



Ethical Challenges in the Use of Information in Selected Public and Private University Libraries in Ghana

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Abstract

Library professionals all over the world constantly encounter an ethical issue that affects the dissemination of information. Academic libraries are faced with different ethical challenges including information dissemination, lack of financial resources, human capacity etc. The study explored the ethical challenges in the use of information in the selected public and private libraries in Ghana using the PAPA's model as a guide. The study adopted the survey method and quantitative approach. The study setting was in four universities namely: KNUST (public), UG (public), Central University (private) and Garden City (private). Ninety-three (93) library staff were the total population surveyed. The sampling technique employed was purposive sampling, while questionnaires were the instrument in use in collecting data. All data collected in person and online were coded and analyzed using SPSS version 26. After analysis, the results were presented in tables and charts. The study revealed that scholarly materials are the nature of information materials in the library, while academic books are the type of information materials in the library. The study discovered that educational books are purchased from publishers while information materials are published through the university's repository and online system. The study also demonstrated that patented materials are the only materials that can be subjected to copyright laws. Recommendations identified include: adhering to professional codes of ethics, developing and implementing policies and procedures, encouraging originality and creativity, providing education and training on accessibility, and reviewing and updating collections and resources.

Keywords: Ethical Challenges, Ethics, Use of Information, University Libraries, Ghana

Introduction

“In ancient times, inscriptions on stones, woodcarvings, rock carvings were the primary source of information.” Although the world progressed and information usage and access increased with time, access to information was still very limited (Choo et al., 2013). Fast forward to the 21st century, information is characterized by rapid access to information via electronic means (Rowley & Hartley, 2017). All over the world, the use of technologies in the distribution of information is rapidly affecting the services public libraries provide to users. Pinfield,

Cox & Smith, (2014), notes that since the introduction of technology, there is a change in the way public libraries provide certain services such as information services, circulation services, and authorship services (Pinfield et al., 2014). These changes have enabled users to type, research, read documents online, access online resources such as research papers, and dissertations, and apply for jobs amongst other things. Globally, the library and information service has undergone several transformational processes as a result of digitization of library services (Enweani & Eke, 2018). Thus the conservative nature of libraries

has been demystified while a more proactive approach to librarianship has taken over (Scupola & Zanfei, 2016). In Africa, libraries and information centres are constantly faced with excess challenges in the documentation and communication of knowledge and data. These include the lack of financial resources, human capacity, technological shortages and the lack of legal frameworks at the national and international levels to support the library's efforts to document and communicate indigenous knowledge (Sejane, 2017).

To move along this trend, libraries are faced with different ethical challenges including privacy and data security, intellectual property right, the digital divide, censorship and access to indigenous knowledge at national and international levels to support the library efforts to document and communicate indigenous knowledge (Hoq, 2017). The fast-developing information and communication technologies continue to pose challenges to how best libraries can document and disseminate this oral and community-based knowledge to a globally accepted knowledge base (Bertot et al., 2014). In Ghana, studies show that ethical dilemmas constantly faced by librarian staff include unawareness of the staff to ethical codes, indulgence in misconducts such as pilfering, falsification, fabrication, data cooking, gifted authorship, ghost authorship, neglected authorship, the lack of ethical approval, nondisclosure, auto-citation, duplicate submissions, duplicate publications, and plagiarism are common problems (Avuglah et al., 2020). To address these challenges libraries can indulge in training and education of staff, foster partnerships and collaborations, as well as advocate for legal and policy reforms (Slatter & Howard, 2013).

Ethics is a multidisciplinary field applicable in nearly all disciplines including library, information services and publishing (Klaver et al., 2014). Therefore, it implies that as a philosophy it studies human characters and activities, particularly good or bad characteristics about the environment, others and themselves (Alfano, 2013). The concept of ethics in information materialized in the 1980s to address issues developing in libraries, institutions and publishing houses (Martzoukou, 2020). Information is an intellectual resource from which individuals rely to shape their lives and promote knowledge (Choo et al., 2013). It is therefore expected that librarians stand for these codes to avoid wrongdoings that could affect their professions. In higher institutions such as universities, preserving information and data is of the essence as these institutions rely on such resources to

expand knowledge in academia (Garcia & Barbour, 2018). Yet issues of plagiarism, theft and wrongful sales are often experienced in several of these libraries putting their integrity in shambles (Astin, 2012).

A study found that some ethical dilemmas often experienced by librarians include accepting bribes, and benefits, disclosing personal and confidential information, using the library for personal use, and influencing peddling (Martin et al., 2014). Most often than not, library professionals are not fully aware of the ethical implications of their actions as their behaviour is shaped by certain customs, and habits and considered the norm (Gonin et al., 2012). Academic libraries can be found in higher educational institutions such as colleges, universities, and polytechnics. Their primary purpose is to support academic activities as well as research of students and faculty. In Ghana, several well-established libraries exist in public, private universities that house large collection of books of various disciplines and other essential knowledge. These libraries also house electronic resources such as online databases, journal databases, online books, CD-ROMs among others. As a result, ethical challenges in handling information arise now and then as the staff of some of these libraries are inadequately trained to handle all kinds of information. According to Musah, 2020, Public universities are well funded either through government, international grants or university resources and thus their libraries are better equipped to handle various challenges (Ogunode & Musa, 2020). On the hand, private universities are underfunded and most times have to fund the libraries through student fees. This affects their effectiveness and functionality. In all these libraries, there is the possibility that some of the staff have no idea about ethical challenges in the use of information. For these reasons, it is therefore important to delve into ethics and the challenges that arise in the use of information in the library.

