



**UNIVERSITY OF
KWAZULU-NATAL**

**INYUVESI
YAKWAZULU-NATALI**

**ROLE OF INFORMATION ETHICS IN THE PROVISION OF LIBRARY AND
INFORMATION SERVICES IN UNIVERSITY LIBRARIES IN TANZANIA**

By

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(Information Studies) in the School of Social Sciences, College of Humanities, University of
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Submitted: January, 2018

DECLARATION

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DEDICATION

I dedicate this work to the Almighty God who strengthened, preserved and inspired me; to my parents the late Corbinian Ndumbaro and Maria Kihaule Ndumbaro; to my husband Wilbert Bugomola; daughters Catherine, Caroline, Clara and son Kenneth for their love, prayers, patience, understanding and sacrifice during the entire period of my studies. To my beloved son, Kelvin of blessed memory, I know you would have been proud of me, may your soul continue to rest in everlasting peace.

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“And whatever you do, whether in words or deed, do it all in the name of the Lord Jesus, giving thanks to God the father through him” (Colossians 3:17)

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ABSTRACT

The purpose of this study was to investigate the role of information ethics in the provision of library and information services in university libraries in Tanzania. The study sought to address the following research questions: what is the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice? What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics? What are the factors that influence information ethics practice by library professionals in University libraries in Tanzania? How is information ethics integrated in the library professional practice in university libraries in Tanzania? What is the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services?

PAPA model and WSIS Action Line 10 were applied as the theoretical framework. The study was underpinned by the Pragmatic paradigm that combines the use of both qualitative and quantitative approaches. A survey research design was used to elicit responses from respondents. Four university libraries were surveyed from among the public and private universities in Tanzania. In addition, Tanzania Library Association officials formed part of the respondents. From the universities surveyed, two largest colleges/faculties from each university were selected for study. They included College of Social Sciences, Humanities and Natural and Applied Sciences; College of Agriculture and faculty of Social Sciences; Faculty of Education, Law and social sciences; and Faculty of Business Administration were sampled respectively. Within the four universities surveyed, the following categories of respondents were covered; library professionals (diploma holders, bachelor and masters with qualifications in library and information science), postgraduate students (masters and PhD students) and faculty (assistant lecturers, lecturers, senior lecturers, associate and full professors). In addition, heads/directors of the university libraries and Tanzania Library Association officials (assistant chairperson, Deputy Secretary, secretary of ethics, education and professionals and two retired Tanzania Library Association officials) formed part of the population of study.

A census was used for library professionals in the university libraries. Purposive sampling was used to select five Tanzania Library Association officials. For postgraduate students and faculty they were selected using purposive and convenience sampling techniques. The

relative sample sizes for postgraduate students and faculty were distributed proportionately across the four universities. Survey questionnaires were used to collect data from faculty, postgraduate students and library professionals. The interviews were used to gather data from university/directors of library and Tanzania Library Association officials. Qualitative data collected from heads/directors of university libraries and Tanzania Library Association officials were analysed using thematic analysis. Data gathered through questionnaires from faculty, postgraduate students and library professionals were analysed using SPSS to generate descriptive statistics.

To achieve reliability and validity, this study adapted questions from tools that have been pretested and validated based on Cronbach Alpha values greater than 0.7. The study complied with the provisions of research ethics policy of University of KwaZulu-Natal and ethics policies of respective universities surveyed. In addition, consent was sought from the respondents.

The findings revealed that males were slightly more (54.4%) than females (45.6%) among the respondents. Moreover, majority of the library professionals 77.3%) were aged between 31 and 60 years. The findings on qualification of faculty revealed that, all the respondents had at least a master's degree. There were more PhD holders (57.5%) among faculty than there were master's holders (38.2%). The findings revealed that library professionals were aware about ethical values and possessed knowledge about information ethics.

The findings furthermore revealed that perception and attitude of library professionals towards information ethics especially on the values of access, intellectual property, information privacy, and information accuracy was positive. As for factors that influence information ethics library professional practice, the findings found them to include resources, technological changes, ICT knowledge and skills, individual characteristics, size and space of the library, education level, staffing, experience, work environment, and more. The findings also showed that information ethics was integrated in library professional practice, but the scope differed from one university to another. It was concluded overall that while library professionals in university libraries in Tanzania seem to understand the ethical values in the provision of information services, the field of information ethics was not widely understood and practiced.

Among the recommendations proffered include, creating awareness, promulgating relevant information ethics policies, capacity building, strengthening professional code of ethics, and continuous professional development. In addition, integration of information ethics in LIS education and training is highly recommended.

LIST OF ABBREVIATIONS

ACEIE	African Centre of Excellency for Information Ethics
ACRL	Association of College and Research Libraries
AIIP	Association of Independent Information Professional
ALA	American Library Association
ANIE	African Network for Information Ethics
CAS	Current Awareness Service
CCTV	Closed Circuit Television
EALA	East African Library Association
ICIE	International Centre for Information Ethics
ICT	Information and Communication Technology
IE	Information Ethics
IFLA	International Federation of Library Associations and Institutions
ITU	International Telecommunications Union
IIT	Indian Institute of Technology
IIUM	International Islamic University of Malaysia
LA	Library Association of UK
LIS	Library and Information Science
MUHAS	Muhimbili University of Health and Allied Sciences
PhD	Doctor of Philosophy
PLA	Pakistan Library Association
SARUA	Southern African Regional Universities Association
SAUT	Saint Augustine University of Tanzania

SLA	Special Library Association
SUA	Sokoine University of Agriculture
TANIE	Tanzania Network for Information Ethics
TLA	Tanzania Library Association
TUDARco	Tumaini Dar es Salaam College
UDSM	University of Dar es Salaam
UK	United Kingdom
UKZN	University of KwaZulu-Natal
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America
WSIS	World Summit on Information Society

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Britz (2013:1; Liton, n.d) defines ethics as “a branch of philosophy that studies human behavior in terms of what is good or bad regarding relationships with themselves, others and their environment”. Fernandez-Molina (n.d) argues that ethics provides us with framework for us to monitor the essential functions of professionals, establish policies and develop strategies. Du Mont (1977) asserts that, ethics in information profession (i.e. information ethics) is concerned with the application of moral standards to the conduct of librarians and other individuals involved in information dissemination. It is a type of applied ethics concerned with clarifying the obligation and dilemmas of librarians and other information professionals who make decisions regarding acquisition, processing, and dissemination of information to individuals, groups, and society at large (Du Mont, 1977; Mbofung & Popoola, 2014).

“The purpose of ethics is to establish principles of behavior that help people to make choices among modes of action” (Du Mont, 1977:201). Information ethics on the other hand is “applied ethics that investigates ethical issues arising from the life cycle of information including generation, gathering, organisation, retrieval, distribution and the use of information” (Britz, 2013:3). Britz (2013:3) further adds that

“Information ethics as an interdisciplinary field of study relates to, among others, the field of computer science, philosophy, library and information science, communication science, journalism and mass media. The focus areas of information ethics include the right to access information, the right to information, intellectual property and quality of information”.

Bielby (2014:3) states that, “information ethics as multi-threaded phenomenon, encompasses, among other disciplines the multi-faceted scope of internet, computer science, management information systems, media, journalism, business and more”. Similarly, Froehlich (2004) views information ethics as confluence of the ethical concerns of media, journalism, library and information science, computer ethics (including cyber ethics), management of information systems, business and the internet. Froehlich (2005) and Mutula (2013) assert that information ethics is dedicated to the critical reflection on the ethical values and practices

related to the production, storage and distribution of information. Information ethics also underscores the importance of information systems, infrastructures and policies embedded in modern culture and society.

1.1.1. Development of information ethics

Information Ethics in the Northern hemisphere has a longer history than in the Southern hemisphere. Froehlich (2004) claims that in 1980 Barbara J. Kostrewski and Charles Oppenheim wrote an article on 'Ethics in Information Science' in which they discussed issues of confidentiality of information, bias of information provided to clients, and the quality of data supplied to online vendors. In 1990 some library schools in North America started teaching information ethics. Most schools of library and information science in United States during that time did not have courses devoted regularly and solely to ethical issues, and even today most of ethical and legal issues are presented in the context of another topic. As years have progressed, information ethics have been adopted by faculty in schools of computer science. In tandem textbooks have emerged like Richard Severson's "the principles of information ethics". In this book he outlines the major principles of information ethics in respect to intellectual property, privacy, fair representation, and maleficence (or "do not harm"). Similarly, Marcher Cook wrote on "computer and information ethics" in which he addressed the issue of computer crime, copyright, privacy, software reliability, artificial intelligence, and e-commerce. Other text books have tried to span issues in computer ethics and ethical issues in information management systems, with some treatment of library issues. For example, the University of Pittsburg offered the course on information ethics at Master's level; Robert Hauptman started the journal of information ethics in 1992 wrote an article on "ethical challenges in librarianship" and identified issues related to censorship, privacy, access to information, balance in collection development, copyright, fair use, code of ethics and problem related to patrons, to mention but a few. Rafael Capurro established International Centre for Information Ethics (ICIE) in 1999. During this period there seemed no activity concerning information ethics in the Southern hemisphere and this may explain why most of the available textbooks on information ethics are from North America and Europe. Besides, most of the activities such as conferences and workshops on information ethics at the time were held in North America.

The World Summit on Information Society (WSIS) held in Geneva in 2003 brought to the attention of the developing world the importance of information ethics. During the Summit, the question of bridging the 'digital divide' (Scheule *et al.*, 2004) between the North and

South was underscored. Consequently, the Summit adopted the Geneva Declaration of Principles which motivated Africa to start addressing the issue of information ethics from a formal point of view. The first evidence of an activity on information ethics in Africa as an academic field was in 2007 when the first African conference on information ethics was held in Tshwane (Pretoria), in South Africa. This conference came up with the Tshwane declaration on information ethics which became a vital contribution to UNESCO code of ethics for information society. Furthermore African Network for information ethics (ANIE) was established to give African scholars a platform to exchange and share their ideas in the field of information ethics. ANIE's mission is to ensure that African academics become part of the global discourse on information ethics.

