the whole purpose of community engagement is to show solidarity with less privileged and vulnerable groups, hence these groups are always a common denominator in community engagement initiatives.

Some believe that due to the socio-economic challenges faced by South Africa, community engagement in the country should always be guided by social justice principles (Shawa, 2020). This means that the community engagement action should not be socially just by accident but by design. This is in line with the narratives of this study’s participants, who indicated that community engagement initiatives that do not seek to contribute to social justice values will not be approved in some universities in South Africa. To support community engagement as a deliberate social justice act, Mahlomaholo (2010; cited in Nethshandama et al., 2011: 122) identifies community engagement as a pillar of social justice.

**Community engagement as social justice through contributing to human rights.** The second theme that emerged was that of human rights. The community engagement initiatives mentioned by the library heads that were aligned with human rights included: providing access to information for learners and other marginalised communities; reading and writing assistance; holding panel discussions on health issues; and the provision of information literacy training.

Five library heads and six focus groups revealed that some community engagement initiatives help to improve access to information. They raised the issue of rights in arguing that a socially just action must align with assisting another person to realise their rights. This is in line with Gorham et al.’s (2016)
study, who refer to an intersection between human rights and social justice. They emphasise that, in librarianship, human rights and social justice are interrelated as the former can only be effectively implemented when there are systems of the latter in place. The library heads gave examples of such social justice acts and systems, including the assistance they render to high school learners, which they said helps them realise their right of access to information. The library heads believed that by providing access to information to the marginalised, academic libraries and librarians are demonstrating social awareness and responsibility, and this can be considered a socially just action. Indeed, Library Head 9 associated their community engagement efforts with the South African Bill of Rights: ‘I think if you think about our Bill of Rights, with the whole notion of having access to information, helping the visually impaired, the elderly, homeless and so forth … these are socially just actions’.

Conversely, a lack of access to information, often represented by a lack of libraries, can deny learners their rights to education and access to information. It denies the majority of learners access to quiet and stable learning spaces, appropriate supplementary learning and reading materials, audiovisual and digital media, and other learning aids. According to Mtwesi (2013) and Mojapelo (2016), a lack of libraries can be presumed to be a violation of learners’ rights not only to equal education but also to access to information. It deprives learners of access to a place of intellectual growth (Ngulube, 2019), meaning that those learners who do not have access to libraries are deprived of opportunities.

During the focus group discussions, a librarian commented that they had partnered with a non-governmental organisation to hold panel discussions on mental health issues. They reminded the investigator that mental health issues are a human rights concern in South Africa, as the mentally ill are often stigmatised. Lund (2016) is of the view that stigma can lead to the violation of the human rights of the mentally ill. By holding panel discussions on mental health, libraries are spotlighting an issue that is often hidden from public view, thereby contributing to the destigmatisation of people suffering from mental health illnesses. This is also a way of ensuring that people who suffer from such illnesses are not hidden or cast away, and raising awareness about mental health illnesses. Considering the stigmatisation of mental illnesses and the library openly talking about this reality, the participant felt that this was a socially just action. Library Head 4 added: ‘I do believe that highlighting mental wellness issues did a great deal in terms of contributing to social justice’. Generally, there was agreement between the library heads and librarians on the contribution of community engagement to addressing or raising awareness about human rights. Lund (2016) shares the sentiments of the library heads and librarians by calling for scholarly debates on mental health issues in South Africa to inform the public and reduce stigma.

Another common subtheme that emerged as a contribution of the participants to human rights was teaching information literacy skills to learners and teacher librarians. A Focus Group 8 participant referred to the imparting of information literacy skills as a foundation that fosters the realisation of human rights. This thinking aligns with IFLA (2005), which refers to information literacy in a digital world as a basic human right that promotes social cohesion. By being engaged in community engagement through the information literacy training of teachers, learners and other community members, academic libraries play a role in promoting a human right. Several other scholars connect information literacy to social justice and human rights (e.g. Battista et al., 2015; Saunders, 2017).

Community engagement as social justice through contributing to social redress. Another common theme from the participants’ comments revolved around social redress. While reminding the investigator of their university’s values, including social justice, Library Head 19 and the participants in Focus Group 6 commented that in carrying out community engagement, the schools that are being assisted are not well-to-do; rather, they are mainly rural and township no-fee schools that are in need of assistance. Library Head 19 stated:

It depends where one comes from, but the kind of projects that we’ve been doing and maybe I should start by saying that our focal area when we started looking at the school projects, we were focusing on Quintiles 1 to 3.

This was in reference to the South African school quintiles system, which groups public schools into five quintiles, with Quintiles 1 to 3 being no-fee schools from the poorest areas, and Quintiles 4 and 5 being fee-paying schools from affluent areas (South African Government, 2006). Nkondo et al. (2014) encouraged libraries to play an activist role in social cohesion by prioritising services to the marginalised. By targeting the marginalised, public universities play a critical role in fostering social justice. As already pointed out, many universities in South Africa already frame their values around social justice, which, in a
way, compels libraries to promote those values in their community engagement endeavours. A Focus Group 6 participant, for example, was of the view that, due to the social justice values and foundations of their university, any community engagement project that does not seek to address a social justice problem will not be supported. She emphasised that the establishment of school libraries by their university library is for the benefit of poor schools. It is a step towards levelling the playing field so that they, too, have access to a library.

Several of the participants observed that the fact that libraries target women’s issues – such as by empowering them with the Take a Girl Child to Work initiative and sanitary towels projects – is testimony to their commitment to social justice and redress. A library head added that not having sanitary towels can have far-reaching consequences for female students, which may result in them eventually dropping out of school. By being provided with sanitary towels, they can see that the library cares about their plight, and this, in a way, can motivate them to work hard and complete their studies, which will have the effect of addressing gender inequality, gender-based violence and other social ills afflicting women in South Africa (Bangani, 2022). The participants considered their community engagement contributions to be a form of social redress. The libraries are involved in giving ‘greater voice and more representation for the under-represented or under-powered communities’ (Clark, 2011: 383) and empowering the powerless (Mathuews, 2016). Mathuews (2016) refers to social justice as distributive fairness. This is very important in the context of South Africa, with its complicated history of discrimination based mainly on race but also on gender, leading to racialised and genderised socio-economic challenges. This is why most community engagement initiatives are focused not only on the black and the poor, as was stated by many of the participants in this study, but also on gender redress, as demonstrated by attempts to address gender inequalities and inequalities.

This contribution to activities that are geared towards redress is in line with the Education White Paper 3, which reminds universities to consider past injustices when conducting their community engagement. As mentioned above, the White Paper encourages libraries to ‘redress past discrimination and ensure representativity’, and to transform the higher education system to serve a new social order, meet pressing national needs, and respond to new realities and opportunities (Department of Education, 1997: 2).

Considering the above, the literature agrees with one of the study’s participants, who stated that community engagement makes a valuable contribution by assisting the vulnerable, who may feel rejected and like outcasts. This is, in itself, a socially just action.

**Conclusion**

This study has outlined the role of South African academic libraries as contributors to social justice and ubuntu through community engagement. Four themes emerged from the discussions with participants in community engagement as a demonstration of social justice: community engagement as a deliberate social justice action; community engagement as social justice through contributing to human rights; community engagement as social justice through contributing to social redress; and community engagement as a contribution to ubuntu.

Regarding community engagement as a deliberate social justice action, the participants shared that their community engagement initiatives target groups in society that are marginalised and considered as social outcasts. Those mentioned include the institutionalised, the poor, the homeless, the genderised, the socially discriminated and the historically disadvantaged. This notion highlights community engagement’s social justice and ubuntu intentionality. Thus, social justice and ubuntu are regarded as inherent rather than accidental notions of community engagement. The librarians also claimed that community engagement contributes to the realisation of human rights. Some of the rights associated with this include the right to education, the right of access to information and the right to human dignity. In addition, the participants claimed that public university libraries contribute to social justice through social redress actions, as their efforts seek to ensure fairness, equality, inclusion and diversity. These participants pointed out that most community engagement initiatives are focused on the black, women and the poor. The aim is to address racial, institutional and gender inequalities.

Finally, the librarians associated community engagement with ubuntu, pointing out that there are similarities between the two concepts. The participants argued that involvement in community engagement initiatives can awaken a sense of social consciousness and responsibility, the need for solidarity and ubuntu within academic librarians. These results confirm some of the positions articulated in the published literature.

The findings of this study will greatly benefit theory in the field of community engagement. They support community engagement activities as a
contribution to a socially just society and ubuntu. Therefore, in reporting their community engagement initiatives, academic libraries are encouraged to frame them as a contribution to social justice and ubuntu. In this way, the powers that be are likely to develop an understanding of the theoretical and philosophical underpinnings of the community engagement initiatives and hopefully offer more support to libraries’ community engagement endeavours. This study also strengthens the theory of community engagement generally, and specifically in academic libraries, and should serve as an encouragement for more studies in this still under-researched and under-theorised niche area. The results of this study can be used when approaching university libraries for possible community engagement initiatives. These results show that university libraries hold community engagement in high regard as a contribution to social justice, social redress and human rights, and an ubuntu imperative. University libraries can use the results of this study to ensure that their community engagement initiatives embody social justice and report those initiatives widely for better support. De la Peña McCook (2011) laments the lack of articulation of community engagement initiatives as social justice and human rights imperatives, despite libraries fulfilling these values through their programmes.

One of the limitations of this study is that it only focused on academic libraries in public universities while community engagement transcends the divide between public, academic, school and special libraries. This study therefore calls for future studies to compare the contribution of community engagement initiatives to social justice across different types of libraries. A study that serves as an audit of the social justice contribution of community engagement initiatives in all library sectors would contribute immensely to theory in this field. Second, the study only used online qualitative research methods (focus groups and interviews), therefore studies utilising surveys and other research methods may have a wider reach and provide the perspectives and nuances of more people in the field. Moreover, studies emanating from other geographic regions would be a welcome addition to the literature in this field. So far, this niche has received limited attention in library and information science academic discourse and practice.

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References


Bantham B (2020) NWU helps with library services for the blind in the NW province. Available at: http://news.nwu.ac.za/nwu-helps-library-services-blind-nw-province?fbclid=IwAR1UOph5ZmxaL43zQyvDFxHFcJ7_GQeaBoAC-CehLm0Kt9KaNzt_1-Pikpdf (accessed 3 February 2023).


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Appendix I

Researcher’s interview guide – library heads
Towards a framework for community engagement in public university libraries in South Africa

Name of academic library

Library head/representative

Section A
1. General view of the participant with regard to community engagement
1.1 What are your thoughts about community engagement?
1.2 What is your view of universities getting involved in community engagement?
1.3 What is your view of libraries getting involved in community engagement?

Section B
2. Community engagement approaches in South African public university libraries
2.1 What are some of the community engagement initiatives/programmes that you or your library worked on?
2.2 Would you say university libraries’ community engagement initiatives fulfil social justice?
2.2.1 If yes, in what way would you say the initiatives fulfil social justice?
2.2.2 If no, what is your view of community engagement as a vehicle towards the fulfilment of social justice?
Factors contributing to slow completion rate among postgraduate students of the Information Studies Programme at the University of Dar es Salaam, Tanzania

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Abstract
This study was carried out to examine causes of slow completion among postgraduate students of the Information Studies Programme at the University of Dar es Salaam. The study used both quantitative and qualitative research approaches. It involved 61 respondents, including 56 postgraduate students involved in a questionnaire survey and 5 lecturers interviewed. Findings revealed that the majority of students took more than the university-stipulated time to complete their studies. Factors responsible include students' failure to comprehend comments from supervisors, poor relationships between students and supervisors, multiple roles and a poor research environment. Incompetence in research skills and financial constraints were also noted to contribute to slow completion. The study concludes that slow completion among students is not a function of a single factor. Addressing these factors is critical in enhancing the timely completion of studies. Accordingly, this study recommends that the programme should create supportive learning environment for its students such that learning outcomes are improved.

Keywords
Postgraduate students, completion rate, information studies programme, University of Dar es Salaam, Tanzania.

Introduction
Universities are charged with the task of producing quality postgraduate students through their various programmes. Traditionally, universities have measured the quality of their students and the success of their postgraduate programmes through the timely completion of studies by their students (Vidak et al., 2017). However, as universities continue to attract more postgraduate students to their programmes, there has been concern about the time taken by postgraduate students to complete their studies. Evidence from prior studies indicates that about 50% of postgraduate students, both master’s and PhD, take a long time to complete their studies and thus fail to match the provided time frame (Antoinette and Shoba, 2012; Ndayambaje, 2018).

Understandably, the slow completion rate among postgraduate students is considered a problem not only for the training institutions which serve these students, but also for employers relying on the strong, local and suitably trained workforce, and the policy-makers responsible for the strong workforce required for national development (Levesque, 2018). For the institutions, a slow completion rate among postgraduate students has been reported to increase the cost of doing master's and PhD studies for both the students and the universities (Eyangu et al., 2014) Although postgraduate students who fail to complete their studies in time are required to pay extension fees for them to complete them, for universities, their resources such as libraries and supervisors become overused.

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due to the backlog of students who should be cleared to be able to graduate (Eyangu et al., 2014).

The problem of slow completion rate is not an exception in Tanzanian universities, more particularly at the University of Dar es Salaam. This study focused on the Information Studies Programme of the University of Dar es Salaam. This programme was established in 1997 as a result of an increasing demand for library and information science graduates in the country (Majinge and Msonge, 2020; Nawe and Materu-Behitsa, 2016). The programme started with 2 students and the number has been steadily increasing since then to over 300 students in 2021, thus demonstrating its growth. Notwithstanding such growth, the programme has been experiencing some challenges in terms of the timely completion of studies by its postgraduate students. Experience shows that there are delays in the completion of studies by some students in the programme as compared to the past. Although for a master’s programme students are required to complete their studies within 18 months, the majority of them spend more than the prescribed time. Similarly, experience shows that most of the PhD students spend more than five years, which is the maximum time for a PhD programme. Such a delay has resulted in some of these students discontinuing their studies. As elucidated earlier, this situation increases the cost of doing both master’s and PhD studies for both the students and the university (Eyangu et al., 2014). Furthermore, this situation undermines the programme’s accomplishment of its goal of making students complete their studies on time so that they can contribute to national development. This, in turn, may create a bad image not only of the programme but also of the university at large in the community. It is due to this background that there was a need to investigate factors contributing to postgraduate students’ delay in accomplishing their studies at the Information Studies Programme, University of Dar es Salaam. Specifically, the purpose of the study was threefold: first, to assess students’ level of competence in conducting research; second, to identify available study facilities for postgraduate students; and third, to examine the factors which hinder students from accomplishing their studies on time.

Related literature

A slow completion rate among postgraduate students is considered a global problem, as reported in several prior studies (Antoinette and Shoba, 2012; Eyangu et al., 2014; Litalien and Guay, 2015; Mckenzie and Derbyshire, 2017; Netsshitangani and Machaisa, 2021; Ziems, 2017). This problem has been associated with the increasing cost of running a postgraduate programme in many higher learning institutions. Some studies (e.g. Eyangu et al., 2014), for instance, have reported hidden costs incurred by both the students and the university due to the increasing rate of slow completion among postgraduate students. In most cases, these costs include students’ extension fees and overuse of university’s resources, both physical (e.g. library resources) and human (supervisors). Other studies (Litalien and Guay, 2015; Wendler et al., 2010) have reported the hidden cost caused by slow completion rate in terms of time and energy invested in doing postgraduate studies that could never be completed. These studies (Litalien and Guay, 2015; Wendler et al., 2010) have also reported low productivity and competitiveness among postgraduate students who took a long time to accomplish their studies. Accordingly, the problem of slow completion rate, as reported in these studies (Antoinette and Shoba, 2012; Eyangu et al., 2014; Litalien and Guay, 2015; Mckenzie and Derbyshire, 2017; Netsshitangani and Machaisa, 2021), tends to slow down not only their academic achievements, but also the contribution of graduate students to the development of their society.

Several factors, both personal and systemic, have been reported to contribute to slow completion rate among postgraduate students. Factors such as financial problems, physical and mental health issues, and family obligations have been reported by many studies (Litalien and Guay, 2015; Mckenzie and Derbyshire, 2017; Mugendi and Githae, 2021) as the main barriers to postgraduates students’ timely completion of their studies. These factors have been reported to contribute not only to slow completion rate but also to drop-out from their studies by many postgraduate students. Studies have also established that psychological distress (Mugendi and Githae, 2021) and attractive job opportunities (Litalien and Guay, 2015) are responsible for the slow completion rate among postgraduate students. In relation to attractive job opportunities, other studies (Ziems, 2017) have reported multiple roles including being employed while studying among postgraduate students. These students, as reported by Mckenzie and Derbyshire (2017), are referred to as part-time candidates and, because of this status, they tend to take more time to complete their studies than full-time students.

Studies have, however, reported mixed findings regarding the role of demographic variables such as age and sex in the timely completion of studies among postgraduate students. Regarding age, whereas some studies (e.g. Groenynyck et al., 2013) have shown that younger postgraduate students tend to complete their
studies on time, other studies, such as that of Matheka et al. (2020), have reported opposing results. Matheka et al. (2020), for instance, reported in their study that older students, particularly those who are over 51 years of age, are more likely to complete their studies than their counterparts. Similarly, studies on the role of gender in the timely completion of postgraduate studies offer conflicting results. Whereas some studied (e.g., Jiranek, 2010) reported a higher completion rate among male students, other studies (e.g, Watthanapradith et al., 2016) reported that female students are more likely to complete their studies on time compared to male students.

Other factors such as a poor relationship between students and their supervisors and a lack of personal motivation among postgraduate students have also been reported to contribute to slow completion rates. Netshitangani and Machaisa (2021), for instance, noted in their study that poor relationships between students and their supervisors, particularly in terms of provision of negative feedback, have contributed to students losing their self-esteem, thus negatively affecting their educational outcomes. On the other hand, Herman (2011) noted that, among other factors, a lack of personal motivation among postgraduate students also contributed to delays in the completion of postgraduate studies. According to Herman (2011), students who are not intrinsically motivated are more likely to delay in accomplishing their studies than those who are motivated. Generally, this review of the literature shows that the slow completion rate among postgraduate students is not a function of one factor but that there is a multitude of factors that are responsible for this problem.

Although the reviewed literature has highlighted some possible factors for students’ delays in accomplishing their studies, some of these factors might be context-specific and hence might not be applicable in other settings such as that of the University of Dar es Salaam, specifically the Information Studies Programme. Although this may be the case, research in this area, particularly in Tanzania, is scarce. The available studies (e.g. Majinge and Msonge, 2020; Mwantimwa, Elia, et al., 2017; Mwantimwa, Mwabungulu, et al., 2021; Nawe and Materu-Behitsa, 2016) have not specifically focused on the topic in question. Majinge and Msonge (2020), for instance, have solely focused their studies on the integration of the needs of library users with disabilities in the library and information studies curriculum. On the other hand, Mwantimwa and colleagues (Mwantimwa, Elia, et al., 2017; Mwantimwa, Mwabungulu, et al., 2021) have focused on how the utilization of electronic resources enhances teaching and learning in higher learning institutions in Tanzania, whereas Nawe and Materu-Behitsa (2016) focused solely on the expansion of the Information Studies Programme at the University of Dar es Salaam. The scarcity of studies on the topic in question has resulted in limited empirical evidence on the same which could otherwise be used to address the problem of delays in the completion of studies by postgraduate students in the programme. As such, assessing factors contributing to delays in the completion of studies among postgraduate students in the Information Studies Programme is crucial in informing decisions tailored to address this problem at the university.

Methodology

This study used a descriptive research design employing a concurrent mixed-method research approach to gain insight into the factors contributing to the slow completion rate of the Information Studies Programme’s postgraduate students (both master’s and PhD). This research approach was used for the purpose of validating the study’s data since both qualitative and quantitative data were concurrently collected. The study was conducted at the Information Studies Programme, University of Dar es Salaam, Dar es Salaam, Tanzania. The selection of the programme was based on the fact that recently the programme has been experiencing delays in terms of the completion rate of its postgraduate students. The population of the study was made up of postgraduate students and lecturers. The involvement of students in the study was due to the fact that these are the ones who were undertaking their studies and research and thus the focus of the study. The lecturers were involved because they were responsible for teaching and supervising the research activities of the students. It was, therefore, imperative to gain their perception of the topic in question.

Overall, the study targeted 83 postgraduate students who were in the programme when it was undertaken. These were those who were doing their PhD by thesis and their master’s by coursework. They were chosen on the assumption that they were more likely to provide more up-to-date information regarding the topic in question. However, of the 83 targeted students, only 56 of them responded to the questionnaire, thus making a response rate of 67.5%. The study also involved 5 lecturers, thus making a total of 61 respondents. A convenient sampling technique was used to sample 56 postgraduate students, whereas purposive sampling was used to select the lecturers for their inclusion in the study. Purposive sampling was also used to sample 6 students out of the 56 who responded...
to the questionnaire and agreed to be interviewed. In this study, convenience sampling was achieved by selecting respondents who were readily available at the university when the study was undertaken. This is due to the fact that some of them were involved in research and hence not available all the time at the university. Therefore, only those who were available were picked. As for the lecturers, these were selected based on their seniority and experience in teaching and supervision. They were also selected based on the number of students they were supervising, implying that only those who had many students to supervise were purposively selected to take part in the study. The required data for the study was collected through a questionnaire that was administered to the students. An interview guide was also developed to collect qualitative data from the six students to supplement data that were collected through questionnaires. Interviews were also conducted to get qualitative data from the five selected lecturers, particularly their insights on the topic in question. Qualitative data were analysed by using content analysis which involved counting and comparing key terms. This was then followed by an interpretation of the underlying context. The qualitative findings were presented using narratives and quotations. On the other hand, descriptive statistics were used to analyse quantitative data with the help of the IBM SPSS version 21 whereby statistical information, such as percentages and frequencies, was generated. Quantitative findings were presented by using tables and figures.

**Results**

**Demographic information of the respondents**

The demographic information of the respondents is listed in Table 1. The results, as indicated in the table, show that of all the students involved in the study, over half of them were aged between 21 to 40 years and very few of them were over 50 years old. Furthermore, a substantial number of all respondents involved in this study were enrolled in a master’s programme when this study was conducted. Very few respondents involved in this study were not employed at the time when the study was carried out.

Apart from the respondents’ demographic information, this study was also interested in finding how much time the respondents had spent on their studies since enrolment. This is because time is one of the essential factors that is used to determine whether students are making satisfactory progress in their studies or not. The findings listed in Table 2 show that nearly half of the master’s students have spent two years studying since they enrolled in the programme. Only a handful of them (4.4%) have spent five years studying since they enrolled in the programme. Overall, the results indicate that most of these students have spent much more time than has been allocated by the university. Likewise, the results in Table 2 demonstrate that more than half of all PhD students involved in this study have spent five years studying since they were registered in the PhD programme.

The findings listed in Table 2 corroborate those from the interviews, as one of the interviewees explained:

> You can’t imagine, this is the second year of my studies and I’m still struggling with my proposal. I was expected to complete this during my first year. The way I see it, I will take more time to accomplish my studies since there are still many processes such as getting the research clearance which also takes time. Data collection also takes time. All these may make me spend more time than anticipated. (Interviewee 1, student – female)

### Table 1. Demographic information of the student respondents (n = 56).

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21–30</td>
<td>11</td>
<td>19.6</td>
</tr>
<tr>
<td>31–40</td>
<td>22</td>
<td>39.3</td>
</tr>
<tr>
<td>41–50</td>
<td>19</td>
<td>33.9</td>
</tr>
<tr>
<td>51 and above</td>
<td>4</td>
<td>7.1</td>
</tr>
<tr>
<td><strong>Level of education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s</td>
<td>45</td>
<td>80.3</td>
</tr>
<tr>
<td>PhD</td>
<td>11</td>
<td>19.7</td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>48</td>
<td>85.7</td>
</tr>
<tr>
<td>Not employed</td>
<td>8</td>
<td>14.3</td>
</tr>
</tbody>
</table>

### Table 2. Number of years spent on studies.

<table>
<thead>
<tr>
<th>Level of education</th>
<th>2 years</th>
<th>3 years</th>
<th>4 years</th>
<th>5 years</th>
<th>&gt; 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s</td>
<td>20 (44.4%)</td>
<td>18 (40%)</td>
<td>5 (11.2%)</td>
<td>2 (4.4%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>PhD</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3 (27.3%)</td>
<td>6 (54.5%)</td>
<td>2 (18.2%)</td>
</tr>
</tbody>
</table>
This quotation and findings from the survey demonstrate that most of the students who were doing master’s and PhD programmes took more than the university’s stipulated time, signifying delays in completing their studies.

**Competence in conducting research**

Competence in conducting research is one of the key aspects of postgraduate students’ accomplishment of their studies. To assess students’ competence in doing research, several research components, ranging from proposal writing to reference management, were presented to the respondents. The respondents were then asked to indicate whether they are competent in those areas or not. The results, as indicated in Table 3, show that a substantial number of all respondents (50.9%) had problems with formulating their statement of the research problem.

Furthermore, results from the table show that nearly half of all study respondents (43.4%) had problems analysing data for their study, whereas more than a quarter of them had problems reviewing literature (30.2%) and presenting and discussing their studies’ findings (30.2%). Only a few respondents (9.4%) indicated having problems in collecting data for their study. Qualitative findings from the study also show that some students were facing problems in data collection, particularly on how to convince their study respondents to take part in their study. During the interview, one of the key informants stated: ‘I faced difficulties in collecting research data and writing a thesis. The majority of respondents were not willing to fill my questionnaires and demanded compensation for their time’ (interviewee 2, student – male).

Results from the interviews further showed that respondents had problems integrating what they have learned in the classroom into the actual research activities in the field. They argued that the theoretical knowledge obtained in the class was not enough for conducting research, especially in collecting data and writing their thesis and dissertations. They also mentioned that it is sometimes difficult to harmonize comments from the panel after presenting their proposals and dissertations during the proposal and pre-examination stages respectively. One respondent explained:

I also failed to integrate my conceptual framework in the discussion of findings as recommended by the panel during the pre-examination presentation. Also, assigning many supervisors for vetting my work was another challenge since everyone provided contradictory comments which confused me. (Interviewee 6, student – male)

However, generally, results from the study show that only a handful of the respondents (5.7%) had problems in writing their proposals. In other words, despite some challenges in other areas of research, a majority of the respondents indicated that they are competent at proposal writing.

**Available study facilities and services for postgraduate students in the Information Studies Programme**

Study facilities and services are considered key factors in facilitating postgraduate studies. This study also investigated if there were enough study facilities and services which help postgraduate students in the programme to smoothly conduct their research activities. The results listed in Table 4 show that a significant number of study respondents (73.6%) agreed that there was free access to electronic resources to support their research. Furthermore, more than half of all respondents (60.4%) said that they received research support from their instructors. Although nearly three-quarters (73.6%) of all respondents admitted that the programme had no computer laboratory and stable internet connectivity to support their research activities, only a handful of them said that
they receive accommodation (17%) and transport services (15%) from the university.