Research Problem and Objectives

A study by Wilkinson, (2014) found that in some libraries in the country, librarians are unaware as to the extent of damage violating ethical codes could cause (Wilkinson, 2014). A literature search on ethical challenges revealed very few studies have been conducted within the Ghanaian context, with all studies concentrated on awareness and perception mostly in one institution (Abban, 2018; Agyen-Gyasi & Boateng, 2015; Cobblah, 2015). The lack of empirical evidence in this context also further proves the relevance of the study as studies fixated on ethics only explore awareness

and perception without addressing the challenges that stem from ethics in information usage. Ghana also experiences a lot of ethical issues about information and data use such as dealing with copyright, plagiarism, usage, social media, ownership, digital divide, privacy, accuracy, property and accessibility, which is likely to be affecting the professional activities of publishers and directors of public libraries in carrying out their daily activities (Ndumbaro, 2018). Therefore, a gap exists in research about examining ethical challenges in the use of data and information in various libraries. It is against these issues that this study seeks to investigate ethical challenges in the use of data and information resources in the library. This study, therefore, seeks to identify the ethical challenges linked with use of data and information resources in the library, using the PAPA (Privacy, Accuracy, Property, and Accessibility) model.

The specific objectives of the study are to (i) identify the type and nature of information in the selected public and private libraries in Ghana; (ii) identify the ethical challenges in acquiring/publishing privacy information; (iii) investigate ethical challenges in errors associated with information; (iv) investigate the ethical challenges in plagiarism management in the use of information.

Literature Review

Type and Nature of Information in Academic Libraries

In general, the nature of the information in libraries is diverse, covering multiple subjects and formats, catering to diverse audiences and providing access to information for educational, research, recreational and personal growth purposes (Rubin, 2017). Libraries offer a wide range of services such as reference assistance, research assistance, and programming such as workshops, lectures and book clubs (Kang et al., 2022). They also offer access to technology such as computers, printers, scanners, and internet access (Michele Moorefield-Lang, 2014). The specific type and nature of information are books, periodicals, audio-visual materials, digital resources, special collections and archival materials.

Ethical Challenges in Acquiring/Publishing Information to Privacy (Privacy)

The dissemination of information to library users should always be the primary objective of a university library. To accomplish this goal, library resources must be fully, effectively and efficiently used (Gakibayo et al., 2013). When it comes to university libraries, user

familiarity with the library and its resources is an important factor; thus, it is the responsibility of library professionals to comprehensively educate users about their information resources and teach them how to utilize them effectively.

Ethical Challenges in Errors Associated with Information (Accuracy)

Accuracy raises issues such as who is responsible for information's correctness and validity, as well as how those who have been harmed by false information may be made whole (Jagarlamudi et al., 2022). Communication that does not verify or even attempt to verify the facts may lead to serious ethical and legal issues. These issues might be avoided if one just tries to verify the facts. Nobody can argue that knowledge may make people's lives more difficult, especially if the information on which their lives are predicated is incorrect (Brown & Duguid, 2017). In addition to these characteristics: the author's identity; whether or not the author is an expert on the subject; no advertising in the text; no spelling or grammatical problems; and the absence of ad placement. When evaluating information, Slavin, 2020, suggests several additional principles but cautions that these suggestions should not necessarily supersede instruction on verifying the material's validity (Slavin, 2020). As a result, library staff and users alike have a responsibility to ensure that the information they are sharing is accurate before it is made accessible to others. Designers must make sure that the information they provide is correct. When a crime like identity theft is committed, the problem of inaccuracy becomes much more serious. This has serious implications for information ethics, and has been a significant concern for some time (Copes et al., 2010).

Libraries have a responsibility to provide accurate information to patrons. However, when errors are present in the information provided by libraries, it can lead to the spread of misinformation (Hamad et al., 2022). Misinformation can lead to confusion, mistrust and even harm to people, institutions and communities. Libraries are trusted institutions and patrons rely on the information they provide. When errors are present in the information provided by libraries, it can undermine the credibility of the library, leading to a loss of trust among patrons (Young et al., 2021). When errors are present in information, it can undermine the credibility of the source, leading to a loss of trust among the public. This can be particularly damaging for organizations, such as news outlets and

academic institutions that rely on their credibility to maintain their reputation (Bennett & Livingston, 2018). Libraries may inadvertently perpetuate bias through the selection and provision of information. Information can be biased, either unintentionally or deliberately and one bias can lead to the dissemination of false or misleading information and can contribute to the spread of misinformation (Bawden & Robinson, 2009). This can also result in a lack of transparency and accountability in the dissemination of information and to mitigate these challenges, organizations and individuals should have fact-checking procedures in place to ensure the accuracy of the information they are providing.

Ethical Challenges in Plagiarism Management in the Use of Information (Property)

The concept of property is concerned with issues relating to ownership, as well as ease of use and consistency in the dissemination of information. Mason's concerns about property are focused on the gathering of information from individuals and the incorporation of that information into intelligent systems such as the Internet (Shim et al., 2019). Even if a user has permitted their information to be stored on the system, there is still a significant risk that the user will no longer have control over the information that has been stored. Information ownership and author's rights are becoming more confusing as a result of technological advancements (Windisch & Peukert, 2022). This is because technological advancements make it possible for content to be reproduced and disseminated more rapidly and easily than ever before, all without the acknowledgement of the work's original author. The fact that information possesses a variety of unique qualities can result in devastating issues concerning intellectual property. On the other hand, once knowledge is formed, it has the mysterious attribute of ease of accessibility to copy and share after it has been created. Because of this, information providers need to refrain from publishing information about themselves that they may choose to delete at a later time.

