Continuing professional development and the changing landscape of academic libraries

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Abstract

Purpose – This article highlights the dynamic and evolving nature of libraries and the role of librarians within the changing landscape. It discusses how libraries have traditionally operated and how they have been impacted by 4IR and external factors such as the COVID-19 pandemic.

Design/methodology/approach – The study employed a mixed methods research approach, combining an online questionnaire to derive quantitative data and interviews to provide qualitative data. The follow-up interviews provided a comprehensive understanding of how academic librarians at the DUT library use Continuing Professional Development (CPD) to adapt to the evolving environment.

Findings – This paper reports that there was consensus that CPD empowers the librarians to adapt seamlessly to the dynamic library landscape. It equips them with the knowledge and skills to stay updated on the latest trends, technologies and best practices in their field.

Practical implications – The findings carry implications for the planning and executing of ongoing CPD programmes and activities across all academic libraries.

Originality/value – This study provides an insight into the results of the importance of CPD for librarians within a developing country in southern Africa.

Keywords Continuous professional development, Academic librarians, COVID-19, Fourth industrial revolution, Academic libraries

Paper type Research paper

1. Introduction and background

Academic libraries have never been stagnant and are always evolving in response to the changes within the information, communication and technology environment. New innovations impact on the way that information is saved, sourced and retrieved, and the user behaviour changes in response to the new innovations that are available. Users no longer need to physically visit a library to retrieve information. Information is now available at the touch of a button. Academic libraries are continuously striving to update the digital collections and to increase the electronic resources collection. Emerging new technologies forced many academic libraries to embrace new ways of working and accessing information for the users (Lal *et al.*, 2022). This means that librarians must ensure that they remain relevant and up-to-date with the constant changes that affect the library and information environment.

Continuing Professional Development (CPD) is an important aspect of librarianship. The need for librarians to keep up with new trends and innovations impacting on their discipline is essential to be able to provide an excellent service to users (Moonasar and Underwood, 2018). The South African Library Association, LIASA (Library and Information Association), as the professional body of South Africa) as the library and information sector, has taken a

position to encourage librarians to continue to participate in CPD-related activities to remain relevant in the profession (LIASA, 2021).

The fourth industrial revolution with smart applications such as robotics, artificial intelligence, the Internet of Things (IoT), data analytics, and cloud technology has impacted libraries and information sectors and is actively developing across the world, influencing the productivity levels in many sectors (Balashova and Gromova, 2018). The flow of information has increased at a rapid rate and has impacted every sphere of the world (Hussain, 2020). As Ahmat and Hanipah (2018) mention, libraries have undergone a complete transformation with automation and the fourth industrial revolution reshaping the library and information discipline.

2. Problem statement

Libraries are a fluid organisation and the expectation is that the librarians need to be flexible in embracing new ways of working and changes that new innovations bring about. The fourth industrial revolution (4IR) introduced many new technologies and emerging innovations that impacted the way libraries functioned. These emerging technologies have impacted libraries and librarians and changed traditional ways of operating (Ghislieri *et al.*, 2018). Covid-19 was a catalyst to get the DUT library and librarians involved in online communication and interactions with users. Although librarians interacted to some extent online with users, the library always encouraged more face-to-face user engagements. With the forced state-lockdown, the librarians were forced to engage with users remotely, and the library increased the online resources collections. More emphasis was placed on purchasing online subscriptions and databases. With the different applications and online communication tools that encouraged online interactions, many librarians had to sharpen their knowledge of online resources and find different innovative ways of engaging with the users. With changes in the information sector and the emphasis on online engagement and the various available innovative smart applications, the DUT library and librarians needed to adapt to new ways of working and engaging with users. With this in mind, the aim of this study is to explore how academic librarians utilise CPD to adapt and embrace the changing landscape of libraries.

3. Literature review

The changing role of academic libraries and the need for continuous development for librarians should be considered, with the users in mind and the advancing technological innovations. CPD is crucial in the information and librarianship profession, especially in a rapidly changing landscape like the academic libraries. The digital revolution has transformed the way information is created, accessed and disseminated. Libraries are increasingly adopting digital resources, online databases, e-books and electronic journals (Raju, 2017). Academic librarians are expected to keep up with the emerging trends.