**Reasons for slow completion rate**

Respondents were asked to point out reasons for the late accomplishment of their studies. The results listed in Table 5 indicate that a significant number of all respondents pointed out that they have dual roles in their workplace (81.1%) and that they get poor cooperation from their supervisors (69.8%). In relation to this, more than half (56.6%) of all respondents said that they experience delays in receiving comments from their supervisors. These findings corroborate those from an interview with one of the key informants:

I have teaching roles in my institution and at the same time, I am required to conduct research and write my dissertation, something which caused stress and delays. Apart from that my supervisor have a very poor response in my calls and did not provide feedback for more than three months. (Interviewee 4, student – female)

In other interviews, respondents also reported that they had poor responses from their supervisors and sometimes did not get enough time to discuss issues relating to their studies with them. They mentioned the busy schedule of their supervisors as one of the reasons for them to take more time in accomplishing their studies. Explaining this, one respondent said:

My supervisor was very busy with his activities and did not consider my study and he did not want even to receive my calls something which discouraged me a lot. Normally, the supervisor insisted that time is enough to accomplish the study but it went up to four years. The supervisors had given the mandate to decide on the time for completing studies something which cost students. (Interviewee 3, student – female)

Findings from the study further revealed that more than half of all students (55.3%) had problems with the mode of supervision applied by their supervisors, particularly online supervision. During the interview, for instance, some students admitted that online supervision has problems that contributed to some delays in completing their studies. Explaining this, one student stated:

Yes, we used to communicate online. However, though the process is easy, it is sometimes difficult to understand some of the important comments which could otherwise be explained by a supervisor if I met him face-to-face. Online communication in my studies was not effective and did not help me to complete my master’s degree. Sometimes, you may find that my supervisor was not online or there were network problems. (Interviewee 5, student – male)

This quotation suggests that some students have problems comprehending comments received from their supervisors via the online mode of supervision. This finding was also confirmed by the lecturers involved in the interviews who mentioned that because of a lack of face-to-face interaction with the students, some of them fail to address their comments whenever they submit their work online. As such, this contributes to delays in completing their studies. Explaining this, one interviewee pointed out that with this mode of supervision, some students tend to not address the comments provided by their supervisors. Some of them may not be able to ask questions as it would be in face-to-face interaction, thus they may take, for instance, six months without giving feedback. Some

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**Table 5. Reasons for slow completion rate.**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double roles</td>
<td>43</td>
<td>81.1</td>
</tr>
<tr>
<td>Poor cooperation from the supervisor</td>
<td>37</td>
<td>69.8</td>
</tr>
<tr>
<td>Delays in receiving comments from supervisors</td>
<td>32</td>
<td>56.6</td>
</tr>
<tr>
<td>Mode of supervision (traditional face-to-face vs online supervision)</td>
<td>31</td>
<td>55.3%</td>
</tr>
<tr>
<td>Incompetence in research</td>
<td>29</td>
<td>54.7</td>
</tr>
<tr>
<td>Financial problems</td>
<td>25</td>
<td>47.2</td>
</tr>
<tr>
<td>Bureaucracy in processing research clearance</td>
<td>23</td>
<td>43.4</td>
</tr>
<tr>
<td>Extension fee</td>
<td>22</td>
<td>41.5</td>
</tr>
<tr>
<td>Comments from panel and supervisor</td>
<td>19</td>
<td>35.8</td>
</tr>
<tr>
<td>Poor cooperation from the coordination office</td>
<td>17</td>
<td>32.1</td>
</tr>
<tr>
<td>Health problems</td>
<td>16</td>
<td>30.2</td>
</tr>
<tr>
<td>Inadequate time for research activities</td>
<td>14</td>
<td>26.4</td>
</tr>
<tr>
<td>Poor support from fellow students</td>
<td>4</td>
<td>7.5</td>
</tr>
</tbody>
</table>
of them may assume that their supervisors have forgotten what they have recommended in their work and thus return their documents without making all the required corrections. (Interviewee 1, lecturer – male)

The results listed in Table 5 further show that a majority of the studied students (73.6%) had adequate time to engage in research activities. Moreover, the findings indicate that more than half (54.7%) of all respondents were incompetent in doing research, whereas nearly half of them had financial problems that deterred them from accomplishing their studies on time. More than a quarter (35.8%) of all respondents mentioned that they receive discouraging comments from their supervisors and panellists after they have presented their work. It has been noted that this demotivates them from doing their research activities. Supporting this, one key informant during an interview stated:

It took four months for my student to be in a normal situation to address comments provided by the panel during the pre-examination presentation. It was even difficult to access him after the presentation. Finally, he told me that the comments discouraged him to the point of freezing his studies. (Interviewee 2, lecturer – male)

Other reasons that were pointed out for slowing down students’ completion rate include bureaucracy in processing research clearance, extension fees, poor cooperation from the coordination office and health-related problems among study respondents.

This study was also interested in knowing whether or not student–supervisor meetings contribute to the timely completion of student studies. The findings, as shown in Figure 1, revealed that all postgraduate students have chances to meet with their supervisors to discuss various academic issues regarding their studies. However, as demonstrated in Figure 1, the time allocated for these meetings varies from one student to another. The findings show that over one-third (39.6%) of all study participants met regularly with their supervisors.

The findings displayed in Figure 1 further show that over one-third (37.8%) of all the students met once in two to three months. The findings further revealed that out of all the students involved in the study, very few of them (1.9%) did not have a stipulated time for meeting with their supervisors, meaning that they communicate with their supervisors whenever the need arises. When they were asked to elaborate on this, particularly during the interview, one interviewee stated:

I normally communicate with my supervisor online. With this approach, we do not have a specific time scheduled for our communication. The supervisor told me that in case I want to submit my draft dissertation or want to ask him anything regarding my studies, then I should do it online. We usually use email to communicate. (Interviewee 2, student – male)

This quotation shows that there are other approaches used by supervisors to meet with their students apart from traditional face-to-face meetings. This, as demonstrated in the quotation, shows that there is no specific time for some supervisors and their students to meet and discuss students’ work.

Discussion
This study investigated factors contributing to the slow completion rate among postgraduate students at the University of Dar es Salaam with specific reference to the Information Studies Programme.
A total of 61 respondents participated in the study: the majority of them were master’s students and a few were PhD students. Overall, findings from the study demonstrated that most of the postgraduate students, both master’s and PhD, spent more time on their studies than was stipulated in the university guidelines, thus indicating a slow completion rate among them. These programmes are expected to take a maximum of two years for a master’s programme and five years for a PhD programme. A slow completion rate, as has been reported in previous studies (e.g. Eyangu et al., 2014), is a burden to the students pursuing postgraduate studies and the institution offering such studies as it increases the cost of master’s and PhD studies for both the students and the universities.

Findings from the study revealed that there is a multitude of factors responsible for the slow completion rate among the studied students. The findings show, for instance, that there were different approaches, both traditional (face to face) and online, used by supervisors to meet with their students to discuss students’ research work. Although it is considered that these meetings are essential in the overall progress of postgraduate students’ studies (Seifi et al., 2014), evidence from this study suggests that some modes of these meetings, particularly online, tend to contribute to a slow completion rate among the studied population. It has been noted in this study that students fail to comprehend comments provided by their supervisors through these platforms. This is, however, in contrast to the promise made by online supervision as it is considered to enhance information management and communication for and between the students and supervisors, and transform students’ research training into research practice (Gumbo et al., 2019; Leshchenko et al., 2021). A combination of the two approaches is, therefore, ideal for addressing this problem. Similarly, the study shows that poor cooperation from supervisors also contributed to students’ delay in accomplishing their studies. It has been noted in this study that students did not get enough time to discuss academic matters with their supervisors and were hence affected academically. It was revealed in the study that although the students were eager to learn, their supervisors acted as a barrier to their learning process as many of them were busy with other activities rather than supervising their students. Other prior studies (e.g. Netshtinganani and Machaisa, 2021) have also reported similar findings.

The study further revealed that there were inadequate facilities in the Information Studies Programme to support students’ research activities. The findings demonstrated, for instance, that the programme had no computer laboratory and stable internet connectivity to enable students to access various types of scholarly information during the entire period of their studies. The problem of internet connection, however, is not peculiar only to this programme, as other prior studies (Alphonce and Mwantimwa, 2019; Mwantimwa, Elia et al., 2017; Mwantimwa, Mwabungulu et al., 2021) have long reported how unstable and slow internet connection undermines access to and the use of scholarly information by students at the University of Dar es Salaam. These facilities and services are essential in supporting students’ studies, such that their absence compromises not only the quality of students’ research, but also timely completion of their studies. As in previous studies (e.g. Ziems, 2017), the findings in this study also exemplify how students’ engagement in multiple roles affects their educational outcomes. It was observed in the study that a majority of the study participants engaged in other activities apart from their studies. This finding, however, may be because most of the postgraduate students are employed even before joining their studies. This contributes, as has been evidenced in this study, to delays in the completion of studies by many of the studied students. This, however, might not always be the case since evidence from prior studies (Dundes and Marx, 2007; Ziems, 2017) shows that there is a positive relationship between work and students’ academic achievement. These findings, thus, suggest that there might be other underlying factors contributing to students’ delay in accomplishing their studies. From this, it can be concluded, therefore, that delay in accomplishing studies is not simply a function of only one factor.

There is no doubt that research competencies are essential in determining postgraduate students’ success in their research activities (Azmi and Daud, 2019). These competencies, as noted by Azmi and Daud (2019), are good indicators to measure students’ abilities in conducting research and producing new knowledge. Although this is the case, findings in the present study show that more than half of all the studied students had inadequate competence in doing research. This is, however, in contrast to the fact that these students had been introduced to research methodology when they were undertaking their coursework in class. Specifically, most of them had problems in writing statements of the research problem, in how to analyse their data and in how to harmonize comments from the panel after presenting their proposals and dissertations. The students were further noted to have problems integrating theoretical concepts with actual research activities. These findings, however, are not peculiar to this study only, as other prior studies have observed the same (e.g. Ugwu et al., 2015). Deficiencies in these competencies, as
noted in the current study and other previous studies, tend to compromise the quality of research as the findings of the study may be invalid, unreliable and not useful.

As in other preceding studies (e.g. Litalien and Guay, 2015; McKenzie and Derbyshire, 2017; Mugendi and Githae, 2021), the present study also noted financial challenges as one of the major factors contributing to the slow completion rate among postgraduate students. This challenge, as has been explained in other studies, causes the postgraduate students to fail to pay various costs associated with their studies. As a result, they fail to complete their studies on time. As seen in this study, this factor may also explain why these students engage in multiple roles. This may suggest that the students do so much in order to obtain funds to cover the various costs of their studies.

Conclusion and recommendations

Although it is an undeniable fact that the timely completion of studies is an important educational outcome for both the postgraduate students and the host university, the present study highlights different challenges contributing to the slow completion rate among the studied population. Thus, addressing the identified challenges is pivotal in enabling postgraduate students to complete their studies within the stipulated timeframe. This study, therefore, recommends that research supervision capacity-building for supervisors should be introduced to enhance their supervisory skills. The supervision process should also be improved by creating a mutual relationship between supervisors and their students. This should go along with encouraging supervisors to provide timely feedback to their students to avoid unnecessary delays. In a similar vein, it is also important to enhance the research knowledge and skills (research competency) of postgraduate students through different platforms such as conferences, seminars and workshops, so that they are able to complete their research projects within the normal period. Furthermore, it is imperative to ensure that the learning environment is supportive enough to facilitate the learning process. Specifically, this should include the provision of strong internet connectivity and establishing a computer laboratory that will ensure students get access to various scholarly information (both subscription and open access) to enhance their studies. Finally, the students should be encouraged to focus on their studies rather than engaging in multiple roles as this has proved to contribute to delays in completing their studies, as evidenced in this study. Just like other studies, this study also has limitations. This is just a small-scale study which assessed only a single programme. As such, its findings should be interpreted with caution. However, the findings of this study may act as a wake-up call for different schools and colleges within the University of Dar es Salaam and even other universities in Tanzania to start taking the necessary measures to avoid students spending too much time in accomplishing their studies.

Declaration of conflicting interests

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Bibliotherapy by medical librarians for the blind females

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Abstract
This quasi-experimental study aimed to investigate the effect of group bibliotherapy on the self-esteem of blind females. Thirty blind females agreed to participate in the study. They were randomly divided into experimental and control groups. Data were collected through the Coopersmith Self-Esteem Inventory. A medical librarian performed an eight-session bibliotherapy intervention in collaboration with a psychological counsellor for the experimental group. After the intervention, the experimental group’s self-esteem scores were higher than the control group’s ($p < 0.05$). The mean self-esteem scores in the experimental group after the intervention increased significantly ($p < 0.05$). The highest percentage increase is related to the family and educational/professional self-esteem subscales. Using bibliotherapy by a team of medical librarians and psychologists to improve the psychological problems of the blind and other people with disabilities is recommended.

Keywords
Bibliotherapy, self-esteem, the blind, medical librarians

Introduction
Vision loss is one of the critical sensory impairments and many people have blindness and related disorders globally. This number has risen from 216.6 million in 2015 (Flaxman et al., 2017) to 338 million in 2020 and is expected to reach 535 million by 2050 (Bourne et al., 2021). The prevalence of visual impairment in developed countries increases due to increasing population age. Accordingly, these countries need eye and psychiatric care programmes for visually impaired individuals (World Health Organization, 2012; Van Der Aa et al., 2015). In Iran in 2011, approximately 22,000 people had complete blindness, about 0.03% of this country’s population that needs special services (Siamian et al., 2012). Blindness causes many psychological, emotional and social problems, such as depression or permanent isolation, and reduces the quality of life (Van Der Aa et al., 2015). Isolation, seclusion and lack of adequate social support for blind and visually impaired people reduce their self-esteem (Salehi et al., 2015). Self-esteem is one of individuals’ essential personality and behavioural characteristics, which according to psychologists, is the basis of mental health. Self-esteem makes
a person feel valued and respected. People with self-esteem believe in their ability to overcome problems and feel self-satisfied (Tuttle and Tuttle, 2004; Salehi et al., 2015). Lack of self-esteem causes mental disorders and social issues such as depression, anxiety, loneliness, hopelessness, isolation, exclusion and aggression (Tuttle and Tuttle, 2004; Salimi et al., 2014; Salehi et al., 2015).

Various methods can be used, such as referring to a psychologist or using the bibliotherapy technique to increase self-esteem. Bibliotherapy is defined as “The use of books selected based on content in a planned reading program designed to facilitate the recovery of patients suffering from mental illness or emotional disturbance” (Reitz, 2013). In addition, it is a practical, low-cost intervention and global strategy to increase mental health. Besides, it is used as a complementary method to help treatment by medical librarians in collaboration with psychologists, counsellors, or physicians (Salimi et al., 2014; Gualano et al., 2017). The bibliotherapy technique has been scientifically and professionally studied for over a hundred years. Most researchers and psychologists believe that bibliotherapy can be used as a supporting device in treating mental disorders and helping people improve mental health resilience and sedatives of human pains (Stip et al., 2020; Bankar and Patil, 2021). In some sources, bibliotherapy has been introduced as one of the activities offered by the hospital and organizational librarians (Beatty, 1962; Salimi et al., 2014; Bankar and Patil, 2021). Librarians and information professionals committed to their profession and expertise, familiarity with various information sources and continuous interaction with different people in educational, research and library environments can play essential roles in bibliotherapy (Gualano et al., 2017; Czernianin et al., 2019).

Roberts (1984) pointed out the importance of bibliotherapy for the blind and Hardiansyah et al. (2022) indicated that bibliotherapy is effective in the environmental mastery of blind students. Nevertheless, no study has been done on the effect of bibliotherapy on the self-esteem of the blind. Considering that blind people are also a part of society, and their mental health affects the health of their families and society, it is necessary to pay enough attention to this critical issue. Therefore, the present study aims to investigate the effect of bibliotherapy on the total self-esteem of the blind and its dimensions at the Fatemeh Zahra Center in Isfahan, Iran.

**Literature review**

Since bibliotherapy was introduced as a complementary tool in treating mental disorders, many studies have been conducted in this field, only one of which has been done on the blind. In this study, Hardiansyah et al. (2022) indicated that bibliotherapy is effective in the environmental mastery of blind students. They developed an educational tool to aid teachers in increasing students’ environmental awareness.

In other studies, Radtke et al. (2022) studied the impact of bibliotherapy on reducing the fear of dogs in a sample of seven children, four to seven-years-old. They observed a significant reduction in phobia diagnostic severity and parent and child fear ratings. Parents reported being highly satisfied with the children’s improvement. In a randomized pilot trial, Kim et al. (2022) investigated the efficacy of eight-week forgiveness bibliotherapy with a few undergraduate nursing students. The results revealed that bibliotherapy effectively improves the forgiveness feeling, anxiety, depression and fatigue in nursing students. Vetri et al. (2022) tested the impact of bibliotherapy on the acceptability of elementary school-aged children of parents with a mental illness. The participants were eight children, eight parents, and six psychologists. They found that parents, children and psychologists believe bibliotherapy is a valuable and appropriate tool for supporting children. In a quasi-experimental study, Hamdan et al. (2021) showed that bibliotherapy helped to reduce the stress of female college students before their examination. Zandian et al. (2019), in a study on 30 prisoners of the Rey Women’s Penitentiary, concluded that bibliotherapy could improve the mental health of women prisoners. In a meta-analysis study, Yuan et al. (2018) examined bibliotherapy’s relative and acceptable efficacy for treating depression and anxiety disorders in children and adolescents. They concluded that bibliotherapy is a valuable intervention to reduce depression and anxiety and is more effective for adolescents. Loveimy and Safarzadeh (2017) concluded that narrative therapy positively reduces shyness and depression and increases children’s self-esteem. Salimi et al. (2014) showed that bibliotherapy could increase female students’ self-esteem.

In general, the findings of previous studies indicated a positive effect of bibliotherapy on some mental disorders such as stress, anxiety, depression, self-esteem and life satisfaction in children and adolescents. Nevertheless, little study has been done in this regard due to the problems of implementing bibliotherapy for the blind and the present research is designed to fill this gap.

**Methods**

The research method was quasi-experimental, with two experimental and control groups as pre-test–
post-test. The study population included blind females from Fatemeh Zahra Centre affiliated with the Welfare of Isfahan province. It is worth noting that this centre only cares for blind women. The number of blind people in Fatemeh Zahra Centre at the time of the research was 35 and their age range was between 16 and 40 years. Of these, only 30 people willing to cooperate were numbered from 1 to 30, and alternately (even–odd number) were divided into two experimental and control groups. Then, the second author of this article (medical librarian) obtained consent from the participants to enter the study and distributed a pre-test questionnaire among the study population (experimental and control groups). Given the participants’ disabilities, she read all the questions and recorded the responses from the participants. In the next stage, eight-sessions of 60 minutes of direct therapeutic intervention was considered in 15 samples (experimental group). In these eight sessions, the blind were taught how to raise self-esteem through group reading. Bibliotherapy sessions were held using the book Seven Day Self-Esteem Super Booster (Alexander, 2019). The book was selected based on the opinions of psychologists, librarians and information professionals, because, in addition to numerous reprints in Iran, it had already been used in another study (Salimi et al., 2014) in addition to its numerous reprints in Iran. Additionally, this book uses practical examples and exercises for sample engagement. It should be noted that no intervention was performed for the control group. After eight weeks, at the end of the sessions, both groups completed a post-test and data were collected.

The data collection tool is the Persian version of the Coopersmith Self-Esteem Inventory (SEI), one of the most popular and widely used tools for measuring self-esteem. This questionnaire consists of 58 items describing the person’s attitudes, feelings, ideas, or reactions toward oneself. This tool has four subscales: general self-esteem; family self-esteem; social self-esteem; and educational or professional self-esteem. General self-esteem is about the attitudes toward him- self in general situations. Family self-esteem is related to home/parents’ situations. Social self-esteem is associated with social self-peers’ situations, and the professional situation is related to the school or academic or professional situations. Some of the questions asked in the subscales are as follows:

- General self-esteem: (I’m never happy; Things are all mixed up in my life; Things usually don’t bother me).
- Family self-esteem (My family and I have much fun together; There are many times when I would like to leave home; I get easily upset at home)
- Social self-esteem: (I’m popular with people my age; I find it very hard to talk in front of a group)
- Educational self-esteem: (I’m not doing as well at work as I’d like to; I’m proud of my work; I often get discouraged in school/work)

The SEI is scored at zero and one. Eight questions are not included in the total score because they are lie detector tests. If the respondent scores more than four points on the lie detector questions, the test’s validity is low, and the subject has tried to show herself better than she is. The score range is between zero and 50. The general self-esteem subscale has 26 questions and ranges from zero to 26. Each family, social and educational/professional subscale has eight questions with a score ranging from zero to eight. This questionnaire has also been used as a standard questionnaire in various studies in Iran and the validity and reliability of the questionnaire have been reported as acceptable (Salimi et al., 2014; Loveimy and Safarzadeh, 2017; Potard, 2017).

Data analysis was performed using the paired t-test, independent t-test, Chi-square and Mann–Whitney covariance analysis. The statistical software used for data analysis was SPSS version 22.

Results
Comparison of demographic variables in the experimental and control groups
In the experimental group, the mean age was 28.6, with a standard deviation of 7.7. The control group’s mean age was 28.1, with a standard deviation of 6.2. The independent t-test showed that the mean age was not significantly different between the experimental and control groups (p-value = 0.86). Besides, most samples in both experimental and control groups were unmarried (60% and 53.3%) and completely blind (86.7% and 80%). The Chi-square test revealed that the frequency distribution of marital status did not differ significantly between the two groups (p > 0.05). The Mann–Whitney test also showed no significant difference in the severity of vision loss between the two groups (p > 0.05). The leading causes of absolute blindness and severe low vision in both experimental and control groups (73.3% and 60%) were congenital. The Chi-square test showed that the frequency distribution of the cause of blindness was not significantly different between the two groups (p > 0.05). Most degrees in the experimental group were middle school and diploma (33.3%) and in the control group were...
diploma (33.3%). The Mann–Whitney test showed that the level of education of the subjects was not significantly different between the two groups ($p > 0.05$) (Table 1).

**Comparison of test and control groups in terms of self-esteem score before bibliotherapy (pre-test)**

Table 2 indicates that the experimental and control groups scored 22.1 and 23.8 out of 50 self-esteem scores before the intervention. Also, among all subscales, only the subscale educational/professional self-esteem score was higher than the average in both experimental and control groups. The other subscales scored lower than the average. The independent $t$-test showed no significant difference between the mean score of total self-esteem and its subscales before the intervention between the experimental and control groups ($p > 0.05$).

**Comparison of experimental and control groups in terms of self-esteem score after bibliotherapy (post-test)**

Table 3 illustrates that after the intervention, out of 50 total self-esteem scores, the experimental and the control groups scored 26.7 and 24.4, respectively. Analysis of covariance shows that after the intervention, the mean total score of self-esteem and its subscales in the experimental group is significantly higher than the control group ($p < 0.05$).

**Comparison of pre-test and post-test scores in the experimental and control groups**

The paired $t$-test revealed that the mean score of total self-esteem and all its subscales in the experimental group increased significantly after the intervention ($p < 0.05$). The highest percentage increase is related to the family self-esteem and educational/professional self-esteem subscales and the lowest is related to the general self-esteem subscale. However, the mean score of total self-esteem and its subscales in the control group were not significantly different before and after the intervention ($p > 0.05$) (Table 4).

Figure 1 also shows that the mean self-esteem score of the blind before and after bibliotherapy differs in the experimental group but not much in the control group.

**Discussion**

The results revealed no significant differences between the mean score of self-esteem in the two experimental and control groups before bibliotherapy. However, a significant difference between the two groups was observed after bibliotherapy. In addition, this study showed that the experimental group that received the bibliotherapy intervention, compared to
the control group, had a significant difference in increasing self-esteem. In other words, bibliotherapy sessions have effectively increased the experimental group’s self-esteem. These findings are in line with most previous studies that examined the effect of bibliotherapy on the mental health of different groups (Salimi et al., 2014; Lewis et al., 2015; Riahinia et al., 2015; Gerlach and Subramanian, 2016; Jacob and De Guzman, 2016; Betzalel and Shechtman, 2017; Block et al., 2017; Hazlett-Stevens and Oren, 2017; Loveimy and Safarzadeh, 2017; Böttcher et al., 2018; Yuan et al., 2018; Zandian et al., 2019; Hardiansyah et al., 2022).

Table 2. Comparison of self-esteem scores in the experimental and control groups before the intervention (pre-test).

<table>
<thead>
<tr>
<th>Self-esteem</th>
<th>Score range</th>
<th>Experimental group</th>
<th>Control group</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean score</td>
<td>Standard deviation</td>
<td>Mean score</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>General</td>
<td>0–26</td>
<td>10.9</td>
<td>2.5</td>
<td>11.3</td>
</tr>
<tr>
<td>Family</td>
<td>0–8</td>
<td>3.2</td>
<td>1.6</td>
<td>3.9</td>
</tr>
<tr>
<td>Social</td>
<td>0–8</td>
<td>3.8</td>
<td>1.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Educational/professional</td>
<td>0–8</td>
<td>4.2</td>
<td>1.5</td>
<td>4.06</td>
</tr>
<tr>
<td>Total</td>
<td>0–50</td>
<td>22.1</td>
<td>4.9</td>
<td>23.8</td>
</tr>
</tbody>
</table>

Table 3. Comparison of self-esteem scores in the experimental and control groups after the intervention (post-test).

<table>
<thead>
<tr>
<th>Self-esteem</th>
<th>Score range</th>
<th>Experimental group</th>
<th>Control group</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean score</td>
<td>Standard deviation</td>
<td>Mean score</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>General</td>
<td>0–26</td>
<td>12.7</td>
<td>2.7</td>
<td>11.8</td>
</tr>
<tr>
<td>Family</td>
<td>0–8</td>
<td>4.1</td>
<td>1.7</td>
<td>3.8</td>
</tr>
<tr>
<td>Social</td>
<td>0–8</td>
<td>4.9</td>
<td>1.2</td>
<td>4.7</td>
</tr>
<tr>
<td>Educational/professional</td>
<td>0–8</td>
<td>5</td>
<td>1.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Total</td>
<td>0–50</td>
<td>26.7</td>
<td>4.4</td>
<td>24.4</td>
</tr>
</tbody>
</table>

Table 4. Comparison of self-esteem score and its subscales before and after bibliotherapy intervention in the experimental and control groups.

<table>
<thead>
<tr>
<th>Self-esteem</th>
<th>Groups</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Increase %</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean score</td>
<td>Standard deviation</td>
<td>Mean score</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>General</td>
<td>Experimental</td>
<td>10.9</td>
<td>2.5</td>
<td>12.7</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>11.3</td>
<td>3.4</td>
<td>11.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Family</td>
<td>Experimental</td>
<td>3.2</td>
<td>1.6</td>
<td>4.1</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3.9</td>
<td>1.1</td>
<td>3.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Social</td>
<td>Experimental</td>
<td>3.8</td>
<td>1.7</td>
<td>4.9</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>4.5</td>
<td>1.4</td>
<td>4.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Educational/professional</td>
<td>Experimental</td>
<td>4.2</td>
<td>1.5</td>
<td>5</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>4.06</td>
<td>1.5</td>
<td>4.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>Experimental</td>
<td>22.1</td>
<td>4.9</td>
<td>26.7</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>23.8</td>
<td>4.9</td>
<td>24.4</td>
<td>6.03</td>
</tr>
</tbody>
</table>

Note: *significant

The present study indicated that bibliotherapy intervention positively affects and increases all subscales of self-esteem, which is consistent with in Loveimy and Safarzadeh’s (2017) research on the effectiveness of narrative therapy on self-esteem in preschool children. However, in some previous studies, the positive effect of bibliotherapy on increasing self-esteem has not been observed in some of its subscales, such as social (Salimi et al., 2014), family and educational/professional subscales (Riahinia et al., 2015).