In addition, the creator of the content should not disclose any information that is the product of the ideas of another person unless that other person has permitted them to do so. It could be difficult to remove the item from the public domain after it has been distributed to a wide audience. When individuals or organizations use the information without proper attribution or permission, they may be violating

copyright laws (Scassa, 2013). This can lead to legal action and financial penalties. When plagiarism is detected in an individual's work, it can undermine their credibility and integrity. This can be particularly damaging for students, researchers, and professionals who rely on their reputations to maintain their careers (Anderson & Steneck, 2011). When plagiarism is present in an individual's work, it can be seen as a lack of originality and creativity. This can lead to a lack of trust and respect from others in the field. When plagiarism is present in an individual's work, it can be seen as a misuse of the information and a lack of respect for the original source. This can lead to a lack of trust and respect from the original author and the community (Maxel, 2013). When plagiarism is present in an individual's work, it can be difficult to determine the responsible parties and hold them accountable. This can lead to a lack of transparency and accountability in the use of information (Evering & Moorman, 2012).

Theoretical Framework

The theoretical framework in this study known as the PAPA model has been used in empirical literature to understand and evaluate the problem of ethics. The model introduced by Mason (1986) is used to identify ethical issues that arise from the misuse of information and information technology. Dr. Richard Mason created the PAPA model where he categorized information ethics issues into four categories. The PAPA model created by Mason in 1986 establishes the fact that the challenges faced in the digital age are due to the nature in which information is obtained usually through the mind of one person to the mind of another (Măță et al., 2019). The PAPA model is categorized into Privacy, Accuracy, Property, or Accessibility. The variables for the study are privacy, accuracy, property, accessibility, use, and information. Studies conducted on ethical challenges also demonstrate that the use of the PAPA model is a suitable framework that explains the research problem. This is because the PAPA model covers all aspects of examining the ethical behaviour of a person based on a particular phenomenon. For instance, with the issue of academic libraries, ethical issues of privacy involve assessing the personal information of others from databases or computers in the library. While, accuracy raises issues such as who is responsible for information's correctness and validity, as well as how those who have been harmed by false information may be made whole (Jagarlamudi et al., 2022). The concept of property is concerned with issues relating to ownership, as well as ease of use and

consistency in the dissemination of information. The ethical concerns about property are focused on the gathering of information from individuals in this case, faculty and students and the incorporation of that information into systems such as the Internet (Shim et al., 2019). There is therefore a direct relationship between the framework and objectives.

Profiles of the study Communities

The study was taken on four campuses namely Kwame Nkrumah University of Science and Technology (KNUST), University of Ghana, Legon, Central University and Garden City University College. KNUST and Garden City University are in Kumasi, in the Ashanti region, whiles UG, and Central University are in the Greater Accra region respectively.

The University of Ghana, Legon (UG)

The University of Ghana (UG) is the oldest of the thirteen Ghanaian national public universities. It was founded in 1948 and can be found in the centre of Legon in the hidden hills. It was built in the British colony of the Gold Coast, as the University College of the Gold Coast, and was originally an affiliate college of the University of London, which supervised its academic programs and awarded degrees. After independence in 1957, the college was renamed the University College of Ghana. It changed its name to the University of Ghana in 1961, when it gained full university status. The University of Ghana is situated on the West view of the Accra Legon hills, at the northeast of the centre of Accra. It has various schools, institutions, colleges and departments and has over 40,000 registered students.

Its library, the Balme Library, established in 1948 is located on the main campus of the University of Ghana. The Balme Library is the main library of the University and is also the largest within the University of Ghana Library System (UGLS). It houses information resources, IT infrastructure and expert staff. Since its establishment in 1948, the library has gone through successive growth with its printed book collection totalling over 400,000 volumes. The library subscribes to an increasing number of online databases including electronic journals (e-journals) and electronic books (e-books). The Balme Library together with the various satellite libraries in schools, institutes, faculties, departments and halls of residence of the university, from the University of Ghana Library System (UGLS).

Kwame Nkrumah University of Science and Technology (KNUST)

The Kwame Nkrumah University of Science and Technology (KNUST) is a Ghanaian public university and the largest university in the Kumasi Metropolis and in the Ashanti Region of Ghana. The university was first conceived by Agyeman Prempeh I, the Ashantehene in the early 1950s as part of his drive towards modernization of his Ashanti kingdom. Within the four campuses, KNUST is the largest. It covers a total land capacity of 2512.96 acres. The main campus which is about seven square miles in area, is about eight miles (13 km) to the east of Kumasi, the Ashanti Regional capital. It houses 6 colleges with several faculties, research centres and courses. Within the university, the KNUST Library provides information in electronic and print formats to staff and students mainly to support teaching, learning and research in science and technology for national development. It is a depository library for all materials published in Ghana and for international institutions and organizations like the World Bank and other United Nations Agencies. Digital services are available through the Open Educational Resource (OER) as well as the DSpace repository. The Open educational resources component of the Kwame Nkrumah University of Science and Technology fosters collaboration on curricula, course materials, and content; generates connections between disciplines, teachers, and learners; and inspires the use of educational materials more effectively.

Central University

Central University is an initiative of the church, International Central Gospel Church (ICGC). It started as a short-term pastoral training institute in October 1988 by the church. The college later upgraded its programs to the baccalaureate level, and in line with national aspiration expanded its program to include an integrated and practice-oriented business school, named Central Business School. In January 2016, the University College received its long-awaited Presidential Charter to become an autonomous and fully-fledged university, as Central University.

The Central University Library was set up to provide the informational and research needs of the University community. Knowledge is said to connote power, and the mission of a library is to package this knowledge in a way that can be easily accessible to support teaching, research, give information and entertain. Since the Vision of the University is to

train transformational leaders, the library provides accurate, current, relevant, and timely information to empower users. A higher percentage of the library's collection is funded from the University's budget. However, the library receives donations from donors both in Ghana and abroad. The library also has E-Journal services through its membership of the Consortium for Academic and Research Libraries in Ghana (CARLIGH), E-book Service and an Electronic Catalogue both built in-house and powered by the Destiny Library Manager's Software. Central University currently has seven (7) libraries, stocking mostly books on programs being run at the various campuses.