3.1 Continuing professional development

CPD refers to the process of lifelong learning that professionals undergo to maintain and enhance their knowledge and skills (Moonasar and Underwood, 2018). It is the ongoing process of acquiring and updating individuals' knowledge, skills and attitudes to enhance professional competence and meet the evolving needs of the users and profession. It is imperative that librarians continue to update their knowledge and competencies with the latest trends to remain relevant in their profession. Librarians are required to keep abreast of the latest advancements and trends within their profession to improve their work

performance and to provide quality services to the users. CPD allows the librarians to acquire new knowledge and skills that can help them enhance their work performance and thus reflect positively on their institution (Campbell-Meier and Goulding, 2021). As Llewellyn (2019) indicates that the academic librarians roles and responsibilities have evolved considerably over the years and the librarians are compelled to further develop their skills to remain relevant in their current field. By attending CPD initiatives, librarians have an opportunity to network with colleagues and develop collaborations to share ideas and skills and learn from others (Moonasar and Underwood, 2018). With the focus on data at the academic institutions, it is important that the librarians are keeping abreast and developing their skills in data management, research data services and digital preservation, as the volume of and complexity in handling research data increases (Koltay, 2019). Users now expect convenient and seamless access to information anytime, anywhere. They rely on libraries to provide user-friendly interfaces, personalised services and support for digital literacy. Academic librarians must stay abreast of user needs, engage with users to understand their requirements and adapt library services to meet evolving user needs (Raju, 2017). The role of librarians has expanded beyond traditional collection management to actively supporting information literacy and research skills development (Pan and Hovde, 2010). Librarians must be knowledgeable about information literacy frameworks, research methodologies and scholarly communication practices to assist students and researchers effectively.

Open access initiatives and copyright regulations have a significant impact on scholarly publishing and library services. Librarians need to stay updated on open access publishing models, licencing agreements, copyright compliance and intellectual property issues to guide researchers and promote open scholarship (Stevens, 2015).

The International Federation of Library Associations and Institutions (IFLA) initiated a workplace learning group for librarians to continuously progress with learning initiatives to enhance their services to users and to further their careers (IFLA, 2023). This workplace learning group encourages the participation of interested institutions and librarians with the common goal of improving their knowledge and skills. The IFLA (2023) workplace learning group focusses on the various demands and changes placed on libraries and librarians in the evolving environment, and the group encourages librarians to embrace new developments and trends in their profession. IFLA (Varlejs, 2016) has initiated guidelines that can guide national library associations to adopt and adapt to suit their countries professional developmental needs. The professional body in South Africa, known as the Library and Information Association of South Africa (LIASA) has adopted IFLA's CPD guidelines and adapted it to suit the South African information professionals requirements (Varlejs, 2016). The CPD guidelines for LIASA were announced in April 2018 (LIASA, 2021). These guidelines are directed towards allowing the South African librarians an opportunity to remain relevant in their profession. These guidelines have been fine-tuned and customised to suit the needs of librarians in South Africa. LIASA (2021) explained that CPD is essential for all information professionals as libraries are faced with an increasing pressure in maintaining and developing professional competence. In order to maintain competence and remain relevant, LIASA (2021) professed to ensure that registered members retain and continuously develop their:

(1) Professional knowledge;

(2) professional skills;

(3) professional values, ethics and attitudes; and

(4) competence achieved during years of study.

This can ensure that the librarians are always enhancing their skills and improving their qualifications to deliver a quality service to the users.

3.1.1 Benefits of CPD. CPD is beneficial to the individual, institution and users as it leads to better quality services which reflects positively on the institution. The institution can benefit with allowing their staff to continuously update their knowledge and skills as it will lead to increased productivity and improved performance by the staff who feel more motivated and eager to practise what they have learnt (Oladokun and Mooko, 2022). The users benefit from CPD as they will receive faster services with increased satisfaction when the librarians are able to deliver a quality service due to continuous learning initiatives. As Gleason (2018) explains, it is essential that librarians identify relevant learning opportunities and engage enthusiastically with CPD initiatives. By staying up to date with technology, librarians are aware of the latest trends and emerging technologies that can enhance their work. According to Moonasar and Underwood (2018), CPD provides opportunities for librarians to develop new skills and techniques that can enhance their work and allow them to adapt to meet the changing needs of the users. By participating in CPD activities, librarians can gain insight about new user needs and preferences and how to integrate these new knowledge into library services and resources. Librarians are able to deepen their knowledge in specific subject areas, which allows them to better support researchers and users when they attend continuous learning activities (Llewellyn, 2019).

CPD offers many benefits for employers.

(1) CPD enhances employee performance. CPD empowers employees to gain new knowledge, skills and abilities that directly enhance their performance in their respective roles (Mohideen *et al.*, 2022). Employers who allocate resources for CPD activities, foster a workforce that is more proficient and capable, resulting in increased productivity and improved outcomes.

(2) CPD contributes to employee retention and more motivated employees. Employers providing CPD opportunities, demonstrates a commitment to promote employee development and growth. It can enhance employee satisfaction, motivation and loyalty, increasing turnover rates. Employees who perceive that their professional development is valued by their employers are more likely to be committed to their work (Cheng, 2017).

(3) CPD ensures that employees remain up-to-date with the latest advancements, trends and best practises in their profession (Pan and Hovde, 2010).