According to the findings, total self-esteem and its subscales are lower than the average in most blind people before bibliotherapy intervention. Notably,
self-esteem is an indicator of mental health and is an essential and fundamental factor in human growth and prosperity. Therefore, low self-esteem is the cause of many psychological problems that are harmful to both the individual and society. The blind and legally blind are part of society, so the mental health of these people is also vital and must be promoted. Regarding the present and Hardiansyah et al. (2022) studies, bibliotherapy can help the blind improve their ability to solve or minimize some problems, such as low self-esteem or environmental mastery skills.

All bibliotherapy sessions emphasized increasing the sense of value, respect and interest that the person receives from others. As a result, total self-esteem and all its subscales were affected after the intervention. In addition, the highest percentage increase is related to the two subscales of social self-esteem and family self-esteem (29% and 28% increase, respectively). In conclusion, the bibliotherapy method has influenced the individual’s beliefs about himself as a member of society or the so-called subscale of social self-esteem after the intervention. In addition, it impacts a person’s beliefs about himself/herself as a member of the family or the so-called family self-esteem scale. Accordingly, the sense of self-worth was strengthened in blind people and they better judged themselves. However, no significant increase was observed in the control group that received no intervention. Low self-esteem is a risk factor for aggression, depression, delinquency, substance abuse and the like (Mahmoodi, 2013). Therefore, using bibliotherapy in welfare and rehabilitation organizations to increase the self-esteem of the blind is suggested.

For decades, librarians have been involved in some bibliotherapy programmes and evidence strongly supports bibliotherapy in libraries (Fanner and Urquhart, 2008). Furthermore, Fanner and Urquhart (2009) found that libraries need more facilities for service users and psychiatric librarians are uncertain about the benefits of bibliotherapy for mental health patients. Nevertheless, in Hamdan et al. (2021) and in the present study, in which bibliotherapy intervention was done by librarians and considering the positive impact of bibliotherapy, it is suggested that librarians participate in holding this type of intervention. Seemingly, if the collaboration between clinical librarians and psychologists expands, bibliotherapy can be used as an accessible way to improve mental health. Furthermore, in line with Fanner and Urquhart (2008) and Hamdan et al. (2021), this study can conclude that bibliotherapy can be used to expand the traditional services to libraries. However, no training is available in bibliotherapy in the Medical Library and Information Science courses in Iran (Eshaghi et al., 2022). Hence, proposedly bibliotherapy should be considered in the courses of this field or workshops so that students and librarians can get to know this technique scientifically and apply it in libraries.

**Figure 1.** The mean of total self-esteem score in the experimental and control groups before and after the intervention.
Limitations
One of the limitations of this study was the samples. The samples of this study were blind females in a centre for the blind in Isfahan. We needed permission from the Isfahan Welfare Organization to conduct the research. Considering that the second and third authors of the study, who were responsible for holding bibliotherapy sessions, were female, the organization mentioned above issued the license for this study to the Fatemeh Zahra Centre for the Blind, which is only for females. If the study had been conducted by males or on blind males, the results would have been different. Another limitation relates to the number of participants, which was limited to 15 blind people in each experimental and control group. Although it is adequate to test the hypotheses, conducting studies in larger groups may provide opportunities to test other hypotheses. The other limitation is related to the completion of the questionnaire. As the samples were blind, the second author of the article read the questions for them and completed the questionnaire based on their answers. She tried to be neutral while completing the questionnaire and recorded responses from the blind participants with no bias.

Conclusion
This study investigated the impact of bibliotherapy on the self-esteem of the blind. According to the research findings, bibliotherapy positively impacts the total self-esteem of the blind and the general, social, family and educational subscales. Bibliotherapy can be used to expand the traditional services to libraries in rehabilitation centres. Some of these centres may have no library, such as the centre in which the present study was conducted. Therefore, it is recommended to establish libraries in these centres and employ medical librarians. Identifying the other mental health problems of the blind and holding regular bibliotherapy and book reading sessions is also recommended.

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Abstract

Information literacy skills are crucial for academic and everyday success. Using various pedagogical techniques, librarians reach out to their users and equip them with the skills necessary to utilize the available information effectively. The study aimed to determine the members’ perceptions of their information-seeking behaviour and how much the book club had contributed to improving their information-seeking abilities. The study population consisted of 49 book club members, from whom a survey and focus group interview gathered data. The study reveals that the book club improves information-seeking training initiatives, practices and librarian engagement. This study can be used to advocate for and enhance library book clubs as platforms for enhancing instruction of information-seeking processes. It can also motivate further research into this phenomenon.

Keywords

Information-seeking behaviour, information literacy, leisure reading, book club, teaching and learning, project-based learning

Introduction

Information literacy (IL) allows individuals to engage and effectively use the available information. Libraries are fundamental in ensuring users have the skills to search, organize, evaluate and use information effectively. In order to function effectively in an increasingly information-intensive environment, undergraduate students should acquire information-seeking skills while at university (Yebowaah, 2018). This can be accomplished by learning how to seek relevant information successfully, analyse it critically, apply it and reference it. Through library training, delivery and support, librarians working in academic libraries can aid in the development of this vital skill (Purnell et al., 2020). The Neville Alexander Library at the University of the Free State (UFS) established a book club to foster a reading culture among its users. During book discussions, members can interact with librarians less formally. Reading enhances critical thinking and is therefore intertwined with information searching in retrieving relevant information. This is corroborated by a study by Ulu (2019), which reported that reading attitude had a positive and substantial influence on reading habit attitude and metacognitive awareness of reading methods, and metacognitive awareness of reading strategies had a positive and significant influence on critical thinking tendency. However, librarians have
noticed that book club members lack awareness of defining their information and seeking needs and have difficulty locating library materials in print and electronic formats. The library has created a WhatsApp group for the club to enhance engagement; it is also through this group that librarians noticed that students frequently asked whether certain books were available in the library without searching the library catalogue to ascertain availability. This behaviour gives the impression that students may lack the necessary skills to use the library’s resources to search for information. Therefore, the aim of the study was to determine the members’ perceptions of their information-seeking behaviour and how much the book club had contributed to improving their information-seeking abilities. In line with this, the following research questions have been answered:

- How are the book club members selecting and locating books to read?
- What are the members’ perceptions of the book club’s influence on their information-seeking behaviours?
- What aspects of information-seeking are learned by book club members/students?

There is scant literature on the influence of book clubs on information-seeking behaviours and members’ perceptions, particularly within the African region; therefore, this study adds value and contributes to closing this knowledge gap. It is anticipated that the findings will provide insight for academic librarians in higher education institutions to utilize book clubs as informal platforms for facilitating and enhancing information-seeking skills. This study will also significantly contribute to advocating for the establishment of book clubs to develop and inculcate critical thinking skills and comprehension of academic content in academic institutions. Lastly, the study can initiate further research related to this phenomenon and motivate the development of a framework for using book clubs to enhance the acquisition of information-seeking skills.

**Background of the study**

The University of the Free State was established in 1904 in Bloemfontein as Grey University College. The university is a multi-modal institution with three campuses, all of which are in the Free State province. The two Bloemfontein campuses are located approximately 12 kilometres from each other and the other campus is in Qwaqwa in the Eastern part of the Free State province (University of the Free State, 2022). The university can accommodate more than 40,000 students across seven different faculties. There are five libraries across the three campuses: Sasol, Medical, and Music libraries can be found on the Bloemfontein campus, while the Neville Alexander Library can be found on the South campus and the Qwaqwa campus, respectively (TK Mopeli Library). The South Campus provides an alternative route to higher education in three faculties (Humanities, Natural and Agricultural Sciences and Economics and Management Sciences) for students who did not achieve the necessary marks in their final school examinations. Students have access to various programmes that enable them to enrol in higher education. Through participation in these programmes, students who have completed the prerequisite courses will eventually be able to transition into mainstream academic programmes. IL is one of the primary strategic tasks that the UFS Library and Information System (LIS) is responsible for in order to ensure that users are provided with the skills necessary to make ethical use of a variety of information resources and that facilitation is carried out in both formal and informal settings. The Library Information Research Skills Training, which is incorporated into individual modules across several faculties, has incorporated an element of IL into the academic curriculum. The UFS LIS is working toward the goal of making IL a fully integrated and required component of the curriculum for all students. In accordance with one of the mission statements of the UFS LIS (University of the Free State, Library and Information Services Home/About Us, 2022), which is to “provide a stimulating platform for intellectual dialog and engagement in contributing to the life-long learner attribute”, the South Campus Neville Alexander Library established a book club in February 2022 in order to “inculcate and foster a culture of reading within the university community”. The book club currently has a total of 49, of whom the majority are females. This is no wonder as studies have reported females as the majority leisure readers rather than males (Logan and Johnston, 2009; Jabbar and Warraich, 2022)

Book discussions are held regularly, and a WhatsApp group has been created to increase participation in discussions regarding the books that have been read and give recommendations. The librarians realized they had an opportunity to engage students in discussions about information-seeking issues in addition to the leisure reading book discussions that the book club was having. In alignment with the theory anchoring this study, an opportunity was presented to develop an interactive IL-based crossword puzzle competition that imparted knowledge and skills to members searching the library catalogue and electronic databases for leisure books. Various authors endorse embedding IL teaching
methods such as crossword puzzles, escape rooms, and scavenger hunts to enhance engagement and content comprehension (Aniroh et al., 2020; Koelling and Russo, 2020; Tchangalova, 2021). The puzzle also had questions on referencing. Members had difficulties completing some questions and engaged the librarians on the WhatsApp group; some visited the library for guidance. Figure 1 is an example of the crossword puzzle used.

**Literature review**

The reviewed literature provides a reference in line with the study to better understand leisure reading and information-seeking behaviours. It also provides context on skills enhancement, particularly those in line with information-seeking.

**Selecting and locating leisure reading materials**

Several studies have been conducted focusing on the leisure reading finding and selecting behaviours of users of reading circles and book clubs, and general fiction readers at large (Wilson et al., 2012; Saarinen and Vakkari, 2013; Richardson, 2021). Ross (2021: 107) outlines five elements which contribute to the identification and selection of leisure reading books, which include “the reading experience wanted by the reader; alerting sources the reader uses; elements in a book that the reader takes into account in making book choices; clues on the book itself; and costs to the reader in getting access to a particular book”. These elements are supported by Majid (2018), noting that the selection of books to read was reportedly influenced by ‘interesting topic’ (59.1%), ‘attractive book title’ (41.9%), ‘easy to read’ (33.5%) and ‘colorful pictures’ (32.0%), according to research findings on young people’s leisure reading behaviour in Singapore. The language also plays a fundamental role; however, libraries might not always be able to have a balanced multilingual collection as books in some languages might be challenging to acquire (Bangani et al, 2018). In addition to this, various authors also identify the genre of a book as a contributing factor in book selection (Edmunds and Bauserman, 2006; Merisuo-Storm, 2006). Book club discussions have also been reported to enhance title recommendations and selections among members (Petrich, 2015; Jansen, 2019: 582).

Various authors also provide various methods of searching for leisure reading materials, and they recommend using book reviews, reader advisory programmes, library catalogues and social websites such as Goodreads, Flicker and LibraryThing (Ivey and Johnston, 2013; Huang and Nathan-Roberts, 2019). Library book displays have proven to be very effective in enticing users to identify and select books to read (Larkin-Lieffers, 2013; Calman, 2018). In addition, Mikkoven and Vakkari (2012) note browsing book shelves, displays and returned loans in libraries as ways to find interesting leisure reading books to read.

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**Figure 1.** Information literacy crossword puzzle.
**Reading and skills enhancement**

The literature has also provided reference to the relationship between the usage of book clubs for developing and enhancing critical thinking, as these are critical in information-seeking endeavours. (Gorman, 1998; Switzer and Barclay, 2012; Jocius and Shealy, 2018: 692). In a recent study conducted by Alghamdi (2022: 7) among female teachers in Saudi Arabia, the participants reported positively regarding their perceived impact of a book club in enhancing their critical thinking and communication skills for professional development. This is supported by a study conducted to determine the reading culture of university students in Tanzania, which recommended book clubs as establishments for fostering and inculcating critical thinking skills (Wema, 2018: 16). Interestingly, Shenton (2018) states that if librarians accept the argument that reading is the most important information skill, they may reason that even within their IL remit, their priority should be to simply help the child read more effectively. Hughes-Hassell (2008) argue that leisure reading has been found to correlate with achievement in vocabulary, reading comprehension, verbal fluency and content knowledge. Erdem (2015: 3984) also believes that university students are expected to have a strong leisure reading habit, which is one of the criteria of social and individual development in today’s world where education and ‘lifelong learning’ have become essential for professional and career development after formal education and especially adapting to change. These skills are contributed to using and engaging with information effectively as far as IL is concerned. Various studies have also demonstrated the efficiency of book clubs in enhancing the teaching and learning of academic courses and modules (Hartman, 2005; Watson, 2015; Blanton et al., 2020; Landry et al., 2022). This is evident in a study by Wyant and Bowen (2018), where in-person and online book clubs have been used to teach sociological concepts. Scholars have also applied this practice to enhance comprehension of texts for sociology courses (Hartman, 2005: 317; Castellano et al., 2008: 240). Jansen (2019: 357) argues that it is pertinent for librarians to engage students in leisure reading as this can enhance the behaviour of reading for academic purposes. This assertion is supported by Manning (2010), stating that literature circles provide meaningful learning that ensures students can retell, relate, question what they have read and engage in cooperative learning.

**Methodology**

The study was anchored by a project-based learning (PjBL) model, which used a book club initiative to embed and promote IL. This pedagogical strategy allows students to acquire knowledge and skills through engaging in projects based on issues and challenges they encounter in the real world (Shin, 2018). This model has been utilized in studies concerning information-seeking with positive outcomes (Saliba et al., 2017; Tarasova et al., 2021). Wenger (2014: 142) argues that many of the information-seeking skills that students need to conduct successful research are difficult for librarians to teach due to student overreliance on search engines and the time constraints of one-shot instruction sessions; thus, PjBL is required. This is also supported by a study conducted among North-West University students evaluating librarians as teachers of IL, in which respondents expressed dissatisfaction with one-time instructions and the duration of training sessions (Bangani et al., 2020: 408). The findings of a study conducted by Syakur et al. (2020) reported that this model improved student learning outcomes of English in higher education. The book club members actively learn and engage in IL practices as they select, retrieve and evaluate leisure reading materials. Therefore, within the context of this study, the book club serves as a project for enhancing information-seeking skills through informal facilitation.

The model’s elements of ownership, collaboration, critical thinking and creativity are all aligned with the Neville Alexander Library’s book club engagements because students could collaborate by sharing book reviews, outline their creativity by providing various perspectives on titles they have read and take ownership of their learning by seeking assistance and engaging with librarians in guiding them to search and locate leisure reading books. This is consistent with the findings of a study conducted by Mofana and Jacobs (2018: 9), who found that respondents (primarily millennials) learn more about IL when engaging and collaborating with their peers. Finally, they develop critical thinking skills essential for increasing vocabulary and constructing relevant search strategies.

In addressing the study’s objectives, a case study design has been used, which involved the analysis of students at the UFS. Focus group interviews and an online survey were used to collect data. An online survey was used to collect quantitative data using LibWizard, one of the library applications offered by SpringShare, and distributed via email and the book club WhatsApp group. The survey was completed by 31 of the 49 book club members, yielding a 63% response rate. The first section of the questionnaire focused on demographic data, such as age, gender, faculty and reading experience. The second section of the questionnaire included six questions
relating to the information seeking-behaviours of book club members, with single and multi-point Likert scales used. Question 2.1 looked into the criteria or aspects considered by the members when selecting books to read. Question 2.2 ascertained the platforms and channels used to get title recommendations, followed by question 2.3, which looked into the methods used to locate leisure reading books. Question 2.4 focused on the support provided by librarians in enhancing the members’ leisure information-seeking process skills. Followed by question 2.5, the ascertaining skills enhanced through the book club; lastly, question 2.6 included the comments and suggestions of the book club members. Quantitative data from the survey have been analysed through the Lib-Wizard application as it generates graphs and tables.

To complement the data collected from the survey, a semi-structured focus group interview was conducted with nine book club members, who also completed the survey to get a more in-depth analysis of the phenomenon of the study. This allowed an in-depth exploration of the phenomenon of the study. Data from the focus group interview have been transcribed and conceptualized using an inductive coding approach. Thematic analysis was used. Qualitative data have been represented in direct quotations. This study’s population comprised members of the Neville Alexander Library book club. The researcher received gatekeepers, ethical clearance from the university’s ethical committee and consent from the book club members before data were collected. Ethical norms such as anonymity, privacy, no harm, analysis and reporting were observed.

Findings and discussions
This section reports and discusses the survey findings and the focus group interview.

Demographics
The survey was used to ascertain the perceptions of members regarding the value of embedding IL skills training in the book club. The first section focused on the participants’ demographics, which are depicted in Table 1. The findings show that most respondents are between 18 to 24 and 24 to 34 years old. There were no respondents over 34 years. Regarding gender, females comprised more of the participants (29) than males (2). This is consistent with the results of a study conducted by Erdem (2015: 3985) to determine the leisure reading habits of Ankara University and Erciyes University, in which it was found that most leisure readers were female (64%) and male (36%) in Ankara University and female (59%) and male (41%) in Erciyes University. This has also been reported in the literature, which found that female youth outnumbered males in leisure reading (Hughes-Hassell, 2008: 4). This was expected as the book club only has two male members. All three faculties offered on the campus are well represented in the book club, where the Humanities and Economic and Management Sciences both constituted 12 participants each and only seven participants were affiliated with the faculty of Natural and Agricultural Sciences. The book club has been experiencing challenges in reaching most students in the faculty of Natural and Agricultural Sciences as their academic schedules and practical assessment limits them from participating in extra-mural activities. Therefore, this has allowed librarians to consider embedding the book club in the campus residence halls after hours to ensure maximum reach. The reading experience revealed that most participants started reading for leisure in primary school (14), followed by secondary/high school (13) and higher education/tertiary (3) and finally, pre-school (1).

Table 1. Demographic data of the respondents (n = 31).

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>16–24</td>
<td>84%</td>
<td>26</td>
</tr>
<tr>
<td>24–34</td>
<td>16%</td>
<td>5</td>
</tr>
<tr>
<td>35–44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 and over</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6%</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>94%</td>
<td>29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Percentage</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>39%</td>
<td>12</td>
</tr>
<tr>
<td>Economics and Management Sciences</td>
<td>39%</td>
<td>12</td>
</tr>
<tr>
<td>Natural and Agricultural Sciences</td>
<td>22%</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reading experience</th>
<th>Percentage</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>3%</td>
<td>1</td>
</tr>
<tr>
<td>Primary school</td>
<td>45%</td>
<td>14</td>
</tr>
<tr>
<td>Secondary/high school</td>
<td>42%</td>
<td>13</td>
</tr>
<tr>
<td>Higher education institution/tertiary</td>
<td>10%</td>
<td>3</td>
</tr>
</tbody>
</table>

Selection of leisure reading books
To answer the first research question, Figure 2 shows the questions asked of participants about the aspects considered when selecting leisure reading books.

Based on the findings relating to aspects considered when selecting leisure reading books, a total of (5) participants ‘agreed’ that language is essential. This was followed by (4) participants who ‘strongly
agreed’ and (1) selected ‘neutral’. These highlight the importance of languages and their comprehension as a determinant of a book choice. The UFS LIS, in line with its institutional language policy and multilingualism strategy, develops an inclusive collection of resources representing diverse languages approved by the university, including English, Afrikaans, Sesotho, isiZulu and Setswana. Compared to English and Afrikaans, acquiring leisure reading books in South African indigenous languages is challenging due to the library’s procurement bottlenecks and a limited number of authors writing in these languages. This assertion is also supported by the finding of a study conducted by Bangani et al. (2018: 14), which reported that the North-West University Libraries had limited books in African languages due to the institutional procurement policy which limits the purchase of materials from small and self-published authors.

Furthermore, 13 participants ‘agreed’ that the genre of the book helps them choose what to read, (7) ‘strongly agreed’, (4) selected ‘neutral’, and (1) ‘strongly disagreed’. This shows how genre guides readers in determining the type of reading experience they want. These findings are corroborated by the literature, which has demonstrated that adults and students have strong preferences for the books they like and do not like to read and they search according to certain types of books or genres rather than for a particular author (Edmunds and Bauserman, 2006; Merisuo-Storm, 2006). The authors of the books are also considered when selecting books as a total of (6) participants ‘agreed’, while (4) ‘strongly agreed’. 10 participants ‘agree’ that title motivates them in choosing their next read, while (6) ‘strongly agree’, (1) selected ‘neutral’, and (1) participant ‘strongly disagreed’. This demonstrates how important a good title is in sparking readers’ interest and to intrigue them to learn more about the plot. Lastly, on popularity/reviews when choosing a book (7) participants ‘agree’, (4) participants ‘strongly agree’, and (2) participants were ‘neutral’. This demonstrates how book evaluations and their popularity aid in validating the worth of a book and choosing it. Ivey and Johnston (2013) found that reading engagement was evidenced by widespread talk about books, including spontaneous conversations between students who had selected and read the same book.

The focus group interview responses have corroborated the survey responses’ on how the members select books to read. Their views are quoted below:

"I check the reviews; I check the back of the book. The first page and the last page of the book, and I also look at the author, if I have heard great reviews of the author, I can take that book".

"ehhhh! I am not too sure about that, as I have said that I go and pick based on a title. If I see a title, sometimes a title draws me; as I have told you, I am on a journey on what women write, I just go maybe search for something that is basically painful; that is why I picked the black widow society as my first book because I thought that if there’s a word widow inside means that women lost their husbands, I wanted to know based on what and how did they lose their husbands . . . stuff like that".

Figure 2. Aspects considered for leisure reading selection.
“sometimes I just look at the cover or the title if it attracts me and the second step is taking the book and reading the summary at the back”.

**Book recommendation platforms**

Figure 3 shows that an overwhelming majority of 26 participants noted that they get their book recommendations on what to read or what is currently trending on social media platforms such as Facebook, Instagram, Twitter, WhatsApp, TikTok and others, where members of the social media community share their reviews. 19 participants said that they get recommendations from their family and friends. Their close ones are the ones who help them to navigate to their next book or which book to put on their reading lists. A total of 17 participants stated that they got their book recommendations from the Neville Alexander Library LibGuide, where librarians have embedded both print and electronic covers of leisure books. There are links for eBooks, which easily direct the members to the database hosting platforms.

Furthermore, 14 participants highlighted that they get recommendations from the book club WhatsApp chat group, where fellow members share their reviews, their experiences in the group and their insights from the book storylines, which helps lure the attention and entice members to read the same books. This is followed by the same number of participants (14), that indicated that they get their leisure recommendations during face-to-face book club discussions where participants share reviews of books they have read. 10 participants agreed to using Goodreads as their recommendation platform, providing book reviews and trending, best-selling and award-winning titles. Lastly, the least number of participants (8) stated that they get leisure book recommendations from asking librarians what to read or what is new in the collections. These also coincide with the platforms mentioned in the literature for leisure reading recommendations (Larkin-Lieffers, 2013; Calman, 2018).

There seems to be a correlation between the survey and the focus group results regarding getting book recommendations, selections and searching. One of the interview questions asked how they select books to read and members indicated various aspects that influence their choice of leisure reading materials. The perceived preferred format is usually print as opposed to electronic leisure reading books. In addition, some noted the usage of various methods ranging from book displays, the library catalogue and book reviews to using social platforms such as Goodreads and recommendations from the book club discussions and WhatsApp group. These similar findings have also been reported in the literature (Mikkoven and Vakkari; 2012; Huang and Nathan-Roberts, 2019). Based on these, it is evident that the members are aware of their information needs and which measures they need to implement in accessing relevant leisure reading books. Their responses are as follows:
"There was this title one of the members was talking about... I don’t remember the title but it was... the one with the Zimbabwean woman, the way she was explaining it, it made me interested in reading the book, yah so it goes with the ways the book club member is explaining the book, so now you are there interested, like yoh this person is on their toes about this book, even the way she was explaining Hlomu, I just wanted to read it again.

"The first one I did on campus, when the library was still operating, so there a lot of books, sitting there so I just went and picked it. I loved the title, so I just picked the book"

"Basically, by listening to other book club members on what books they have read and discussed"

"okay... on a monthly basis we meet up for book reviews and discussions, so if someone is reading a book and it is interesting, that is when I go and look for the book and umh read it. Also on WhatsApp, people... group members tell each other about the books they are reading and yah."

**Methods used for locating leisure reading books**

Figure 4 depicts the course of actions that book club members use to locate leisure reading books. Most participants (18) located leisure books through the leisure book display in the library’s foyer. This method of locating leisure books seems the most popular option for book club members to locate books, as they can easily physically browse. This aligns with the literature, where it was reported that book displays entice and motivate users to read extensively and identify titles more likely hidden on library shelves (Larkin-Lieffers, 2013). In addition, a study conducted by Calman (2018: 279) on using bibliographies and displays to motivate extended reading among students reported that 78% of the respondents indicated the usage and reliance of displays to locate leisure reading materials. The use of displays by the book club members may be due to the ease of access as it saves time to search the library catalogue and retrieve them on the shelves. The study’s outcome further indicated that the second most popular course of action for locating leisure books is searching the catalogue/KovsieCat, which comprised (12) of the participants. This option indicates that book club members can navigate through the catalogue to locate their leisure reading material; hence, they can conduct a basic search strategy using the catalogue. 11 of the participants located leisure/fiction books by accessing the Neville Alexander LibGuide, where librarians have embedded print and electronic covers of leisure books that also serve as a virtual bookshelf display. Additionally, 10 of the participants selected the ‘Ask a librarian’ option, which means that they sought assistance locating leisure reading books. The options used by the book club members are also related to those reported in the literature (Mikkoven and Vakkari, 2012; Huang and Nathan-Roberts, 2019).

The interview further asked the participants to elaborate on their experience of using the KovsieCat and below were some of their responses:

"I use my catalogue to search for that book if it is available. If it is... I usually do that with my phone in my room and I know that if I go to the library, I will find that book there and sometimes I'm not familiarly with the shelves in the library, I would ask the librarian to
help me find that shelf that has the book. But I usually come with shelf numbers”.

The above response aligns with the ‘ownership’ element of the PjBL model anchoring this study, where book club members take it upon themselves to seek assistance and consult librarians for guidance on locating leisure reading materials,

“it is helpful, and straightforward, it is not complicated”.

Interestingly, one of the participants brought up a technical issue regarding handheld device access to the library catalogue. This demonstrates that accessibility is essential when designing platforms to ensure users have a positive experience and can easily navigate and search the library’s electronic resources. This was their response:

“It is a bit challenging on the phone because you have to make it landscape but on the PC [personal computer] it is good but on the phone, you have to, eix”

Perceived helpfulness of librarians in locating leisure reading books
In alignment with the second research question, Figure 5 demonstrates members’ perceptions of the role of librarians in equipping them with the skills for locating leisure reading books. According to the responses, 27 of 31 participants stated that the librarian’s demonstrations on verifying book titles and checking availability were ‘extremely helpful’, whereas three of 31 participants stated that they were ‘somewhat helpful’, lastly one of 31 participants, unfortunately, stated that librarians were ‘not helpful’ in this regard. This creates an opportunity for the UFS Neville Alexander librarians to strategize on enhancing support to maximize the accessibility of displayed leisure books.