Garden City University College

The Garden City University College is one of the private universities in Ghana. It is located at Kumasi in the Ashanti Region. It was established in 2001 as the College of Information Technology and Management Systems. The college was converted into the Garden City University College in 2004. GCUC's library has a large collection of books, periodicals, newspapers, manuscripts, CDs etc., all of which are available for lending to patrons and members of the GCUC community for specified periods. The library also provides quiet areas for studying as well as facilities for accessing electronic resources and the Internet. Additionally, Central to its mission is to serve the university's students, faculty, and staff as well as researchers and alumni. Members of the community are also welcome to use the library's facilities under the determined policy governing them.

This study focused on four universities consisting of two public and two private universities. These universities have been in existence for at least 20 years and their library systems are more organized with experienced staff as well as stocked with good materials. The selection of these universities and the research is considered suitable as demands in technological advancement can affect ethical compliance. Furthermore, there is limited information on this research area which has motivated the researcher's interest.

Methodology

Quantitative survey research was adopted for this study. The study employed non-probability sampling approaches such as purposive sampling for selecting the target population. By using purposive sampling, the researcher directly selected librarians

who have direct experience and understanding of these challenges. This targeted approach ensures that the sample consists of individuals who can provide valuable insights and perspectives on the research topic. The selection of the university libraries was done based on key factors. Firstly, the researcher considered the organizational structure of the universities. The chosen universities have been in existence for at least 20 years, indicating their establishment and stability in the Ghanaian higher education landscape. This implies that their library systems have had sufficient time to develop and refine their operations, making them suitable candidates for studying ethical challenges in library information use. Secondly, by selecting universities with well-established libraries, it can be assumed that the librarians working in these institutions possess a certain level of knowledge and understanding of ethical issues related to information use. Their expertise and familiarity with library operations make them valuable sources of information for assessing the ethical challenges faced in the library context. Moreover, the selected universities were chosen to represent the broader landscape of university libraries in Ghana. By including these universities, the researchers aimed to capture a comprehensive understanding of ethical challenges prevalent in different types of institutions. This ensures a more holistic exploration of the topic and enhances the applicability of the study findings to the wider Ghanaian context. A well-structured questionnaire consisting of close-ended questions, distributed into four sections was used to collect primary data from the target population with a sample size of 100. Out of the 100 copies of the questionnaire administered, only 93 copies were filled and used for analysis. While the sample size is smaller than desired, it still provided a valuable snapshot of the perspectives and experiences of librarians in the selected universities.

Demographic of Respondents

Table 1: Gender of Respondents

Gender	Frequency	Per cent
Male	47	50.5
Female	46	49.5
Total	93	100.0

Source: Field data, 2022

Table 1.1: Gender of Individual Respondents in the Universities

Gender	UG	KNUST	CENTRAL UNIV.	GARDEN CITY	TOTAL
Male	17	19	10	1	47
Female	12	17	13	4	46
TOTAL	29	36	23	5	93

Source: Field data, 2022

Table 1.2: Age of Respondents

Age	Frequency	Per cent
30 and below	22	23.7
31-40	39	41.9
41-50	22	23.7
51-60	10	10.8
Total	93	100.0

Source: Field data, 2022

Table 1.3: Educational Level of Respondents

Education	Frequency	Per cent
Diploma	11	11.8
Bachelor's degree	55	59.1
Master's degree	24	25.8
PHD	1	1.1
O'Level	1	1.1
Certificate	1	1.1

Source: Field data, 2022

Table 1.4: Working Years of Respondents

Working Years	Frequency	Per cent
Less than 5 years	27	29.0
5-10years	16	17.2
11-15years	22	23.7
Above 16years	28	30.1
Total	93	100.0

Source: Field data, 2022

Table 1.5: Current Rank in the Library

Library Ranks	Frequency	Per cent
Senior library assistant	39	41.9
Library assistant	30	32.3
Principal Librarian	7	7.5
Junior Library Assistant	9	9.7
Chief deputy library assistant	2	2.2

Deputy librarian	1	1.1
Sub chief	1	1.1
Electronic resource librarian	1	1.1
Administrative assistant	1	1.1
Junior assistant registrar	1	1.1
Assistant library director	1	1.1
Total	93	100.0

Source: Field data, 2022

Table 1.6: Type of Library

Type of Library	Frequency	Per cent
Public	64	68.8
Private	29	31.2
Total	93	100.0

Source: Field data, 2022

Table 1.7: Place of Work

Place of Work	Frequency	Per cent
UG	23	24.7
KNUST	29	31.2
Central University	36	38.7
Garden City University	5	5.4
Total	93	100.0

Source: Field data, 2022

Type and Nature of Information in the Library

Nature of Information in the Library

Respondents were asked to indicate the nature of information available in the library using the yes or no responses. Respondents also had the option to select multiple responses from a list which includes scholarly materials, newspapers, non-academic books, and open Internet sources. Each option was coded and analyzed individually and the result is presented. This result shows that most libraries primarily possess scholarly materials, followed by newspapers and open Internet sources. The responses are shown in Table 2 below:

Table 2: Nature of information in the library

Nature of Information	Yes	No
Scholarly materials	91(97.8%)	2(2.2%)
Newspapers	69(74.2%)	24(25.8%)
Non-academic books	26(28.0%)	67(72.0%)

Open internet and social media	52(55.9%)	41(44.1%)
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Source: Field data, 2022