3.1.2 Challenges of CPD. Librarians face several challenges with continuous learning initiatives.

(1) Time constraints. Librarians often have demanding work schedules and limited time for professional development activities. Balancing CPD activities with their regular work responsibilities can be challenging for employees (Moonasar and Underwood, 2018).

(2) Financial constraints. Allocating sufficient financial resources to support CPD initiatives, including training programmes, conference attendance and workshops, can be a challenge for employers. Budget constraints can limit the ability of librarians to participate in these activities or access valuable resources (Pan and Hovde, 2010).

(3) Keeping updated with technological advancements. Libraries are increasingly relying on digital tools and technologies. Librarians must continuously update their skills and knowledge to adapt to changing technology trends, such as digital cataloguing systems, online research tools and new open source library systems (Jabur, 2019).

(4) Limited networking opportunities. CPD activities often offer valuable networking opportunities where librarians can connect with peers, share experiences and learn from one another. However, limited access to such opportunities can hinder professional growth and knowledge exchange.

(5) Lack of institutional support. Some libraries may not prioritise or provide adequate support for CPD activities. This lack of support can discourage librarians from actively engaging in professional development opportunities (Shupe and Pung, 2011).

(6) Access to relevant and up-to-date resources. Finding relevant CPD resources and materials can be challenging, especially in rapidly evolving professions, such as information science. Ensuring that CPD activities align with the librarians specific areas of interest can be difficult (Shonhe, 2020).

Addressing these challenges requires a collaborative effort between the librarians and their managers. Library management can explore cost-effective CPD options, such as online courses or internal training programmes. They can also foster a supportive work environment that encourages and facilitates participation in CPD. Librarians must also take personal responsibility for their own professional development and growth by seeking out relevant opportunities, effectively managing their time and demonstrating the value of CPD to their employers.

Although there are challenges associated with CPD, its benefits, such as improved employee performance, engagement, and adaptability, make it a valuable investment for both employers and employees. Finding ways to overcome the challenges and create a culture that values and supports CPD is crucial to reap its full potential.

3.2 Smart libraries

As Momoh and Folorunso (2019) highlight the fact that roles of librarians have undergone a transformation overtime. This was corroborated by Nkosi et al. (2020) concurring that the impact of the continuously changing information and communication technology triggered the changes of the way information was retrieved which affected the changes in the user behaviour which in turn initiated the changes within the library and information sectors.

These authors further explain that the speed in which 4IR is influencing the environment and changing the way people socialise and work is impacting on the information environment. The variations in the way that people access information at their fingertips is overwhelming with the various devices available. As Sutherland (2020) alluded to the influx of smart technologies that accompany 4IR and the ways in which these new gadgets and technology will drive changes within the various sectors. The new technologies are the triggers in user behaviour in accessing and retrieving information. The librarians need to rise up to meet the changing needs.

Many libraries are fast becoming smart libraries with the introduction of many smart technologies, such as RFID and self-check systems. These new technologies are very expensive and many libraries are facing budget constraints which restrict the libraries from moving forward with new technologies (Lal et al., 2022).

The concept of smart libraries focusses on the way librarians incorporate the use of technologies within the library environment. It needs to be a fairly collaborative initiative that engages with the users and allows for their input in creating a smarter environment by enhancing the user experience in using the non-traditional library services (Lal et al., 2022). As Dutta (2022) emphasises the users are the main part of an academic library, which includes the students, lecturers, administrative staff and any other member of the university

community. Web technologies and smart platforms have improved information services and the ease with which information is accessed and retrieved tremendously (Abdulla and Esmaeel, 2019). The fifth technological revolution is currently active with Web 3.0 and advanced smart devices that enable users to have immediate access to information within seconds (Abdulla and Esmaeel, 2019). As Duncan (2021) explains a smart library should "user-centric and flexible to user's needs". This explanation clearly captures the essence of the aim of any information service. The academic library exists to support the users in achieving their goals and the university throughput rates. Therefore, the library needs to provide the necessary services and resources to satisfy the user needs and should be able to evolve as the user needs change. The ongoing technological changes impact on libraries and the way that they function. Although technological innovations have helped libraries evolve and transition smoothly with new developments, the rate at which new developments develop is costly and at an alarming speed (Duncan, 2021). Smart libraries are deemed to focus on providing more comfortable physical spaces for users to relax and less on housing a physical collection. The collection is noted to be offered virtually and as an electronic collection, and users need to get used to accessing information from any smart device at their fingertips (Duncan, 2021). Future smart libraries are geared to provide contactless information services.