Furthermore, findings revealed that 23 of 31 participants stated that the librarian’s demonstrations regarding using the LibGuide to find leisure/fiction books were ‘extremely helpful’. This is followed by eight of 31 participants who stated that they were ‘somewhat helpful’. This is followed by 25 of 31 participants who stated that librarians’ demonstration on locating books on the display and shelves was ‘extremely helpful’. Whereas five of 31 stated they were ‘somewhat helpful’, and one of 31 participants indicated ‘not helpful’. Further findings revealed that 25 of 31 participants supported that the demonstrations on using the catalogue/KovsieCat in finding fiction/leisure books were ‘extremely helpful’, whereas six of 31 participants indicated that they were ‘somewhat helpful’. These findings also motivate librarians to work harder to enhance the support needed for the members to effectively use the library catalogue for leisure and academic purposes. Lastly, 23 of 31 participants stated that the librarian’s demonstrations concerning using the LibGuide to find leisure/fiction books were ‘extremely helpful’. This is followed by eight of 31 participants who stated that they were ‘somewhat helpful’.

These findings indicate that the members appreciate the librarians’ efforts in equipping them with the skills needed to source and access leisure reading materials. Based on this, it is evident that the members are exposed to sources of information and librarians also raise awareness of the LibGuide, which is one of the resources used to embed informative content to support teaching, learning and research needs. These

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**Figure 5.** Perceived helpfulness of librarians.

![Perceived helpfulness of Librarians](image)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Extremely helpful</th>
<th>Somewhat helpful</th>
<th>Not helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verifying book titles and checking availability</td>
<td>27</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Locating books on display and shelves</td>
<td>25</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Using the catalogue/KovsieCat in finding</td>
<td>25</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>leisure/fiction books</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using the LibGuide to find leisure/fiction</td>
<td>23</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>books</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---
findings are consistent with the study by Bangani et al. (2020: 411), in which students reported that librarians were very helpful and encouraging during IL training sessions to equip them with the skills necessary to use various information sources and to cite them properly.

The responses from the focus group interview corroborate the findings above. The views about the librarians as helpers in guiding the members to search and cite sources are reflected below:

“I use my catalogue to search for that book if it is available. If it is... I usually do that with my phone in my room and I know that if I go to the library I will find that book there and sometimes I’m not familiarly with the shelves in the library, I would ask the librarian to help me find that shelf that has the book. But I usually come with shelf numbers”.

“most importantly is the borrowing of books, online and using that checking in and out system, yah that is important, citation... remember I asked you about citation on how to automatically do it... so yah that is what I have learnt because we are writing research papers in my course, yah”.

“I used the display and I also asked the librarians about books and then they tell me if it is available or not”.

Some responses referred to the assistance and guidance provided by librarians to find answers to the IL crossword puzzle competition, depicted in Figure 1. They are as follows:

“uhm there was a quiz that was appointed for us to do, uhm struggling with that quiz I had to come to the library and ask for help and then that’s when... the librarian didn’t tell me the answers but she told me to go through with myself on the website so that I can familiarise myself with it, So the book club, the quiz helped me because now I know how to go about searching for books on my own”.

“I also struggled until the last day and I was let me just go and ask for help”.

“So now im like... I think I texted mme Dina and I said ‘I don’t know if it is allowed but I need help with number 4’”.

These responses demonstrate that the activity engaged and motivated the members to take ownership of their learning, in alignment with the PjBL model underpinning the study. As the members asked for assistance, librarians used this as an opportunity to train the members in searching various databases to find the answers on their own. Tchangalova (2021), a librarian at the University of Maryland, College Park, has also used crossword puzzles to embed a fun element in teaching IL.

**Perceived enhanced skills and lessons learned**

In alignment with the study’s second and third research questions, Figure 6 demonstrates the participants’ perceptions concerning the book club’s influence on their IL and associated skills. According to the findings, 27 participants indicated that the engagements had enhanced their communication skills. This correlates with the study by Alghamdi (2022: 7), indicating enhanced communication skills among school teachers participating in a book club. This is followed by 23 participants, who deliberated that their comprehension skills have been sharpened. This aligns with what has
been alluded to by Hartman (2005: 317), Castellano et al. (2008: 240) and Hughes-Hassell (2008). A total of 22 participants agreed that their creative skills had been positively impacted. Students need to enhance their creative and critical thinking skills, which will sharpen their vocabulary to construct effective search strategies. This is supported by Gorman (1998), arguing that despite the modern emphasis on user-friendly electronic interfaces that involve ‘the minimum of words and typing’, the works to which the searcher is ultimately directed are texts, which make considerable demands on the individual’s reading ability.

Eighteen participants noted the book club’s contribution to their ability to search for library leisure reading eBooks. This is followed by the perceived enhancement of their reasoning capacity (17) participants. 16 participants confidently stated that their catalogue/KovsieCat searching skills have improved. This is impressive as this demonstrated self-efficiency instead of relying on library staff to assist and search for books on their behalf. 15 participants confidently noted enhancing their problem-solving and analysis skills. There is no doubt that being engaged and reading plays a fundamental role in improving these skills, as indicated by previous studies (Jocius and Shealy, 2017: 692; Wema, 2018: 16).

In addition, this relates to Shenton’s (2018: 62) assertion that it may be appropriate to equate the placement of reading within IL with the placement of skills such as critical thinking and problem-solving. The same proportion of participants (13) agreed with the enhanced decision-making evaluation skills. Lastly, 10 participants noted that they had gained awareness and knowledge about using the library LibGuide as links and book covers of leisure print and eBooks have been embedded for easy access.

The responses of the focus group interview have also corroborated these. Some participants also referred to the structured crossword puzzle competition activity (Figure 1). Their responses indicate that they learnt to search for information on various platforms such as library databases, KovsieCat (catalogue), LibGuide, referencing, lending of books and self-checkout machine. Below are some of their responses:

"Database, I am like what is this? I know two questions out of the puzzle that were about databases, I am like what is a database? I don’t know what is going on. I remembered some time ago, I think it was a Wednesday, that is when I came to confirm the venue and then I spoke to Tebogo about what a database is and then she told me how to go about it, if you doing research on something or doing an assignment this is where you go and if you need this and that this where you go and I am like all this time”

“I have never used the catalogue. I have never used it because I remember last year when it was the Covid-19, for me personally nothing was happening so I was living in liberty and nothing really was happening so we didn’t know about libraries because I remember the prime of liberty and I we are close friends so we also talking about if it wasn’t for Covid maybe we could go to the library and ask to be library assistants because we would literally sit around and do nothing besides academics, so yah I was really happy to see so much information and everything that you can get just from the library website”.

“It improved a lot; I did not even know there was EBSCOhost database, even KovsieCat”

“Most importantly is the borrowing of books, online and using that checking in and out system, yah that is important, citation . . . remember I asked you about citation on how to automatically do it, so yah that is what I have learnt because we are writing research papers in my course, yah.”

unh I have learnt to use the kovsiecat/catalogue to search for books and if I want to find information like if I have an assignment and I need information, articles and stuff, I was taught by the librarians on how to go about it on the UFS library website and if I need information about the book publication, book publisher and all of those stuff . . . so yah.

Based on the above, it is evident that the book club as a project can enhance the information-seeking skills of the members. These findings align with the model underpinning the study as corroborated in the literature (Syakur et al., 2020).

Conclusion and recommendations

Leisure reading plays a fundamental role in acquiring various skills relevant to students in higher educational institutions in enhancing teaching, learning and research endeavours. One-shot IL sessions that the UFS Neville Alexander Library conducted are insufficient to engage students on crucial aspects needed to acquire skills to be effective information users to support teaching, learning and research needs. Undoubtedly, the students’ information-seeking and usage behaviours are indicators of gaps and skills in making use of the library’s information resources and facilities. Therefore, this study has ascertained, without a doubt, that the book club members have been made aware of strategies to implement when searching for resources from the library. We conclude that book clubs are an effective pedagogical tool because of their flexibility and ability to foster student engagement and higher-level thinking. The members have
been able to enhance their information-seeking skills through collaboration with both the librarians and their peers while at the same time engaging on reading for leisure. This confirms the applicability of the PJBL model.

Regarding the findings, the study recommends the informal embeddedness of information-seeking skills in extra-mural activities and not only strategizing in formal university structures to enhance their facilitation practices. Librarians should step out of their comfort zones and reach out to students widely. The study can be used to motivate the development of book clubs to enhance library services beyond leisure reading. This platform can enhance creative writing, debates and innovative thinking aligned with the creative element of the PJBL model anchoring this study. The study further recommends reinvention of the library and information sciences curriculum to embed IL pedagogy to ensure that librarians are equipped with the knowledge to effectively apply various methodologies in facilitating this phenomenon.

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References


Purling together: information seeking behaviors of knitters in the internet age. Master’s dissertation, University of North Carolina, USA.


University of the Free State (2022) About the UFS. Available at: https://www.ufs.ac.za/about-the-ufs (accessed 13 August 2022).


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reading circles and library marketing.
School library censorship: Looking at the perspective of a school librarian association in Indonesia

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Abstract
The information needs of students must be met by school libraries as resources for student learning with collections that support academic curricula and are suitable for learning activities. A collection that contains no sensitive or contentious material is one that is appropriate for students. In this study, censorship issues in school library collections are examined from the point of view of the Association of Indonesian School Librarians. The study found four topics connected to the Association’s perspective on censorship issues in school libraries based on staff interviews and thematic analysis: the root reasons for censorship; how censorship is implemented; how to become a competent librarian; and how urgent censorship is. Censorship is seldom reported, thus the Association does not view it as a pressing concern. It places greater emphasis on problems such as information literacy training and developing librarians’ competencies than censoring library collections. Hence, there is no national attention given to this subject.

Keywords
Information censorship, school library, censorship issues, school library collections, school library association

Introduction
School libraries are set up to enhance teaching and learning in schools. Students’ primary source for learning is the school library; thus, it must be able to satisfy students’ information needs by offering a variety of information resources. Students’ information needs should be supported with resources that are relevant to their learning activities. Many think that school library collections should be suitable for school students and not harmful to students’ minds. Librarians have been seen to be the ones who can take responsibility to ensure that library resources are safe and appropriate for school students, and promote research skills and support the curriculum (Hossain, 2019; Rahme et al., 2021). In the past, censorship has been used to uphold people’s morals and public awareness (Irum and Laila, 2015).

Over time, the idea of censorship has become stronger when it comes to school libraries, where school authorities take action based on parents’ advice that library materials should be monitored and censored for any information that is considered harmful for students. Prebor and Gordon (2015: 28) state...
that censorship is seen as an action that ‘limits right of access to library collections since the content is found to be dangerous for readers’. School students should be safe from any materials in a library that their parents regard as not relevant to their study. Hence, censorship is intended as a means of limiting access to information (Emeka and Atanda, 2017).

Cases of censorship have been identified in Indonesian libraries. For instance, according to Ramadhan (2016), censorship has been carried out at the Japan Foundation Library. The library owns several collections of printed books, magazines, audio materials and comics. The collections that have been censored in this library include books, magazines and comics. The types of censorship include image-sealing, labelling, the separation of collections and access limitation. A further example of censorship has been detailed by Rianti and Dewakanya (2018), who report on the censorship that took place in the school library of a kindergarten and primary school. The librarian censored some items after considering parents’ advice. They complained that there were several collections that were believed to be inappropriate for school students to read. The censorship was implemented in every school library under the management of the Insan Cendekia Madani Foundation (Rianti and Dewakanya, 2018).

However, despite the censorship that has occurred in some schools, it is not a major topic of discussion among Indonesian librarians or even the professional librarian association in Indonesia, compared with other issues such as information literacy or open access resources. One of the professional organizations that plays a role in discussing issues related to libraries is the Association of Indonesian School Librarians (AISL).

The AISL is an Indonesian school librarian organization that was founded in Jakarta on 28 May 2009. The AISL is a national independent organization based on the Pancasila. According to the AISL’s statutes and bylaws, its purpose is to elevate the professionalism of school library staff and contribute to the development of library science. In order to accomplish these objectives, the AISL undertakes several activities, such as (1) fostering communication forums between school library staff and library institutions; (2) organizing and taking part in various scientific activities, particularly in the field of school libraries, documentation and information; (3) ensuring the AISL’s participation in implementing government and national development programmes in the field of school libraries, documentation and information; and (4) supporting advocacy efforts for school librarians.

The AISL emphasizes the professionalism of school librarians. The AISL is slightly different from professional librarian associations in Indonesia because it recommends career paths for its members. Most AISL members work in public schools where certification can affect librarians’ salaries. Accordingly, the AISL plays a role in enhancing the careers of its members. At the AISL, there is a commission for performance and career development, which is responsible for carrying out activities to further librarians’ careers – for example, if a librarian is a public servant, they can pursue a career path from a proficient librarian to an expert librarian.

The AISL was chosen for this study because it is one of the largest professional librarian associations in Indonesia, with 31 branches. This enables the AISL to connect with library staff in the different regions of Indonesia to implement its programmes. One of the AISL’s programmes is technical guidance for librarians. This guidance is divided into many learning modules, one of which covers collection development and includes a subchapter on censorship issues.

Nonetheless, in the literature, research on censorship is still limited (McNicol, 2016). Currently, research on censorship issues revolves around how it is implemented in school libraries. While international professional librarian organizations have highlighted censorship as a significant concern, the same is not true in Indonesia. At present, school librarians, like other librarians, are more concerned about more popular issues such as information literacy training, new technology based on artificial intelligent and library management systems, rather than censorship issues. Censorship was a topic for discussion in 2018 among librarians when local media reported that parents discovered a book with adult content in a school library (Fatmawati et al., 2018; Rianti and Dewakanya, 2018). But since then, very few studies have discussed censorship in Indonesia. Moreover, the issue of censorship continues to be a matter that is rarely brought up and debated on a global scale (McNicol, 2016). McNicol (2016) emphasizes that research on censorship still requires further investigation, particularly on the role of professional associations in supporting school librarians in dealing with the issue.

The professional librarian associations in the USA and the Netherlands have recommended that librarians should be concerned about the censorship of library collections, and this stance has been adopted in official statements by several professional librarian associations (Prebor and Gordon, 2015). Meanwhile, according to the American Association of School Librarians, school libraries can organize work
programmes involving policy, procedures and guidance to support information access. School libraries have the power to make decisions regarding collection selection by considering how the curriculum is used in the school. School libraries should be able to select any collections that suit the education levels that are being instructed. As a result, this study investigates book censorship in school libraries.

Review of the literature on censorship in school libraries

There are three major groups that support censorship: parents, community members and particular organizations (Ademodi, 2013). Nevertheless, when it is applied to library collections, O’Sullivan and O’Sullivan (2007) emphasize the problem of influence and who should be in charge of censorship decisions – the librarians, the parents or the community.

While censorship can be found in various forms, such as book bans, the removal of a collection from a library or restricted access to information sources, Knox (2014: 740) argues that the definition of censorship within librarianship is concerned with ‘impediment to access’. Censorship in school libraries is typically accomplished by restricting access to a collection that is deemed to be unsafe for students. Censored collections contain racism, pornography or other matters that are identified as provocative (Steele, 2017).

A recent study of censorship in a school library by Afifa and Dewi (2018) reveals some of the reasons why library collections need to be censored. Their research shows that the state school library in Semarang, Central Java, evaluated its fiction collection after complaints by parents that there were some novels that included inappropriate imagery for junior high school students and language that referred to pornography. The censorship process was conducted by assessing all of the collection’s contents with the help of student librarians. Another study was conducted in Indonesia by Rianti and Dewakanya (2018), which looked at the implementation of school library censorship as some parents had alerted the school about library materials that they believed were not appropriate for the school curriculum and went against the school’s visions. These two studies confirm that complaints and feedback from parents regarding library collections has become the basis for implementing censorship in school libraries.

Research on the censorship of school library collections has also been published in other countries (e.g. McNicol, 2016; Saykanic, 2000). The censorship of books in school libraries have involved school systems such as parent groups, community groups and taxpayer groups. They influence the books that are available in a library. Librarians and teachers do not have much choice other than to follow the demands of parents and community groups (Saykanic, 2000). There have been important censorship issues dealt with by school librarians in the United Kingdom, and variables affecting attitudes towards censorship in school libraries. McNicol (2016) raises a concern about how librarians make decisions in the face of pressure from outside bodies, such as parent and community groups. Librarians are believed to be the guardians of the right to information. However, librarians’ authority in this issue is not clear – for instance, according to Marco (1995: 15): librarians are authorised censors of their societies to do what operates for the communal goods, but if they fail to do what community requires, the community will take steps to remove the librarians from the authority. In practice, librarians need more support in implementing their censorship roles (Hannabuss and Allard, 2001). They need assistance in finding ways to uphold the principle of information freedom professionally in school settings, particularly from professional organizations in coping with censorship issues (Hannabuss and Allard, 2001; McNicol, 2016).

In view of the previous literature, this research offers a different perspective on the issue of censorship. This study looks into the point of view of one of the professional school librarian associations in Indonesia. It reveals the AISL’s perspectives regarding censorship issues in school libraries.

Research methods

This study employed qualitative research techniques. The qualitative research method is a research procedure that produces descriptive data in the form of speech or writing and the behaviour of the people being observed (Patton, 2015). This approach is said to be pertinent for researchers since it enables them to study and explain descriptively phenomena that cannot be quantified.

The informants were selected using a purposive sampling technique. Purposive sampling is a non-probability sampling strategy based on traits possessed and chosen because they are consistent with the research goals (Etikan, 2016). This research used purposive sampling because, in this way, the researchers could find informants who suited the criteria – that is, (1) registered as the officials at AISL head office and (2) were responsible for librarian competency development activities. This research is only devoted to interviewing AISL staff. These
criteria were confirmed as the guidelines for selecting the informants to be interviewed because the selected informants had to be registered as AISL officials. By following these requirements, two AISL staff were recruited and consented to be interviewed. Anwar is an AISL leader whose role is to support and administer the chairman’s duties, including coordinating the AISL programmes and providing advocation to AISL members. Nana is the chairperson of the Commission for the Professional Development of School Librarians. This commission is responsible for carrying out research activities in the fields of libraries, documentation and information. Both of the informants were recommended by the Central Management Coordination Meeting.

Semi-structured interviews were used as the data collection method in this research, where the interview questions consisted of main questions and follow-up questions. The interview questions included:

1. Why do you think censorship should take place in school libraries? The follow-up questions were: What kinds of library collections have been censored? How did they censor the collections? Was there any impact on students and teachers?
2. How does the AISL react to the censorship in school libraries? The follow-up questions included: What has been done by the AISL to respond to the censorship?

Thematic analysis was the data analysis method used in this study. This process was developed by Braun and Clarke (2012), who recommend thematic analysis as a way to analyse data with the aim of identifying patterns or finding themes in data that has been collected by researchers. The steps used in analysing this research refer to the stages outlined by Braun and Clarke (2006):

1. Familiarization with the data: the researchers familiarized themselves with the data obtained through the interviews, listening to them again and producing written interview transcripts. The transcripts were created differently for each informant with the aim of facilitating the coding process.
2. Generating initial codes: the researchers developed codes based on the interview transcripts according to the definition of the problem (see Table 1).
3. Grouping: the codes that were made were reviewed again and grouped based on the meanings they had (see Table 2).
4. Defining and naming themes: the themes were defined and determined on the basis of the predetermined groups. These themes indicated the perspectives on censorship issues in the school library collections.
5. Producing the report: the researchers wrote the research report detailing the data analysis.

**Results and discussion**

Based on the analysis, four themes were found regarding censorship issues in school libraries: factors causing censorship; the censorship being performed; librarian competency development; and censorship urgency.

The selection of library materials is a crucial step in the collection development process. Library material selection activities include analysing and evaluating a collection so that it meets users’ needs. The selection procedure for library materials is carried out based on the school’s policy. This process is an important step before the collection is presented to users. However, censorship does not just happen; there are other elements that affect censorship in school libraries.

**Factors causing censorship**

The first theme is the factors that cause censorship in school libraries. The censorship that takes place in

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**Table 1. Coding examples.**

<table>
<thead>
<tr>
<th>Number</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Does not suit the school’s vision</td>
</tr>
<tr>
<td>2</td>
<td>Contains racism and pornography</td>
</tr>
<tr>
<td>3</td>
<td>Information protection</td>
</tr>
<tr>
<td>4</td>
<td>Selection since the collection procurement</td>
</tr>
<tr>
<td>5</td>
<td>Librarians are not involved in the collection procurement</td>
</tr>
<tr>
<td>6</td>
<td>Contents do not suit the education level</td>
</tr>
<tr>
<td>7</td>
<td>Old culture is not appropriate</td>
</tr>
</tbody>
</table>

**Table 2. Grouping examples.**

<table>
<thead>
<tr>
<th>Group</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Censorship factors</td>
<td>Does not suit the school’s vision</td>
</tr>
<tr>
<td></td>
<td>Contains racism and pornography</td>
</tr>
<tr>
<td></td>
<td>Information protection</td>
</tr>
<tr>
<td>Censorship applied</td>
<td>Close the content</td>
</tr>
<tr>
<td></td>
<td>Limited service</td>
</tr>
<tr>
<td></td>
<td>Book withdrawal</td>
</tr>
<tr>
<td></td>
<td>Handout review</td>
</tr>
</tbody>
</table>

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school libraries can differ from one school to another; it is based on the vision and mission of each school. For school libraries, their vision and mission are the key pillars of library development, which includes collection development. The management and service of the school library is organized in order to support the development and improvement of school tasks, and functions as stated in the vision and mission of the school: ‘This includes if the books considered to be left stream and they are not in accordance with the school’s vision and mission, so we should censor them’ (Anwar). The relevance of the school’s vision and mission is put into practice at the material procurement stage to ensure that the library’s resources adhere to school policy. The selected collection cannot be separated from the librarian’s important role during the planning process. Yet there are still many schools that do not involve librarians in the creation of their library collections, especially student handbooks.

A collection development policy can be a guide for librarians in implementing censorship when there is inappropriate content. The collections that are censored are general ones, such as those that have racist and pornographic elements. It is hoped that librarians will not only read the title of a publication during the filtering process but also the entire contents, so that they can detail and minimize uncensored content that is considered to be high risk. The absence of policies regarding censorship results in little information about prohibited content. The censorship process is not limited to purchased books but can also be applied to grants or gifted books, which are also selected and censored if they are incompatible with the main institution’s policy and improper according to the main institution’s needs.

Librarians have the right to freedom of information in using the available information in a library. However, censorship is often regarded as the limitation of information for readers. Librarians must be extremely cautious when censoring their library books as they do not want to create new complex problems in the future as a result of censoring books. Hence, they are only limiting the access, not removing the books from library collection. In fact, school libraries have the right to make decisions in collection selection by taking into account the curriculum applied in the school, and can protect students from unsafe information. Based on the right that libraries have, they employ censorship with the aim of safeguarding the information that students will access. By implementing censorship, librarians play a role in protecting information and continuing to ensure that students get information according to their needs:

A librarian in school has to think about how our students are kept safe from any inappropriate information, but at the same time we should not break the freedom of information rule. It’s not easy... but censoring unimportant materials from students is actually helping them by ensuring they only get the information they need for study. (Anwar)

The censorship being performed

The second theme is the implementation of censorship. This theme describes the types of censorship that librarians perform on high-risk collections. Librarians have the full responsibility for ensuring that libraries remain secure locations and meet users’ information needs. Censorship is intended to exclude or even remove inappropriate content. There are numerous ways to block or delete inappropriate information. One is by closing content that is thought to be unacceptable. The partial closure of content is undertaken when there are only a few images that are deemed to be improper. As reported by Anwar: ‘If it is only one or there are two pictures, then we only censor those parts’. Limiting access is the most frequent thing that school librarians do when discovering contentious materials in a school’s library collections. Dawkins (2018) also comments that the restriction of dubious content in school libraries was decided by school librarians in North and South Carolina during their study.

If there is a lot of content in a book that is deemed to be inappropriate, a librarian can take other action, including withholding a collection. Collection withdrawal may be done not only when there are inappropriate collections, such as those containing racism and pornography, but also if the available collections are not in accordance with the main institution’s mission and values. The reasons for collection withdrawal may vary by school because each will have its own constraints. For instance, in a religion-based school library, if there are collections that deviate from that religion, they will certainly be withdrawn.

Collection withdrawal is not always carried out; there is a separate protocol for collection withdrawal, although in some libraries the procedure is not in writing. The librarian must first look at the level of the collection’s usage; if the book is needed by only a few readers, then the librarian has no right to remove the entire collection. This can be overcome by limited service, where the collection is placed in a special cupboard or on a shelf where access is restricted and supervised by the librarian:
Regarding the procedures, we always look at the level of the book usage. If it is categorized as a scientific book, we put it on a particular shelf in case there is a teacher who needs to use it, meanwhile, when students have already learnt anatomy in their class as it is taught in higher Grades 5 or 6. Moreover, the teacher has already taught them about it. So, they also have the right to access this collection (Nana)

A preventive measure performed by librarians to avoid censorship is to involve teachers in evaluating student handbooks before the procurement of such books. This step can be taken by the librarian so that the procured books suit students’ needs and censorship is avoided following procurement. Here, cooperation between librarians and teachers is necessary for the books to be appropriate for students and serve as learning resources for them.

When high-risk collections are not censored, it will have an impact on students’ mindsets and behaviour. Censorship can protect students from harmful information, whatever the manner of censorship. In Indonesia, librarians, as citizens, are obliged to comply with the provisions of the law by continuing to censor the collections that have been determined dangerous for readers. Law No. 3 of 2017 concerning the keeping of books categorically forbids collections that are not in line with the Pancasila (Five Principles) – those containing racism, pornography, violence and hate speech (Republic of Indonesia, 2017). So, if there is a problematic collection, then, based on the law, a librarian is obliged to carry out censorship in any form whatsoever. In addition to being based on the law, librarians can conduct censorship in accordance with accepted standards.

**Librarian competency development**

The third theme is competency development. Based on the data analysis that has been carried out, librarian competency development in this research is interpreted as an activity undertaken by the AISL in the context of developing librarians’ competence. Librarians’ competence in selecting library collections is considered an important skill by the AISL. Librarians are required to be capable of determining library materials that suit their readers’ information needs. This competency is also particularly needed when assessing library materials in order to avoid inappropriate and sensitive content. This finding is consistent with the research conducted by Mosher (2010), which demonstrates the necessity for school librarians to educate themselves to be good advocates for their students, so that they have the knowledge necessary to support both students and constitutional law.

Based on the interviews that have been conducted, it was found that currently 90% of schools have libraries, but only few of them managed by librarians. The fact, in reality, is that there are still many teachers who are hired to become library personnel in order to accommodate the demand for working hours.

Because of the lack of librarians and many positions being filled by teachers, the AISL considers that what is more urgent is to increase librarians’ competence and professionalism in order to deal with such issues as censorship. Librarians’ competency development is one of the AISL’s goals by offering instruction and training in library administration. Censorship is a subchapter discussion in the collection development training held by AISL, although the discussion on the censorship issues during the training was not yet so detailed. The paucity of information on the subject of censorship is caused by variations in the content limitations that school librarians are required to impose because each institution has its own restrictions based on its vision and goals.