Type of Information in the Library

Respondents were asked to indicate the type of information available in the library. Respondents had the option to select multiple responses from a list which includes news sources, popular magazines, trade journals, scholarly journals and academic books. Each option was coded and analyzed individually and the result is presented. The results show that scholarly journals and academic books are the type of information most libraries keep. Table 2.1 displays the responses:

Table 2.1: Type of Information in the Library

Nature of Information	Yes	No
News sources	68(73.1%)	25(26.9%)
Popular magazines	25(26.9%)	68(73.1%)
Trade journals	24(24.8%)	69(74.2%)
Academic books	80(95.7%)	4(4.3%)
Scholarly journals	82(88.2%)	11(11.8)

Source: Field data, 2022

In this study, 68.8% of respondents work in public libraries while 31.2% work in private libraries. This representation is due to large numbers of individuals in public institutions like KNUST and low numbers of individuals in private institutions such as Central. Moreover, public libraries may be likely to possess several types of information as compared to private libraries as visitors that frequent both types of places may not solely do so for academic purposes. In the study, results show that based on the nature of information, scholarly materials (97.8%) are the most kept information in the libraries, followed by newspapers (74.2%) and open internet sources (55.9%). Studies by Chen, (2015), and Oyedemi, (2017) also reported similar findings and found that academic libraries mostly contain scholarly materials. In a similar vein, for the type of information, the results show that academic books (95.7%) are the highest type of information in these libraries followed by scholarly journals (88.2%), news sources (73.1%), magazines (26.9%) and trade journals (25.8%). This finding is supported by Chen (2015), Oyedemi, (2017) and Gyasi, (2010) that also found similar results in their findings.

Ethical Challenges in Acquiring/Publishing Information (Privacy)

Libraries obtain several information in various forms yet the ways, in which data is obtained, distributed or published raise concerns about information confidentiality. Therefore, knowledge of information privacy must be assessed by library professionals and personnel as described below.

Table 3: Acquisition of Educational Books in the Universities

Responses	Yes	No
Purchased from publishers	89(95.7%)	4(4.3%)
Donations	49(52.7%)	44(47.3%)
Submissions from authors	29(31.2%)	64(68.8%)

Source: Field data, 2022

Eighty-nine (95.7%) indicated that educational books are 'purchased from publishers, whilst 4 (4.3 %) indicated otherwise. Out of 93 respondents, 49 (52.7%) indicated educational books are acquired through 'donations' while 44 (47.3%) did not select that option. Out of 93 responses, 29 (31.2%) indicated that educational books are acquired through 'submissions from authors', whilst 64 (68.8%) did not select that option.

Publication of Information Materials in the University

The publishing of information materials in universities is a critical aspect of the academic enterprise. This process involves the dissemination of knowledge and research findings to the broader academic community and beyond. However, the publication of information materials also raises several ethical challenges that were considered in this study. These challenges include issues such as plagiarism, fabrication of data, conflicts of interest, and privacy violations. Respondents were asked how information materials are published in the university, and Table 3.1 gives out the responses:

Table 3.1: Publication of Information Materials in the University

Responses	Yes	No
Through a rigorous editorial process	30(32.3%)	36(67.7%)
Through submissions by authors	26(28.0%)	67(72.0%)

Through the university's repository and online system	66(71.0%)	27(29.0%)
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Source: Field data, 2022

Thirty (32.3 %) out of 93 respondents indicated that information materials are published through a rigorous process, while 36 (67.7 %) indicated otherwise. 26 (28.0 %) indicated information materials are published through submissions by authors, 29 (31.2%) indicated that information materials are published through the university's repository and online system, whilst 64 (68.8%) did not select that option.

Type of Information a person or an organization has a right/ a privilege to obtain from the library.

Libraries play a crucial role in the dissemination of information, serving as a source of knowledge and resources for individuals and organizations. However, access to information is not unlimited, and certain types of information may be restricted. This can include information that is confidential, classified, or protected by privacy laws. Determining what information, a person or organization has the right to obtain from a library can be complex, as it may depend on several factors, including the purpose of the request, the type of information, and the laws and policies that apply. It is important to note that while libraries have a responsibility to provide access to information, they also must protect the privacy and confidentiality of their patrons and the information they hold. Therefore, respondents were made to select the type of Information a person or an organization has a right/ a privilege to obtain from the library which involved responses on copyright materials, published articles, newsletters and flyers. Table 4.15 gives out the responses.

Table 3.2: Type of Information a person or an organization has a right/ a privilege to obtain from the library

Responses	Yes	No
Copyright materials	65(69.9%)	28(30.1%)
Published articles	82(88.2%)	11(11.8%)
Newsletters	65(69.9%)	28(30.1%)
Flyers	43(46.2%)	50(53.8%)

Source: Field data, 2022

The information given showed that sixty-five (69.9%) of respondents indicated that copyrighted materials are information materials a person has a right to obtain. Eighty-two (88.2%) indicated that published

articles are information materials; a person has a right to obtain. Out of 93 respondents, 65(69.9%) indicated that newsletters are information materials; a person has a right to obtain. Whilst out of 93 respondents, 43(46.2%) indicated that newsletters are information materials; a person has a right to obtain.

In various academic libraries across the world, information materials are needed to meet the demands of research and support academic work. Therefore, authentic sources must be sought in acquiring materials. In this study, 95.7% of respondents indicated that educational books are sourced from publishers, while 52.7% indicated that educational books are sourced from donations and only 31.2% indicated that educational materials are acquired through submissions. According to a study by Plokey, Appiah and Ofori, (2019), a major source of acquiring information materials is through purchases which is similar to the findings of the current study (Plokey et al., 2019). From these results, it can be inferred that the majority of educational materials sourced are from authentic and reliable sources. Apart from that for every higher institution, it is important to rely on various sources of acquiring educational materials instead of solely on one source as indicated in the result.