3.3 Emerging trends in academic libraries

Otike and Barát (2021) describe the academic library as an "integral organ" of its parent institution. The academic library plays a vital role in the success of the university in supporting the academic curriculum and research output. In addition to the impact of continually evolving technology and the impact on the academic library, the trend in personnel changes is prevalent. Many universities tend to offer the higher level jobs on a contract basis with a demand for new skills and knowledge. The changing organisational needs and the transformation that comes with technology have an impact on staff and the relevant skills required. The library is expected to comply and adjust according to the university's changes which include different skills and higher qualification levels (Crumpton and Bird, 2020). It is essential that the libraries continue to embrace the new trends and evolve accordingly. This includes looking at ensuring that the current staff are on par with the trends and to include new criteria that is aligned with the new trends when recruiting new staff (Crumpton and Bird, 2020). As Otike and Barát (2021) mention that librarian's jobs are changing and the libraries are no longer expecting librarians to just be disseminators of information but also to be trainers and to train the users on how to retrieve the relevant information from the influx of information available. The librarians need to educate users on how to identify and separate the fake news from the legitimate information (Stein-Smith, 2017). Many libraries and institutions are now recruiting librarians with either a masters qualification or higher to continue with keeping up with trends and ensuring that the libraries are able to deliver excellent services to the users (Otike and Barát, 2021).

Academic libraries are embracing research initiatives by transforming into open access and scholarly initiatives (Otike and Barát, 2021). Digital and institutional repositories are increasing at institutions, and the focus is on showcasing and sharing the institutions research outputs. The involvement of librarians in the research data cycle is another area that is drawing much attention within libraries. Librarians are more involved in the research cycle with the researcher from the conception of the data to how the data are eventually managed and stored (Koltay, 2019). Librarians must keep up with emerging technologies, such as library management systems, discovery tools and digital preservation, to effectively manage and provide access to these resources.

4. Research methodology

The purpose of this study was to explore how academic librarians use CPD to evolve with the changing landscape of libraries, and it focused on librarians at the DUT library. The data collection methods employed for this study were self-administered online questionnaires and interviews. This study utilised an explanatory approach and employed the mixed methods research (MMR) framework to investigate the librarians approach to continuous learning initiatives in remaining relevant in their profession amidst the evolving changes impacted by technological advancements. The researcher collected data from participants to explore the significance of ongoing professional development for librarians in the light of these implications. The study followed an explanatory sequential mixed methods design, with a primary focus on analysing the quantitative data obtained through an online questionnaire. Subsequently, the qualitative data derived from face-to-face and virtual interviews were analysed to provide additional clarification. The data were thoroughly examined to identify patterns and similarities, in order to illustrate the generality of the patterns attained (Khaldi, 2017).

Durban University of Technology is a multi-campus university with six site libraries based in Durban and Pietermaritzburg. The study population focused on 41 out of 70 library staff employed at the DUT Library. A further ten library staff members (from the sample population of 70 participants), were further identified and selected to participate in face-to-face interview sessions, while others opted for virtual sessions due to COVID-19. Follow-up interview sessions allowed the researcher to engage directly with selected participants during the data retrieval process. The self-administered online questionnaire was used for this study as it was easy to send to librarians spread throughout the six library sites and allowed respondents to complete the questionnaire at their own pace. The questionnaire was administered online using the DUT subscribed software, namely QuestionPro, which is an online research method survey tool used in collecting data for research purposes. An online link was sent to all participants to access and complete.

5. Participant demographics

This research was open to all DUT librarians regardless of their diverse qualifications or level of occupation in their current library position. The study included acquisitions, cataloguing, circulation, periodicals, management and subject librarians. The respondents, as shown in Table 1, describe the demographics collected through the online questionnaire distributed to all participants who were part of the research sample. The study asked participants to share their highest qualifications, current designation, number of years in the DUT Library and number of years in current position, as shown in Table 1. The participants held a range of qualifications from Matric, Bachelor of Technology, Bachelor's degree, Honours, Master's and a Ph.D. in Information Science. In terms of work experience, the participants ranged from just under a year to over 30 years of experience. Based on the provided demographics, the participants exhibited considerable qualifications, substantial professional experience and in-depth knowledge within the library discipline.

In order to augment the quantitative data, the researcher followed the online questionnaire with an individual interview session with 10 librarians employed at the DUT library. Table 2 describes the list of participants in no particular order that participated in the individual interview sessions. The participants in the interviews were selected based on their willingness to participate and their expertise and experience in the relevant field. The participants' extensive knowledge and familiarity with the subject matter provided valuable insights to the research during the interview sessions.