In 2010 Africa Reader on information ethics was published. Other publications that have emerged on information ethics in Africa include: Malan and Bester (2014), *curriculum to teach information ethics in Africa*; Sueur, Homes and Bester (2013) *concepts information ethics: an introductory workbook*. In addition, the Innovation journal in 2013 devoted two issues on information ethics. Furthermore, a handbook on information ethics and several publications on the subject have been generated. The University of Pretoria has also established the African Centre of Excellence for Information Ethics (ACEIE) to spearhead research and curriculum development on information ethics. The Centre serves dual purpose; firstly, to conduct and facilitate research on information ethics issues globally and locally. Secondly, to coordinate activities which are aimed at enhancing the awareness and knowledge of all those with a stake in and/or a role to play in promoting information ethics. Building on the 2007 information ethics conference in Pretoria, many other conferences around Africa have been held in Nigeria, Kenya, Botswana, Zanzibar, and Uganda among other countries. Moreover, ANIE has established a website (<http://www.africainfoethics.org/>) on information ethics for sharing events, publications, conferences and experts in the subject area. Africa Network for Information Ethics (ANIE) and Africa Centre of Excellence for Information Ethics (ACEIE) have made significant contribution to making information ethics understood in Africa. Information ethics education is significant in Africa because such education would support information professionals in their understanding and development of ethical values and moral values with regards to data protection, instance privacy and confidentiality among others.

1.1.2. Development of University libraries in Tanzania

The development of university libraries in Tanzania is the one of evolution and change that parallels the history of their parent institutions. University libraries have a close relationship with teaching, learning and research activities which are the core functions of universities. Hence development of university libraries went parallel with the development of the parent university. At independence in 1961, Tanzania had only one university, the University of Dar es Salaam (UDSM). The University of Dar es Salaam is the oldest and largest public library in Tanzania. The University was established in 1961 as a college of the University of London and became a constituent college of the University of East Africa. In 1970, it became a national university. The University focuses on training people to become independent thinkers, analytical and problem solvers. Since its inauguration as an independent institution, the University of Dar es Salaam has expanded both in student enrolment and staffing from 14 students in 1961 to more than 26,000 students in 2016 (UDSM, 2016). The main campus of the University of Dar es Salaam is situated at Mlimani, about 13 kilometres (8 miles) from Dar es Salaam central business district. Until the late 1980s, the faculty of Agriculture of the University of Dar es Salaam was based in the neighbouring town of Morogoro. This faculty grew to become an independent institution, Sokoine University of Agriculture (SUA). Likewise, the faculty of Medicine of the University of Dar es Salaam based at the largest referral hospital in the country at Muhimbili on the outskirts of the city of Dar es Salaam has expanded to become the Muhimbili University of Health and Allied Sciences (MUHAS). In 1985, the Tanzanian government liberalised university education thus allowing private entrepreneurs to establish private universities (UDSM, 2004). Consequently, in 2002 many private universities including St. Augustine University of Tanzania (SAUT) and Tumaini University (TU) among others were established with their own library services and facilities. Both SAUT and TU have full-fledged status to operate as private universities. Tanzania has currently thirty two (32) chartered universities of which twelve (12) are public and twenty are (20) private (SARUA, 2015).

1.1.3. Library professional practice and information ethics in Tanzania

Library associations have a long history of developing and promoting ethics for their profession. Liton (n.d:5); Hoq (2012:45) states that,

“International Federation of Library Association (IFLA), Association of College and Research Libraries (ACRL), Association of Independent Information

Professional (AIIP), Special Library Association (SLA), American Library Association (ALA) and Library Association of UK (LA), all have a long standing code of ethics for guiding information professionals in discharging their professional duties in an ethical way. These codes focus on upholding the principles of intellectual freedom, individual privacy and confidentiality, intellectual property right, fair and ethical use of resources, and so on”.

Tanzania Library Association on the other hand has not yet established a code of ethics; instead the code passed in 2005 during annual TLA meeting is not yet implemented. Shachaf (2005:19) claims that, “library associations in many countries have developed and published codes of ethics but operationalisations of the codes remain problematic”. Similarly, Hauptman (2002) claims that generally, ethical values are discussed in professional conferences and in literature, but they are not often implemented. Consequently, the professional codes of ethics are often violated by information professionals, lecturers, students, employers, and information workers (Kaddu, 2007). The study of Ossai-Ugbah (2013:268) on the role of professional library associations and institutions in facilitating access to information in Africa observed that “library professional associations do not communicate and defend the tenets of their profession as well as the needs of their communities”.

“The Tanzania Library Association (TLA) was established in 1963, after the dissolution of the East Africa Library Association (EALA). Ever since, it has remained the only professional association that represents the interests of all library and information personnel in Tanzania” (Ossai-Ogbar, 2013:265). “TLA is responsible for the development of library personnel and the library profession in Tanzania” (Kiluswa, 2007:2). Being an Association which is responsible for the development of the library profession in Tanzania, role of information ethics in the provision of library and information services in university libraries should be vital and at the heart of their operations in order to enable library professionals to perform their duties in an ethical manner. According to Tanzania Library and information Association constitution (2005:6-7) article II, the main objectives of the association are:

1. To unite all persons working in the libraries or interested in library development in Tanzania;
2. To enhance cooperation in the provision of library services among member institutions;

3. To present and act as a professional body for persons working interested in library and information services;
4. To scrutinise any legislation affecting the provision of library and information services and to promote such further legislation as may be considered necessary to this end;
5. To promote and encourage the maintenance of adequate and appropriate provision of library and information services of various kinds throughout mainland Tanzania;
6. To improve the standards of library services and enhance the conduct and the status of library personnel;
7. To promote the establishment and development of libraries in Tanzania;
8. To encourage and facilitate the study and research in library and information management.

In pursuance of these objectives, TLA has the following functions:

1. To play an advisory role to the Government and private organisations in matters affecting quality in establishing and managing libraries and information services;
2. To organise meetings, seminars, workshops, conferences and run courses so as to impart new knowledge and skills;
3. To collect, collate and publish journal, bulletins, newsletters, etc to inform members and promote the objectives of the association;
4. To compile, keep and regularly update information pertaining to each member;
5. To collaborate with national and institutional associations, and institutions interested in the development of libraries and information industry;
6. To advise means to raise funds either through fees subscriptions, soliciting grants and donations or economic ventures;
7. To perform and/or do anything lawful of interest to members and associations;
8. To develop, maintain and enforce a code of conduct to its members (Tanzania library and information Association, 2005:7-8).

Despite the clearly defined objectives and functions of Tanzania Library and Information Association, implementation remains problematic. This has resulted in poor library services in Tanzania (Kiluswa, 2007). This is exacerbated by the lack of quality, competent and committed members and leaders, and adequate funding to fulfil the mandate of the association.

Tanzania Network for Information Ethics (TANIE) was formed in October 2013 during the workshop of the Africa Centre for Excellency for Information Ethics (ACEIE) that was held in Zanzibar to promote information ethics in the country. However, TANIE is yet to start any meaningful professional role with regards to information ethics due to lack of capacity in developing a framework for integrating information ethics in the LIS professional practice. Otiike (2010) claims that “unlike developed countries, no empirical research has been carried out in developing countries to ascertain the status of the information ethics in the library professional practice”. Otiike expresses the need for information science scholars in Africa to consider information ethics as a viable area of research. Information ethics provides an opportunity for librarians to explore personal, professional, local and global realms of ethical issues (Adejumo & Oye, 2015).

LIS professionals as one of the major custodians of information, they are expected to follow ethical standards prescribed by their professional bodies in dispensing information services to the users. However, Tanzania Library Association as already stated above does not have a functioning professional code of ethics and must transform in this regard to be able to play a meaningful role in the emerging information society.

It is therefore expected that this research would provide a framework for Tanzania Library Association to develop a more robust code of ethics that would include ethos of information ethics.

1.2 Statement of the problem

It is reported in various studies (Mbofung & Popoola, 2014; Ocholla, 2009; Capurro, 2013; Britz, 2013) that, information ethics is not well understood to the most of Library Professionals in the university libraries (Mbofung & Popoola, 2014). Similarly, Ocholla (2009:17) in a study of information ethics in Africa noted that, “information ethics is an area that is not well understood or appreciated”. Capurro (2013) also asserts “that information ethics in Africa is a young academic field, and not much has been published on the subject”. In addition, Britz (2013) posits that, information ethics in Africa is still in its infancy and as a result many Africans are yet to understand and address the subject.

Due to the proliferation and pervasive nature of information technology, the field of ethics alone as a general area of study has become insufficient to deal with all issues relating to responsible use of ICT in the information society. The responsible use of ICT requires

compliance tenets of privacy, confidentiality, trust, intellectual property, and access to information, information integrity, identity safeguards and more. Moreover, the proliferation of information now constitutes a substrate of information market, wherein information has become a commodity (Babik, 2006). In turn, this situation has become a source of many problems related to the right of selection of information, information management and ethical responsibility on the part of information producers and consumers. Ndwandwe (2009) argues that one of the challenges of the information and knowledge society is how to deal with the tremendous increase in the quantity and diversity of information. Similarly, Stahl (2008) argues that if we are truly living in the early stage of what has been termed the information society, then clearly ethical concerns with regard to information are of central importance.

Mbofung and Popoola (2014) claim that, ethics and information ethics awareness is essential to library professionals to understand the moral values and ethical issues in the generation, storage and dissemination of information. The primary concerns of library and information science professionals is how to understand issues of use and misuse of information, with particular reference to intellectual property, censorship, data integrity, privacy, access to information, and others (Hoq, 2012). Furthermore, Hoq (2012:46) asserts that “library and information professionals need professional guidance and insights into the question of ethics and morality to promote and uphold information ethics in the evolving knowledge society”.

The World Summit of Information Society (WSIS Action Line 10) on ethical dimensions of information society reaffirms that information and knowledge societies “should be subject to universally recognised values; promote the common goods and prevent abusive use of ICTs”, particularly the need to enhance protection of privacy; and personal data access to information and property rights. Moreover, all stakeholders need to raise awareness and promote debate concerning ethical opportunities and challenges related to ICT, and encourage further research on information ethics.

Despite the provisions of Action Line 10 of WSIS, the extent to which library professional practice in University libraries in Tanzania has espoused the ethos of information ethics with regard to privacy, access, intellectual property, accuracy remain largely unknown. Therefore this study aimed at investigating the information ethics and provision of library and information services in University libraries in Tanzania.