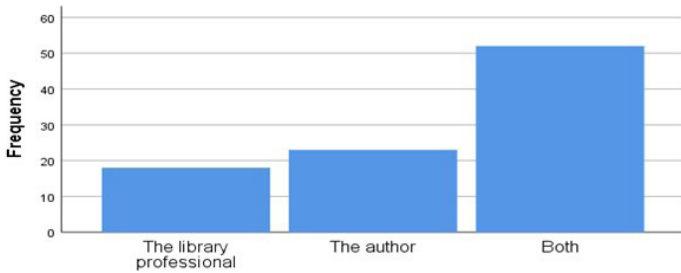
According to Mushi et al., 2022, apart from supporting academic activities, information materials should be adequate in-depth, diverse and of quality to support the curriculum. Publishing information materials is vital in every higher institution (Mushi et al., 2022). Apart from that, publishing is a rigorous and complex activity in which various processes are involved. In some institutions, the process of publishing information in a library could take up to 3 months while for some it could be longer and up to a year. In the present study, 71.0% of respondents indicated that information materials are published through the university's repository, while 32.3% of respondents indicated that information materials are published through a rigorous editorial process and 28% of respondents indicated that information materials are published through submissions by authors. In various universities, when these information materials are submitted, it is passed through a plagiarism check before finally being approved for viewing on the university's site. However, in cases where the material fails to meet the benchmark of the plagiarism checker, it is rejected and sent back to the author for revisions. Although it is a standard procedure, it is also possible that submitting to a university's repository does

not imply that a plagiarism check will be applied. Therefore, this implies that in the various institutions, apart from submissions done through the university’s repositories, rigorous editorial processes should also be applied.

Ethical Challenges in Errors Associated with Information (Accuracy)

Accuracy is a critical aspect of the dissemination of information, and the information published must be reliable and trustworthy. However, errors in information can occur, and they can have serious consequences, including harm to individuals or organizations, loss of credibility, and legal consequences. The ethical challenges associated with errors in information are complex and can result from a variety of factors, including poor research methods, inaccurate data collection, misunderstandings, or human error. To ensure the accuracy of the information, all parties involved in the publishing process must be aware of these challenges and take steps to mitigate them. In various organizations including libraries, some errors occur in publishing, acquiring, and distributing information. These affect ethical standards and thus the researcher sought to identify these challenges as presented below:

Figure 1: Responsibility for the Authenticity, Fidelity and Accuracy of Information.

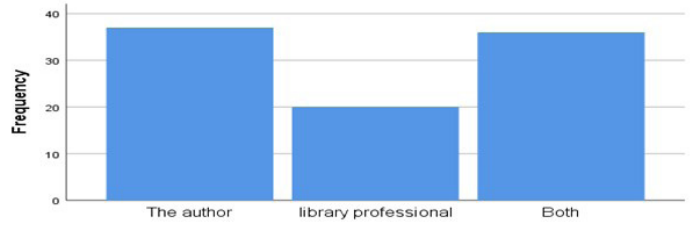


Source: Field data, 2022

From Figure 1, 18 (19.4 %) of respondents indicated that ‘the library professional’ is responsible. Twenty-three (27.4%) of respondents indicated that ‘the author’ is responsible. Fifty-two (55.9%) of respondents indicated that ‘both’ is responsible.

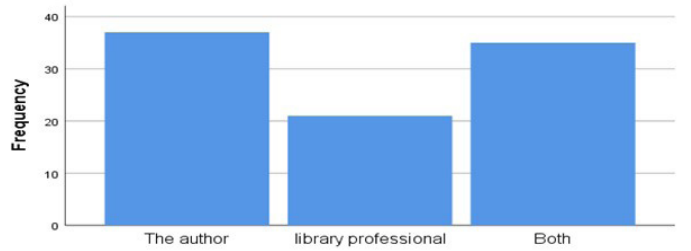
From Figure 2, 37 (39.8 %) of respondents indicated that ‘the author’ is accountable for any error. Twenty (21.5%) of respondents indicated that ‘the library professional’ is accountable for any error. Thirty-six (38.7 %) of respondents indicated that ‘both’ the library professional and the author are accountable.

Figure 2: Accountability for Any Errors in Information



Source: Field data, 2022

Figure 3: Responsibility for Authenticity of Information and Tracing of Errors



Source: Field data, 2022

The response showed that out of 93 respondents, 37 (39.8 %) of respondents indicated that ‘the author’ is responsible for any authenticity of the information. Twenty-one (22.6%) of respondents indicated that ‘the library professional’ is responsible for any authenticity of information. Thirty-five (37.6%) of respondents indicated that ‘both’ the library professional and the author are responsible for any authenticity of the information.

Stages Errors Occur

Respondents were asked to indicate the various stages at which errors occur. These include Information creation, processing, dissemination process and every stage. Respondents had the option to select multiple responses from the list. Each response variable was analyzed individually.