Respondent designation	Years of experience at DUT	Time in current position	Qualifications
Director	1 year	1 year	PhD in information science
Manager: campus library and sites	15	8 months	Master's in information technology
Manager	23	18	Bachelor in information science
Librarian: marketing and communication	6	2	Master's in information science
Librarian: training and development	1 +	1 +	Honours in information science
Postgraduate librarian	24	24	Honours in information science
Librarian digital services	10	2	Postgraduate diploma: LIS
Librarian (x5)	Ranging between 5 and 13 years	Ranging between 5 and 13 years	Ranging between Bachelor in information science, honours in information science and master's in information science
Subject librarian (x7)	Ranging between 10 and 33 years	Ranging between 1 and 33 years	Ranging between postgraduate diploma: LIS, honours in information science, master's in information science and a PhD
Co-ordinator: IT and systems	33	33	Diploma: Information technology
Coordinator: site	21	19	Honours in information science
Librarian: circulation	12	12	Master's in information science
Assistant librarian (x4)	Ranging between 10 and 28 years	Ranging between 1 and 10 years	Bachelor in information science
IT technician (x2)	Ranging between 6 and 27 years	Ranging between 1 and 4 years	N\A
Admin assistant	8	5	N\A
Library assistant (x12)	Ranging between 2 and 27 years	Ranging between 1 and 27 years	Ranging between matric, national diploma: LIS, and bachelor in technology: LIS

Source(s): Table by author

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Table 1.
Participant
demographics [n = 41]

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Participant designation	Years of experience at DUT	Time in current position	Qualifications
Subject librarian	33	18	Master's in information science
Postgraduate librarian	10	10	Master's in information science
Librarian	6	2	Master's in information science
Subject librarian	23	14	PhD in information science
Librarian	1	1	Honours in information science
Library assistant	28	28	Postgraduate diploma: LIS
Subject Librarian	10	1	Honours in information science
Librarian: after hours	11	2	Bachelor in information science
Manager	15	3 months	Master's in information technology
Subject librarian	13	10	Master's in information science

Source(s): Table by author

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Table 2.
Interview
participants [N = 10]

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6. Findings

To ensure anonymity of the participants no codes are assigned against the participant in Table 1 and Table 2. The responses from the emailed online questionnaire respondents are recorded as: R1 – R41: Respondent. The follow-up interviews will be recorded as: IP1 – IP10: Interview Participant.

A total of 41 out of 70 completed questionnaires were received. A further ten follow-up interviews were conducted. The findings indicated that all the respondents were of the opinion that CPD was crucial and that it improved the professional skills of the individuals. There was consensus among the respondents that engagement in CPD activities improved their understanding of technological advancements and its effect on libraries. The DUT librarians believed that the CPD activities were supported and encouraged in their library. This belief suggests that CPD initiatives play an important role in professional growth and development for librarians, fostering a culture of learning and improvement (Oladokun and Mooko, 2022). Such findings are likely to be applicable beyond the confines of the DUT library environment, indicating that CPD is not only valued but also beneficial across various library settings. Emphasising the significance of CPD in libraries underscores its universal relevance, highlighting its potential to improve skills, knowledge and service quality in libraries worldwide (Mohideen *et al.*, 2022).

6.1 Utilisation continuing professional development to adapt and embrace the changing landscape of libraries

CPD empowers librarians to embrace and adapt seamlessly to the ever-changing library environment. Through active participation in CPD activities, librarians can stay updated of the latest trends, developments, technologies and exemplary approaches within their field. This enables librarians to effectively address the evolving requirements and expectations of library patrons. Additionally, CPD fosters a proactive mindset among librarians, motivating them to actively seek opportunities for professional growth and learning. It provides them with the means to explore emerging trends, innovative concepts and broaden their professional connections. Engelbrecht *et al.* (2007) describe CPD as a process that enables individuals to stay updated with the ongoing changes in their respective fields, fostering continuous learning. Lifelong or continuous learning is of great significance in the library environment and can be manifested through various means, such as attending conferences, workshops, trainings and participating in skill-based courses and activities. Librarians who actively embrace CPD are more prepared to face challenges, implement innovative strategies and contribute to the constant enhancement of library services.

When librarians were asked whether they considered CPD an important aspect of librarianship, there was an overwhelming consensus of 100% (41) among the respondents that CPD is an essential aspect for librarians. The findings of librarians are aligned with the perspectives shared by Shonhe (2020), who supports the view that continuous learning is crucial for librarians of the twenty-first century to remain professionally relevant. The respondents agreed that participating in CPD activities would increase productivity and improve library services. The findings of the librarians illustrated in Figure 1 highlight and support the widespread recognition among librarians of the positive impact of CPD on their professional effectiveness and the services they provide. This collective sentiment accentuates the universal relevance of CPD initiatives in libraries, suggesting that investing in professional development is not only beneficial but also essential to optimise library operations and meet the evolving needs of library users.

