1. Introduction

The internet has transformed the way netizens communicate, work and learn. It has made it easier for people to access information, share ideas and connect with others. Information and communication technologies (ICTs) have provided us with numerous benefits, but they also pose several ethical challenges (Dunmade, 2022). As the world becomes increasingly digitized, protecting intellectual property and ensuring ethical use of technology has become a major concern for academic libraries in Nigeria (Dutta, 2023; Masenya, 2023; Fadehan and Okiki, 2023). The increased use of the internet has also created new ethical challenges, especially in the area of cybersecurity (Reidsma et al., 2023). Cybersecurity is defined as the practice of protecting computers, servers, mobile devices, electronic systems, networks and data from unauthorised access, theft and damage. Cyberethics refers to the ethical principles and guidelines that govern online behaviour. Cyberethics includes issues such as privacy, intellectual property, security and responsibility. Postgraduate students in Nigeria are exposed to cyber threats such as phishing attacks, identity theft, cyberbullying, cyberstalking and revenge pornography, among others (Dunmade, 2022). These threats can have serious consequences, such as loss of sensitive data, reputation damage and financial losses. Therefore, it is important for postgraduate students to have a good understanding of cyberethics and to practice appropriate behaviour when using the internet. Academic libraries in Nigeria must therefore be proactive in implementing cyberethics strategies to safeguard against intellectual property theft, cybercrime and other ethical issues related to the use of technology (Essien and Ekaiko, 2022; Nongo et al., 2023).

This literature review highlights the significance of cyberethics in academic libraries in Nigeria, emphasising the need for librarians and Nigerian institutions to stay current with technological advances and develop appropriate policies to ensure the ethical use of technology among postgraduate library users. It also highlights the crucial role librarians play in promoting cyberethics awareness and providing guidance to postgraduate students on ethical technology use. Librarians in Nigerian postgraduate libraries need to continually educate themselves on the latest cyberethics practices and provide support to students as they navigate ethical issues.

2. Cyberethical behaviour

Right from the time of Greek civilisation, ethics, which is the inner struggle for good to triumph over evil or the tussle between right and wrong, has been discussed by ancient philosophers such as Pliny, Aristotle and Socrates, among others, with many of them presenting their arguments, which have continued even up to the present day. Because Plato and Aristotle’s views on the nature of social duty and the role of the individual in society, human societies have struggled with ethics. With the arrival of Judeo-Christian influence in the Western World, this ethical system was joined by another over a period of about 500 years. Through changing social realities that necessitated a re-envisioning of what they mean for each new era, both ethical systems formed the foundation of Western social development over the following centuries (Mahfood et al., 2005). Cyberethics can be defined as the appropriate moral conduct to be observed when functioning in cyberspace. Various behaviours and factors come into play when an individual is in an online environment and has the opportunity of interacting with other individuals both known and unknown as a result of the advancement in ICT which allows remote communication with others in real time. The expression of these behaviours could be deemed positive or negative, based on so many pre-determined factors. While Dunmade et al. (2019) posited that there is a need to check moral behaviour while in cyberspace, Baron (2018) opined that technology has no inbuilt or inherent mechanism with which it can insist on compliance of suitable behaviour from those who partake of it, thus inferring that the onus is on the end user to ensure responsible usage. Also, technology is developing at a faster rate than civil society can make laws to ensure that netizens (users of cyberspace) are protected.

3. Types of cyberethical behaviour

Various researchers have identified different cyberethical behaviours. These include hacking, fraud, internet libel, identity theft, child pornography, cyber-sex, cyber-squatting, domain-squatting, espionage, copyright infringement, financial theft, cyberstalking, cyberbullying, spamming, copyright, online harassment and software theft as well as digital plagiarism, internet addiction and online sales of human beings and body fluids, among others (Pruitt-Mentle, 2008). Wiafe et al. (2020) listed cyber piracy,
cyber plagiarism, computer crime and abuses and cyber privacy infringement as cyberethical behaviours. Kavitha and Preetha (2019) mentioned all forms of improper, wrongful and illegal use of information derived online; all forms of impersonation and identity theft; and the spreading of malware and viruses, among others. Adetimirin (2017a) mentioned fair and responsible ICT use, intellectual property and copyright issues, online courtesy politeness and etiquette as well as software violation issues.

In a classification of ethical behaviours in the use of ICTs, Vârlan and Tomozei (2018) divided cyberethical actions into four categories: general ethical behaviour, software piracy, plagiarism and cheating and computer security. Property rights, freedom of expression, freedom of association, equal access to information, confidentiality and intellectual property were included in the list of general ethical behaviours. Hacking, all sorts of illicit downloading and questionable online habits and activities are among the others—in other words, privacy, accuracy, property and accessibility issues. For software piracy, they mentioned downloading or stealing copyright-protected software. Under plagiarism and cheating, they listed unwholesome practices as cutting and pasting texts without acknowledging the source, paraphrasing the words of another person without citing the source, using another person’s ideas without giving due credit, purchasing projects or assignments on the internet, holding a conversation or a chat with students during a test or examination, using mobile phones and claiming to have attached an assignment to an e-mail when one did not. Finally, for computer security issues, they listed the protection of the personal data of an organisation.