1.3 Major Research question

This study addresses the major research question: What is the role of information ethics in the provision of library and information services in University libraries in Tanzania?

1.3.1 Aim of the study

The aim of the study was to investigate the role of information ethics in the provision of library and information services in university libraries in Tanzania.

1.3.2 Research objectives

Basing on the study, the following research objectives were addressed:

1. To assess the level of awareness of library professionals towards information ethics in university libraries in Tanzania in promoting LIS professional practice
2. To determine the factors that influence information ethics practice by library professionals in University libraries in Tanzania.
3. To examine the extent to which information ethics is integrated and practiced in university libraries in Tanzania.

The study was also extended to cover the following broader issues: ethics, human rights, freedom of access to information, information society, World Summit on information society, and digital divide which are related to the phenomenon that was investigated.

1.3.3 Research questions

The following research questions were used to investigate the phenomenon:

1. What is the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice?
2. What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics?
3. What are the factors that influence information ethics practice by library professionals in University libraries in Tanzania?
4. How is information ethics integrated in the library professional practice in university libraries in Tanzania?
5. What is the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services?

1.3.4 Assumptions

This study did not test hypotheses but instead used the research questions outlined above to address the research problem. According to Creswell (2002) research questions can be used in the place of hypotheses in investigating and addressing a research problem. Moreover, in qualitative studies where hypothesis testing is not the norm, assumptions should be presented (Leedy & Armrod, 2010). For this reason, the following study assumptions were made in investigating the research phenomenon:

1. LIS professionals in Tanzanian university libraries are lagging behind in adopting values and ethos of information ethics.
2. The Tanzanian Library Association code of ethics is bereft of principles of information ethics.
3. There is low level of awareness among library professionals in University libraries in Tanzania about the role of information ethics in promoting LIS professional practice.

1.4 Significance of the study

The researcher acknowledges that information ethics is a basic component in library professionals' provision of library and information services in university libraries in Tanzania. Hence, this study generated baseline information about the extent to which library professionals in Tanzania have espoused the values and ethos of information ethics. The study has also created awareness and advocacy about the importance of information ethics in University libraries. The study findings provide the basis upon which a national information ethics policy for Tanzania can be developed. The study has also provided information needed for the integration of information ethics in the curriculum in LIS schools in Tanzania. It encourages and inculcates ethical values in the responsible use of ICT in the information society. The study also provides good reference for academic teaching methodology and research writing. Since information ethics in developing countries particularly in Tanzania is a new field, this study can serve as "talking" and "engagement point for scholars, library professionals, and other information stakeholders in debating the issue of responsible use of ICT. The study in addition contributes to the knowledge and awareness of information ethics among library practitioners.

1.5 Scope and limitations of the study

The study examined the role of information ethics in the provision of library and information services in University libraries in Tanzania. There are thirty two (32) chartered public and private universities in Tanzania. This study was conducted only in four purposively selected universities of which two were public and another two were private. The respondents in the study included library professionals, faculty, postgraduate students and Tanzania Library Association officials.

The study was constrained by the fact that being a new field, information ethics has limited literature. The study was also limited in terms of theories and models that would suit information ethics in the context of Africa and Tanzania particularly. Moreover, data collection started in the second semester when the target sample, specifically postgraduate students (masters and PhD), were in the field for experiential learning which made it difficult to reach as many respondents as was planned. Besides, some respondents declined to answer some open ended questions claiming that they had no time; while others indicated they did not understand the subject of information ethics.

1.6 Preliminary literature review

This section presents preliminary literature review which is comprehensively explained in chapter three of this thesis. This study investigated the role of information ethics in the provision of library and information services in university libraries in Tanzania. This study is motivated by the need to gain a better understanding of how information ethics contributes towards improving library professional practice in university libraries in Tanzania.

The importance of information ethics integration in library practice need not be underestimated. Mbofung and Popoola (2014:10) noted that “information service delivery of Library and Information Science professionals in federal universities in Nigeria is guided by legal and ethical principles that govern their behavior with respect to what is right or wrong while ensuring fairness, equity and justice”. However, the study does not allude to specific information ethics values as they relate to responsible use of ICT in the information society. Similarly, the study carried out in Bangladesh by Liton (n.d:38) reveals that, “information professionals need to maintain highest level of ethical standards so that they can serve their clientele in the most fair and just manner”. However, the study does not make specific reference to information ethics but ethics in general. Library and information professionals

have an important role to play in the promotion of information ethics and the creation of a just and equitable society. For them to play this role effectively, they need to gain a deeper and more holistic understanding of ethics in general and information ethics in particular (Hoq, 2012:47; Buchanan, 1999).

Besides, today's global information environment presents complex issues of access, intellectual property, privacy, security, and human rights due to the ramifications brought about by widespread use of ICT that demand critical reflection and dialogue across boundaries of geography, language, and cultural background (Smith, 2002). In this regard, Buchanan (1999) pointed out that, developed countries in the Northern hemisphere continue to dominate the developing countries in terms of enjoyment of materials as well as knowledge assets. Moreover, Buchanan questioned the ethics of information age and its supposed free flow of information and related commodities given the growing digital divide between the countries of the North and those of the South. Consequently, all stakeholders in the information services chain such as information seekers (general users), information generators (authors and publishers) and information owners (owners of intellectual property right) must engage on how best to meet the needs of information users in the information society. Ossai-Ugbah (2013) claims that, the librarian profession in Africa has been lacking the knowledge of the right steps to take in facilitating information for development (especially with regard to access and its responsible use) in the emerging knowledge economy. Khalil and Seleim (2012) in a study in Egypt on issues of information privacy, information accuracy and information access expressed the need for universities to consider integrating ethics education into the curricula. A study by Ndwandwe (2009) on teaching and learning information ethics in Library and Information Science, revealed the importance of training library and information science (LIS) professionals in the responsible use of information in the information society. Hannabus (1998) noted that, the information professionals face a range of ethical challenges in modern world especially because the proliferation and increasing use of ICTs.

Liton (n.d) reports that in Bangladesh there is growing realization of the need to redress conflicting viewpoints about what is considered right or wrong from different cultural perspectives around the world given globalized society (due to pervasive use of ICT) where information professionals from different countries often engage through various means including social media, emails, videoconferences, etc. Liton (n.d:1) adds that, "in

Bangladesh, in spite of the existence of right to information act (passed in 2009) and also the rigorous campaign by library and information professionals about upholding ethical standards in all spheres of information works, the question of information ethics is not widely recognized”. Mason (2016) argues that the complexity of today’s society due to advancement in ICTs has raised a lot of ethical dilemma for information professionals.

There is growing studies undertaken in different contexts to understand issues of ethics and library professional practice around the world. However, among these studies, only a few seem to address responsible use of ICT (information ethics) in professional library practice. A study by Salman, Ocholla, Mostert and Mungwisi (2013) on ethical issues with regard to access and use of information services in public libraries in Nigeria revealed that privacy and accuracy of information were of greatest concerns. Matingwina (2015) in a study carried out in Zimbabwe on ethical issues and challenges affecting LIS professionals’ found that the issue of privacy and access to resources were the major ethical issues affecting LIS professionals. Matingwina (2015:85) particularly found that “lack of resources, lack of locally drafted ethical codes, conflicting interest and complexity of certain ethical codes to be of concern”. A study carried out by Restanti (n.d) in Indonesia on implementation of code of ethics for librarians came up with obstacles to implement code of ethics that included the fact that the code of ethics of librarians was not popular, code of ethics was inferior to policy of bureaucracy, there was unequal education of librarians, librarians do not read code of ethics because it is considered less important; and finally sanctions for violation of the code of ethics were not decisive. Restanti (n.d) concludes that, one of the requirements of being a professional librarian should be the understanding of code of ethics.

The extant research on ethics and library professional practice does not seem to reveal any studies in the context of Tanzania. This is confirmed also by a search on leading databases on library and information science such as Emeralds, SAGE, Taylor & Francis and others such as Scopus, EBSCO and Google Scholar. When search was carried on these databases using search words ‘information ethics and Tanzania library professional practice’ the following postings were returned, 55 results from Emerald with information on library instructions and information literacy, no information related to information ethic were found, SAGE returned 296 results on library and information services and knowledge management, Taylor & Francis 516 posting were found on information literacy and teaching ethics, Scopus 1 posting on research influence on antimalarial in Tanzania was found, EBSCO 258 postings were found

on library services and information education and Google Scholar 22,300 results were found with much of the information in teachers ethics and information literacy.

In table 1.1 below some of the gaps found in reviewed in literature are identified and an indication of how such gaps are addressed by this study provided.

Table 1.1: Gaps from literature and how they are addressed through research questions

Gap(s) from literature	How is the gap(s) is/are addressed	Research questions
Studies by Liton (n.d) in Bangladesh, Hoq (2012) and Buchanan (1999) suggest Library professionals need to be aware of the values of information ethics	The study explored the level of awareness of library professionals about the role of information ethics in promoting LIS professional practice.	What is the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice?
There is need to carry out studies that determine the attitude of information profession towards information ethics that relate to information provision (Fernandez-Molina, n.d).	The study evaluated attitude and perception of library professionals in university libraries towards information ethics.	What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics?
Matingwina (2015) in Zimbabwe, Restanti (n.d) in Indonesia revealed the lack of locally drafted policy, lack of resources, conflicting interest, inferiority of code to policy etc. as the factors affecting extent of implementation of professional ethical practice .	The study investigated factors that influence information ethics practice by library professionals in university libraries in Tanzania.	What are the factors that influence information ethics practice by library professional in University libraries in Tanzania?

Table 1.1 Gaps from literature and how they are addressed through research questions (cont..)

Otike (2010) in a study conducted in Kenya suggests that a deeper understanding is needed on how information ethics can be integrated in professional practice.	This study assessed how information ethics is integrated in library professional practice in University Libraries	How is information ethics integrated in the library professional practice in university libraries in Tanzania?
Otike (2010) claim that, no empirical research that has been carried out in developing countries to ascertain the perception of users (faculty and postgraduate students) towards information ethics in provision of library and information services.	The study evaluated the perception of faculty and postgraduate students about ethical conduct of library in providing library and information services in university libraries in Tanzania.	What is the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services?