The interviewed participants agreed that CPD is definitely an important aspect of for all librarians and that CPD activities contributes to the well-rounded professional competencies of librarians. As Participant IP3's explains the importance of investing in CPD to maintain a
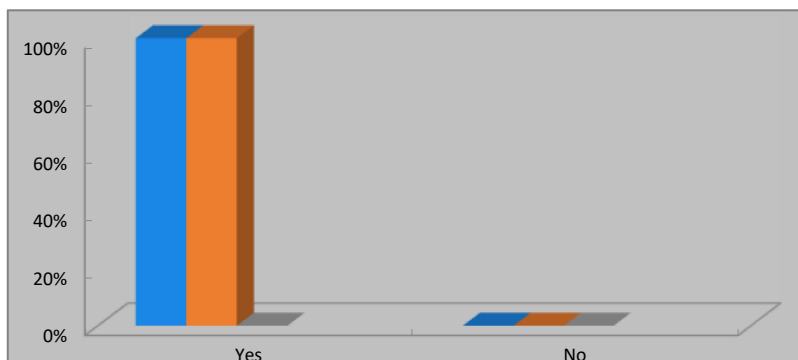
Figure 1.
Is CPD an important
aspect of librarianship?

Source(s): Figure by author

dynamic and effective library environment and stated that: "by engaging in CPD activities, staff will be equipped with crucial skills necessary to meet the challenges and opportunities of 4IR technologies."

CPD plays a vital role in enhancing the expertise and abilities of professionals in various fields, including librarianship. Continuous upskilling enables librarians to identify and address any gaps in their professional competencies (Moonasar and Underwood, 2018). The librarians were asked about the impact of CPD on improving their professional competence and skills. All respondents unanimously agreed that CPD plays a crucial role in enhancing professional competence and skills. This finding aligns with Shonhe (2020, p. 1), which emphasises the necessity of CPD for librarians to improve their skills and competency levels, enabling them to remain abreast of emerging trends and best practices. By updating their knowledge, librarians can stay informed about new trends, theories and methodologies, allowing them to apply the most up-to-date knowledge in their work (Shonhe, 2020). Importantly, all respondents unequivocally expressed their agreement regarding the importance of CPD initiatives. Mohideen *et al.* (2022), further elaborate on the significance of developing competence and skills for librarians within the context of continuously technological advancements. In order to remain competitive and marketable in the job market, librarians need to continually enhance their knowledge and skills, encompassing both soft and hard skills. Librarians are required to be knowledgeable on latest technological developments in information management, cataloguing systems, digital archiving, database management, teaching methodologies, integration of new instructional technologies and to be updated on information literacy standards. Figure 2 provides a visual representation of the librarians' responses regarding the impact of CPD on professional competence and skills.

The participants interviewed felt strongly that CPD was important, as they all valued their jobs and were aware that if they did not understand the changing technologies and evolve, they would be at a loss to provide a proper service to their users.

As one of the participants (IP8) succinctly captured the important essence of CPD:

A well-developed employee can perform their duty to the best of their ability due to their improved skills. Making a good impression on users is important, it boosts ones confidence and self-confident employees excel at their duties.

It is important to acknowledge that CPD is crucial for enhancing professional competence and skills in a multitude of disciplines, extending beyond the confines of any particular library setting. Librarians serve diverse institutions and communities with varying needs, and CPD allows librarians to enhance their ability to meet the specific demands of their users (Pan and Hovde, 2010).
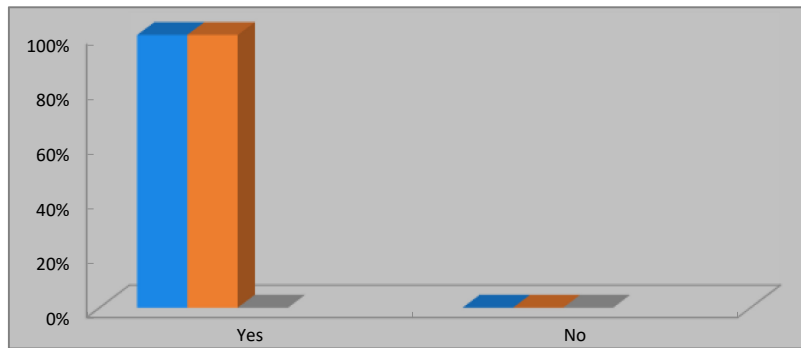
Source(s): Figure by author

6.2 The impact of COVID-19 on academic librarians

The appearance of COVID-19 had a significant effect on academic libraries, which led them to quickly adopt technologies to adapt to changes to ensure continuous provision of library services. As a result, higher education institutions and academic libraries encouraged librarians to either work from home or implement rotational schedules to prevent the spread of the virus (Dube, 2022). The DUT library was in a similar situation, and the librarians had to rely on technology for support and assistance in continuing to provide the users with library services. Due to the impact of COVID-19, the librarians at the DUT library witnessed a rapid and significant transformation. According to Kosciejew (2020), libraries played a crucial role in disseminating accurate information about the pandemic, particularly by providing factual health information to users. To ensure virtual access to information, libraries had to improve their capacity and adapt to the changes caused by the pandemic. Librarians were actively involved in providing online instruction and support for information literacy skills for the users. Libraries, including the DUT library, developed digital tutorials, webinars and instructional videos to assist users with navigating online resources effectively. With remote work becoming a norm during the pandemic, librarians had to acquire new skills to effectively work in virtual environments. These findings align with the perspectives of authors Connell *et al.* (2021, p. 5) who argue that it was feasible to engage in remote work while still providing services to library users. The following are views expressed by the interviewed participants.