Although the focus of the AISL is more on competency development, censorship issues are important because one indicator of good management is librarians’ ability and knowledge with regard to censorship in their school library collections. Censorship issues have not been expressly covered by the AISL because, until now, the goal of this professional organization has been to improve the skills of school librarians. The AISL considers that the most urgent need in the field today is to create competent librarians. The librarians’ competence is important in the library management as illustrated by the following two quotations:

> We are more concerned with improving competence in general. So, we prioritize managerial competence, social competence, information technology competence due to the urgent need of our colleagues. (Anwar)

> we are paying more attention to the staff, to the people, not the library itself, moreover to the staff’s competence reinforcement. (Nana)

Even though censorship is not the AISL’s focus, the organization nonetheless helps librarians by offering guidance if there are items in their collections that are thought to be particularly inappropriate:

> we provide some kind of advice, some kind of input to our colleagues, so we can only give input to that person or to the librarian ... like, OK, because they are not appropriate and some other considerations ... it’s better to withdraw. (Nana)
It is undeniable that, in selecting collections, it is important to find out which collections are unsafe or otherwise; this requires in-depth knowledge on the part of a librarian. The AISL, as a professional school librarian organization, has decided to concentrate on the improvement of librarians’ competency. The AISL considers that if librarians are highly competent, they can manage libraries properly, including being able to perform censorship activities on each school library collection effectively without infringing students’ right to information, in terms of both censorship policy and censorship practices. In this setting, school librarians may face challenges. School librarians are obliged to keep students safe from sensitive and controversial information, but, on the other hand, they have the responsibility to ensure that they do not contravene students’ right to information. According to Duthie (2010), these are challenging circumstances, where school librarians have a special responsibility of care to the developing mind, and should ensure that students’ information needs are met while protecting them from any knowledge that is unrelated to the curriculum.

Censorship urgency

The fourth theme is censorship urgency, which reveals why censorship issues have not been considered urgent and have not been widely investigated, especially by professional associations. The AISL thinks that librarians carefully choose their items so that users will only receive what they need. Hence, they do not need to censor the collections anymore. The rare occurrence of censorship issues is also influenced by book publishers, which already have their own censorship organizations. Through their censorship bodies, publishers perform strict book selections, especially for student handbooks. As stated by Nana: ‘the books, in particular student handouts, they have been censored by their own censor body carefully, therefore censorship cases are rarely found’.

Discussion of censorship issues within professional associations in Indonesia is still very limited and rarely leads to a specific topic. Censorship issues only comprise a small part of the collection development material. As explained by Anwar: ‘Specifically, it has never come to a serious discussion related to censorship. We do more general things, not specifically about censorship alone. It still runs more common, for instance, on the management of library collection’.

There are undoubtedly justifications for debating the censorship issue. The underlying reason is that, until now, the censorship cases that have occurred have been within the internal scope of specific schools. This signifies that there has not been a censorship case with a collection that has occurred nationally, where Indonesia as a whole has carried out the censoring of the same collection. Currently, the censorship cases that occur in schools are still limited to the local level. This indicates that censorship is still confined to the internal policy of each school and has not yet manifested at the national level. It is influenced by the policies of each school, which are different, depending on the vision and mission they have. In addition, it is also constrained by the various censorship policies in each school, particularly those in religious schools. This relates to Mosher’s (2010) finding that censorship acts are never reported and become local issues that librarians themselves manage and solve. Mosher (2010) reports that librarians prefer to self-censor to avoid the challenges that may come from parents and other community organizations.

The low rate of censorship cases, especially at the national level, causes censorship to be an issue that does not need to be prioritized and is considered to have no urgency. The AISL, as a professional association, may need to decide on or investigate urgent issues and put them into action as soon as possible (of course, this is conditional, given what may occur in reality). Right now, there are not many censorship cases, and they have not reached the national level (see Afifa and Dewi, 2018; Fatmawati et al., 2018; Rianti and Dewakanya, 2018). The AISL has not considered censorship to be an urgent matter. If, in future, there are numerous cases involving censorship difficulties, the AISL will have to examine censorship issues. During this period, discussions regarding censorship issues were conveyed through technical guidance activities on the topic of library collection development. Nonetheless, the AISL does not simply disregard findings from censorship-related studies. It continues to include censorship issues on its agenda as a preventive step in enriching school librarians’ expertise. The AISL asserts that it is still receptive to censorship-related issues and willing to help librarians if they discover collections that need to be assessed and censored.

Conclusion

As a school librarian association, the AISL has not yet considered censorship to be a key issue for school library management since what is more pressing at present is the continued professional development of school librarians. The AISL has observed that,
currently, assisting school librarians to increase their competence is more urgent, especially given that some school libraries are being run by teachers who have fewer teaching hours, and hence lack the administrative and practical expertise of library and information service staff. In addition, there are other issues in Indonesia that are continuously becoming main concerns – for example, improving information literacy skills, social inclusion in libraries and reading habits. The AISL further holds that by enhancing school librarians’ competencies, it is anticipated that they will gain confidence in their ability to handle censorship issues in their institutions, and will have sufficient knowledge to practise censorship in their school libraries.

Moreover, censorship issues are regarded as local issues by the AISL, which can be resolved locally in each school; hence, there has been no instance of censorship that has garnered widespread national attention. It seems that censorship cases have only been the interest of students and researchers in higher education in Indonesia. In this regard, academic communities have the responsibility to collaborate with other organizations, such as schools, the government and community groups, concerning censorship in school libraries and even censorship in general. This investigation has focused on exploring a school library association’s perspective on censorship in school library collections, but censorship may also occur in other types of libraries, such as special libraries, public libraries or university libraries. The results of this study may be valuable for further research investigating the same subject in various cultures. The findings may also benefit other librarian associations in the region and international bodies as guidance when discussing censorship and freedom of information in Indonesia, especially in the school library context.

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References


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Framework for communicating library training at a South African university

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Abstract
This article combines social constructivist and transformative paradigms to propose a framework for communicating library training to first-year students. Although performance indicators for literacy are universal, there are explicit attempts to move away from a universal approach to information literacy, as exemplified in the Association of College and Research Libraries Framework for Information Literacy for Higher Education. This article addresses the fragmentation of teaching and learning practices in a single case study of University of the Free State libraries. Data were collected using two methods: an integrated literature review; and document analysis. Literature and documentary evidence were found to justify a call for developing an underpinning theory for planning purposes. Furthermore, it was found that synthesized concepts from models, ideas and frameworks can inform new pedagogical approaches. This article proposes the Authority Pedagogy Socialization framework for communicating library training to first-year students and concludes with several recommendations.

Keywords
Framework, communication, information literacy, academic libraries, librarians, South Africa

Introduction
Empowering students with skills and knowledge for navigating through the vast resource pool in academic libraries differs from country to country. Library instruction, bibliographic instruction, user education, library orientation and library training, consist of programmes that teach library users how to find and locate information (Reitz, 2004). Library training is known by different names across the world. Similarly, information literacy programmes in South African university libraries are “known by different titles/names” (Jiyane and Onyancha, 2010). Library training is different from information literacy. Library training equips users with skills to use information resources in a library. Information literacy focuses on the ability of individuals (e.g. library users) or groups of people (e.g. local communities) to identify information needs from an abundance of information sources at different times for different purposes (Zurkowski, 1974). The critical point here is that library training is often used as an approach and method to facilitate the training of users in information literacy programmes. However, being information literate is unrestricted to the academic library environment and can occur anywhere for different reasons. This article focuses on library training facilitated by library and information service professionals to emphasize the context of University of the Free State (UFS) libraries.

The origins of library training
Libraries, in general, and academic libraries, in particular, design programmes that support users’ learning, teaching and research activities. According to Renirie

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and Harper (2019: 339), “library instruction can include broad threshold concepts of the nature of research and the value of information, as well as the more practical skills of searching a library’s print and electronic resources”. Library instruction started in the United States between 1876 and 1910 and gained a stronghold in the early twentieth century (Grassian and Joan, 2010). Librarians take the role of teachers in library training programmes.

The librarian as a teacher

The librarian’s role as a teacher was redefined by Justin Winsor, president of the American Library Association, in 1880 (Robinson and Winsor, 1880). Lorenzen (2001) posits that the introduction of library instruction in the United States resulted in the founding of the Library Orientation Exchange. This non-profit initiative has hosted conferences and shared borrowing collections with more than 650 member states as members, including South Africa. Library instruction relates to information literacy because a programme empowers students to be “able to recognize when information is needed and the ability to locate, evaluate, and use the needed information effectively” (Association of College and Research Libraries, 2006). Based on these explanations, library training plays a significant role in teacher–librarian–student relationships in academic libraries.

The UFS library training context

The UFS libraries offer library training to first-year students in two (2) approaches; firstly, general library training for all first-year students. This is communicated by the librarians to the students using a blended learning approach (e.g. face-to-face and on Blackboard). The second approach is embedded library training, where the activity forms part of a module in a department/faculty. It is compulsory for all students registered for that module to attend these sessions since they come with an assessment. Compared to the first approach, this embedded library training is communicated to students by academic facilitators in partnership with librarians. As a result, attendance for the embedded library training programme is always characterized by good attendance compared to the general library training for first-year students. This article focuses on the general library training administered by librarians.

The significance of library training

While programmes vary from country to country, library training makes it easier for users to “access, identify, retrieve and effectively use information from the library shelves and catalog that will aid their learning, teaching, and research” (Omeluzor et al., 2017: 1). Rowe et al. (2021) conducted a study that sought to understand the impact of library training on undergraduate student success. The study found a correlation between students who attend library training programmes and student success. The study concluded that library training could effectively educate users and create awareness about resources in the library. The Association of College and Research Libraries (2015: 14) notes that academic libraries in the United States prioritize library training to “reach a high number of students and to establish a foundation of information literacy competencies for students as they progress through their academic careers...”. Aliyu (2011) asserts that although a considerable number of students at the Abubakar Tafawa Balewa University in Nigeria considered the library training course important, there was a need to review the programme to reflect changes in library operations.

Rapid changes in society require a reflection on library training programmes. Ellis-Barret (2014) notes that because the information literacy landscape in the twentieth century changes rapidly with technology, it is essential to keep up with the needs of the students and their different learning styles. Academic libraries in the Global South, particularly South Africa, have adapted somewhat to rapid technological changes affecting operations. As with UFS libraries, budgets focus on adopting specialized tools to create electronically driven systems, processes and procedures. For librarians in teaching and learning sections of universities, introducing new technologies poses challenges and opportunities for improvement in how they communicate library training to a diverse student population with different learning styles and needs. There is a need to develop new pedagogical approaches in library training.

The following sub-sections present the research gap and focus of the article. The methodology adopted for the paper follows with a view to discussing findings from an integrated literature review and documentary evidence from a library training programme at UFS libraries. The final part of the article discusses the results, presents the framework and concludes with recommendations.

Addressing the research gap and focus of the article

The critical role played by library training in information literacy programmes is vast in the literature, with most of the studies referring to the Association of College and Research Libraries (2016) Framework
for Information Literacy for Higher Education. However, most studies present perspectives of library training from a universal point of view, specifically those of thought leaders and think tanks in developed economies (e.g., the United States). It is therefore not surprising that the Framework for Information Literacy for Higher Education (Association of College and Research Libraries, 2016) is communicated in language versions belonging to non-African countries, such as Chinese in Asia and various languages in Europe, which include German, Italian, Persian, Spanish and Swedish. In addition, there is also a focus on library training as it relates to the written word and information and communications technologies (ICTs). As the United Nations Educational, Scientific and Cultural Organization (2008: 22) puts it, “for UNESCO, the focus on IL should be as it relates to the written word and ICT”.

The overemphasis on the written word and ICTs needs to pay more attention to alternative performance indicators informed by epistemologies from preliterate oral cultures in developing countries. Several studies point to this epistemological neglect. Kay and Ahmadpour (2015) developed the 5Ps model to chart the way forward for assessing and understanding new directions for information literacy. Harden and Harden (2020) offer practical skills on how instructors in a political science course can teach information literacy with or without librarians. Carncross (2015) redeveloped an information literacy course for university students using the Framework for Information Literacy for Higher Education. To understand the perceptions of librarians, faculty and student’s perceptions of information literacy skills in academia, Yevelson-Shorsher and Bronstein (2018) shared three perspectives on information literacy. Fullard (2017) used the Framework for Information Literacy for Higher Education to foster partnerships between librarians and faculty members. While Fullard (2017) suggests that librarians and lecturers can use the Framework for Information Literacy for Higher Education to uncover processes and practices of knowledge creation never known before, there is also a need for transformative frameworks that guide such partnerships, especially in South African university libraries. Furthermore, indicators for determining adult literacy levels are based on international surveys that originated in developed countries, mostly in Western Europe and the United States. One example of a global survey guiding literacy levels is the International Adult Literacy Survey (United States Department of Education, 1994). While literacy and information literacy are two discrete fields of knowledge, they share a common ground in assisting individuals in making sense of the world and its natural and manufactured objects. The example of the Latin American Migration Project (LAMP) survey was included in this article to emphasize the thesis that both concepts originated in the developed world and were exported to developing countries (e.g., South Africa). Again, the five levels of proficiency identified in LAMP are strictly associated with literacy proficiency with written records and ICTs.

In summary, the authors of this article assert that although the concept of literacy is universal in nature, there are explicit attempts to move away from a universal approach to information literacy, as exemplified in the Framework for Information Literacy for Higher Education. Additionally, proficiency in information literacy is associated with written records and ICTs. The overemphasis on information literacy based on written documents and ICTs perpetuates the marginalization of oral indigenous African ways of knowing in library training programmes. The literature considers other types of literacies (e.g., media, audio and library) to focus more on specific skills, leading to information and digital literacy as general concepts based on knowledge, perceptions and attitudes (Bawden, 2001). To close this gap, the purpose of this article is to address the fragmentation of teaching and learning practices in a case study of UFS libraries. This article seeks to achieve the following objectives:

- To explain the librarian’s role towards self, and others, including objects.
- To encourage librarians to think as teachers for best practices in library training.
- To motivate librarians to model knowledge construction through socialization.
- To make recommendations for the implementation of the framework.

**Methodology**

The authors combined social constructivist and transformative paradigms to propose a framework for communicating library training to first-year students at UFS libraries. Social constructivism [the Vygosky version] emphasizes language and culture as essential cornerstones on which learners experience, share and comprehend reality (Mohammed and Kinyo, 2020). Transformative frameworks are based on the belief that knowledge production in society should benefit marginalized groups such as indigenous communities and other societies needing freedom from institutional and systematic marginalization. Transformative frameworks recognize that social knowledge is shaped
by social and power relationships and, therefore, is not neutral. For qualitative researchers, adopting a transformative framework in research sets the agenda for reforms that can change people’s lives (Mertens, 2003).

Two methods were used in the article, namely: integrated literature review; and document analysis. The authors presented data from an integrated literature review (see Molepo and Blose, 2023). Document analysis is a qualitative data collection method used to analyse documentary evidence (Frey, 2018) systematically. Additional data were collected from official documents used by librarians to communicate library training in a single case study design of UFS libraries. Single case studies allow a deeper understanding of a situation or participants (Yin, 2009). Direct quotations from official documents were used to present the findings. The UFS General/Human Research Ethics Committee approved this study as ethically sound with an ethical clearance number UFS-HSD 2021/1755/21. The authors believe that ethical clearance in research projects protects participants and researchers. It also shows that the article’s authors have adhered to the accepted moral standards of the affiliated institution. Figure 1 visualizes the methodology used in this article. The following subsections briefly explain the two data collection and analysis methods employed in the report.

### Integrated literature review

The article followed Torraco’s (2005) guidelines for conducting integrated literature reviews, namely: asking whether the topic investigated is mature or new; explaining why a literature review is the research method to address the problem earlier in the article; organizing the study with a conceptual structure of the article; describing how the review was conducted; critical analysis aligned with objectives; synthesizing new knowledge on the topic; considering the logic and conceptual reasoning; and using the review article as a catalyst for future research and a clear writing style. The guidelines assist researchers in analysing, commenting on and synthesizing available literature to develop a new theory or framework (see also Molepo and Blose, 2023).

### Document analysis

The authors collected and analysed secondary data from email communication and library training ‘tutorials’ (e.g. word-processed documents) of the teaching and learning section of UFS libraries. Additionally, the authors categorized emerging data for relationships, patterns and examples using Creswell’s (2007) spiral approach. The spiral method consists of categorization or coding, classification and synthesis before the final presentation.

### Results

This section presents and discusses data collected from an integrated literature review (see Molepo and Blose, 2023) and documentary evidence from library training activities at the UFS libraries.

### Insights from the integrated literature review

Molepo and Blose’s (2023) integrated literature review identified concepts from models and theories. In addition to the concepts identified in the integrated literature review, this section briefly presents the first of six frames specified in the *Framework for Information Literacy for Higher Education* (Association of College and Research Libraries, 2016). The aim is to draw insight from the first of the six frames and its knowledge practices and dispositions to construct a valuable framework for communicating library training to first-year students at UFS libraries. As the Association of College and Research Libraries (2016: 25) puts it:

“Librarians and teaching faculty need to understand that the framework is not designed to be implemented in a single information literacy session in a student’s academic career; it is intended to be developmentally and systematically integrated into the student’s academic program at a variety of levels.”
This article sought to select from the six frames a framework that could be useful for developing a framework for communicating library training to first-year students at UFS libraries.

**Framework for Information Literacy for Higher Education**

This section discusses the first of the six frames of the Association of College and Research Libraries (2016) *Framework for Information Literacy for Higher Education*. The framework is the most recent, cited seminal work in information literacy. There are various models for information literacy training worldwide (see Odede 2020, for a comparative review). These models were discounted because they deal with specific ways of implementation. The authors understand that frameworks are practical as underpinning theory that shows the interrelatedness of concepts for planning purposes. At the same time, models build on frameworks to provide specific, practical solutions for implementation.

Like the preceding *Information Literacy Competency Standards for Higher Education* (Association of College and Research Libraries, 2000), libraries and educational institutions worldwide recognize and use the new framework for planning library training. According to Carncross (2015), aspects of the rescinded standards are still widely used even though the Framework has replaced them for *Information Literacy for Higher Education*. The author says that the standards will remain for some time because they were tightly woven into the information literacy course they teach. Removing the standards simultaneously requires revising the course, assignments and activities—a time-consuming and energy-consuming process. The new framework has six frames: Authority Is Constructed, and Contextual; Information Creation as a Process; Information Has Value; Research as Inquiry; Scholarship as Conversation; and Searching as Strategic Exploration.

Having established the six frames, this section focuses on the first frame (e.g. Authority Is Constructed and Contextual) of the *Framework for Information Literacy for Higher Education*. The reason is that the framework developed in this article focuses on library training for first-year students at UFS libraries. The authors contend that librarians should play a significant role in planning to activate specific knowledge practices and dispositions in library training aimed at first-year students. The framework can include other frames as students progress through their academic journey. The Association of College and Research Libraries (2016: 12:13) explains the first frame as follows:

“Authority Is Constructed and Contextual

Information resources reflect their creators’ expertise and credibility and are evaluated based on the information needed and the context in which the information will be used. Authority is constructed in that various communities may recognize different types of authority. It is contextual in that the information needed may help determine the authority level required.

Experts understand that authority is a type of influence recognized or exerted within a community. Experts view authority with an attitude of informed skepticism and an openness to new perspectives, additional voices, and changes in schools of thought. Experts understand the need to determine the validity of the information created by different authorities and to acknowledge biases that privilege some sources of authority over others, especially in terms of others’ worldviews, gender, sexual orientation, and cultural orientations. Understanding this concept enables novice learners to examine all evidence critically—be it a short blog post or a peer-reviewed conference proceeding—and to ask relevant questions about origins, context, and suitability for the current information need. Thus, novice learners come to respect the expertise that authority represents while remaining skeptical of the systems that have elevated that authority and the information created by it. Experts know how to seek authoritative voices but also recognize that unlikely voices can be authoritative, depending on need. Novice learners may need to rely on basic indicators of authority, such as type of publication or author credentials, where experts recognize schools of thought or discipline-specific paradigms.”

An understanding of the above frame by librarians should motivate students to embrace knowledge practices and qualities highlighted in the *Framework for Information Literacy for Higher Education* (Association of College and Research Libraries, 2016). Although motivation is internal to the individual, a librarian’s understanding could help motivate students by engaging in ongoing scholarly conversations. Students will explicitly share their experiences when librarians make them understand that authority is not limited to library sources and systems and is dependent on context for use.

Overall, we can deduce that there is a recognition that library training in higher education should continue. Library training programmes in institutions of higher learning could reap significant benefits from embracing new perspectives and world views related to information systems and sources.

Now that there is evidence of frames for improving library training programmes in university libraries,
the following sub-section analyses data collected from documentary evidence at UFS libraries. The documentary evidence was analysed to gain deeper insights into the current practices of librarians at UFS libraries. Documentary evidence is crucial for understanding gaps in piloting new pedagogical approaches for communicating library training to first-year students. Data were analysed thematically with examples of direct verbatim from documents.

Documentary evidence

This sub-section analyses documents used in one-shot library training at UFS libraries. Direct verbatim from official documents (e.g. email correspondence and tutorial letters) used by librarians at UFS libraries were transcribed into categories and classifications using Creswell’s (2007) spiral approach. The categorization and classification of themes in the analyses draw from discussions about tutorial action’s significance in university education (see Guerrero-Ramirez et al., 2019). Since librarians in UFS libraries do not necessarily teach, tutorial actions can enhance the library’s support role in library training programmes. The analysis is limited to three themes: name of the library training programme and welcome message; learning outcomes; and activities. The following sub-sections present direct verbatim from one official document template for training students about various electronic resources database usage. The following results emerged from the document.

Name of the library training programme and welcome message

Having established the approach used in the analyses, this sub-section presents the results from the documents. While the paper used to communicate library training to students at UFS libraries is referred to as a ‘tutorial’, it is written in an unstructured format. Furthermore, the document does not clearly state the name of the library-training programme at the beginning. Only the terms of databases taught to students appeared at the beginning of the paper. The following blocks (refer to Figure 2) indicate the direct verbatim relating to the name of the library-training programme and welcome message.

The first introductory sentence in the above document appears as a welcome message to the library training session. The following sentence describes a ‘tutorial’ for a subscription electronic resource database. The example clearly shows that the ‘tutorial’ does not adhere to standard tutorial design processes.

Learning outcomes

To understand the extent to which the official document used to communicate library training outlines learning outcomes, this sub-section focuses on the direct verbatim that follows the previous example. The analysed document does not indicate learning outcomes, as illustrated in Figure 3.

From the documentary evidence above, the authors deduce that there are no learning objectives to indicate the expected outcomes of the one-shot library training programme. According to the example above, the training activity moves from the welcome message to a live demonstration of the electronic resource database.

Activities

To the authors’ knowledge, the document analysed does not contain any synchronous or asynchronous

![Figure 2. Direct verbatim showing the name of the library training programme and welcome message.](image-url)
activities for students. Following the ‘live demonstration’ of the electronic resource database, the training activity focuses on several numerical ‘slides’ until the end. The final part of the document ends with a thank you message and referral to the faculty librarian in case of further questions.

**Recruitment message**
A closer analysis of the email recruitment message for UFS library training programmes indicates that English is the primary language of instruction (refer to Figure 4). Whereas the recruitment message is distributed at least once a week, the authors have experienced low attendance rates in UFS library training programmes. Low attendance rates continue despite the blended learning approach to library training.

These data imply two things: one, most students may not relate to the recruitment message because it needs to consider their diverse learning styles and linguistic, cultural and epistemological characteristics; and two, students do not relate to the message because it needs to indicate how much library training contributes to the required credits to progress their studies. Several studies share strategies for improving student library training attendance (see Galvin, 2005; Krysiewski and College, 2020; Martin et al., 2012).

Based on the results of the integrated literature review (see Molepo and Blose, 2023) and analysis of documentary evidence, the following sub-sections will present a framework that could be useful for communicating library training to first-year students in UFS libraries.

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**Figure 3.** Verbatim from the document analysed shows no learning outcomes.

**First-year students!**
Please join the Library and Information Services for training on how to use our resources. These sessions are there for your convenience to help you through your academic journey at the UFS. All of you at the Bloemfontein Campus, South Campus and Qwaqwa Campus are welcome! For your convenience all sessions will be face to face and online.

**Figure 4.** The first part of the recruitment message.
This sub-section presents the APS framework. The APS framework (refer to Figure 5), works within transformative (Mertens, 2003) and social constructivist (Mohammed and Kinyo, 2020) frameworks to encourage new pedagogical approaches in library training at UFS libraries. The framework synthesizes selected concepts identified in the integrated literature review by Molepo and Blose (2023), namely: information source (Shannon and Weaver, 1964); three generations of pedagogy (Anderson and Dron, 2011); social learning (Bandura, 1977); and authority as constructed and contextual (Association of College and Research Libraries, 2016).

The framework is born out of the belief that librarians can significantly encourage first-year students to think critically and embrace new perspectives and diverse ways of knowing in previously marginalized communities. Research shows that historically, library training went beyond teaching users how to use systems by including encouraging learners to think critically, participate actively in learning and learn new concepts (Grassian and Kaplowitz, 2010). Universities also recognize the need to transform teaching and learning methods to enable students to compete globally while focusing on local concerns. As the Revised Integrated Transformation Plan (University of the Free State, 2022: 6) puts it:

Much of the curriculum traces back to isolation years or is stuck in a past that neither reflects contemporary global thinking nor shows sufficient respect for local understanding, experience, and problems. Students do not feel recognized in their human fullness and feel that their knowledge and the knowledge produced by their communities are not valued. At the same time, we need to be fully engaged in global conversations and disciplinary, multidisciplinary, and transdisciplinary debates. An achievement gap, particularly between black and white students, needs to be addressed.

The evidence above highlights that transformative library training frameworks are necessary to enhance academic library–student–community relations. This multilateral approach has the potential to pin the librarian and first-year students to the epicentre of knowledge production processes in UFS libraries. Current debates in information literacy show that there is an acknowledgement that the poor scoring in one-shot library training sessions and low attendance [author’s emphasis] have little to do with flawed instruction but much to do with the method (Rinto, 2015). Reviewing the method of communicating library training at UFS libraries would be difficult without frames.

### The frames

This sub-section presents the three core frames of the APS framework: authority; pedagogy; and socialization. Table 1 illustrates the alignment of the objectives with the three frames.

#### Authority

This sub-section addresses the first of the three frames of the proposed APS framework. Within the context of local communities, authority within the UFS libraries should be constructed through a partnership between students, librarians and domain experts. UFS is a multi-campus institution with diverse campuses in Bloemfontein (two) and one in QwaQwa (University of the Free State, 2022). These three campuses consist of a diverse student population represented by prevalent languages such as Sesotho, Afrikaans, English, IsiZulu and IsiXhosa. The QwaQwa campus is located in an area historically consisting of mainly black African ethnic groups such as Makholokoe, Bakoena and Batlokoa, united under the name QwaQwa (Raper, 2016). These communities consist of local paradigms and knowledge, also called indigenous knowledge systems. The United Nations Educational Scientific and Cultural Organization (2021) explains that “local and indigenous knowledge refers to the understandings, skills, and philosophies developed by societies with long histories of interaction with their natural surroundings. For rural and indigenous peoples, local knowledge informs
decision-making about fundamental aspects of day-to-day life”.