1.7 Background to theoretical framework

This section presents background to ethical theories that are presented in more detail in chapter two of this thesis. The theories include consequence-based theory, duty-based theory, virtue-based theory, right-based theory, PAPA model and World Summit on Information Society (WSIS) Action Line 10 framework.

1.7.1 Consequence- based theory

Consequence- based theory by Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873). According to Consequence-based theories, what distinguishes right actions from wrong actions is that they help better consequences. In order to do right thing, we should perform actions that have good consequences. Consequence- based theory was not applied in this study because it relies on the result or consequence of an action. Ndwandwe (2009:15) “questions how one would hold an argument if the intended consequence does not materialize? Or if the means of achieving the consequence is unethical? And worse yet, who is in position to judge whether an outcome is best consequence, simply good or even bad?”

1.7.2 Virtue-based theory

Virtue-based theory was developed by Aristotle. According to virtue based theory the right thing to do is what a virtuous person would do in the same circumstances. The Aristotelian virtue includes things like courage, temperance, friendliness and generosity. Philipps Foot (1978) and Alasdair Mac-Lntyre (1981) cited in Fallis (2007:32) assert that “virtues are clearly applicable to issues of information ethics. For example, library professionals often need courage to stand for principles of information ethics in the face of resistance”. In addition, Virtue-based theory states that friendliness certainly makes it more likely that library professionals will succeed in their mission of providing people with access to information. Virtue-based theory is concerned with character and virtue, and not act or duty. It postulates that good people will naturally do the right thing. This theory is applicable to the study of information ethics to library professional practice as it gives an understanding of ethical reasoning in library practice.

1.7.3 Duty-based theory

Duty-based theory was developed by Immanuel Kant (1785). According to this theory, consequences are not necessarily all that matters in determining what the right thing to do is. Another duty based theory was developed by W.D. Ross in 1930. This theory has been widely applied. One reason for the greater applicability of Ross’s theory is that (unlike Kant or Mill) he does not try to distinguish between right actions and wrong actions using a single unified principle. Ross instead presents a whole list of duties that are each supposed to follow directly from our moral intuition. This list includes a duty to keep our promises, a duty to distribute goods justly (justice), a duty to improve the lot of others with respect to virtue, intelligence, and happiness (beneficence) and duty to avoid injury to others. The duty to justice and beneficence are especially important for library professionals. In addition, Ross’s list of duties (possibly a duty to provide access to information are directly relevant to library professionals). Duty-based theory is applied in this study as it provides general understanding of information ethics to library professional practice.

1.7.4 Right-based theory

Right-based theory on the other hand was developed by Locke (1689). This theory suggests that, we have some rights merely by virtue of being human beings. This theory insists that every individual has the right to read, write, and think whatever she or he wishes. “But can we honestly say that what every one reads writes and thinks will always lead to the right

thought and right speech in all cases”? (Ndwandwe, 2009:15). Therefore Right based theory was not used in this study because the theory is generic and does not specify other duties that professional librarian should perform but rather insists on user’s rights

1.7.5 World Summit on Information Society (WSIS) Action Line 10

Though World Summit on Information Society Action Line 10 is not a theory, Mutula (2013) suggests it is useful in understanding ethical concerns of using ICTs in information society. WSIS Action Line 10 asserts that “the information society should be subject to universally held values, promote the common good, prevent abusive uses of ICTs, take steps to promote respect for peace and uphold a fundamental value of freedom, equality, solidarity, tolerance, and shared responsibility. In addition, all actors in information society should promote the common good, protect privacy and personal data and take appropriate actions and preventive measures, as determined by law, against abusive uses of ICTs for illegal and other acts such as racism, racial discrimination, xenophobia and child pornography, and trafficking in and exploitation of human beings” (WSIS, 2005). World Summit on Information Society Action Line 10 underscores respect for legitimate rights of the individual such as privacy, confidentiality, accuracy, ownership access/accessibility and security online.

1.7.6 PAPA Model

Privacy, Accuracy, Property and Access (PAPA) model was developed by Mason in 1986. The model was developed in response to increasing digital information and ethical concern in computing. In 1986, Mason designed the model to explain four broad categories of ethical issues in an electronic environment that affect access and use of the information namely; privacy, accuracy, property, and access. Mason’s concern for privacy was that an individual should be able to decide what personal information to hold private, what information to share, and be confident that shared information would be kept safe. The issue of accuracy focused on discussions of who was responsible for the accuracy and authenticity of information and what retribution was due to those injured by erroneous data. Property deals with ownership issues, the fair prices for the exchange of information and access to the resources. Access describes the right or privilege of individual or organization to obtain information and under what conditions.

Therefore this study was informed by PAPA model and World Summit on Information Society Action Line 10. However, consequence-based theory, duty based theory, right-based

theory and virtue-based theory were reviewed to provide a broad understanding of the field of ethics in general. Fallis (2007), Ndwandwe (2009), Ocholla (2013), Britz, (2013), Matingwina (2015) and others concur that consequence-based theory, duty based theory, right-based theory and virtue-based theory are dominant in defining the field of ethics. However, Fallis (2007) and Froehlich (2004) and Capurro, (2010) are of the view that, these theories are too limited to underpin the study of information ethics in developing countries because they are rooted in the Western tradition where their economy is developed. Nevertheless, they acknowledge that these theories help to capture the basic forms of ethical reasoning found in multitude of cultures. Capurro (2008) confirms that, information ethics is a new field in Africa and not much has been published on its impact on African societies and cultures from a philosophical perspective; hence Africans do not have a pool of information to draw from in this regard.

Table 1.2 below presents a mapping of research questions to the relevant theoretical variables.

Table 1.2: Mapping of research questions to sources of variables being studied

Research questions	Variables studied	Source of the variables
1. What is the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice?	Information ethics awareness, professional ethical code awareness	WSIS Action Line 10 PAPA model Literature
2. What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics	Attitudes, perceptions, privacy, access, property and accuracy,	PAPA model Literature
3. What are the factors that influence information ethics practice by library professional in University libraries in Tanzania?	Individual factors (e.g. age, gender, education level, work experience etc.), policies, codes, IT guideline etc.) and external variables (professional environment, organizational environment, economic condition etc.)	Consequence-based theory, duty based theory, right-based theory Virtue-based theory Duty based theory, Literature,

Table 1.2: Mapping of research questions to source of variables being studied (cont...)

4. How are ethical aspects of information society such as privacy, accuracy, property and access integrated in the library professional practice in university libraries in Tanzania?	Privacy, accuracy, property, access	PAPA model, Literature,
5. What is the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services?	Privacy, access, property and accuracy	PAPA model, WSIS Action Line 10

1.8 Research methodology

This section provides a brief description of the methodological issues that are discussed in detail in chapter four of this thesis. This study was conducted using pragmatic paradigm. In scientific inquiry there are different research paradigms. These paradigms include; positivist paradigm, post-positivism and interpretive paradigm. Pragmatism was suited for this study because it focuses on the consequence of the research and on the use of multiple methods such as questionnaires and interview to inform the problem studied. Punch (2009) explains that Pragmatism has two implications: firstly, the research question(s) is more important than the method used or the paradigm underlying the method and secondly, the decision regarding the use of either qualitative, quantitative methods or mixed methods depends on the research questions being asked. Both qualitative and quantitative methods were used in this study. Ngulube (2005) advocates the use of both qualitative and quantitative methods to complement and strengthen each other and provide a comprehensive picture of a social phenomenon.

There are various research designs such as survey, case study, experimental, action research, archival studies, ethnography, grounded theory, phenomenology and more. This study used survey design as discussed in chapter four (see table 4.5) of this thesis. Census technique was used to select library professionals in the university libraries surveyed, purposive sampling was used to select Tanzania Library association officials and heads and/or directors of university libraries and purposive and convenience sampling technique was used to select postgraduate students. The overall sample of postgraduate students and faculty was guided by

the table of determining sample sizes of Saunders *et al* (2012) based on a 5% error margin as shown in table 4.2.

This study was conducted in three of the 29 regions in Tanzania namely: Dar es Salaam, Morogoro and Mwanza covering four universities code named U1, U2, U3 and U4 respectively. University U1 and U4 are situated in Dar es Salaam while University U3 is situated in Mwanza and University U2 is situated in Morogoro. Universities U3 and U4 are private while University U1 and U2 are public respectively. These universities were selected for the study because they have the most established libraries with the large number of professional librarians, postgraduate students and academic staff who were surveyed. Also surveyed were Tanzania Library Association (TLA) officials (including Deputy Chair person, Deputy Secretary General, secretary of education, professionalism and ethics department and two retired officials).

Data were collected through self-administered questionnaire and interview schedule. Data gathered through interview were analysed through thematic analysis and data gathered through questionnaires were analysed using SPSS to generate descriptive and inferential statistics. Table 4.6 presents mapping of research questions to sources of data and data analysis strategies.

Reliability and validity were achieved by adopting survey questionnaires, and interview schedules from tools that have been validated, and used in related studies. The study complied with the provisions of research ethics policy of University of KwaZulu-Natal. Consent was also secured from the respondents to gather data from them. Permission was also secured from the respective universities in which the study was carried.

1.9 Definition of key terms and concepts

This section presents definitions of key terms and concepts used repeatedly throughout this thesis. These terms include ethics, information ethics, Information and Communication Technology (ICT), professional code of ethics, World Summit on Information Society Action Line 10, university library, privacy, accuracy, property and access.

1.9.1 Ethics

Ethics is a branch of philosophy that studies human behavior in terms of what is good or bad regarding relationships with themselves, others and their environment (Britz 2013). Du Mont (1977) asserts that, ethics in information profession is concerned with the application of moral standards to the conduct of librarians and other individuals involved in information dissemination. This study adopts Du Mont (1977) definition.

1.9.2 Information ethics

By definition, Information ethics is the product of information society, the concept of information ethics is defined in the special issue of innovation (June 2013) as a discourse concerned with the responsible use of Information Technologies (ICTs) (Mutula, 2013). In addition, Bester and Bothma (2013) assert that information ethics is a field of critical reflection on societal moral values and practices with regard to production, storage, distribution and access to knowledge as well as to all kinds of societal process, systems and media of information and communication. Information ethics is further “concerned with the question of who should have access to what information, with the core issues being intellectual freedom, equitable access to information, information privacy, and intellectual property” (Fallis, 2007:26).