IP1 indicated that:

> Librarians, specifically information services librarians have to adjust to working virtually using online tools to engage with library users to offer support for research, teaching and learning.

The DUT librarians similar, to many other librarians across the globe, had to quickly adapt to remote work and the provision of virtual services to continue supporting the users during the government-imposed lockdown. This is aligned with the assertion by Kosciejew (2020, p. 307) that the lockdown measures prompted by the pandemic accelerated technological changes in the DUT library. The librarians were cognisant that using new technologies meant that they needed to learn new skills and adapt to the new changes in providing quality services to the users.

The forced lockdown impelled librarians to seek and acquire new skills to effectively continue providing services remotely to their users. Many CPD activities shifted to online platforms, with DUT librarians participating in webinars, virtual conferences and online courses to improve and improve their knowledge and skills. This was highlighted by Participant IP1:

> By participating in CPD activities such as webinars, training, mentoring, and online courses, we (librarians) can build on our existing skills and research the areas that are changing and find ways to improve these areas

IP8 affirmed that:

> By continually developing ourselves and learning new things, we can ensure that we are providing our users with an excellent service. We must read up on new trends affecting our profession, network, attend webinars, and improve our qualifications to remain relevant

It is evident that the COVID-19 pandemic had a significant impact on many aspects of librarianship and the pandemic forced libraries to quickly adapt to digital platforms and learn new technologies. The COVID-19 pandemic accelerated the transformation of libraries, promoting innovation and resilience in the face of unprecedented challenges.

6.3 Changes in the roles of librarians

The librarians were aware of the changes impacting on their profession and they were cognisant of the changes that new technologies incurred and the transformation in their service delivery to users. Wong and Chan (2018) believe that librarians need to be adaptive and proactive in responding to the challenges brought about by technological and environmental transformation. The librarians were asked about the changes they had experienced in the traditional roles of working in the library. The shift from physical to digital resources, in many libraries, has been notable and librarians now manage electronic databases, e-books, online journals, digitised archival materials and many other resources alongside traditional print materials (Raju, 2017). Figure 3 illustrates the responses, 76% (31) of the respondents acknowledged that the roles had indeed changed, while 17% (7) expressed uncertainty and 7% (3) believed that there had been no alterations in their work practices. With the imposed lockdown, DUT librarians have increasingly been helping users virtually, using online chats and the library's LibChat platform. LibChat serves as a communication tool in libraries, facilitating real-time interactions between library staff and users. It enables libraries to offer virtual reference services, support research queries and address general user concerns (Goss and Decker, 2022). By utilising LibChat libraries enhance the accessibility and convenience of their services, allowing users to connect with librarians remotely through instant messaging or live chat features. Consequently, there has been a reduction in face-to-face interactions on-site. Wong and Chan (2018) reinforce the notion that the traditional roles of librarians, such as being gatekeepers of collections and information mediators, are rapidly evolving and being replaced by Internet-connected devices for searching purposes.

Has the traditional ways of operating or working in the library changed in anyway?

Not sure; 17% (7)

No; 7% (3)

Yes; 76% (31)

■ Yes ■ No ■ Not sure
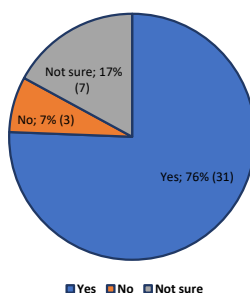
Source(s): Figure by author

Figure 3.
Changes in library
functions

The role of academic librarians in the DUT library underwent a significant change as they became actively involved in research, teaching and learning initiatives within the university. This shift aligns with the perspectives of Otike and Barát (2021) that emphasise the need for academic librarians to support research activities, together with teaching and learning initiatives. The librarians began collaborating closely with the relevant faculties to explore more effective ways of reaching out to users. Additionally, the research unit worked in close partnership with the library to advance research activities at the university. In line with Tenopir *et al.* (2014), librarians were undergoing a transformation in their roles, which involved actively promoting open access research and engaging with researchers to educate them about the benefits of research data and the importance of proper data storage for future use. During the interviews, participants discussed the changes witnessed in the library's evolution.

IP1 revealed that:

> The library was on track with engaging and collaborating with all the departments regarding research data and the importance of sharing and exchanging of knowledge amongst the researchers.