Using the UFS QwaQwa campus as an example, librarians need to acknowledge that students do not only rely on the library’s information resources for their daily information problems. Their information needs are also driven by different problems encountered daily within their communities. Instead of focusing only on teaching students how to use the UFS library systems in one-shot library training sessions, librarians should construct authority through innovative approaches to library training programmes. Innovative approaches require self-reflection on the part of the librarian. Reflecting on the procedures for information seeking, searching and retrieval used in library training programmes can pave the way for new designs based on students’ subjective experiences. The librarian knows by situating the library training programme for redesigning processes in students’ experiences. Figure 6 illustrates a case in point.

A library training programme based on the students’ subjective experiences has the potential to motivate students to change their perceptions of the librarian. The librarian’s acknowledgement of diverse information resources places them in a better position to encourage students to be critical information seekers and users. Indicators should include critical thinking, scepticism, library–student–community relations and legitimization of local knowledge. This will require innovation in the teaching and learning activities of the library training programme.

**Pedagogy**

This sub-section presents pedagogy as a second frame of the proposed APS framework. Noe (2013) asserts that a change of perception from librarians can bring benefits in examining one’s teaching style, developing and implementing improved pedagogies, class planning and awareness of how students learn. A pedagogically inclined academic library workforce is necessary for engaged scholarship.

Education pedagogies were constructed from various worldviews. There are widely used learning theories in education: cognitive behaviourism; social constructivism; and connectivism (Anderson and Dron, 2011). It has become customary for UFS librarians to take a top-down approach to library training, which implies an allegiance to the cognitive-behaviourist theory. A pedagogically inclined library workforce is likely to introduce acceptable universal design principles (Mcquire, 2011) that recognize the diversity of learners in instructional material (e.g. tutorials and study guides). Content can combine text, images, video and audio. Content could be structured as a module consisting of a welcome message, learning outcomes, learning units and a list of references consulted. Library training pedagogy in UFS libraries is necessary for face-to-face and web-based learning environments (e.g. Blackboard).

Lessons from the 2021 UFS Learning and Teaching Conference indicate a paradigm shift in teacher–learner relationships. For example, the conference name starts with the construct ‘learning’ instead of ‘teaching’. A similar approach was taken for the 2022 Learning and Teaching Conference (University of the Free State, 2021). Alignment with changes at the institutional level can assist UFS libraries in addressing fragmentation in library training programmes.

Librarians in UFS libraries may benefit from identifying different education classifications, namely education based on educational technology and

**Table 1. Alignment of the objectives with the three frames.**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Concepts</th>
<th>Source</th>
<th>Indicators</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>To explain the role of the librarian towards self and others, including objects</td>
<td>Information source; Authority</td>
<td>Communication models; information literacy framework; psychology literature</td>
<td>Critical thinking; scepticism; academic library–student–community relations; legitimization of local knowledge</td>
<td>Framework for communicating library training to first-year students at the University of the Free State Libraries</td>
</tr>
<tr>
<td>To encourage librarians to think as teachers for best practices in library training</td>
<td>Three generations of pedagogy</td>
<td>Education literature</td>
<td>Improvement of method; active participatory learning</td>
<td></td>
</tr>
<tr>
<td>To motivate librarians to model knowledge construction through socialization</td>
<td>Social learning; web-based learning environments</td>
<td>Psychology literature</td>
<td>Discussion groups; open pedagogy</td>
<td></td>
</tr>
</tbody>
</table>
technology teachers (Hansen, 1998; Stošić, 2015) and education based on learners’ experiences and the socialization of educators (Leal-Rodríguez and Albort-Morant, 2019; Hansen, 2000). As in the example in Figure 6, the librarian may centre their training on collaboration and two-way communication with the students for engaged scholarship. Indicators should include improvement of method and active participatory learning. One way of centring UFS library training programmes on student experiences is through socialization.

Socialization

This sub-section presents the third and final frame of the proposed APS framework. Librarians in UFS libraries may benefit from socialization that is two-pronged: socialization of self; and socialization of learners. According to Šaras and Perez-Felkner (2018: 1), socialization “is the multifaceted process through which individuals learn and internalize cultural norms, codes, and values. This process enables entry into and sustained membership in one or more social groups. Individuals develop social and cultural competencies through (1) interaction with other individuals and social institutions and (2) response to their macro- and micro-sociocultural contexts”. Librarians in UFS libraries already belong to a diverse environment of distinct cultures, languages, norms and values. Due to the history of apartheid, librarians and learners from mostly black African ethnic groups were socialized into Anglo-Saxon and Afrikaner culture, language, norms and values. Present-day South Africa is based on fairness, liberty, equality and inclusion, enshrined in the Constitution of the Republic of South Africa (Republic of South Africa, 1996). What better way to have social learning (Badura, 1977) between librarians, students, domain experts and local communities reciprocated between diverse cultures, languages, values and norms? Indicators should include discussion groups

**Example one: constructing authority from local paradigms and knowledge within the South African context**

An undergraduate first year student is looking for information sources about the tribes that make up the QwaQwa community for an assignment. Fewer sources exist about tribes in QwaQwa. There appears to be a source in the library that shares limited and unverifiable information about the tribes. The available information source was published under apartheid. Additionally, information about the chronological succession of kings and queens of the royal family in the community is not available in the library. After exhausting the library catalogue and the inter-library loan search for the relevant information source about the succession of the Batlokoa kings and queens during the year 1701, the librarian advises the student to ask elders in the community. Upon arrival in the community, the student asks the grandparents. The grandparents share their implicit knowledge with the student from communal memory. During the second appointment with the librarian, the student shares their experiences, and the librarian thinks about ways to legitimize the knowledge.

A possible scenario could include a project that aims at compiling an annal detailing the chronological succession of the royal family in question. Throughout the project, the librarian consults the grandparents, and the traditional council in the local community to verify the information. Additionally, the librarian engages domain experts such as historians and language practitioners for information quality checks. A possible research methodology to guide the processes in the project is Africography – “premised on the epistemic and axiologic axioms of retrieval; reconstruction and creation of new forms of indigenous knowledge building upon the prior intellectual achievements of the erudite Africanist ancestors who have gone before us” (Zulu, 2022: 6). Such a methodology builds on the work of H.I.E Dlomo, who believed that libraries can develop African intellectualism (The Journalist, 2015).

With support from the library management, this process is likely to result in the writing and publishing of an annal about succession in the royal family concerned. At the end of the project, the librarian transfers the annal to the cataloguing department for appraisal and notation. Once the annal is catalogued, and shared, the indigenous knowledge in the local community is legitimized, and the information source(s) become authoritative. In other cases, the local community can legitimize knowledge as in the example by Burns et al (2014). Throughout the process, the student becomes aware of the credibility and expertise of information sources. Importantly, the student begins to perceive the librarian in a positive light. A heightened awareness on the part of the student motivates them to be sceptical, and critical about the library’s information sources. At the end, the student, librarians, local community, and domain experts become part of a transformative knowledge production process for the greater good of society.

**Figure 6. Constructing authority from local paradigms and knowledge.**
and open pedagogy, where librarians can explore the interface between open pedagogy and open educational resources on connected platforms.

**Conclusion and recommendations**

In conclusion, this article developed a framework for communicating library training to first-year students at UFS libraries. The framework is born out of the belief that UFS Librarians can significantly motivate first-year students to think critically and embrace new perspectives and diverse ways of knowing. Instead of focusing only on teaching students how to use the UFS library systems in one-shot library training sessions, librarians should construct authority through new pedagogical approaches to library training programmes. Since “academic librarians are not required to have educational or practical training in pedagogy, either through coursework or practicum experiences” (Hess, 2018: 8), it is in the best interest of the librarian in UFS libraries to seek innovative approaches to library training programmes. A decision must be made about the type(s) of literacies UFS librarians teach students. Onyancha (2020) identified 75 types of literacies in the literature. Diversifying the literacies taught to students and employing innovative approaches requires self-reflection on the part of the librarian. In other words, a return to the central unit of analysis in the core business of academic libraries – information. Without initiative, librarians in UFS libraries will find it challenging to adapt to a changing higher education landscape.

This article makes the following recommendations:

- Strengthen the activity referred to as ‘library training’ with an information literacy programme(s) for undergraduate and postgraduate students.
- Entrench the librarian as a facilitator of critical information literacy approaches (e.g. for teaching and learning purposes) and restore credibility.
- Prioritize the student’s voices in library training programmes.
- Conduct further research with students, librarians and academics in UFS libraries to ascertain their perceptions and understanding of information literacy programmes.
- Socialization between UFS librarians and first-year students should occur in person or online through a learning management system such as Blackboard. In-person activities can include face-to-face focus groups discussing content presented during library programmes. Online discussion groups can be hosted on Blackboard’s discussion board, where threads can be organized around a particular information literacy topic.
- Assume the new role of teacher–librarians.
- Whereas academic librarians do not teach, they should adopt acceptable facilitation methods and be designing learning materials and tutorials to support first-year students’ learning and research activities.
- Introduce library training using a five-stage framework for online activities (Salmon, 2002) and other learning strategies for improving library training.
- Work within the social constructivist learning theory in addition to existing ones.
- UFS librarians should be role models and set examples for a reciprocal socialization process.
- Collaborate and train students using real-life scenarios and problem-solving techniques not far-fetched from the language and culture of the student.
- Incorporate learning theories into the library training programme.
- Reform library training for adherence to conventional curriculum and pedagogical practices. Renewal should focus on making information literacy programmes credit-bearing.
- Embrace education pedagogies in the Teaching and Learning Section of UFS libraries.
- Collaborate with learning designers for support departments.
- Renew the relationship with the Centre for Teaching and Learning to address the fragmentation of teaching practices in UFS library training.
- Support the reskilling of librarians on effective teaching and learning practices in collaboration with internal stakeholders. An example could be arranging a weeklong workshop where librarians are introduced to learning theories, curriculum development, facilitation, instructional design (e.g. tutorial development) and more. Kleinveldt et al. (2016) affirm that increased support from management is crucial for enhancing lecturer–librarian collaboration. Similarly, support from library management is vital for teacher–librarians.
- Librarians in other South African university libraries should conduct further research to discover what holds in their contexts. Multi-case and comparative study designs can be helpful in this regard.
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References
Krysiewski R and College J (2020) Using an information literacy program to increase student retention. Academy of Educational Leadership Journal 24(4). Available at: https://abacademies.org/articles/using-an-information-


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Library and information services’ reflections on emergency remote support and crisis-driven innovations during pandemic conditions

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Abstract
Crisis-driven innovation is needed to manage a scarcity in resources. The recent COVID-19 crisis exacerbated the prevailing digital exclusion in the education sector in particular. Sudden changes in otherwise stable higher education environments necessitated immediate and decisive innovation, particularly where education support services were concerned. This study reports on an academic library and information service’s reflections on emergency strategies implemented during the COVID-19 pandemic. This study was conceptualised through the lenses of existing digital exclusion frameworks and information poverty frameworks. The findings from the qualitative data gathered via focus group interviews emphasise the importance of emergency remote library and information services. The pandemic conditions and sudden remote service delivery model highlighted the prevailing socio-economic and socio-technical inequalities and exclusions among students. The value of the study lies in the reflections made on the institution-wide crisis-driven innovation strategy implemented, and the realisation that library and information services must offer active academic support. The study offers a library and information services model to prepare for future eventualities.

Keywords
Crisis-driven innovation, remote academic library and information services, digital exclusion, information poverty, mobile library and information services

Introduction
Reportedly, 2020 was the year when emergency remote teaching became a sudden and unexpected reality in many higher education institutions (see Ibach et al., 2021; Van Wyk et al., 2020). Library managers of academic support services and information specialists were confronted with unfamiliar challenges. Some libraries opted to close during this time, resulting in detrimental effects for students and academic staff, such as information poverty and academic failure. In other cases, information specialists were suddenly tasked with moving face-to-face services and resources to online services, where, inter alia, digital literacy became an aspect to be addressed. Similarly, not all information specialists were equipped to work from home. Conditions at home made the blending of work and home life complex and challenging. Furthermore, the disruption in the mode of learning severely impacted students affected by digital exclusion (Hopman et al., 2020). The self-isolation and interrupted learning also impacted students’ mental health and led to anxiety (Crawford et al., 2020). The resulting uncertainty caused dropouts, as many students felt overwhelmed and neglected due to a lack of support from teachers and peer-to-peer relationships (Ozili and Arun, 2020). These conditions compelled innovative measures. Crisis-driven innovation often stems from an urgent and sudden change in conditions or scarcity in resources. Providing academic libraries during
periods of disruption and crises is not an unknown phenomenon, but often one that finds us ill-prepared. Crises, such as that brought on by the COVID-19 outbreak, require immediate and decisive action to minimise negative impacts, especially in South African higher education institutions. In the case under study, immediate innovation and emergency planning commenced on an institution-wide basis. The resulting strategy formed part of a broader institutional emergency project.

The concept of disruptive innovation originated in the commerce and business fields (Bessant et al., 2012), but it has also documented applications in library and information services and education (Temiz and Salelkar, 2020). Although 21st-century technology innovation and the proliferation of technology theoretically supported the sudden shift to remote learning, the preparedness of both students and library staff was unclear. Seen against the backdrop of an already unequal learning ecosystem, the exacerbation of the prevailing digital exclusion was an immediate concern to be addressed within the emergency remote teaching plans.

The South African higher education institution chosen for this study offers undergraduate and postgraduate programmes to around 50,000 students in the disciplines of education, law, commerce, engineering, social sciences and the humanities. This study followed soon after the implementation of the crisis-driven-innovation strategy plan, where an emergency remote teaching strategy was planned, approved and implemented within the span of one month. In compiling this strategy, a prior institution-wide project gathered quantitative data from 450 survey questionnaires that were sent out to lecturers, as well as library support staff (Van Wyk et al., 2020). The foregoing project aimed to implement interventions, which included resourcing, and training and monitoring academic and support staff to continue with their programmes remotely. Given that the mobile penetration in Africa is relatively high (see GMSA, 2021), the strategy explored the application of mobile technology in learning and support (Van Wyk et al., 2020). High-level negotiations with several providers and telecommunications companies commenced to provide students and staff with data and white-listed access. This study builds on the prior 2019 project at the case under study, which identified the need for further research, particularly where library support was concerned. The purpose of this article is to report on the second study, gauging the reactions, experience and perceived readiness of libraries to switch to emergency remote teaching and support.

Rationale

This study was conducted to explore information specialists’ experience of a crisis-driven-innovation plan implemented at a higher education institution in South Africa. The rationale for the study was to expand on the prior institution-wide project plan that informed the crisis-driven-innovation planning in 2019. As a follow-up study, 26 information specialists and their 6 managers were approached to explore their experiences, efficacy and reactions to the emergency remote teaching and strategy for the library sector as an academic support partner. The aim was to further improve on the implementation success of the strategy.

Conceptual lens

Studying and planning for rapid and innovative interventions during times of uncertainty must consider the transboundary nature of the ecosystem, as well as the socio-technical and socio-economic variables at play. A multi-theoretical approach was the best option for this study to underpin all the tangents and complexities in developing a best-practice model. Crisis innovation models, critical digital librarianship, digital exclusion frameworks and the exposure to information poverty frameworks informed this study. As such, the constructs of information poverty, mobile learning, digital literacy, creating microcontent and digital exclusion, as well as related concepts, were explored further.

Frameworks and models for studying information poverty have been addressed by Chatman (1996), Brits and Blignaut (2001) and Bronstein (2014). Most information poverty frameworks and models hinge on information-seeking behaviour around human needs and information needs. Studies report the prevalence of perceived secrecy, feared deception, risk-taking and situational relevance (Bronstein, 2014). Studies allude that the information poor may be silent or conceal or ignore their information needs. This avoidance behaviour rests on incorrect perceptions and anxieties around the anticipated negative consequences of seeking and sharing information. In an educational ecosystem, this behaviour can have detrimental consequences. The result is unfulfilled information needs and a greater possibility of failing.

In addition to information poverty frames, critical digital pedagogy and critical librarianship frames offered a deeper scope for praxis under crisis conditions in an educational landscape already marked by inequalities. Boczar and Jordan (2022) highlight that critical digital pedagogy is student-centred, where the student is at the centre of learning. Drabinski explains
that critical librarianship acknowledges the existence of power relations in creating library spaces:

Rather than concerning itself with the radical, or root, of various problems, this critical stance looks at what is and tries to understand how it came to be that way, what various systems produce and reproduce in the world, what the stakes might be in accepting something as natural, and how we might imagine systems, structures, objects, and processes differently. (Drabinski, 2019: 51)

Critical librarianship sets out to address disrupting systems of inequality and exclusion (Jacobs and Murgu, 2017), and it is intrinsically connected to critical pedagogy. Some of the shared constructs between critical librarianship and critical pedagogy – digital exclusion, social injustice and information poverty, among others – are often observed during times of disruption. As such, critical librarianship links to critical digital pedagogy in the sense that it, inter alia, addresses social justice, power structures, access to information, openness, capacity, trust and inclusion issues. The concepts of critical librarianship and critical digital librarianship must be explored further in African higher education. It is pivotal for librarians and information specialists to understand and apply critical values to digital services so that the role of libraries in open pedagogy under emergency conditions can be realised.

**Literature review**

Higher education institutions in South Africa have implemented alternative strategies and crisis-driven innovations for remote teaching and learning during the disruption (Crawford et al., 2020). Crisis-driven innovation is explained as the emergency planning necessitated by sudden changes or a scarcity in resources (Bessant et al., 2012; Flavin and Quintero, 2018). Crisis-driven innovation may be a more familiar concept in business models than in higher education and libraries. During COVID-19, it was useful to apply this model also to higher education institutions (Van Wyk et al., 2020), where educational technology paved the way for emergency remote learning via technology-assisted education and information support. These temporary measures were rapid responses to sudden disruption, and not designed to replace face-to-face services permanently.

The institution under study already had online platforms and virtual classrooms in place for all services and programmes offered before the COVID-19 outbreak. This position assisted in the rapid response to the crisis. In this institution, embedded library support was in place for both asynchronous and synchronous instruction, facilitation, learning and teaching. Reportedly, the most popular online platforms were Blackboard, Zoom, Microsoft Teams and Google Classroom (Ting et al., 2020).

The foremost challenge was the prerequisite access to stable and affordable connectivity. The use of online platforms and resources furthermore required sufficient and affordable data. In the case under study, this infrastructure was offered free of charge to students on residential campuses but became a barrier to access during lockdowns. While many students in this institution do not have stable Internet connectivity, most have access to a mobile phone. The learning management system referred to in this case offers both offline and mobile access to learning content and information sources. Deserving students received sponsorship to purchase data for study purposes.

**Disaster management and risk management**

The crisis-driven innovation in this study had to consider existing disaster plans. Ezenyilimba et al. (2018) allude to the four components of a disaster management plan – namely, prevention, preparedness, response and recovery. Although most higher education institutions had disaster management and risk management strategies, these did not address the challenges faced during lockdowns, and many institutions struggled with this transition. The COVID-19 pandemic significantly differed from previous disasters (Dahlke et al., 2021). Most South African library and information services have disaster plans in place, though it is questionable whether these prepared them sufficiently and assisted them during the recent lockdowns. Ezenyilimba et al. (2018) describe disaster management as plans activated during unforeseen events to prevent harm to people and resources, and continue operating. However, the full impact of the emergency remote services was not anticipated or clearly mapped in existing policies.

**Emergency remote teaching and library services**

E-learning should not be confused with emergency remote teaching and learning, which attempts to provide emergency and temporary access to instruction and instructional supports in a manner that is quick to set up and reliably available during an emergency or crisis (Van Wyk et al., 2020). Emergency remote teaching and learning is a temporary shift to an alternative education delivery mode, which may return to normal once the crisis ends. E-learning refers to learning in which instruction and engagement with lessons, activities and assessment occur predominantly online, as is the case in this study.
The evolution in technology and its ubiquitous nature have changed all facets of society, including higher education and libraries. It has altered the way we live, how business activities are conducted, and how knowledge is shared. Considering the continuous evolution of technology and the emergence of the Fourth Industrial Revolution, technological skills have become an essential requirement to participate in the current digital era. Libraries have also witnessed this transformation, but there are still sectors in Africa and southern Africa that have not made this transition and rely on outdated practices and technologies. Nowadays, teaching and learning activities are being subjected to various technological innovations, offering flexibility for students and information specialists. The literature (including Matli and Ngoepe, 2020) has also shown that the effective use of technological resources, such as mobile library services, offers students ample access towards a high learning gain. Therefore, the lack of information and digital literacy and fluency will hamper students’ potential to succeed (Matli and Ngoepe, 2020).

**Microlearning and mobile library services**

Wang et al. (2021) suggest that microlearning has benefits during disruptive events. Microlearning is generally seen as offering learning content in smaller, episodic, manageable and easy-to-use segments, often with mobile technology as an access point. Wang et al. (2021) mention that the characteristics of microlearning can include shorter engagement periods, offering less content at any one time, coherency, and being media-rich. Microlearning as part of the learning strategy was considered in this case for the overall emergency remote teaching and learning strategy, as well as for library support. This is learning that focuses on a subsection of a topic at any one time. Sadeck (2016) distinguishes between e-learning, which is technology-assisted learning, and e-teaching, which is what the educator does in an online environment. He posits that ‘e-teaching’ should be the preferred term as this directly involves the educator. An argument for e-facilitation in libraries could be made. The emergency remote teaching and learning strategy for this study had to be cognisant of these differences.

**Digital literacy and digital fluency**

Due to the proliferation of digital technologies and educational technologies, digital literacy and digital fluency are requisite skills for information specialists, lecturers and students alike. Digital literacy entails individual awareness, attitude and cognitive thinking, and the ability to utilise technological tools and infrastructures appropriately (Matli and Ngoepe, 2020). It also entails locating, assessing, analysing and integrating digital resources to generate new insights in a specific context. Literacy exceeds the mere ability to read and write with meaning and understanding, and digital skills go beyond having mere technical skills. Student transition requires individual cognition of digital tools (Clarke, 2020). Students who lack technological skills are at a severe disadvantage. This socio-technical reality has compelled the need to improve digital literacy, which is a prerequisite to be a participant in a digital ecosystem (Nelson et al., 2011). The ubiquitous and pervasive nature of disruptive technologies has resulted in the reformation of society at large. Considering the continuous evolution of technology and the emergence of the Fourth Industrial Revolution, technological skills have become essential for participation in an online teaching and learning environment. Clearly, a lack of digital literacy will negatively impact students’ success, especially during times of crisis.

Literacy fluency exceeds the ability to read and write, and implies that sense-making and understanding will take place. Likewise, digital skills go beyond having technical skills (Clarke, 2020). Jacobson and Mackey (2013, 2016) allude that a narrow definition of digital literacy will not suffice in online teaching and learning as digital pedagogies and critical digital librarianship are important subsets to be considered. Lecturers need to inculcate a more comprehensive approach to metaliteracy in order to advance critical thinking and reflection in online learning communities.

**Information poverty and protective information behaviour**

Marcella and Chowdhury (2020) remind us that the information poverty and information deficit of the information rich and information poor has pervaded information services and information science for decades. Similarly, researchers in information behaviour have explored information as an empowering agent in terms of the ways in which access to and the use of information can assist individuals to overcome obstacles, take advantage of the opportunities available to them and improve their lives (Marcella and Chowdhury, 2020). One of the biggest challenges that higher education institutions face is the issue of a digital divide existing among students. A digital divide refers to the gap between individuals who have access to and the skills to use information and communications technology and those who do not.
It is important to note that South African higher education institutions are faced with complex and unequal socio-economic realities and equality gaps (Howard et al., 2020). Here, information poverty is a social condition that has been around for decades. IFLA (2018) describes information poverty as a condition where individuals, groups and communities lack the essential attributes, access and resources to find and apply quality information. Marcella and Chowdhury (2020) state that information poverty points to exclusion from access to information sources. Exclusion may be the result of sets of barriers that may include technological, educational and economic barriers, among others, and leads to an information deficit. The occurrence of emergency conditions will exacerbate these existing barriers and information poverty. Typically, information poverty and a poor information infrastructure and support go hand in hand (IFLA, 2018). Not having the required infrastructure, such as connectivity, data, devices and laptops, as well as digital fluency, is problematic. In addition, human agency is necessary to accommodate the dire need for human support among disadvantaged students. They must be able to rely on the continuous support of online and emergency remote library services. Mere access to technological resources does not guarantee better academic performance if students lack the technological skills to capitalise on such technologies for learning.

**Human agency and collegiality in a changed online landscape**

Generally, human agency is described as an individual’s will and capacity to make purposive decisions and consciously reflect and act on their environment. Bandura (2018) states that it is a metacognitive ability to reflect on one’s capabilities, actions and thoughts. The two questions are: How does human agency change in an online environment, and can agency be collegial and collective? Aitken and Hays (2021) state that online education requires human agency, while Bandura (2018) postulates that collective agency is just as important in sharing knowledge.

**Research design**

This study followed the implementation of a crisis-driven-innovation strategy at a higher education institution in South Africa. The broader institutional crisis-driven-innovation plan indicated the need for further research to prepare libraries to continue operations during the COVID-19 lockdowns. The purpose of this study was to explore the readiness of staff to switch to emergency remote teaching and information support. The study aimed to implement interventions on the further training and support required, and resource staff to cope with the sudden change and rapid response to that change. The study collected qualitative data during focus group interviews with information specialists and their managers. The non-probability sample was purposively selected and comprised information specialists of 26 campus libraries of the institution. The transcribed data was coded and thematically analysed. Focus groups in research studies can be described as a form of group interview in the presence of an interviewer or moderator (Bezuidenhout et al., 2014). In focus group studies, the interaction within the group is important to obtain the desired information on a specific research topic, and the collective views are more important than individual views. It is important to note that the focus group interviews were carried out after the results of the broader study were known, and initial training and orientation were already in place.

The qualitative data collected during the focus group interviews was analysed using thematic reflective analysis to codify the categories and main themes from the rich data gathered. In this case, in-depth socio-technical information and data were gathered. Qualitative content analysis and thematic analysis are classified as a descriptive qualitative research design, which aims to systematically describe a phenomenon, situation or population.

Thematic analysis is related to phenomenology and focuses on the participants’ perceptions, opinions, feelings and experiences subjectively (Noon, 2018). The focus group interviews were recorded and transcribed. Coding the rich data and certifying the transcripts as a true and accurate reflection added to the trustworthiness of the study. Researcher observations and field notes mapped the analytical process, uncovered the Researcher’s (there was one researcher) perspectives and refined the data collection.

**Data collection**

The focus group interviews were conducted online, recorded and then transcribed. The transcriptions were audited and certified to be a true copy of the focus group discussions. During the focus group discussions, the participants shared their experiences, challenges and involvement in the institution’s emergency remote teaching and learning strategy. In addition, secondary data was considered from the literature review and the broader institutional quantitative study (see Van Wyk et al., 2020). The primary data obtained from the focus group interviews was analysed thematically. Guided by the chosen conceptual constructs, the group was
prompted with questions around their observations, reactions and experiences regarding the implementation of the emergency remote teaching and learning strategy, the management of the crisis, and the socio-technical challenges among staff and students, such as access, inequalities, networking, and levels of digital literacy and fluency. There was a good synergy in the group and the discussions resulted in rich and useful data. The data that was collected included research observations and field notes. All research ethics were observed.

**Data analysis**

The primary data from the focus group interviews is outlined in Table 1. The secondary data obtained from the prior survey (Van Wyk et al., 2020) assisted in the preparation of the focus group interviews. The subsequent focus group interview transcriptions were analysed following the steps of thematic analysis explained by Clarke and Braun (2017): getting familiar with the data, generating initial codes, identifying themes, revision and generating a report. Thematic analysis is the process of identifying codes from which patterns and themes are derived (Vaismoradi et al., 2016).