4. Relationship between cyberethical behaviour and libraries

Libraries are important institutions that serve as a hub for information and knowledge dissemination. With the advent of technology, libraries have also evolved to provide digital resources and services to users (Bouamri et al., 2022). However, with the increasing use of technology, there has also been a rise in cybercrime and unethical behaviour (Pratama et al., 2022).

Cyberethics refers to the ethical principles and practices that govern the use of technology and the internet. It encompasses a wide range of issues, including privacy, security, intellectual property and online behaviour. Cyberethical behaviour involves following these principles and practices in one’s online activities. Libraries are crucial in promoting cyberethics because they are often the gateway to digital resources and services (Wasike, 2013).

Libraries have a responsibility to promote and enforce cyberethics. They must ensure that their digital resources and services are secure and protect users’ privacy. Libraries must also educate their users on cyberethics and provide them with the tools to engage in ethical online behaviour (Akakandelwa, 2016). This can be done through workshops, training sessions and the provision of resources such as online guides and tutorials.

In addition, libraries must also promote cyberethics by setting an example themselves. This includes adopting best practices in their online activities, such as securing their networks and protecting their users’ data. Libraries must also be transparent about their data collection and use policies and ensure that they comply with relevant laws and regulations (Tanate-Lazo and Cabonero, 2021).

Furthermore, Fortier and Burkell (2015) opined that libraries must also be aware of the potential risks associated with digital resources and services. This includes the risk of cyberattacks, data breaches and other forms of cybercrime. Libraries must take steps to mitigate these risks, such as implementing security measures and regularly updating their systems and software.

Another important aspect of promoting cyberethics in libraries is ensuring equitable access to digital resources and services. Loh et al. (2022) maintained that libraries must ensure that all users have equal access to these resources and services, regardless of their background or socioeconomic status. This includes providing access to digital resources in multiple languages and formats and ensuring that users with disabilities can access these resources.

The relationship between cyberethical behaviour and libraries is crucial in promoting ethical online behaviour and protecting users’ privacy and security. Libraries have a responsibility to promote cyberethics by educating their users, adopting best practices and mitigating potential risks associated with digital resources and services. By promoting cyberethics, libraries can ensure that their users can engage in ethical online behaviour and make the most of the digital resources and services available to them.

5. Role of libraries and librarians in curbing inappropriate cyberethic behaviour

In a bid to carry out their research and to satisfy their information needs, postgraduate students make use of the library and its resources, whether in a book or electronic form (Azonobi et al., 2020; Kumar and Kumar, 2021). When these students approach the library or access its resources from an offsite internet-enabled location, they expect that librarians, with their expertise and skill, should be able to render assistance, enabling them to retrieve materials with maximum satisfaction in as short a time as possible (Mugo and Mathu, 2021). Beever et al. (2019) suggested different means that academic libraries and librarians can play in creating awareness to reduce the menace of plagiarism and by extension undesirable cyberethical behaviour. These include expanding library resources to include books and publications on cyberethical behaviour and research ethics, using library education as a means of increasing awareness, and provision of similarity-checking software (Boghian, 2022; Gupta et al., 2022).

Libraries can play an important role in promoting cyberethics among postgraduate students in Nigeria (Aderibigbe et al., 2021). Libraries provide access to a wide range of resources, including books, journals, databases and online resources.

Libraries can promote cyberethical behaviour in several ways, including the following:

- Providing education and training: Libraries can offer educational programs and training sessions on cyberethics, create online tutorials and provide access to online resources on cybersecurity, including safe online behaviour, protecting personal information, avoiding
scams and phishing attacks and respecting intellectual property rights. The role of librarians in ensuring that postgraduate students engage in appropriate cyberethical behaviour can be carried out through adequate user education (Adetimirin, 2017b). In the case of students who physically approach a library building, this can be done by various library promotion activities and placing of well-positioned banners and fliers in strategic and eye-catching locations in the library, as well as using adequate user education and library orientation programmes (Jack, 2007). The above can also be done similarly for those who choose to access online resources, by leveraging ICT and various social media platforms. Nannim et al. (2023) and Banjoko et al. (2023) listed YouTube, Facebook, WhatsApp, LinkedIn, ResearchGate and Academia as commonly used social media platforms that students use regularly. This education can help users make informed decisions about their online behaviour and understand the potential risks and consequences of unethical behaviour. Librarians can work with postgraduate students to help them understand the importance of cyberethics and to provide them with the resources they need to practice appropriate behaviour (Nazeer Khan et al., 2023).

Implementing policies and guidelines: Libraries can develop policies and guidelines for appropriate online behaviour and enforce these policies through filtering software and monitoring tools (Harisanty et al., 2022; Ribble and Park, 2022). These policies may include guidelines on the appropriate use of library computers and networks, rules for accessing and sharing digital resources, and penalties for violating library policies.