For the purpose of this study information ethics was taken to mean the field of ethics that deals with values arising from the development and responsible use of Information and Communication Technologies. Information ethics values include privacy, accuracy, property, access, dignity, integrity, confidentiality, respecting human rights and more.

1.9.3 Information and Communication Technology (ICT)

Information and Communication Technology (ICT) is any communication device or application, including radio, television, cellular phones, computer network hardware and software, satellite system, as well as various associated services and applications (Yu and Li-Hua 2010). According to Young (2012) Information and Communication Technology (ICT) refers to technologies that provide access to information through communication. It focuses primarily on communication technologies which include the internet, wireless network, cell phones and other communication medium.

1.9.4 Professional code of ethics

Shachaf (2005:1) defines professional code of ethics as “a formal statement of professionals values regarding ethical behaviors. It focuses on principles and values that govern the behavior of a person or group with respect to what is right or wrong”.

1.9.5 WSIS Action Line 10

World Summit on Information Society was a top level meeting of heads of states and government, business, civil society, academia and technology experts held in Geneva and Tunis in 2003 and 2005 respectively to discuss various aspect of ICT as they relate to national and international development especially the millennium development goals. The summits came up with 11 thematic areas in their declaration of principles. These thematic areas were referred to as Action Lines C1-C11. Action Line C10 of declaration of principles was dedicated to ethical Dimension of Information Society (Mutula, 2013). Action Line C10 holds that the Information Society should be subject to universally held values and promote the common good while preventing abusive uses of ICTs (Information Ethics).

1.9.6 Library services

“Library services are the facilities provided by a library for the use of books and dissemination of information” (Prytherch, 1995:387 cited in Majinge, 2014). For the purpose of this study the term refers to facilities provided by the library to all users. These facilities include information resources which are books, internet, computers, and library education which allow users to obtain access to information services housed in the library.

1.9.7 Privacy

According to Mason (1986:5), privacy is defined as what information about one’s self or one’s associations as a person must be revealed to others, under what conditions and with what safeguards. It also addresses the things that people can keep themselves and not be forced to reveal to others.

1.9.8 Accuracy

Information accuracy reflects the responsibility for the authenticity, fidelity and accuracy of information, the accountability for errors in information and the healing of injured party (Mason, 1986).

1.9.9 Property

Mason (1986) defines information property as the issue dealing with the ownership of information, just and fair prices for its exchange, the ownership of channels, especially the airways, through which information is transmitted, and how access to these resources should be allocated.

1.9.10 Access

According to Mason (1986), access refers to right or privilege that a person or an organization has in order to obtain information, the condition and the safeguards to be observed when accessing and obtaining information.

1.10 Structure of Dissertation

This thesis is organised in seven chapters as follows:

Chapter One: Introduction

The chapter presents an overview of the study which includes background to the study, statement of the problem, objectives of the study, research questions, assumptions, significance of the study, scope and limitations preliminary literature, background to theoretical framework, methodological issues, definition of key terms and concepts, and structure of dissertation.

Chapter Two: Theoretical Framework

This chapter discusses the theoretical framework underpinning this study and the common theories used in ethics/information ethics including consequence-based, duty-based, right-based and virtue based theories, PAPA model, World Summit on Information Society Action Line 10 framework, Luciano Floridi's Resource-Product-Target (RPT) model, and the African Network for Information Ethics (ANIE) Thematic Frame (ATF).

Chapter Three: Literature Review

This chapter reviews empirical and theoretical literature in books, journal articles, conference proceedings, and book chapters. The gaps in literature are identified and how they are addressed is presented.

Chapter Four: Research Methodology

This chapter presents the research methodology. The chapter covers: research paradigm, research approaches, research design, area of the study, population of the study, sampling methods, data collection methods, data analysis and presentation, reliability and validity of the instruments and ethical issues.

Chapter Five: Data Analysis and Presentation of Findings

This chapter analyses and presents the findings using descriptive and graphical tools.

Chapter Six: Discussion of the Findings

This chapter discusses the findings using the theory that underpinned the study and related literature. The originality of the study and its contribution to theory, policy, practice and research is provided.

Chapter Seven: Summary, Conclusion and Recommendations

This chapter presents the summary of the findings, conclusion and recommendations. Potential areas of further research are also provided.

1.11 Summary of the chapter

Chapter one laid down the foundation for the rest of the chapters in this study. The study sought to investigate role of information ethics in the provision of library and information services in university libraries in Tanzania. The chapter includes the following sub-section: background of the study which describe the concept of information ethics, the development of information ethics, development of university libraries in Tanzania, library professional practice and information ethics in Tanzania, statement of the problem, major research question, significance of the study, scope and limitation of the study, preliminary literature review, background to the theoretical framework, research methodology, definition of key terms and concepts, structure of dissertation and summary of the chapter.

The study is guided by PAPA model complemented by WSIS Action Line 10, consequence-based theory, duty based theory, right-based theory and virtue-based theory to provide a broad understanding of the field of ethics in general. The study was conducted using pragmatic paradigm. The study applied both qualitative and quantitative approaches. The chapter showed its uniqueness by outlining gaps from literature and how they are addressed.

In addition mapping of research questions to source of variables being studied is provided to give more clarity.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 Introduction

The purpose of this study was to investigate the role of information ethics in the provision of library and information services in university libraries in Tanzania. The chapter provides the theoretical foundation for the study. Theoretical framework is one of the important aspects in research process. Grant & Osanloo (2014) state that theoretical framework serves as the structure and support for the rationale for the study, the problem statement, the purpose, the significance, and the research questions. In addition, the theoretical framework in a research project relates to the philosophical basis upon which the research is founded, and forms the link between the theoretical aspects and practical components of the investigation being undertaken (Mertens, 1998).

Theories explain “how” and “why” something operates as it does (Johnson & Christensen, 2007:7). In contrast, theoretical models are a copy, replica or analogy that differs from the real thing in some way (Bailey, 1994:322). Furthermore, a “theoretical framework is a general theoretical system with assumptions, concepts and specific social theories” (Neuman, 2006:74). Due to development of technology and access of information from other countries ethical theories became systematic in their analysis of information ethics issues (Msongelwa-Njini and Dube, 2013). There are several classical ethical theories, frameworks and recently ethical models that explain research phenomenon in information ethics. The classical ethical theories include among others: Consequence-based theory, Duty-based theory, Right-based theory, and Virtue-based theory. Among the ethical models known for studying information ethics are the PAPA model which is an acronym for Privacy, Accuracy, Property and Access, and Luciano Floridi’s Resource-Product-Target (RPT) model. On the other hand, Information ethics frameworks include; World Summit on Information Society (WSIS) Action Line 10 and The African Network for Information Ethics (ANIE) Thematic Frame (ATF).

This study is underpinned by PAPA model and World Summit on Information Society (WSIS) Action Line 10 framework complemented by Consequence-based theory, Duty-based theory, Right-based theory, and Virtue-based theory.

2.2 PAPA Model

PAPA model was developed by Mason in 1986. The model was developed in response to increasing digital information and ethical concern in computing. In 1986, Mason designed the model to explain four broad categories of ethical issues in an electronic environment that affect access and use of information namely: privacy, accuracy, property, and access, otherwise known as PAPA (Mason, 1986). These aspects are described below.

Privacy: “Mason’s concern for privacy was that an individual should be able to decide what personal information to hold private, what information to share, and be confident that shared information would be kept safe” (Mason, 1986:5). Mason (1986) opines that “two forces threatens privacy, one is the advancement in information technology and its ability to capture, compute, and communicate information, two is the value of information to those who can use it to their advantage”. Mason believed that “while IT allows companies and governments to collect large amounts of information on individuals, the speed of retrieval and the transmission of this information threaten information security”. “Information is also becoming increasingly valuable to policy makers; they covet it, even if acquiring it invades other’s privacy”. The author asserts that “ethical concerns arise from the need to balance the requirements for information for decision making, with concerns for the privacy of individuals”. The privacy questions that arise in this regard are: “what information is required to divulge about one’s self to others, and under what conditions? And what information should one be able to keep strictly to one’s self?”

Parrish (2010) however points out that “the real threat to privacy lies in the fact that the computing devices can take still images, record video, text commentary or any combination of the three and send it directly to information consumers in the community”. In examining the world events, the scope of the issue of privacy broadens beyond the individuals. Liton (n.d:5) argues that, “library and information professionals are increasingly concerned about protecting privacy of the personal and other information of people held in databases and in other sources. Besides, personal information of library users also needs to be protected from outside threats”. Therefore library and information professionals are advised, when disseminating information, “to consider the privacy of one’s personal information, as well as the privacy of information of users who may be tied to the information being shared” (Parrish, 2010).

Accuracy: The issue of accuracy focuses on discussions of who is responsible for the accuracy and authenticity of information and how those injured by erroneous data can be made whole (Mason, 1986). “An inaccurate message that does not confirm or even attempt to confirm the truth has the potential to cause serious ethical and legal problems. It is undeniable that information has the capacity to unfavorably complicate people’s lives, especially when the information upon which lives depend is inaccurate” (Mason, 1986). “Inaccurate information poses problems for people because they can often be misled in making wrong decisions” (Fallis, 2004). Fallis posits that “the mere fact that an information source contains some amount of inaccurate information is not necessarily a problem as long as people can distinguish accurate and inaccurate information so that they are not misled”.

LIS scientists have responded to the problem of inaccurate information on the Internet primarily by publishing guidelines for evaluating information (Fallis, 2007). These guidelines, as explained by Fallis, provide people with a list of features of websites that are supposed to be indicators of accuracy (for example the author’s identity, whether the author is an authority on the topic, no advertising in the document, no spelling or grammatical errors, the website is up-to date, authoritative references are cited, and more). Fallis (2007) “proposes some new guidelines for evaluating the accuracy of information, but warns that such guidelines should not necessarily substitute education on verifying the accuracy of information. His guidelines include: authority, independent corroboration, plausibility and support, and presentation”. Therefore when providing library and information services it is the responsibility of the one desiring to share (library professionals/users) to verify the accuracy of information before dissemination. Mason (1986) “maintained that when designing information systems, it is the designer's responsibility to be "vigilant in the pursuit of accuracy of information" because people might be harmed by inaccurate data. The problem of inaccuracy becomes quite grave when deliberate falsification of information such as identity theft happens. This has direct bearing on information ethics and has been a major cause for concern”.