**Table 1. Themes and subthemes.**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
</tr>
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<tbody>
<tr>
<td>Responses to the emergency remote teaching and learning strategy</td>
<td>Planning, implementation and monitoring</td>
</tr>
<tr>
<td></td>
<td>Including the library as an academic support partner</td>
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<tr>
<td>Outreach and networking initiatives</td>
<td>Colleaguality</td>
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<td></td>
<td>User groups</td>
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<td>Support groups</td>
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<td>Perceived readiness of library staff to continue online</td>
<td>Capacity</td>
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<td></td>
<td>Skills gaps</td>
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<td></td>
<td>Flexibility</td>
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<td>Resourcing</td>
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<td>Management, monitoring, quality and support</td>
<td>Weekly reporting</td>
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<td></td>
<td>Contractual and legal considerations: revision of contractual agreement</td>
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<td></td>
<td>Research data management (RDM)</td>
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<td></td>
<td>Collaboration with other academic departments</td>
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<td></td>
<td>Time management, integration and productivity</td>
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<tr>
<td>Socio-technical constructs</td>
<td>Data costs, affordable connectivity and access</td>
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<td></td>
<td>Information poverty, information avoidance and protective behaviour</td>
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<td>Literacies, metaliteracy and fluencies</td>
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<td></td>
<td>Remote technical and information support</td>
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<td>Human needs</td>
<td>Inclusivity/exclusion</td>
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<td></td>
<td>Motivation</td>
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<td></td>
<td>Anxiety</td>
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<td>Trust</td>
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<td></td>
<td>Collaboration</td>
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<td>Human agency</td>
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<td>Remote wellness support</td>
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<td>Praxis, observed student agency</td>
<td>Critical digital pedagogy and online facilitiation</td>
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<td></td>
<td>Observed changes in student agency</td>
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<td>Participation in hybrid online spaces</td>
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<td>Library online embeddedness and participation</td>
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<td>Literacies: information, digital and metaliteracies</td>
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<td></td>
<td>Microlearning and microcontent</td>
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<td>Mobile learning and mobile library services</td>
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<tr>
<td></td>
<td>Instructional design, tutorials, facilitation</td>
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**Discussion of findings**

Vaismoradi et al. (2016) state that qualitative research, as a group of approaches for the collection and analysis of data, aims to provide an in-depth, socio-contextual and detailed description and interpretation of the research topic. As such, the study has seven themes.
**Response to the emergency remote teaching and learning strategy**

The participants shared that although some managers wanted to close the libraries entirely, they eventually did form part of the emergency remote teaching and learning strategy. The critical importance of access to information during the sudden shift to remote learning was realised. The findings are that the information specialists found the emergency remote teaching and learning strategy useful but reported that, despite training, they were only partially prepared for the challenges they faced.

**Networking**

The participants reported that the transition was difficult, but the support and guidance received from national and regional library management teams assisted in transitioning from predominantly offering services in a physical setting. The librarians formed communities of practices to support each other remotely.

**Perceived readiness for remote support**

Library training and refresher courses offered the necessary exposure to digital and mobile library services. Electronic sources, tutorials and prescribed material were already embedded and accessible via the library website and the learning management system. The information specialists were provided with laptops and data to work from home.

**Management and monitoring**

The participants reported that they were involved in compiling daily action plans, and that they had to report on specific goals and outcomes. They felt supported by management.

**Socio-technical aspects**

The participants mentioned that, regrettably, affluent data and information providers were initially unapproachable in getting reasonable and discounted data packages for students. This had a negative effect on the prevalent information poverty during the crisis. They further shared that some students were overwhelmed and lacked motivation to study. The participants said that the collaboration between student-wellness divisions and libraries could have been better in assisting students.

**Human needs, skills and capacity**

The participants shared that many students confided that they felt isolated, anxious and overwhelmed. They reported that many students were struggling with social problems at home and often could not find a quiet place to study. They reported that a lack of student agency towards making self-reliant decisions pointed to the presence of information poverty and information avoidance behaviour. Furthermore, a lack of digital fluency among students and some lecturers was observed. To address these challenges, the library and information services assisted in the creation of annotated bibliographies for assignments and online classes to help with accessing the right information. Some of the participants admitted to their own lack of digital literacy and pedagogical knowledge, as well as online facilitation skills. They felt that they needed additional training.

**Praxis and agency**

The participants shared that they were in the process of developing improved online services for postgraduate students and online students but had to expedite the roll-out of these plans on a wide scale when the lockdowns were enforced. Students shared that they missed the opportunities that collaborative learning offered in physical library spaces.

**General observations and comments**

The participants' general observations and comments included the following:

- The change in assessment strategies to include more self-study and portfolios of evidence instead of summative assessments highlighted the need for students to be aware of the sources and services available to them;
- The importance of honouring vendor agreements such as digital rights management was reaffirmed, as innovative interventions must still be legal;
- The need for libraries to constantly update skills such as digital literacy was underpinned;
- The role of libraries as academic partners and advocates for the eradication of information poverty was highlighted.

The seven themes and subthemes that resulted after the coding and data analysis are summarised in Table 1.

Ultimately, the most important observation is that the institution's decision-makers and sectional managers at first considered closing the libraries and
letting staff go on leave. This was opposed and the resulting response was praised and welcomed by both academics and students. The role of academic libraries as academic partners has often been underpinned in the literature (see Henderson, 2016). This was corroborated in this study, and the librarians were generally of the opinion that the disruption afforded the opportunity for libraries to be valued as worthy academic partners. As one of many examples, some information specialists relayed how they assisted lecturers with finding resources by creating annotated bibliographies to assist in document discovery.

**Recommendations**

It is during a disruption that inequalities are most visible. In Figure 1, a transboundary model is presented. The need to cement the library and information services as an academic partner that is capable of addressing inequalities and information poverty was established. The model takes into consideration that, in times of crisis, quality and legality should not be compromised, but socio-technical pressures, such as information poverty, must be seen as an ongoing reality. The model underpins the need for information specialists to be present, visible and proactive in higher education, and to embrace new developments. The model emphasises the importance of transboundary innovation and collaboration, both within the institution and with external parties such as vendors, services and systems. The model underpins the importance of critical digital librarianship, as well as critical digital pedagogy.

In explaining critical librarianship, Drabinski (2019) warns that in our efforts to make access to information seamless, the information specialist can become invisible. But the model in Figure 1 outlines four areas where the presence of a library is crucial in the transboundary working towards an innovative response to disruption. The areas include: adapted policies and strategies; the constant monitoring of responses and readiness to change; the importance
of legal compliance; and a continuation of adapting and innovating towards a responsible, just and inclusive system to cope with disruption. The model can be used to reaffirm the positioning of academic library services in higher education.

Conclusion

The aim of this study was to gauge the responses of information specialists to the implemented emergency remote teaching and learning strategy. The most important finding is that the institution’s initial response was to close its libraries during the pandemic lockdowns. On the insistence of the library management, the libraries remained open and adapted their services in an online setting. While emergency remote teaching was a rapid response to the crisis situation, the exercise allowed for much introspection on how to improve on current praxis. The valuable lessons learnt not only assisted the libraries to improve their policies and procedures; they also highlighted the critical role that libraries play as academic partners in a still unequal educational ecosystem. The true impact of information poverty was realised and the renewed importance of a library and information service presence and embeddedness in teaching and learning towards improved inclusivity and social justice came to the fore. The value of this study lies in the institution-wide transboundary response that has been proposed as an intervention, which also serves as a blueprint for future eventualities. The findings emphasise the need for further research in library risk management, understanding the affordances of mobile library services, and the creation of microcontent to support teaching and learning. The rigorous research in a real-life setting, both on an institutional and also on a library and information service level, allows for libraries to capitalise on disruptive circumstances and establishes the pivotal role of libraries as academic partners in higher education.

Declaration of conflicting interests

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References


Noon EJ (2018) Interpretive phenomenological analysis: An appropriate methodology for educational research?


**Author biography**

**Brenda van Wyk** has a background in managing both public library services and academic library services. She is currently a senior lecturer and research associate at the University of Pretoria, South Africa.
A study on the knowledge and perception of artificial intelligence

Copyright literacy of library and information science professionals in Pakistan

Identifying trends in information security and privacy concern research
Factors contributing to slow completion rate among postgraduate students of the Information Studies Programme at the University of Dar es Salaam, Tanzania

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The University of the Free State Neville Alexander Library book club and information-seeking behaviour

The University of the Free State Neville Alexander Library book club and information-seeking behaviour

Abstracts

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The University of the Free State Neville Alexander Library book club and information-seeking behaviour

Abstracts
School library censorship: Looking at the perspective of a school librarian association in Indonesia

Framework for communicating library training at a South African university

Library and information services’ reflections on emergency remote support and crisis-driven innovations during pandemic conditions
Abstracts

Copyright literacy of library and information science professionals in Pakistan

Ghahib Khan, Muhammad Basir
IFLA Journal, 49-3, 514-526

Abstract

Library and information science professionals should possess a basic understanding of copyright law. This study was conducted in Pakistan, a country where copyright law is not widely understood. The study aimed to assess the copyright literacy of library and information science professionals in Pakistan.

Identifying trends in information security and privacy concern research

Maor Weinberger, Dan Bouhnik
IFLA Journal, 49-3, 527-540

Abstract

Information security and privacy are critical issues in today's digital age. This study aims to identify trends in information security and privacy concern research.

Factors contributing to slow completion rate among postgraduate students of the Information Studies Programme at the University of Dar es Salaam, Tanzania

Emmanuel Marco Mkhai
IFLA Journal, 49-3, 554-563

Abstract

Completion rates among postgraduate students are crucial for academic success. This study investigates factors contributing to slow completion rates among postgraduate students of the Information Studies Programme at the University of Dar es Salaam, Tanzania.

South African academic libraries as contributors to social justice and ubuntu through community engagement

Siviwe Bangani, Luyanda Dube
IFLA Journal, 49-3, 541-553

Abstract

Academic libraries in South Africa play a significant role in promoting social justice and ubuntu through community engagement.

Copyright

Copyright laws and regulations are essential for protecting the rights of creators and ensuring the fair use of intellectual property. This section discusses the importance of copyright literacy among library and information science professionals.

Information security and privacy

Information security and privacy concern research is crucial for understanding the current landscape and identifying areas for improvement.

Completion rates among postgraduate students

Completion rates among postgraduate students are critical for academic success. This study examines factors contributing to slow completion rates at the University of Dar es Salaam, Tanzania.

Community engagement

Community engagement is a vital aspect of academic libraries' role in society. This study highlights the importance of librarians in promoting ubuntu through community engagement.

Copyright and intellectual property

Copyright laws and regulations are fundamental for protecting intellectual property. This section discusses the role of library and information science professionals in promoting copyright literacy.

Identification of trends

Trends in information security and privacy concern research are essential for understanding the current landscape and identifying areas for improvement.

Factors contributing to slow completion rates

Completion rates among postgraduate students are crucial for academic success. This study examines factors contributing to slow completion rates at the University of Dar es Salaam, Tanzania.

Community engagement and ubuntu

Community engagement is a vital aspect of academic libraries' role in society. This study highlights the importance of librarians in promoting ubuntu through community engagement.
摘要
本文旨在调查达累斯萨拉姆大学情报学研究生结业进度缓慢的原因。本研究同时采用了定性和定性研究方法。受访者共有61名，包括56名参与问卷调查的研究生和5名接受采访的讲师。调查结果显示，大多数学生完成学业的时间超过了规定的时间。造成这种情况的因素包括学生无法理解导师的观点、学生和导师之间的不良关系、多重角色和糟糕的研究环境、研究技能的不足和财政限制。本研究得出了结论，学生结业进度缓慢不是单一因素的结果。克服这些问题对于促进学生及时完成学业至关重要。因此，本研究建议该专业应为学生创造有利的学习环境，提升学习成果。

Bibliotherapy by medical librarians for the blind females

医学图书馆员为盲人女性使用阅读疗法
Maryam Shekofteh, elaeheh Ahmadi, Maryam Kazeroni, Sedigheh Salabifard
IFLA Journal, 49-3, 564-572

摘要
本研究实验研究旨在探讨团体阅读疗法对盲人女性自尊的影响。30名盲人女性愿意参与这项研究。她们被随机分为实验组和对照组。数据是通过库珀史密斯自尊量表收集的。一名医学图书馆员与一个实验组的心理顾问合作，对实验组进行了四次阅读干预。干预后，实验组的自尊得分高于对照组(p<0.05)。实验组的平均自尊得分在干预后显著增加(p<0.05)。实验组的自尊分数显著高于对照组。本文建议由医学图书馆员和心理学家组成的团队使用阅读疗法来改善盲人和其他残疾人的心理问题。

The University of the Free State Neville Alexander Library book club and information-seeking behaviour

南非自由州大学内维尔亚历山大图书馆读书俱乐部与信息检索行为
Dina Mokgadi Mashiyane, Tebogo Agnes Makhurupetsi, Thuto Kgoshiemang
IFLA Journal, 49-3, 573-586

摘要
信息素养在学术和日常生活中至关重要。图书馆员可以利用各种教学技巧接触到用户，并培养他们有效利用现有信息所需的能力。本研究的目的是确定读书俱乐部成员对其信息检索行为的看法，以及俱乐部对提高成员的信息搜索能力有重大贡献。研究对象包括49名读书俱乐部成员，数

据通过调查和焦点小组访谈等方式收集。研究表
明，读书俱乐部提高了信息搜索训练的主动性、
实践度和图书馆员的参与度。本研究可用于倡导
图书馆书俱乐部成为加强信息搜索指导的平台，
并提高这一能力，同时也可激发对这一现象的进一步研究。

School library censorship: Looking at the perspective of a school librarian association in Indonesia

学校图书馆审查制度以印尼学校图书馆员协会为视角
Ariandra Anggraeni Ayuningtyas, Heriyanto, Ana Irhandayaningsih, Roro Isya Permata Ganggi
IFLA Journal, 49-3, 587-595

摘要
学校图书馆必须满足学生的信息需求，提供支持学术课程和适合学习活动的书籍。不包含敏感或有争议信息的书应适合学生使用。本研究
从印尼学校图书馆员协会的视角审视了学校图书馆审查问题。与工作人员的访谈和主题分析，本研究发现学校图书馆审查问题的看法相关的四个主题。审查的根本原因
审查制度如何实施 如何成为一种职业的图书馆员
以及审查的紧迫程度 有关审查制度的报道
很少，因此协会并未察觉这是个紧迫的问题。相似审查图书馆员，协会更重视培养信息素养以
及图书馆员的能力等方面。因此，这个问题目前
没有得到国家的重视。

Framework for communicating library training at a South African university

南非大学宣传图书馆培训的框架
Mahlaga Johannes Molepo, Sihle Blose
IFLA Journal, 49-3, 596-609

摘要
本文结合社会建构主义和变革范式，提出了一
个向大一新生宣传图书馆培训的框架。虽然大学
生已具有文字读写能力，但仍然存在很多不
同于普遍方法的新方式来培养学生们的信息素
养，例如高校与研究图书馆协会的高等教育信息
素养框架。本文以自由州大学图书馆的单个案例
为研究对象，解决了教学和学习实践的碎片化问
题。研究数据的收集采用了两种方法。综合文献
综述和文献分析法资料和文献证据证明了为规
划目的开发基础理论的需求是合理的。此外，我
们还发现，包含模型、思想和框架的综合性概念
可以为新的教学方法提供信息。本文提出了向大
Copyright literacy of library and information science professionals in Pakistan

(Compétences en matière de copyright des professionnels des sciences de l’information et des bibliothèques au Pakistan)

Ghalib Khan, Muhammad Basir
IFLA Journal, 49-3, 514-526

Résumé:
Les professionnels des sciences de l’information et des bibliothèques sont supposés avoir des compétences adéquates en matière de copyright et de ce qui s’y rapporte. Une étude quantitative au niveau provincial (Khyber Pakhtunkhwa) s’est penchée sur les compétences en matière de copyright des professionnels des sciences de l’information et des bibliothèques au Pakistan. Sur 311 répondants, 279 ont participé à l’étude. Les résultats indiquent que les professionnels des sciences de l’information et des bibliothèques sont plutôt compétents en matière de copyright et de ce qui s’y rapporte. La majorité d’entre eux (94%) a déclaré que le matériel publié, comme les livres et les articles, était protégé par copyright. De même, 73% connaissait les lois locales sur le copyright. Toutefois, ces professionnels sont moins bien informés de la législation internationale sur le copyright. Les professionnels des bibliothèques indiquent que la formation actuelle en sciences de l’information et des bibliothèques n’offre pas de connaissances adéquates en matière de copyright. Par conséquent, la plupart (94%) a exprimé la nécessité d’inclure la législation sur le copyright ainsi que les concepts de base du copyright à la formation sur les
Résumé:

L’objet de cet article est d’évaluer le rôle des bibliothèques universitaires en tant qu’agents de défense, de promotion et de collaboration dans le cadre d’un engagement communautaire. Il s’agit d’une étude qualitative utilisant des entretiens avec 20 responsables de bibliothèque et 8 groupes de discussion avec des bibliothécaires universitaires d’Afrique du Sud dans l’objectif de collecter des données. Les résultats révèlent que les approches de l’engagement communautaire des bibliothèques universitaires sud-africaines peuvent être regroupées par thèmes. Ces derniers comprennent les contributions à une éducation de qualité, la santé et le bien-être, le travail et l’emploi, la sécurité alimentaire, la résolution du problème de la fracture numérique, la problématique environnementale, l’égalité et l’égalité des genres et la préservation de l’héritage national. En ce qui concerne la justice sociale, quatre thèmes ont émergé des discussions avec les participants: (1) ils ont déclaré que l’engagement communautaire est une action de justice sociale délibérée; (2) l’engagement communautaire a été associé à une contribution aux droits à l’accès à l’éducation et à l’information, entre autres; (3) ils ont souligné les actions de redressement social de leurs bibliothèques, qui contribuent à la justice sociale; et (4) ils ont associé l’engagement communautaire à l’ubuntu, qui est lui-même un concept de justice sociale, ont-ils argumenté. Les résultats soutiennent les activités d’engagement communautaire à titre de contribution à une société socialement juste et à l’ubuntu. Les résultats confirment la nécessité que les bibliothèques universitaires (et les universités en général) aillent au-delà de leur rôle traditionnel d’enseignement, de soutien de l’apprentissage et de la recherche et participent à l’engagement communautaire non seulement au titre de responsabilité sociale attendue mais aussi au titre de collaboration à une société et à un développement socialement justes. Sur la base des résultats, cet article considère la justice sociale et l’ubuntu comme étant inhérents à l’engagement communautaire et non comme une notion accidentelle de celui-ci.

Factors contributing to slow completion rate among postgraduate students of the Information Studies Programme at the University of Dar es Salaam, Tanzania

(Facteurs contribuant à la lenteur d’achèvement du Programme d’Études sur l’Information parmi les étudiants de troisième cycle à l’Université de Dar es Salaam, Tanzanie)

Emmanuel Marco Mkhai

IFLA Journal, 49-3, 554-563
Résumé:
Cette étude a été menée pour examiner les causes de la lenteur d’achèvement du Programme d’Études sur l’Information parmi les étudiants de troisième cycle à l’Université de Dar es Salaam. L’étude a utilisé des approches quantitatives et qualitatives de la recherche. Elle a impliqué 61 répondants, y compris 5 étudiants de troisième cycle ayant répondu à un questionnaire et 5 enseignants ayant participé à un entretien. Les résultats ont révélé que la majorité des étudiants prenaient plus de temps que celui stipulé par l’université pour achever leurs études. Les facteurs responsables incluent l’incapacité des étudiants à comprendre les commentaires de leurs superviseurs, les mauvaises relations entre les étudiants et les superviseurs, les rôles multiples et un mauvais environnement de recherche. Des incompétences en ce qui concerne les compétences en matière de recherche et des contraintes financières ont également été notées, celles-ci contribuant à la lenteur d’achèvement du programme. L’étude conclut que cette lenteur d’achèvement parmi les étudiants n’est pas une fonction d’un seul facteur. Il est essentiel d’aborder ces facteurs pour améliorer l’achèvement des études dans les délais impartis. Par conséquent, cette étude recommande que le programme crée un environnement d’apprentissage qui soutienne ses étudiants, de manière à améliorer les résultats de l’apprentissage.

Bibliotherapy by medical librarians for the blind females

(Bibliothérapie par des bibliothécaires médicaux pour les femmes aveugles)

Maryam Shekofteh, eloheh Ahmadi, Maryam Kazerani, Sedigheh Salabifard

IFLA Journal, 49-3, 564-572

Résumé:
Cette étude quasiment expérimentale visait à étudier l’effet de la bibliothérapie de groupe sur l’estime de soi des femmes aveugles. Trente femmes aveugles ont accepté de participer à l’étude. Elles ont été divisées aléatoirement en groupe expérimental et en groupe de contrôle. Les données ont été collectées par le biais du Coopersmith Self-Esteem Inventory. Un bibliothécaire médical a réalisé une intervention de bibliothérapie en huit sessions, en collaboration avec un conseiller psychologique pour le groupe expérimental. Après l’intervention, les résultats en matière d’estime de soi du groupe expérimental étaient supérieurs à ceux du groupe de contrôle (p < 0.05). Les résultats moyens en matière d’estime de soi du groupe expérimental après l’intervention étaient nettement supérieurs (p < 0.05). L’augmentation la plus importante du pourcentage est liée à la famille et aux sous-échelles d’estime de soi éducationnelles/professionnelles. L’utilisation de la bibliothérapie par une équipe de bibliothécaires médicaux et de psychologues pour améliorer les problèmes psychologiques des aveugles et d’autres personnes handicapées est recommandée.

The University of the Free State Neville Alexander Library book club and information-seeking behaviour

(Le club de lecture et le comportement de recherche d’informations de la Bibliothèque Neville Alexander de la University of the Free State)

Dina Mokgadi Mashiyane, Tebogo Agnes Makhurupetsi, Thuto Kgosiemang

IFLA Journal, 49-3, 573-586

Résumé:
La maîtrise de l’information est essentielle à la réussite universitaire et au quotidien. En utilisant différentes techniques pédagogiques, les bibliothécaires touchent leurs utilisateurs et les équipent des compétences nécessaires pour utiliser efficacement les informations disponibles. L’étude visait à déterminer les perceptions des membres quant à leur comportement de recherche d’informations et dans quelle mesure le club de lecture a contribué à l’amélioration de leurs compétences de recherche d’informations. La population de l’étude était constituée de 49 membres du club de lecture, auprès desquels des données ont été collectées au moyen d’une enquête et d’une discussion de groupe. L’étude révèle que le club de lecture améliore les initiatives et les pratiques de formation à la recherche d’informations, ainsi que l’engagement des bibliothécaires. Cette étude peut être utilisée pour recommander et améliorer les clubs de lecture en tant que plateformes pour améliorer l’instruction des processus de recherche d’informations. Elle peut aussi motiver d’autres recherches concernant ce phénomène.
School library censorship: Looking at the perspective of a school librarian association in Indonesia

(Censure dans les bibliothèques scolaires: étude du point de vue d’une association bibliothécaire scolaire en Indonésie)

Apriana Anggraeni Ayuningtyas, Heriyanto Heriyanto, Ana Irhandayaningsih, Roro Isya Permata Ganggi

Résumé:
Les bibliothèques scolaires doivent répondre aux besoins en information des étudiants, en tant que ressources pour leur apprentissage, avec des collections qui viennent soutenir le programme scolaire et qui conviennent aux activités d’apprentissage. Une collection ne contenant aucun matériel sensible ou contentieux est une collection appropriée pour les étudiants. Dans cette étude, les questions de censure dans les collections des bibliothèques scolaires sont examinées du point de vue de l’Association of Indonesian School Librarians (Association des Bibliothécaires scolaires indonésiens). L’étude a révélé quatre sujets liés au point de vue de l’Association concernant les questions de censure dans les librairies scolaires sur la base d’entretiens avec le personnel et d’une analyse thématique: les raisons à la base de la censure; la manière dont la censure est implémentée; comment devenir un bibliothécaire compétent; et quel est le degré d’urgence de la censure. La censure fait rarement l’objet de rapports et par conséquent, l’Association ne la considère pas comme un problème urgent. Elle souligne plutôt les problèmes comme la formation à la maîtrise de l’information et au développement des compétences des bibliothécaires que la censure des collections des bibliothèques. Ce sujet ne fait donc pas l’objet d’une attention nationale.

Framework for communicating library training at a South African university

(Cadre de communication de la formation au travail en bibliothèque à l’Université d’Afrique du Sud)

Mahлага Johannes Molepo, Sihle Blose

Résumé:
Cet article combine des paradigmes sociaux constructivistes et transformationnistes pour proposer un cadre permettant de communiquer la formation au travail en bibliothèque aux étudiants de première année. Bien que les indices de performance concernant l’alphabétisation soient universels, des tentatives sont explicitement faites pour s’éloigner de l’approche universelle de la maîtrise de l’information, comme le montre l’Association of College and Research Libraries Framework for Information Literacy for Higher Education. Cet article aborde la fragmentation des pratiques d’enseignement et d’apprentissage dans une seule étude de cas des bibliothèques de l’Université de the Free State. Les données ont été collectées au moyen de deux méthodes: un bilan intégré de la littérature et une analyse de document. De la littérature et des preuves documentées ont été trouvées pour justifier un appel au développement d’une théorie de base à des fins de planification. En outre, l’étude a révélé que les concepts synthétisés de modèles, d’idées et de cadres peuvent informer de nouvelles approches pédagogiques. Cet article propose le cadre Authority Pedagogy Socialization pour communiquer la formation au travail en bibliothèque aux étudiants de première année et il conclut par plusieurs recommandations.

Library and information services’ reflections on emergency remote support and crisis-driven innovations during pandemic conditions

(Réflexions des services de bibliothèque et d’information sur l’assistance à distance en cas d’urgence et les innovations induites par la crise en cas de pandémie)

Brenda Van Wyk Dr

Résumé:
soulignent l’importance de services de bibliothèque et d’information à distance d’urgence. Les conditions créées par la pandémie et le modèle de service à distance soudain ont mis en lumière les inégalités socio-économiques et socio-techniques actuelles ainsi que les exclusions parmi les étudiants. La valeur de l’étude réside dans les réflexions sur la stratégie d’innovation induite par la crise à l’échelle de l’institution mise en place et dans la prise de conscience que les services de bibliothèque et d’information doivent offrir un soutien scolaire actif. L’étude offre un modèle de services de bibliothèque et d’information permettant de préparer de futures éventualités.

A study on the knowledge and perception of artificial intelligence

(Eine Studie über das Wissen und die Wahrnehmung von künstlicher Intelligenz)

Subaveerapandiyan A, Sunanthini C, Mohammad Amees
IFLA Journal, 49-3, 503-513

Zusammenfassung:

Diese Studie untersuchte das Wissen und die Wahrnehmung von künstlicher Intelligenz unter Bibliotheks- und Informationswissenschaftlern in Sambia, indem 245 zufällig ausgewählte Teilnehmer befragt wurden. Die Ergebnisse zeigen, dass die Fachleute aus dem Bereich der Bibliotheks- und Informationswissenschaft der künstlichen Intelligenz positiv und ermutigend gegenüberstehen, aber auch besorgt darüber sind, dass die künstliche Intelligenz die Aufgaben der Bibliothekare ersetzen könnte, und dass es Hindernisse für die Einführung von Technologien der künstlichen Intelligenz gibt. Der Artikel schlägt vor, dass Bibliotheken die Ergebnisse der Studie berücksichtigen sollten, bevor sie künstliche Intelligenz einsetzen, und dass sie die künstliche Intelligenz in ihrem Lehrplan aufnehmen können.