IP2 explained that:

> Big data needs to be explored further.

> The research data management (RDM) is an initiative that the library set up to collaborate with researchers.

It is clear that the roles and skills of librarians have undergone significant changes in recent years due to advances in technology, evolving user needs and the changing landscape of information. Librarians have traditionally been responsible for organising and cataloguing physical library resources. With the rise of digital resources and technologies, librarians now manage electronic databases, digital collections and online repositories (Ocholla and Ocholla, 2020). Librarians are increasingly expected to possess strong digital literacy skills. They help users navigate online resources, teach digital literacy skills, and help users understand and critically evaluate information found on the Internet. As the participants alluded to in their interview sessions, librarians are now actively involved in assisting researchers with finding and accessing scholarly resources, providing guidance on literature reviews, citation management tools and research databases. The librarians are assisting researchers in managing their research data (Jabur, 2019). It is significant to note that changes in the information services landscape have transformed the role of librarians across all types of libraries, from academic and public libraries to special and corporate libraries. Librarians are no longer seen as mere custodians of books, but as dynamic information professionals who play a key role in connecting users with resources and information they need in a rapidly evolving digital landscape.

7. Conclusion
The study highlights the evolving nature of librarianship, emphasising the transition from traditional custodians of physical collections to versatile information professionals who embrace technology, promote information literacy and actively engage with patrons. Librarians across various institutions recognise the importance of their libraries by facilitating information access, providing literacy education, supporting research endeavours and enhancing data management, all while tailoring services to meet the diverse needs of their users. Moreover, librarians actively foster collaborations and forge partnerships within their institutions and with external communities.

CPD is paramount in ensuring that librarians remain equipped with the necessary competencies to navigate the dynamic landscape of their profession effectively. By investing

in CPD initiatives, libraries guarantee that their staff possess the skills and knowledge required to provide exemplary services to their university community and beyond. Despite the challenges posed by various factors, including the pandemic, librarians continually improve their expertise, embrace emerging technologies and innovate service delivery approaches. CPD activities emerge as indispensable tools to support librarians during periods of adaptation, empowering them to meet evolving professional demands effectively. Overall, CPD is essential for librarians to maintain their professional relevance, adapt to changes in the information landscape and continue to provide high-quality services to the users.

8. Recommendations

Due to the changing dynamics, within academic libraries and its evolving landscape, libraries must prioritise and encourage CPD initiatives for their librarians. By adopting these recommendations, libraries can create a culture of continuous learning and development and ensure that the information professionals are equipped with the necessary skills and knowledge to adapt to the evolving landscape of the profession. Some strategies that can help are.

(1) Training and workshops initiatives. Libraries and information services must encourage and provide regular training sessions and workshops for the librarians on emerging technologies, such as digital resources, information literacy trends, research support, copyright compliance and other relevant trending topics.

(2) Conferences and seminars. The librarians should be encouraged to attend professional conferences and seminars to stay updated on trends within the profession. Librarians need to participate in local, national and international library conferences. These events offer opportunities to learn about new developments in the profession, provide networking opportunities and librarians gain insights from experts within the field.

(3) Collaboration and networking initiatives. Foster collaboration among librarians within their institutional communities and with external colleagues from other libraries and information services. Participation in professional associations, forums and online communities should be encouraged to share best practices, exchange ideas and build networks.

(4) Mentoring and job rotations. Libraries and information services should establish mentoring programmes where experienced librarians can guide and support junior librarians in their professional development. Implement job rotation opportunities to allow librarians to gain diverse experiences and broaden their skills set.

(5) Research and publication opportunities. Encourage librarians to engage in research activities and be encouraged to publish their findings. This not only contributes to the profession but also enhances their own knowledge and credibility.

(6) Explore emerging areas within the profession. Librarians must explore emerging areas within librarianship, such as data management, digital preservation and information technological innovations. By developing expertise in these areas, librarians can improve their career prospects and are able to provide valuable services to their libraries and communities.

(7) Performance evaluation and recognition. Integrate the goals and achievements of CPD into the performance evaluation process of librarians, highlighting the importance of ongoing professional development. Recognise and reward librarians

for their active participation in CPD activities and their commitment to enhancing their skills and knowledge.

(8) Develop leadership skills. Librarians should be encouraged to develop leadership skills through training programmes, seminars and workshops. Effective leadership is essential in advancing careers and making meaningful contributions to the library and the institution as a whole.

(9) Reflect and evaluate your personal professional development. Librarians should reflect regularly on their professional development goals and evaluate their progress. Identify areas for improvement, set new objectives and adjust personal learning initiatives accordingly to ensure growth and development.

By adopting these recommendations, many libraries can cultivate a culture of continuous learning and development, ensuring that librarians remain well-equipped to meet the evolving needs of library users and adapt to the evolving changes in the profession.

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