Table 4.18: Stages Errors Occur

Responses	Yes	No
Information creation stage	31(33.3%)	62(66.7%)
Processing stage	23(24.7%)	70(75.3%)
Dissemination process stage	8(8.6%)	85(91.4%)
Every stage	43(46.2%)	50(53.8%)

Source: Field data, 2022

Thirty-one (33.3 %) of respondents indicated that 'information creation' is one of the stages at which errors occur. Twenty-three (24.7 %) of respondents indicated that 'processing' is one of the stages at which errors occur. Out of 93, 8 (8.6%) indicated that the 'dissemination process' is one of the stages at which errors occur. While 43 (46.2%) indicated that 'every stage of the information process is where errors occur

Students require the capacity to identify and determine the nature of their information demand if they are to successfully seek information in any field. Students were thus asked directly whether or not they verified the author's credentials. Incredibly, 98.1% of people said they agreed. The research of Alexander (2020), in which he raises several concerns that must be answered before acquiring or reading any scholarly literature, is consistent with this view. These inquiries include, "Who is the author and what are their credentials?" Does the author hold a position of authority in the area about which they write? Does, say, a PhD in physics make a writer any more credible in the discussion of the origins of life? The ability to find and properly use information is essential in every sector, and this necessitates abilities like those stated above, such as information retrieval, source evaluation and accuracy. These are some of the generic information-seeking abilities that may be applied to any field of study and are best taught by librarians because of their expertise in information retrieval, classification, and organizing. A valid argument is one in which the premises are true and the conclusion follows logically from them. However, expert expertise in the field is usually required to determine whether or not the evidence is credible.

Libraries have seen radical transformations in the recent past. The delivery of information services has been affected by the shift brought about by advances in information and communication technology. Electronic techniques of communication have largely replaced more conventional methods of spreading news. New roles in information supply, dissemination, and transfer have emerged as a result of the development and application of ICT in library operations, which has enhanced and streamlined the distribution and access to information (Dehgani & Navimipour, 2019). Since 55.9% of respondents said the librarian shares the authenticity integrity obligation with the author, the librarian's traditional passive function has been replaced with an active one. He is no longer only a keeper of books, but rather a portal to an ocean of information. While supplying

books was a primary responsibility for libraries and librarians for centuries, Adewuyi (2021) argues that in the digital era, libraries and librarians have expanded their services to fulfil the requirements of their diverse user bases.

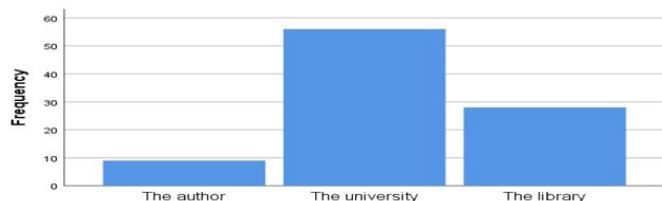
Librarians in the modern era of information technology must take on new roles beyond that of information gatherers and archivists. The ability of students and researchers to retain, retrieve, and use information has evolved along with the development of technology (Chukwueke & Onuoha, 2019). Anyone with a computer, a modem, and an Internet service provider may instantly access a wealth of information and data. Librarians' traditional function is evolving as a result of the rise of digital information since they no longer need to wait for students to approach them and ask for help discovering information in a building called a library. Their new position requires them to do it in a manner independent of location, time, or medium. The function of the modern librarian is increasingly seen as integral to the pursuit of new knowledge and the improvement of existing services. To be successful in their careers, librarians, need to devote themselves to study and the advancement of their field. Books that he has written, edited, referenced, or reviewed are expected of him. Conference participation, paper presentation, and classroom participation are all required of them. Web 2.0, Twitter, Facebook, Myspace, OPAC 2.0, etc. are all part of an integrated library system (ILS), and these librarians need to be familiar with them.

Ethical Challenges in Plagiarism Management in the Use of Information (Property)

Plagiarism is a serious issue in the academic community, as it involves the unauthorized use of someone else's work without proper attribution or permission. The ethical challenges associated with plagiarism are significant, as it undermines the integrity of the academic enterprise, discredits the work of the original author, and violates the principles of intellectual property. To prevent plagiarism and ensure the proper use of information, all parties involved in the publishing process must be aware of these challenges and take steps to mitigate them. This includes authors, editors, publishers, and the university itself. Adhering to ethical principles, such as transparency, accountability, and a commitment to original work, is essential for maintaining the credibility of the academic enterprise and protecting the rights of authors and the public. The study shows

the distribution of respondents on ownership of information in the library. Figure 4.6 illustrates the information.

Figure 4: Ownership of information in the library



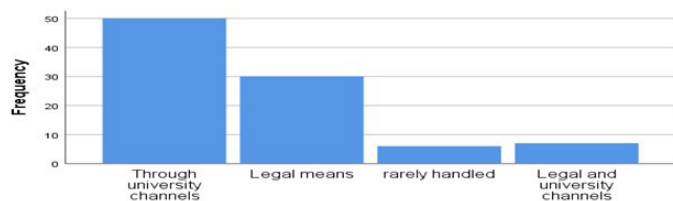
Source: Field data, 2022

From Figure 4, 9 (9.7 %) respondents indicated that 'the author' owns information about the university. 56 (60.2%) respondents indicated that 'the university' owns the information in the university while 28 (30.1%) respondents indicated 'the library' owns the information in the university. In all, results show that the majority of library professionals agree 'the university' owns the information in the library.

Handling Issues with Plagiarism

Handling plagiarism issues is a critical aspect of ethical information management, as it involves ensuring the integrity of the academic enterprise and protecting the rights of authors and the public. Respondents showed how plagiarism issues needed to be handled and it is illustrated in Figure 5.

Figure 5: Handling Issues with Plagiarism



Source: Field data, 2022

From Figure 5, 50 (53.8 %) of respondents agreed 'through university channels' is how plagiarism issues are handled. 30 (32.3%) of respondents agreed 'legal means' is how plagiarism issues are handled. 6 (6.5 %) of respondents agreed 'rarely handled' is how plagiarism issues are handled. 7 (7.5 %) agreed 'legal and university channels' is how plagiarism issues are handled. In all, the majority of respondents attested to the fact that 'through university channels' is the best way of handling plagiarism.