Copyright literacy of library and information science professionals in Pakistan

(Kenntnisse über das Urheberrecht bei Bibliotheks- und Informationswissenschaftlern in Pakistan)

Ghalib Khan, Muhammad Basir
IFLA Journal, 49-3, 514-526

Zusammenfassung:


Identifying trends in information security and privacy concern research

(Identifizierung von Trends in der Forschung zur Informationssicherheit und zum Schutz der Privatsphäre)

Maor Weinberger, Dan Bouhnik
IFLA Journal, 49-3, 527-540

South African academic libraries as contributors to social justice and ubuntu through community engagement

(Südafrikanische wissenschaftliche Bibliotheken als Beitrag zu sozialer Gerechtigkeit und Ubuntu durch gesellschaftliches Engagement)

Siviwe Bangani, Luyanda Dube
IFLA Journal, 49-3, 541-553

Zusammenfassung:

Factors contributing to slow completion rate among postgraduate students of the Information Studies Programme at the University of Dar es Salaam, Tanzania

(Faktoren, die zu einer schleppenden Abschlussquote bei Postgraduierten des Studiengangs Informationswissenschaften an der Universität Dar es Salaam, Tansania, beitragen)

Emmanuel Marco Mkhai
IFLA Journal, 49-3, 554-563

Zusammenfassung:
Diese Studie wurde durchgeführt, um die Ursachen für den schleppenden Studienabschluss unter den Postgraduierten des Studiengangs Information Studies an der Universität von Dar es Salaam zu untersuchen. Für die Studie wurden sowohl quantitative als auch qualitative Forschungsansätze verwendet. Es wurden 61 Personen befragt, darunter 56 Postgraduierte, die an einer Fragebogenerhebung teilnahmen, und es

Bibliotherapy by medical librarians for the blind females

(Bibliotherapie durch medizinische Bibliothekarinnen für blinde Frauen)

Maryam Shekofteh, elaaeh Ahmadi, Maryam Kazerani, Sedigheh Salabifard
IFLA Journal, 49-3, 564-572

Zusammenfassung:

The University of the Free State Neville Alexander Library book club and information-seeking behaviour

(Der Buchclub der Neville-Alexander-Bibliothek der University of the Free State und das Verhalten bei der Informationssuche)

Dina Mokgadi Mashiyane, Tebogo Agnes Makharupetsi, Thuto Kgosiemang
IFLA Journal, 49-3, 573-586

Zusammenfassung:

School library censorship: Looking at the perspective of a school librarian association in Indonesia

(Zensur in Schulbibliotheken: Ein Blick auf die Perspektive einer Schulbibliothekarsvereinigung in Indonesien)

Apriona Anggraeni Ayuningtyas, Heriyanto Heriyanto, Ana Irhandayaningsih, Roro Isya Permata Ganggi
IFLA Journal, 49-3, 587-595

Zusammenfassung:
Die Informationsbedürfnisse der Schülerinnen und Schüler müssen von Schulbibliotheken als Ressourcen für das Lernen der Schüler*innen mit Sammlungen erfüllt werden, die die akademischen Lehrpläne unterstützen und für Lernaktivitäten geeignet sind.

Framework for communicating library training at a South African university

(Rahmen für die Vermittlung von Bibliotheksausbildung an einer südafrikanischen Universität)

Mahlaga Johannes Molepo, Sihle Blose

Zusammenfassung:


Library and information services’ reflections on emergency remote support and crisis-driven innovations during pandemic conditions

(Überlegungen von Bibliotheks- und Informationsdiensten zur Notfall-Fernunterstützung und krisenbedingten Innovationen während einer Pandemie)

Brenda Van Wyk Dr

Zusammenfassung:

A study on the knowledge and perception of artificial intelligence

Subaveerapandiyan A, Sunanthini C, Mohammad Amees

Исследование, посвященное знаниям и восприятию искусственного интеллекта
Субавейерапандиян А, Сунантини С, Мохаммад Амесс

IFLA Journal, 49-3, 503-513

Аннотация: В данном исследовании изучались знания и восприятие искусственного интеллекта среди библиотечных специалистов и специалистов в области информатики в Замбии путем опроса 245 случайно выбранных участников. Результаты показывают, что специалисты в области библиотек и информатики имеют благоприятный и обнадеживающий взгляд на искусственный интеллект, но они в то же время выражают обеспокоенность тем, что искусственный интеллект заменяет функции библиотекарей. В статье обсуждаются препятствия для внедрения технологий искусственного интеллекта в библиотеках Замбии.

Copyright literacy of library and information science professionals in Pakistan

Ghalib Khan, Muhammad Basir

Грамотность специалистов библиотек и профессионалов в области информатики в вопросах авторского права в Пакистане
Халиб Хан, Мухаммад Башир

IFLA Journal, 49-3, 514-526

Аннотация: Считается, что специалисты в области библиотек и информатики обладают соответствующими навыками и компетенцией в отношении авторского права и связанных с ним вопросов. С применением методики количественного опроса на уровне провинции (Хайбер-Пахтунхва) в Пакистане было проведено исследование в области грамотности библиотечных работников и специалистов по вопросам информатики и авторского права. Из 311 респондентов в опросе приняли участие 279. Результаты показывают, что специалисты библиотек и информатики в некоторой степени знакомы с авторским правом и связанными с ним вопросами. Большинство из них (94%) отметили, что опубликованные материалы, такие как книги и статьи, находятся под защитой авторского права. Аналогичным образом, 73% были осведомлены о местных законах об авторском праве; однако они были менее знакомы с международным законодательством об авторском праве. Специалисты библиотек отметили, что действующая учебная программа по библиотечному делу и информатике не обеспечивает адекватных знаний в области авторского права, поэтому большинство (94%) высказались за необходимость включения предметов по законодательству об авторском праве, а также предметов, касающихся основных концепций авторского права, в учебную программу по библиотечному делу и информатике на всех уровнях. Полученные результаты предлагают практические меры по повышению уровня авторской грамотности пакистанских специалистов в области библиотек и информатики.

Identifying trends in information security and privacy concern research

Maor Weinberger, Dan Bouhnik

Выявление тенденций в области исследований проблем информационной безопасности и конфиденциальности
Мэр Вайнбергер, Дан Буюник

IFLA Journal, 49-3, 527-540

Аннотация: Интеллектуальный анализ текста является таким методом исследования, который может быть использован для выявления тенденций исследования и разработок в различных областях знаний. В данном исследовании инструмент автоматизированного текстового анализа (Voyant Tools) был
South African academic libraries as contributors to social justice and ubuntu through community engagement

Siviwe Bangani, Luyanda Dube

Южноафриканские академические библиотеки как вкладчики в социальную справедливость и ubuntu посредством вовлечения сообщества

Сививе Бангани, Луянда Дубе

IFLA Journal, 49-3, 541-553

Аннотация:

Целью данной статьи является оценка роли академических библиотек в качестве защитников социальной справедливости и ubuntu, как промоутеров и инвесторов в рамках взаимодействия с сообществом. Это было качественное исследование, в котором для сбора данных использовались интервью с 20 руководителями библиотек и 8 дискуссий в фокус-группах с библиотекарями из университетских библиотек Южной Африки. Полученные результаты свидетельствуют о том, что подходы академических библиотек Южной Африки к взаимодействию с общественностью можно сгруппировать по нескольким темам. К ним относятся вклад в качественное образование, здравоохранение и хорошее самочувствие, труд и занятость, продовольственная безопасность, преодоление цифрового разрыва, экологические проблемы, равенство и гендерное равенство, сохранение национального наследия и продовольственная безопасность. Что касается социальной справедливости, то из рассказов участников выделились четыре темы: (1) они заявили, что вовлечение сообщества - это целенаправленное действие по обеспечению социальной справедливости; (2) вовлечение сообщества было связано, среди прочего, с вкладом в обеспечение прав на образование и доступ к информации; (3) они указали на действия своих библиотек по социальной защите в качестве вклада в социальную справедливость; и (4) они связали взаимодействие сообщества с ubuntu, что, по их утверждению, само по себе является концепцией социальной справедливости. Полученные результаты подтверждают деятельность по вовлечению сообщества в качестве вклада в социально справедливое общество и ubuntu. Результаты подтверждают необходимость того, чтобы академические библиотеки (и университеты в целом) выходили за рамки своей традиционной роли в преподавании, обучении и исследовательской поддержке, а также чтобы они участвовали во взаимодействии с общественностью не только в качестве ожидаемой социальной ответственности, но и в качестве внесения вклада в социально справедливое общество и развитие. Основываясь на результатах, в этой статье социальная справедливость и ubuntu рассматриваются как неотъемлемые, а не случайные понятия вовлеченности сообщества.

Factors contributing to slow completion rate among postgraduate students of the Information Studies Programme at the University of Dar es Salaam, Tanzania

Emmanuel Marco Mkhai

Факторы, способствующие медленному завершению программы информационных исследований аспирантами Университета Дар-эс-Салама, Танзания

Эммануэль Марко Мхай

IFLA Journal, 49-3, 554-563

Аннотация:

Данное исследование было проведено с целью изучения причин медленного завершения аспирантами программы информационных исследований в Университете Дар-эс-Салама. В исследовании использовались как количественные, так и
качественные исследовательские подходы. В нем приняло участие 61 респондент, в том числе 56 аспирантов, участвовавших в анкетировании, и 5 опрошенных преподавателей. Результаты показали, что большинству студентов потребовалось больше времени, чем предусмотрено университетом, для завершения учебы. Важными факторами являются неспособность студентов понять комментарии руководителей, недостаточно позитивные взаимоотношения между студентами и руководителями, множественность ролей и недостаточно развитая исследовательская среда. Также было отмечено, что медленному завершению работы способствуют некомпетентность в области исследовательских навыков и финансовые ограничения. В данном исследовании делается вывод о том, что медленное завершение обучения среди студентов не является результатом воздействия какого-либо одного фактора. Учет всех факторов имеет решающее значение для обеспечения своевременного завершения исследований. Соответственно, в настоящей работе высказывается рекомендация относительно создания благоприятной учебной среды для студентов с целью улучшения результатов обучения.

**The University of the Free State Neville Alexander Library book club and information-seeking behaviour**

*Dina Mokgadi Mashiyane, Tebogo Agnes Makhurupetsi, Thuto Kgosiemang*

Книжный клуб библиотеки Университета Свободного штата Невилл Александер и поведение в поиске информации

Дина Мокгади Машянэ, Тебого Агнес Махурупетси, Туто Кгосиенг

*IFLA Journal, 49-3, 573-586*

**Bibliotherapy by medical librarians for the blind females**

*Maryam Shekofteh, elaheh Ahmadi, Maryam Kazerani, Sedigheh Salabifard*

Библиотерапия, проводимая медицинскими библиотекарями для слепых женщин

Марьям Шекофте, Элахе Ахмади, Марьям Казерани, Седигех Салабифард

*IFLA Journal, 49-3, 564-572*

**Исследование**

Это квазиэкспериментальное исследование было направлено на изучение влияния групповой библиотерапии на самооценку слепых женщин. Тридцать слепых женщин согласились принять участие в исследовании. Они были случайным образом разделены на экспериментальную и контрольную группы. Данные были собраны с помощью опросника самооценки Coopersmith. Медицинский библиотекарь в сотрудничестве с психологом-консультантом экспериментальной группы провела библиотерапевтическую процедуру, состоявшую из восьми сессий. После интервенции показатели самооценки в экспериментальной группе были выше, чем в контрольной группе (р < 0,05). Средние показатели самооценки в экспериментальной группе после интервенции значительно повысились (р < 0,05). Наибольший процентный прирост связан с показателями семейной и образовательной/профессиональной самооценки. Команде медицинских библиотекарей и психологов рекомендуется использовать библиотерапию для решения психологических проблем слепых и других людей с ограниченными возможностями.
School library censorship: Looking at the perspective of a school librarian association in Indonesia

Apriana Anggraeni Ayuningtyas, Heriyanto Heriyanto, Ana Irhandayaningtyas, Roro Isya Permata Ganggi

Цензура школьных библиотек: взгляд с точки зрения ассоциации школьных библиотекарей Индонезии

Априана Ангграени Аюнингтьяс, Херианто Херианто, Ана Ирхандаянингси, Роро Айсия Пермата Ганди

IFLA Journal, 49-3, 587-595

Аннотация:

Информационные потребности учащихся должны удовлетворяться школьными библиотеками в качестве ресурсов для обучения учащихся с помощью коллекций, которые поддерживают академические программы и подходят для учебной деятельности. Для студентов подходят коллекция, не содержащая деликатных или спорных материалов. В данном исследовании вопросы цензуры в школьных библиотечных фондах рассматриваются с точки зрения Ассоциации школьных библиотекарей Индонезии. Исследование выявило четыре темы, связанные с точкой зрения Ассоциации на проблемы цензуры в школьных библиотечных фондах. Следовательно, на национальном уровне этому вопросу не уделяется никакого внимания.

Library and information services’ reflections on emergency remote support and crisis-driven innovations during pandemic conditions

Brenda Van Wyk Dr

Размышления библиотечных и информационных служб о дистанционной поддержке в чрезвычайных ситуациях и антикризисных инновациях в условиях пандемии

Бренда Ван Вик доктор

IFLA Journal, 49-3, 610-619

Аннотация:

Crisis-driven innovation is needed to manage a scarcity in resources. The recent COVID-19 crisis exacerbated the prevailing digital exclusion in the education sector in particular. Sudden changes in otherwise stable higher education environments necessitated immediate and decisive innovation, particularly
where education support services were concerned. This study reports on an academic library and information service’s reflections on emergency strategies implemented during the COVID-19 pandemic. This study was conceptualised through the lenses of existing digital exclusion frameworks and information poverty frameworks. The findings from the qualitative data gathered via focus group interviews emphasise the importance of emergency remote library and information services. The pandemic conditions and sudden remote service delivery model highlighted the prevailing socio-economic and socio-technical inequalities and exclusions among students. The value of the study lies in the reflections made on the institution-wide crisis-driven innovation strategy implemented, and the realisation that library and information services must offer active academic support. The study offers a library and information services model to prepare for future eventualities.

A study on the knowledge and perception of artificial intelligence

(Un estudio sobre los conocimientos y la percepción relativos a la inteligencia artificial)

A. Subaveerapandiyan, C. Sunanthini, Mohammad Amees

IFLA Journal, 49-3, 503-513

Resumen:

En este estudio se investigaron los conocimientos y la percepción relativos a la inteligencia artificial (IA) entre los profesionales de biblioteconomía y documentación en Zambia mediante una encuesta de 245 participantes seleccionados al azar. Los resultados revelan que los profesionales de biblioteconomía y documentación vislumbraban un panorama optimista y alentador en relación con la IA, pero también que estaban preocupados por la posibilidad de que esta sustituyera las funciones de los bibliotecarios y por las barreras para la adopción de las tecnologías de IA en las bibliotecas de Zambia. El artículo recomienda a las bibliotecas considerar las conclusiones del estudio antes de implantar la IA, en particular por lo que se refiere a la tecnología y las instalaciones, el nivel de competencia de los bibliotecarios en el ámbito de la IA y las posiciones de liderazgo en iniciativas de IA. Los consejos de administración y las asociaciones de bibliotecas pueden utilizar la investigación como recurso para aplicar la IA en bibliotecas académicas y colmar la laguna de investigación que existe en relación con los conocimientos de las bibliotecas universitarias y su disposición a usar la IA en los países en desarrollo como Zambia.

Copyright literacy of library and information science professionals in Pakistan

(Formación en derechos de autor de los profesionales de biblioteconomía y documentación en Pakistán)

Ghalib Khan, Muhammad Basir

IFLA Journal, 49-3, 514-526

Resumen:

Se considera que los profesionales de biblioteconomía y documentación tienen habilidades y competencias adecuadas con respecto a las cuestiones de derechos de autor y otros asuntos relacionados. La formación en derechos de autor de los profesionales...
de biblioteconomía y documentación se investigó en Pakistán utilizando una encuesta cuantitativa a nivel provincial (Khyber Pakhtunkhwa). Respondieron a la encuesta 279 de los 311 encuestados. Los resultados indican que los profesionales de biblioteconomía y documentación están más o menos familiarizados con las cuestiones de derechos de autor y otros asuntos relacionados. La mayoría de ellos (94%) señaló que los materiales publicados, como pueden ser libros y artículos, están protegidos por derechos de autor. Asimismo, el 73% de los encuestados conocían la normativa local en materia de derechos de autor, aunque estaban menos familiarizados con la legislación internacional en esta materia. Los profesionales de biblioteconomía indicaron que el actual plan de estudios de biblioteconomía y documentación no ofrece conocimientos adecuados sobre los derechos de autor y, por lo tanto, la mayoría (94%) de los encuestados expresaron la necesidad de incluir conceptos básicos y legislación en materia de derechos de autor en dicho plan a todos los niveles. En las conclusiones se sugieren medidas prácticas para mejorar el nivel de formación sobre derechos de autor de los profesionales de biblioteconomía y documentación pakistaníes.

Identifying trends in information security and privacy concern research

(Identificación de tendencias en la investigación sobre la seguridad de la información y las preocupaciones en materia de privacidad)

Maor Weinberger, Dan Bouhnik

IFLA Journal, 49-3, 527-540

Resumen:

La minería de textos es un método de investigación utilizado para detectar tendencias de investigación y avances en diversos ámbitos. En este estudio se aplica una herramienta automática de análisis textual (Voyant Tools) a un amplio corpus de documentos académicos para identificar tendencias de investigación en los campos de la seguridad de la información y las preocupaciones en materia de privacidad, centrándose en las diferencias entre las dos primeras décadas del siglo XXI. De la misma manera, se investiga la proximidad conceptual entre los términos relacionados «seguridad de la información» y «preocupaciones en materia de privacidad» mediante la identificación de tendencias textuales. Descubrimos que, si bien la primera década de investigación sobre la seguridad de la información no estaba totalmente definida, la segunda década se centraba en asuntos relacionados con la privacidad. La investigación sobre preocupaciones en materia de privacidad se centraba en el comercio y el marketing en la primera década y en la dimensión social en la segunda. El estudio respalda el uso del análisis textual de la literatura académica para identificar tendencias de investigación en varios ámbitos, entre ellos los tecnológicos.

South African academic libraries as contributors to social justice and ubuntu through community engagement

(Las bibliotecas académicas sudafricanas como contribuyentes a la justicia social y el ubuntu a través del compromiso comunitario)

Siviwe Bangani, Luyanda Dube

IFLA Journal, 49-3, 541-553

Resumen:

El propósito del presente artículo es analizar el papel de las bibliotecas académicas como defensoras y promotoras de la justicia social y el ubuntu en el seno de un marco de compromiso comunitario. Se realizó un estudio cualitativo en el que se entrevistaron a 20 jefes de biblioteca y se mantuvieron 8 debates en grupo con bibliotecarios de bibliotecas universitarias de Sudáfrica para recabar datos. Las conclusiones reflejan que los enfoques del compromiso comunitario de las bibliotecas académicas de Sudáfrica pueden agruparse en varios temas. Entre ellos se incluyen las contribuciones a la educación, la sanidad y el bienestar de calidad, el trabajo y el empleo, la seguridad alimentaria, el abordaje de la brecha digital, las preocupaciones medioambientales, la igualdad y la igualdad de género, y la preservación de patrimonio nacional. Con respecto a la justicia social, de las narrativas de los participantes surgieron cuatro temas: 1) afirmaron que el compromiso comunitario es una acción de justicia social voluntaria; 2) el compromiso comunitario se asociaba a una contribución a los derechos de acceso a la educación y la información, entre otros; 3) señalaron que las acciones de reparación social de sus bibliotecas contribuyen a la justicia social; y 4) asociaron el compromiso comunitario con ubuntu, que es en sí mismo un concepto de justicia social. Las conclusiones señalan que las actividades de compromiso comunitario son una contribución a una sociedad socialmente justa y al ubuntu.
Los resultados corroboran la necesidad de que las bibliotecas académicas (y las universidades en general) trasciendan su papel tradicional de apoyo a la enseñanza, el aprendizaje y la investigación, y participen en el compromiso comunitario no solo como una responsabilidad social esperada, sino también como una contribución a una sociedad socialmente justa y al desarrollo. Sobre la base de los resultados, este artículo considera que la justicia social y el ubuntu son inherentes al compromiso comunitario, y no un mero concepto accidental de este.

Factors contributing to slow completion rate among postgraduate students of the Information Studies Programme at the University of Dar es Salaam, Tanzania

(Factores que contribuyen a la tardanza de los estudiantes de posgrado del Plan de Estudios de Información de la Universidad de Dar es Salaam (Tanzania) para completar dichos estudios)

Emmanuel Marco Mkhai
IFLA Journal, 49-3, 554-563

Resumen:
Este estudio se llevó a cabo para examinar las causas de la tardanza de los estudiantes de posgrado del Plan de Estudios de Información de la Universidad de Dar es Salaam para completar dichos estudios. El estudio empleó métodos de investigación cuantitativos y cualitativos. En él participaron 61 encuestados: 56 estudiantes de posgrado que completaron una encuesta y 5 profesores adjuntos a los que se les hizo una entrevista. Las conclusiones revelaron que la mayoría de los estudiantes tardaban en completar los estudios más tiempo de lo previsto por la universidad. Los factores responsables de ello eran que los estudiantes no comprendían los comentarios de los supervisores, las malas relaciones entre los estudiantes y los supervisores, la existencia de múltiples funciones y un entorno de investigación desfavorable. La falta de capacidades en materia de investigación y las limitaciones económicas también se señalaron como causas de esta tardanza. El estudio concluye que la tardanza de los estudiantes a la hora de completar los estudios no se debe a un único factor. El abordaje de estos factores es crítico para mejorar en este sentido. En consecuencia, este estudio recomienda la creación de un entorno de aprendizaje favorable para sus estudiantes, de modo que se mejoren los resultados del aprendizaje.

Bibliotherapy by medical librarians for the blind females

(Biblioterapia de bibliotecarios médicos para mujeres ciegas)

Maryam Shekofteh, Eaeheh Ahmadi, Maryam Kazerani, Sedigheh Salabifard
IFLA Journal, 49-3, 564-572

Resumen:
Este estudio cuasiexperimental tenía por objeto investigar el efecto de la biblioterapia grupal sobre la autoestima de mujeres ciegas. Participaron en el estudio treinta mujeres ciegas. Estas se dividieron aleatoriamente en dos grupos: el grupo experimental y el grupo de control. Los datos se recabaron a través del Inventario de Autoestima de Coopersmith. Un bibliotecario médico llevó a cabo una intervención de biblioterapia de ocho sesiones en colaboración con un asesor psicológico para el grupo experimental. Tras la intervención, las puntuaciones de autoestima del grupo experimental eran superiores a las del grupo de control (p < 0.05). Las puntuaciones medias de autoestima en el grupo experimental después de la intervención aumentaron significativamente (p < 0.05). El mayor aumento porcentual está relacionado con las subescalas de autoestima familiar y educativa/profesional. Se recomienda el uso de biblioterapia por parte de un equipo de bibliotecarios médicos y psicólogos para paliar los problemas psicológicos de las personas ciegas y otras personas con discapacidad.

The University of the Free State Neville Alexander Library book club and information-seeking behaviour

(El club de lectura de la Biblioteca Neville Alexandre de la University of Free State y comportamiento de búsqueda de información)

Dina Mokgadi Mashiyane, Tebogo Agnes Makhurupetsi, Thuto Kgosiemang
IFLA Journal, 49-3, 573-586

Resumen:
Las capacidades de alfabetización en información son cruciales para el éxito académico y en la vida. Usando varias técnicas pedagógicas, los bibliotecarios llegaron a sus usuarios y los dotaron de las capacidades necesarias para utilizar de forma efectiva la información disponible. El estudio tenía por objeto...
determinar las percepciones que tenían los miembros sobre su conducta de búsqueda de información y en qué medida había contribuido el club de lectura a mejorar sus habilidades en este sentido. La población del estudio estaba compuesta por 49 miembros del club de lectura, de los que se recabaron datos a través de una encuesta y de una entrevista. El estudio revela que el club de lectura mejora las iniciativas y las prácticas de formación sobre la búsqueda de información, así como el compromiso de los bibliotecarios. Este estudio se puede utilizar para defender y mejorar los clubes de lectura de las bibliotecas como plataformas de mejora de la instrucción de procesos de búsqueda de información. También puede promover una profundización de la investigación sobre este fenómeno.

School library censorship: Looking at the perspective of a school librarian association in Indonesia

(Censura en las bibliotecas escolares: análisis de la perspectiva de una asociación de bibliotecarios escolares en Indonesia)

Apriana Anggraeni Ayuningtyas, Heriyanto Heriyanto, Ana Irhandayaningsih, Roro Isya Permata Ganggi
IFLA Journal, 49-3, 587-595

Resumen:
Las bibliotecas escolares deben satisfacer las necesidades de información de los estudiantes, siendo recursos para su aprendizaje, con colecciones que respalden el plan de estudios y sean idóneas para las actividades de aprendizaje. Una colección apropiada para los estudiantes es aquella que no contiene material sensible o polémico. En este estudio, se examinan problemas de censura en las colecciones de bibliotecas escolares desde el punto de vista de la Asociación de Bibliotecarios Escolares Indonesios. El estudio reveló cuatro temas relacionados con la perspectiva de la Asociación sobre los problemas de censura en las bibliotecas escolares sobre la base de entrevistas al personal y análisis temáticos: las razones de la censura, cómo se aplica, cómo convertirse en un bibliotecario competente y cuán urgente es la censura. La censura rara vez se notifica, por lo que la Asociación no la considera un problema urgente. Hace más hincapié en problemas como la formación en alfabetización en información y el desarrollo de las competencias de los bibliotecarios que en la censura de las colecciones bibliográficas. Por tanto, este tema no recibe atención en el país.
reinante en el sector educativo en particular. Los cambios súbitos que tuvieron lugar en entornos de educación superior por lo general estables requirieron innovación inmediata y decisiva, sobre todo en cuanto a los servicios de apoyo educativo. Este estudio expone las reflexiones sobre las estrategias de emergencia implantadas durante la pandemia de COVID-19 de un servicio de biblioteca académica e información. Este estudio se conceptualizó a través de la lente de los marcos de exclusión digital y de los marcos de pobreza informativa existentes. Las conclusiones extraídas de los datos recabados a través de entrevistas grupales ponen de manifiesto la importancia de los servicios remotos de emergencia de biblioteca e información. Las condiciones de la pandemia y el modelo de prestación remota de servicios implantado súbitamente hicieron patentes las desigualdades y las exclusiones socioeconómicas y sociotécnicas reinantes entre los estudiantes. El valor del estudio reside en las reflexiones realizadas sobre la estrategia de innovación espoleada por la crisis aplicada en toda la institución, y la constatación de que los servicios de biblioteca e información deben ofrecer apoyo académico activo. El estudio ofrece un modelo de servicios de biblioteca e información que sirva para prepararse para eventualidades futuras.