Providing resources and tools: Libraries can provide users with resources and tools to help them stay safe online. For example, libraries may offer access to antivirus software, password managers and other security tools. Librarians can demonstrate good cyberethics practices by using secure passwords, encrypting sensitive data and protecting their devices from malware and viruses (Al-Hawamleh, 2023). They may also provide access to digital resources that promote cyberethics, such as e-books on online safety and privacy.

Librarians can also provide support and guidance to postgraduate students who have experienced cyber threats or who have violated the library’s policies (Wynia Baluk, 2022). Serving as a role model: Libraries can serve as role models for cyberethical behaviour by demonstrating best practices in their online conduct. This may include protecting users’ personal information, respecting copyright and intellectual property rights and promoting open access to information. Librarians can also play a role in promoting cyberethics among postgraduate students by modelling appropriate behaviour. By modelling appropriate behaviour, librarians can set an example for postgraduate students to follow.

6. Challenges

Based on the review of literature, the following challenges that libraries and librarians face in promoting cyberethics among postgraduate students in Nigerian universities were highlighted. These are as listed below:

• Lack of awareness of librarians

One of the primary challenges that librarians face is a lack of awareness of cyberethics. Many librarians may not fully understand the implications of cyberethics or be familiar with best practices for promoting appropriate online behaviour. This lack of awareness can hinder their ability to provide guidance and support to postgraduate students.

• Insufficient library infrastructure

Another significant challenge is the insufficient library infrastructure in Nigeria. Many libraries lack the resources necessary to provide students with access to the latest technology and software, making it difficult for students to stay up to date with the latest cyberethical practices. Additionally, inadequate internet connectivity can prevent students from accessing online resources and learning materials that are critical for promoting cyberethics.

• Poor understanding of cyberethics among postgraduate students

Postgraduate students in Nigeria may not have a strong understanding of cyberethics, which can make it challenging for librarians to promote appropriate online behaviour. Many students may not be aware of the risks associated with inappropriate online behaviour or the impact it can have on their personal and professional lives. This lack of understanding can make it challenging for librarians to educate students about the importance of cyberethics and promote responsible online behaviour.

7. Conclusion

In conclusion, libraries and librarians can play an important role in promoting cyberethics among postgraduate students in Nigeria. Libraries can provide access to resources and training sessions on cyberethics, develop policies and guidelines for promoting appropriate online behaviour. Additionally, many librarians may not have the necessary expertise to provide guidance and support to students in this area, which can limit their effectiveness in promoting cyberethics.

8. Recommendations

The study recommends the following:

• Librarians should avail themselves of all possible methods of learning how to exhibit the most ideal cyberethical behaviour, through all opportunities available to them.
Librarians, regardless of age or level of professional attainment, should endeavour to gain awareness on cyberethical behaviour to enable them to function as better citizens of the cyber-society. This can be done through increased awareness by reading relevant books and visiting the library to access resources on cyberethics, participating in cyberethical behaviour training and sensitisation workshops, seminars and specially arranged scientific meetings, among others. If this is done, the librarians will be able to impact postgraduate students and patrons when they make use of resources in the library.

- Towards ensuring that they have a balanced understanding of the concept, there is a need for university management, library policymakers, professional library bodies and all concerned stakeholders to increase awareness through conferences, workshops, etc.

- Similarly, libraries and, by extension, librarians should create adequate awareness by ensuring that there is an expansion of library resources by including books and publications on cyberethics and research ethics, using library education as a means of increasing awareness and provision of similarity-checking software libraries can conduct awareness and training sessions on a variety of online and offline platforms. These could include topics such as general expected cyberethical behaviour, ethics, enlightenment on similarity-checking software and the use of citations and reference management tools (Dunmade, 2022).

Other library orientation programmes could include topics such as raising awareness on copyright and intellectual property rights among others. These user awareness programmes can be conducted at the beginning of each academic session to educate students and research scholars on cyberethics and appropriate cyberethical behaviour.

- The library can be used as a means of creating awareness for postgraduate students to acquire the needed appropriate cyberethical behaviour. This can be done by using orientation, library promotion and exhibition activities, campus radio jingles, billboards, banners and handbills.

- Thus, library management and, by extension, university management should deliberately ensure that strict statements of cyberethical behaviour, computer usage and ICT policies are put in place to ensure that all those who make use of the internet while on campus feel safe. Similarly, penalties and deterrents should be put in place to forestall misbehaviour.

- Specifically, to reduce plagiarism and to ensure that intellectual property rights are maintained, there is a need for librarians to ensure that postgraduate students understand that obtaining permission from the owner of the copyright or proper acknowledgement of the source of the online content is essential. The availability of content on the internet does not automatically signify that it can be used anyhow without abiding by the ethics that surround the distribution and use of electronic resources; these resources should be used within the confines of fair use and good conscience. This can be done by ensuring that universities are equipped with efficient, fast, up-to-date plagiarism-checking software.

REFERENCES