Property: Property deals with ownership issues, the fair prices for the exchange of information and access to the resources. With regard to property, “Mason’s (1986) concerns are centered on taking information from individuals and embedding it into intelligent systems such as the internet”. “Whether this happens with or without the consent of the user, the point is that placing information on the system may not relieve the user of actual ownership of the information, but there is a good chance that they will lose effective ownership of it; though to

be able to account for its various locations as well as have access to those locations” (Parrish, 2010).

Parrish (2010) adds that, “the question of ownership of information and the protection of author’s interest is becoming increasingly blurred and threatened by technology because technology enables information to be copied and disseminated faster and easier than ever before, without the acknowledgement of the original author” (Britz, 1996). Mason (1986) suggests that “information has some unique characteristics that create catastrophic problems with regard to the issue of intellectual property. He believes that the fact that information is sharable and ownership still retained, poses a question of whether information can be stolen. Furthermore, information can be extremely expensive to produce in the first place. Yet once it is produced, information has the elusive quality of being easy to reproduce and share with others”.

Therefore the information creators “should not post information about themselves that they feel they may want to retract at some future date. Furthermore, the information creator should not post information that is the product of the mind of another individual unless they are given consent by that individual. In both cases once information is shared, it may be impossible to retract” (Parrish, 2010:191). Liton (n.d:5) asserts that,

“The growing threat to intellectual property is manifested by plagiarism, making illegal copies of books and other materials and illegal downloading of software, music, and movies. Because of low level of awareness about intellectual property rights in third world countries, many libraries keep photocopies of books and other reading materials without bothering about the violation of copyright. This is in direct violation of information ethics”.

Access: Access describes the right or privilege of an individual or organisation to obtain information and under given conditions (Mason, 1986). “Access in Mason’s model is intended to combat ‘information literacy.’ His conception of access consists of access to education so that citizens of the information society can develop the intellectual skills to cope with information, and the access to information itself”. Access was an issue in 1986 when Mason originally penned the PAPA model. Mason asserted that “the level of access was in a state of retreat” (Mason, 1986). While this may have been the case in 1986, it may not be the case today. For example, issues such as Net Neutrality, where providers can throttle down the

bandwidth in exchange for payment do affect an individual's access to information, but not to the extent that they did in Mason's time. Mason (1986) stated that "systems should be accessible so that individuals would not be illiterate with respect to information. He also believed that access as they relate to individuals are no longer issues of intellectual and technological barriers that cause information illiteracy, but rather are social and legal issues". Therefore, "it is the responsibility of information professionals to determine the authenticity of a person before the person is granted access to the shared information" (Parrish, 2010). Mason maintained that, "in order to access information, literacy is the most important tool especially digital literacy, media literacy, and other forms of literacies. Without these literacies, we cannot ensure universal access to knowledge. So, library and information professionals need to play an increasingly dominant role to ensure people's access to information by carrying out literacy campaigns, book reading competitions, study circles, training, orientation, and more advocacy initiatives".

From the discussion above, it can be seen that PAPA model focuses on four issues (Privacy, Accuracy, Property and Access) which are relevant to library professional practice in providing library and information services to the clientele. Mason's model in this regard remains "the conceptual foundation of many of the information ethics research because of its parsimony and popularity" (Martinsons & Ma, 2009:819). "Many scholars view Mason's model as the most important influential lens underpinning research in information ethics in the information society" (Smith, 2002; Peslak, 2006; Ponelis, 2013; Mohamud, 2015; Khalil & Seleim, 2012).

PAPA model was therefore considered suitable in underpinning the research problem of this study as it addresses important issues of information ethics such as information privacy, information accuracy, property right, and information access. The PAPA model helped gain a deep understanding of the perception and attitude of faculty and postgraduate students towards the ethical conduct of library staff in providing library and information services.

The PAPA model was also suitable for this study because from the library professional practice perspective, it advocates for the "protection of each user's right to privacy and confidentiality with respect to information sought or received and resources consulted, borrowed, acquired or transmitted". With regard to intellectual freedom, the model advocates for library professionals to uphold principles of intellectual freedom and resists all efforts to censor library resources, books and other library resources provided for interest, information,

and enlightenment of all people within the university community. Moreover the model asserts that “materials should not be excluded because of origin, background, or views of those contributing to their creation as long as such works meet criteria for selection as set out in the library’s collection development policy”.

With regard to property, the PAPA model states that, library professionals should recognise and respect intellectual property rights in the provision of library and information services by avoiding all forms of violation of property rights such as downloading large portions of texts, plagiarism and providing education in relation to these issues. The PAPA model has attracted numerous researches (Ndwandwe, 2009 Woodward, Martin and Imbonden, 2010; Salman, Ocholla, Mostert and Mungwisi, 2013; Mutula, 2013; Matingwina, 2015; Mohamud, 2015; Adetimirin, 2017; Ponelis, 2013; Fairweather, 2000; Khalil & Seleim, 2012) “aiming at either validating its robustness in different settings and/or using it to measure attitudes towards the four ethical issues of privacy, accuracy, property, and access”.

Despite the wider use of the PAPA model in studying ethical principles of the information society such as privacy, accuracy, property and accessibility, it does not provide guidelines when professional librarians face ethical dilemma with these principles. Fallis (2007) points out that “whenever the library professionals are guided by one ethical principle, there is possibility that this principle will give them conflicting advice in certain cases”. Fallis (2007:34) is also of the view that “to deal effectively with conflicting situations, “library and information professionals need to have a good working knowledge of information ethics”.

Woodward, Martin, and Imbodem (2010) argue that, “PAPA model is too broad and therefore does not address specific issues related to the information age”. Therefore, they advocate “for theoretical frameworks that provide specific focus for the analytic lens of particular studies”. Ponelis (2013) asserts that PAPA model may not capture all possible ethical issues and that not all moral issues in information technology can be put under PAPA heading. This is supported by Matingwina (2015:88) that, “PAPA model does not cater for the recent trends and development in the LIS field”. He argues that “the PAPA model tends to focus on the information being disseminated or managed, and ignoring library and information services yet, there are a number of ethical issues that may arise from the facilities and services that are provided to library clients such as computer screens, library equipment, furniture, space, and proper ventilation”. Fairweather (2000) argues that “focusing on the issues related to four

aspects of PAPA may result in other ethical issues being overlooked and some areas of information technology do not fit within the framework”.

The PAPA model has also been criticised for not dealing directly with issues of equity. For instance an individual attempting to access information “must be educated enough to read, write, reason, and even calculate”. That means “they must have minimal level of education”. Also “individuals attempting to access and use information must have physical access to technologies such as hardware, software, databases, and telecommunication that are necessary to retrieve information”. Therefore societies that “do not provide universal access, including education and physical access”, create the knows and know-nots among the people. “The knows are a class that has access to knowledge and learning, while know-nots are an underclass of less educated, less-affluent people who have little access to information and who suffer a disadvantage in the modern workplace”. In many developing countries’ university libraries the issue of equity remains unresolved.

Despite of these criticisms, Parrish (2010); Peslak(2006); Khalil & Seleim (2012) argue that “the PAPA model remains a relevant foundation for discussion of ethical principles that relate to library and information services provision because the model focuses mostly on the stable nature of qualities of information rather than the dynamic nature of technology itself or those who interact with it”. A growing number of studies have used PAPA model. For example Matingwina (2015) studied ethical dilemmas confronting information professionals in the 21st century in Zimbabwe. Mohamud (2015) used PAPA model to study “exploring students’ attitude towards information ethics issues (of privacy, accuracy, property, access) at the International Islamic University of Malaysia (IIUM)”. Khalil & Seleim (2012) studied “attitude towards information ethics” using the PAPA model as was Ponelis (2013) who studied “ethical risks of social media use by academic libraries”. Ndwandwe (2009) used PAPA model to study “teaching and learning information ethics in library and information science. The study investigated the nature and level of education in library and information science”. Woodward, Martin and Imbonden (2010) investigated the issues outlined in the PAPA framework in today’s environment and explored the possibility that new issues have emerged. In addition Salman, Ocholla, Mostert and Mungwisi (2013) studied “ethical issues and challenges in access and use of information services in public libraries in Nigeria”.

2.3 World Summit on Information Society (WSIS) Action Line 10

“World Summit on Information Society (WSIS) at the beginning proposed by the International Telecommunications Union (ITU), a United Nations (UN) body in 1998, the summit was formally endorsed by UN General Assembly in December 2001 holding in two phases” (Berry, 2006:1). World Summit on Information Society (WSIS) was held in December 2003 in Geneva, Switzerland and November 2005 in Tunis, Tunisia respectively. The two summits discussed ethical dimensions and challenges facing global information society (Capurro and Britz, 2010). Mutula (2013) suggests that World Summit on Information Society is useful in understanding ethical concerns of using ICTs in information society as articulated by Action Line 10 on the ethical dimension of the information society. WSIS provided broad opportunity for understanding the ethical dimension of information society. World Summit on Information Society (WSIS) Action Line 10 further asserts “that all actors in information society should promote the common good, protect privacy and personal data and take appropriate actions and preventive measures, as determined by law, against abusive uses of ICTs for illegal and other acts such as racism, racial discrimination, xenophobia and child pornography, trafficking and exploitation of human beings (WSIS, 2005).

In this context, World Summit on Information Society Action Line 10 is not a theory, but is used as a framework in this study to understand ethical issues of using ICTs in information society. World Summit on Information Society (WSIS) of 2003 held in Geneva brought to the attention of the developing world the importance of information ethics (Capurro and Britz, 2010). The World Summit on Information Society of 2003 adopted the Geneva declaration of principles which motivated Africa to start addressing the issues of information ethics. Similarly, the World Summit on Information Society of 2005 held in Tunis Tunisia agreed on Tunis commitment and Tunis Agenda for information society (WSIS, 2003/2005). In paragraph 55-56, the declaration principles clarifies the ethical dimension of information society. Among other issues the document states that “the global information society must uphold the fundamentals values of human freedom, human rights should be respected and there should be no abusive use of modern ICTs”.