It's worth noting that a staggering 90.3% of respondents said they had heard of plagiarism. When

Marcella and Oppenheim (2020) investigated student unethical behaviour, they found that graduate students in Egypt were just as familiar with plagiarism as their undergraduate counterparts. Classes in information literacy and seminars on information ethics offered to students at the University of Ghana may have contributed to this finding. Salahu (2020) on the other hand, reported results that ran counter to the prevailing wisdom in the field of computer ethics. The majority of students in Pakistan, according to the study on IT ethics, do not know anything about computer ethics or are only somewhat familiar with it. The reason for this was that the vast majority of students had never received instruction on proper computer use and ethics. Additional research by Abreu (2016) found that student's primary motivation for violating copyright laws was the high cost or unavailability of printed educational materials. This result is consistent with the result of a study conducted by Fox and Henry (2010), which found that most students violate copyright law due to the scarcity of these printed resources. One can conclude that graduate students have sufficient knowledge of information ethics based on the percentages of students familiar with plagiarism, computer ethics, laws against indiscriminate photocopying, and fair use. To gauge conformity, most respondents said they had never passed off the work of another as their own. This means they followed the rules of data ethics. However, Shang (2019) found that a higher percentage of students at University College Northampton submitted work done by someone else as their own in a study on staff and student attitudes toward plagiarism. That meant they were breaking the rules of data ethics. One possible explanation is that students lacked a nuanced understanding of how to use information ethically.

When asked if they had ever submitted someone else's essay as their own with their permission to do so, 68.8% of respondents said they hadn't and were willing to seek the consent of the original author if necessary. This result is consistent with the findings of Mansoor et al. (2022), who conducted a study on Australian engineering students and found that students who wanted to comply with the ethical use of information did not engage in submitting essays or other works written by someone else as their own; they also did not buy from paper mills, nor did they copy/cut and paste, nor did they internet cut and paste. Of the respondents, 33.3% (representing 30 people) said that "legal means" are used to deal with plagiarism, while 53.8% (representing 50 people) said

that "through university channels" is the most effective method. The majority of the statements were deemed extremely unethical by over half of the respondents. Some examples of academic dishonesty are giving false information to teachers, using a textbook passage in an assignment without giving proper credit, and downloading an assignment from the Internet and turning it in as your own. All of the above findings are consistent with those of Kumar et al. (2022) From what has been stated above, it is clear that students at the University hold sensible views on the responsible handling of data. Academic staff and student body members provide sufficient anecdotal and research-based evidence of the existence of student plagiarism in U.K. and U.S. colleges and universities; the question then becomes, what are academic staff doing about it? Many schools have anti-plagiarism policies with defined consequences and procedures for dealing with instances of plagiarism. What actions do professors take when they discover student plagiarism, and how well-informed are they about these policies? Academic dishonesty was the subject of a survey conducted by Aaron and Georgia who polled students and faculty at 175 institutions in 40 states across the United States. According to the results, the vast majority of faculty either do not follow the policies and procedures in place to deal with academic dishonesty (61.9% of the time) or are unaware of them (40.9% of the time) (Mensah, 2022).

The authors draw the conclusion that while academic dishonesty among students is universally acknowledged as a major issue, it is not being given the attention it deserves by educational institutions. According to research by Adzima (2020). The authors also discovered that academic staff lacked strict anti-cheating policies and, despite acknowledging that cheating was a major issue, had little agreement on how to address the problem. Since students are less likely to cheat if the cost of being caught is high, the authors conclude that institutions should provide clear definitions of what constitutes cheating; penalties should be made clear; and academic staff should be more proactive in their efforts to prevent and detect cheating. Overall, these results were consistent with those of Bryzgoria (2022). Additionally, a study conducted by Eaton (2021) involving over 500 college students revealed that when students reported cheating to their professors, no action was taken in about 70% of those cases. It appears that more work needs to be done to define plagiarism for students and encourage academic staff to be proactive about preventing it; to

communicate policies on plagiarism to academic staff and students; and train academic staff on how to deal with student plagiarism, if we apply these findings and conclusions specifically to student plagiarism. The study's findings on what drives people to break the rules of information ethics appear to back up a claim by Bos (2020), who argues that easy access to the Internet and readily available digital databases are to blame. It was also confirmed that students' cheating and copying were motivated in part by their fear of being caught. Students broke the rules of information ethics in their pursuit of better grades. Jereb et al. (2018), Gamage et al. (2020) and Guerrero-Dib et al. (2020) all found similar results. They found that cheating on tests was most common because students wanted to improve their grades.

Conclusion

The duties of library professionals are getting more complex as the years role by. With evolving duties of the personnel, these professionals must be continuously abreast with current ethical standards and codes. The data obtained from the study shows that the professionals at the libraries are aware of several ethical issues linked to property, accessibility, privacy and accuracy. However, a major challenge in maintaining ethical codes is linked to the cost of publishing/acquiring materials. There is therefore a gap bridging responsibility with ethical standards.

Recommendations/ Strategies for Resolving Ethical Challenges in the Use of Information in the University/Academic Library.

- All librarians and library staff should be familiar with and adhere to professional codes of ethics, such as the American Library Association's Code of Ethics.
- Libraries should develop and implement policies and procedures that address specific ethical challenges.
- Universities and academic libraries can encourage originality and creativity by providing opportunities for students and researchers to engage in original research and to present their work in academic venues.
- Universities and academic libraries can provide education and training on accessibility and inclusive design to ensure that all patrons, including those with disabilities, have equal access to information.
- Universities and academic libraries can regularly review and update their collections and resources to ensure that the information provided is accurate and up-to-date.
- Universities and academic libraries can foster

community engagement by providing opportunities for patrons to share feedback and suggestions, and by involving them in decision-making processes related to the use of information.

- Universities and academic libraries can establish an ethics committee to address ethical challenges related to the use of information.

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