“Part C10 of the plan of action, furthermore states that “information society should be subjected to universally held values and promote common good and to prevent abusive uses of ICTs (par.25). It declares a number of actions including that:

- All stakeholders should increase the awareness of the ethical dimension of information society
- All actors in the information society should promote the common good
- Stakeholders, including academia are invited to continue research on the ethical dimension of information and Communication Technologies (ICTs)” (Capurro & Britz (2010:29)

The evidence of information ethics activities on information ethics in Africa as an academic field was begun in 2007 when the first African conference on information ethics was held in Tshwane (Pretoria) in South Africa. At that meeting African Network for Information ethics was established to give African Scholars a platform to exchange and share their ideas in the field of information ethics which contributed to UNESCO code of ethics for information society.

WSIS Action Line 10 is useful in underpinning the research problem of this study because it provides broad opportunity for the ethical dimension of the information society. Capurro and Britz (2010) assert that ethics declaration for information society is necessary in order to have a common ground for dealing with global issues. In addition, the declaration of principles presupposes a deep and sustainable analysis and critical discussion of the ethical issues at stake. World Summit on Information Society is helpful in understanding the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice. However, the World Summit on Information Society Action Line 10 is still new and is not widely tested in the study of information ethics. In addition World Summit on Information Society did not consider technological, economic and cultural differences in information society. Despite these weaknesses the World Summit on Information Society Action Line 10 is still a relevant framework in understanding ethical issues.

The shortcomings highlighted in the PAPA model and World Summit on Information Society Action Line 10 were alleviated in this study by drawing on the western classical ethical theories namely: Consequence-based theory, Duty-based theory, Right-based theory, and Virtue-based theory. Classical western theories and PAPA model summarised in table 2.1 below.

Table 2.1: Sources of variables researched in this study

Research question	Theoretical framework	Variables
1. What is the level of awareness of library Professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice?	PAPA model, WSIS Action Line 10 & western classical ethical theories (Consequence-based theory, Duty-based theory, Right-based theory, and Virtue-based theory)	Information ethics awareness, professional ethical codes, privacy, accuracy, property, access.
2. What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics?	PAPA model, WSIS Action Line 10 & western classical ethical theories (Consequence-based theory, Duty-based theory, Right-based theory, and Virtue-based theory)	Attitude, access, privacy, accuracy, property.
3. What are the factors that influence information ethics practice by library professionals in university libraries in Tanzania?	PAPA model, WSIS Action Line 10 & western classical ethical theories (Consequence-based theory, Duty-based theory, Right-based theory, and Virtue-based theory)	Individual factors- age, gender, education level, work experience; policies, codes, IT guideline; external variables - professional environment, organisational environment, economic condition.

Table 1.2: Source of variables researched in this study (cont...)

4. How are ethical aspects of information society such as privacy, accuracy, property and access integrated in the library professional practice in university libraries in Tanzania?	PAPA model, WSIS Action Line 10 & western classical ethical theories (Consequence-based theory, Duty-based theory, Right-based theory, and Virtue-based theory)	Access, privacy, accuracy, property, dignity, trust.
5. What is the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services	PAPA model, WSIS Action Line 10 & western classical ethical theories (Consequence-based theory, Duty-based theory, Right-based theory, and Virtue-based theory)	Perception, access, privacy, accuracy, property, dignity, trust.

2.4 The African Network for Information Ethics (ANIE) Thematic Frame (ATF)

The African Network for Information Ethics (ANIE) Thematic Frame (ATF) is a state of evolution whose base is the ANIE's annual workshops since 2007. African Network for Information Ethics was established in 2007 with the purpose of structuring information ethics in Africa. African Network for Information Ethics was founded with the aim of promoting the responsible use of ICT in Africa based on WSIS Action Line 10 (Mutula, 2013). From ANIE annual workshops, key themes have emerged that are of special concern to Africa such as e-government & e-governance, information poverty and social exclusion, universal access to digital networks and computing technologies, strategic use of ICT in economic development, privacy, trust, confidentiality, intellectual property, integrity, freedom of information, security online, global intercultural information ethics, social media, web 2.0, open source, and ICT infrastructure development (Mutula and Braman, 2011).

In addition, themes that have emerged from African Network for Information Ethics workshop include bio-ethics, Ubuntu, African renaissance, diversity of cultural traditions, information ethics and character formation of children literacy, cultural diversity, attitudes

and behaviors, censorship, and cultural policies (Mutula, 2013). Bester (2010) asserts that ANIE meeting in Botswana towards the end of 2010 decided on a number of important steps to enhance the level of awareness about information ethics on the African continent. The steps included research and teaching by various academic colleagues on information ethics on African continent. Nevertheless, the Africa Network of Information Ethics activities are constrained by financial constraints, heavy reliance on western literature whose content does not largely reflect local content and shortage of expertise in the area of information ethics.

Africa Network of Information Ethics Thematic Framework is appropriate to studying information ethics as it relates to library professional practice rooted in African context because it draws from African cultural values. Capurro (2008) points out that due to lack of published material on information ethics in Africa, we do not have a pool of information to draw from. The framework provides opportunity for studying information ethics and contributes a unique perspective to the body of information ethics from the perspective of Africa.

2.5 Ethical theories

A theory makes claims about which action people should take and which action they should not take in research (Perumal, 2014). There are a growing number of theories that explain research phenomenon in information ethics. Fallis (2007), notes that the common ethical theories are consequence-based, Duty-based, rights-based theories and virtue-based theories that are discussed below.

2.5.1 Consequence- based theory

Consequence- based theory “is a moral theory developed and refined in the modern world in the writings of Jeremy Benthan (1748-1832) and John Stuart Mill (1806-1873)”. According to Consequence-based theory, “what distinguishes right actions from wrong actions is that they (right actions) have better consequences”. In order for us to do the right thing, we should perform actions that have good consequences. This theory is intuitive and can be applied to understanding ethical dilemmas arising from privacy, access, accuracy, and property right issues. For example, whether or not it is right for library professionals to put internet filters on all computers in university library (access issue), to make photocopies of an article for a class when the university library cannot afford multiple copies of the book itself (property

right issue), or to tell law enforcement officers investigating potential terrorists what a particular patron has checked out faced by library professionals (privacy issue).

The consequence based theory is measured by utilitarianism. “According to utilitarianism, goodness is measured in terms of amount of happiness in the world” (Fallis, 2007:29). “Thus, the right action is the one that maximises overall happiness”. The utilitarianism philosophy was developed by the British Philosopher John Stuart Mill (1859/1978) when he presented an influential argument for the intellectual freedom and against censorship. There are two steps to Mill’s argument. In the first step, he argues that “we are more likely to acquire true beliefs if there is no censorship”. In the second, he points out that acquiring true beliefs tends to increase happiness. In support of the first step, Mills asserts that, “since human beings are fallible, we are sure to censor some true information”. Furthermore, “even if we succeeded in only censoring false information, our true beliefs would quickly become “dead dogma(s)”, not ...living truth(s). That is, we would lose the conviction in our beliefs that comes from seeing how they stand up to criticism” (Fallis, 2007:29).

Fallis (2007:29) pointed out that “Mill’s argument actually supports an absolute ban on censorship”. Doyle (2001:60) admits that, “according to utilitarianism, If we could be sure that a type of expression was seriously inimical to half the population that it carried no compensating benefits, and that it could be banned with few repercussions, then we should ban it”. “However, he argues that there should be an absolute ban on censorship because we cannot be sure which type of expression will have these bad consequences”. Fallis and Mathiesen (2001) have argued (contrary to Doyle) that “there may be cases where the potential consequences are sufficiently bad and sufficiently likely that censorship is unfortunately the right action”.

Consequence-based theory can be applied in addressing some problems in information ethics. For example Hettinger (1989) has offered a utilitarianism argument for respecting intellectual property rights. The basic idea is that, if intellectual property rights are not respected; authors will not be able to recover cost of producing the intellectual property. “As a result, they may not be willing to create and supply libraries with more intellectual property, which would clearly be a bad consequence”.

Shatarevyan (2006) applied consequence-based theory to collection development. “The idea was to determine if consequence-based theory can be used to justify actions of collection manager”. She argued that “according to consequence-based theory, discarding or weeding library materials is ethical if the end result is positive”. She further argued that “discarding or weeding keeps book collections current; creates room on shelves for the new titles; assures that the users are receiving the most current information possible; removes damaged materials from the stacks; and eliminates multiple entries for particular computer files”. Her argument is that “if these goals are achieved, then a consequentialist view of discarding library materials is ethical”. The theory insists that the rightness or wrongness of the action must be explained by its consequences, for example the rightness of discarding library materials if it has good consequences. On the other hand, if it has bad consequences then it may be wrong to discard library materials. However, Ndwandwe (2009:15) argues that:

“There are several problems with this view because it relies on the results or consequences of an action. Additionally how does one hold an argument if the intended consequences do not materialise? Or the means of achieving the consequences are unethical? And worse still, who is in position to judge whether an outcome is the best possible consequence, simply good or even bad? The American Library Association advocates for intellectual freedom arguing that every individual has the right to read, write, and think whatever he or she wishes. But can we honestly say that what everyone reads, writes and thinks will always lead to the right thought and right speech in all cases? It is in this instance that consequentialism breaks down because ultimately we must defend freedom of thought and expression”.

The weakness of consequence-based theory is that it focuses on state of affairs that result from an agent’s action. An act is right or wrong depending on its consequences. Therefore, the theory has no moral value apart from outcomes. Moreover, from consequence-based theory perspective, “a person is allowed to break existing rules, only if foreseeable consequences of that particular violation are better than consequences of not breaking that system”. Therefore according to consequentialism “an action is right or wrong depending on its consequences on the society”. Tadele (2014) adds that “this theory is often difficult to apply because many times it leads to the interests of a minority being sacrificed at the expense of the majority”. In addition, “it is difficult to identify the majority and minority

groups in many cases, along with what constitutes ‘good’ for the society and how to measure that ‘good’”. Consequence- based theory largely relies on the result or consequence of an action which sometimes cannot work in an information society dispensation in which we now operate.

2.5.2 Duty-based theory

Duty-based theory was developed by Immanuel Kant (1785). According to this theory, “consequences are not necessarily all that matters in determining what the right thing to do is”. This theory argues that “we arguably have a duty not to kill innocent people even if doing so would have good consequences”. According to Kant, the basis for right action is a categorical imperative, consequently, lying is wrong. “If everybody lied, then no one would trust anybody else and there would be no point in lying”. “Thus, the maxim “lie whenever it is at your own advantage” would not work as a universal law” (Fallis, 2007:30). Kant gives a version of categorical imperative that actually provides more straightforward guidelines for identifying right actions. “In other words you should not simply use other people in order to achieve your goals”. Fallis (2007) has used Kant’s categorical imperative to defend intellectual freedom.

Another duty based theory was developed by W.D. Ross in 1930. This theory differs from Kant’s, because it insists that, action must satisfy the categorical imperative. The theory emphasises on adhering to ethical principles or duties and fulfilling obligations. In contrast Kant argues that the way to decide if something is a duty is to see whether or not you can consistently generalise it, he uses logic and reasoning. For example, it is the duty of library professionals to keep promise. If they do not keep promise then they can generalise this to allow anyone to break a promise which creates logical contradictions. Ross’s duty-based theory has been widely applied unlike Kant’s or Mill’s. This is because the theory “does not try to distinguish between right actions and wrong actions using a single unified principle”. The theory “instead presents a whole list of duties that are each supposed to follow directly from our moral intuition”. “This list includes a duty to keep our promises, a duty to distribute goods justly (justice), a duty to improve the lot of others with respect to virtue, intelligence, and happiness (beneficence) and duty to avoid injury to others”. The duty to justice and beneficence are especially important for library professionals because it advocates for building trust with users and creates a system of rules that has consistent expectations to all people. Consequently, if an action is ethically correct or duty bound, it would apply to every

person in a given situation. This theory encourages treating everyone with equal dignity and respect in the provision of library and information services.

Duty-based theory (Kantian) is relevant to this study as it provides general understanding of information ethics to library professional practice. According to the Duty-Based theory (Ross, 1930), libraries have the duty to provide information services and resources that satisfy the information needs of their targeted users. Among these duties include but are not limited to “duty to keep promises, duty to distribute justly, duty to improve the lot of others with respect to virtue, intelligence and happiness and duty to avoid injury to others”. All these duties enhance access to library and information services. In application of this theory library professionals in university libraries are required to obey university and library instructions, guidelines and policies in provision of library and information services. In addition, library professionals in university libraries should adhere to professional ethics and “not allow their personal beliefs to interfere with the fair representation of the aims of their institution or the provision of access to its information resources”. According to Duty-based theory, library professionals should be efficient in performing their duties and also protect intellectual property rights. Duty-based theory does not support action such as violation of intellectual property (such as software piracy, downloading large portions of text from electronic information sources, and copying a book or program). The challenge of applying Duty-based theory in investigating information ethics is that as a new field in developing countries including Tanzania, some of the duties espoused by the theory may not be applicable due to the dynamic nature of information and communication technologies. Furthermore, Fallis (2007) asserts that, Duty-based theory is not sufficient in addressing research issues of information ethics that are embedded in professional code. For example the ALA (1996) contends that “access to library materials should not be restricted on the basis of age”. Similarly, Floridi (2001) posits that “information ethics needs its own unique ethical theory because the ethical dilemmas facing library professionals are certainly unique”.

2.5.3 Right-based theory

Right-based theory was developed by Locke (1689). This theory suggests that, “we have some rights merely by virtue of being human beings”. “Such natural rights have many potential applications in information ethics. It has been suggested that it is in the nature of

human beings to think for themselves and that this fact implies we have certain rights”. In particular, Fallis (2007:30) claims that this fact establishes that:

“If information were generally withheld from us, our ability to think for ourselves about what we should do would be seriously impeded. In other words, restriction on access to information would conflict our nature. This theory has been argued to advocate for our natural right to privacy”

The basic idea is that we are not really able to think for ourselves if we are worried that our choices (for example what to read) are being observed. The Right-based theory is congenial to information ethics as it espouses right virtues. The Library Bill of Rights (ALA, 1996) is a notable example of right virtue as it states that “every individual has the right to read, write, and think whatever she or he wishes”. “But can we honestly say that what every one reads writes and thinks will always lead to the right thought and right speech in all cases?” (Ndwandwe, 2009) This theory does not consider factors that limit access to information such as level of illiteracy, low level of infrastructure including computers, internet electricity and bandwidth.

Right-based theory might be objected because it cannot fully support the principles that underpin information ethics and professional codes of conduct (Fallis, 2007) because “codes of professional conduct (just like laws) are written by fallible human beings and are subject to criticism and revision”. The theory is based on western tradition and may have limited relevance to non-western societies. Ocholla (2008) asserts that, “marginalised communities such as children, women, the illiterate, rural dwellers or other social groups that are segregated because of race, creed, religion, and poverty may not necessarily benefit from equitable access to information because what is right to information for them is often decided not by themselves but somebody else”. Right-based theory does not consider the issue of intellectual property, privacy, accuracy and legitimate rights. Therefore Right-based theory is too generic, does not specify other duties that professional librarians should perform but rather insists on user’s rights.

2.5.4 Virtue-based theory

Virtue-based theory was developed by Aristotle. The theory deemphasises rules, consequences and particular acts. Furthermore, the theory neither focuses primarily on whether an intention is right, nor whether one is following the correct rule. The theory posits

that a person's character is the totality of his traits and such character can be good, bad or somewhere in between. The character can be of admirable traits and perfection. "According to Virtue-based theory the right thing to do is what a virtuous person would do in the same circumstances". "Virtue-based theory focuses on habits and abilities that an individual needs to acquire and practice in order to become a good human being" (Britz, 2013). The Aristotelian virtue includes things like courage, temperance, friendliness and generosity. People who do not meet these conditions will be vicious to some degree and exhibit uncontrollable display of anger, fear, longing or hatred (Smith, 2003; Ess, 2011). Virtue-based theory "describes the character of a moral agent as a driving force for ethical behavior, rather than rule as in Duty-based theory or Consequence-based theory which derive rightness or wrongness from outcomes of the act itself rather than character".

Fallis (2007) asserts that "virtues are clearly applicable to issues of information ethics". The Virtue-based theory has therefore ethical implications for libraries with regard to the way they provide information services and resources and also with regard to the way the users access and use the services and resources which the libraries have put at their disposal (Kisenyi, 2013). For example, library professionals often need courage to stand for principles of freedom of access to information by all in the face of resistance especially from government functionaries. Virtue-based theory asserts that "friendliness certainly makes it more likely that library professionals will succeed in their mission of providing people with access to information". Virtue-based theory postulates that "good people will naturally do the right thing". The Virtue-based theory was relevant in this study because the aspects discussed in virtue-based theory are important in the provision of library and information services. The variables or virtues espoused by the theory are justice, courage, honest, friendliness, generosity and temperance. These virtues must be practiced by library professionals in order to achieve moral excellence in the provision of library and information services (Gorman, 2000).

Virtue-based theory "has proven to be one of the most solid and flexible ethical theories in the provision of library and information services in relation to information ethics" (Tadele, 2014). Virtue-based theory "essentially attempts to define ethical virtues that library professionals and library users should aspire to exercise in order to be ethically sound". Virtue-based theory "provides a framework that can be understood and translated into

different societies across physical and cultural boundaries”. This characteristic justifies its use in the study of global phenomenon like information ethics (Sicart, 2011; Ess, 2011).

Hoq (2012) suggests that in difficult circumstances, the library and information professionals will have to be guided by their personal judgment and discretion in following a particular course of action. Virtue-based theory is relevant for studying problems in information ethics because it gives an understanding of ethical reasoning in library practice with regard to the way library professionals provide information services and resources, the way the users access, use services and resources in university libraries. Both Virtue-based theory and Duty-based theory provide the basis for ethical reasoning in provision of library and information services. The difference in the two theories arise from the fact that while Virtue-based theory focuses on what sort of people we should be the Duty-based theory is concerned with what actions we should perform. Tadele (2014) asserts that Virtue-based theory describes character of moral agent as a driving force for ethical behavior, rather than rules (as in Duty-based theory) and Consequence-based theory (which derives rightness or wrongness from the outcome of the act itself rather than character).

Consequently, ethical theories such as Consequence based-theory, Duty based-theory and Virtue-based theories are too limited singly to underpin a study of information ethics problem because they are rooted in the Western tradition and do not espouse so much values of non-western cultures (Froehlich, 2004). In addition, Capurro (2010) argues against Consequence based-theory, Duty based-theory and Virtue-based theories because of the fact that research in information ethics is concentrated in developed economies such as Germany, Japan, United Kingdom and United States at the expense of developing countries. Nevertheless Capurro acknowledges that these theories to a certain extent capture the basic forms of ethical reasoning found in a multitude of cultures.

2.6 Luciano Floridi's Resource-Product-Target (RPT) model

Floridi's Resource-Product-Target (RPT) model has been proposed as a unified approach for information ethics. According to Floridi, information ethics is a part of environmental ethics where information technologies and information systems are incorporated into the environment through value systems (Steinerová, 2014). RPT can be used to explain and relate the main concepts of information ethics. It models morally relative acts on information (Al Fedaghi, 2010). Floridi (1998) proposed that the concept of information is organized as a

fundamental intrinsic moral value. Floridi considered information ethics the philosophical foundation of moral principles that guide problem-solving procedure in computer ethics. Floridi (2006) further introduced Resource-Product Target (RPT) model of morally relative act of information. The model explains three components of information ethics when information is used (information as a resource), when information is produced (information as product) and when the information environment is being affected (information as target).

The RPT model (resource, product, and target) can be summarized as follows:

Information as a resource ethics: In this view, information is used to make better moral decisions about what can and ought to be done in a certain given circumstances. According to this view, a well-informed agent is more likely to do the right thing. Wrong behavior is viewed as the outcome of deficient information. Responsibility tends to be directly proportional to agent's degree of information. Lack of information sometimes achieves morally desirable goals, as in the case of protecting anonymity. This view describes information ethics as a study of moral issues arising from availability, accessibility and accuracy of resources (Al Fedagh, 2010). Steinerová (2014:28) adds that "ethics of information as a resource refers to moral values when presence or absence of information resources is being secured. Moral values concern accessibility, safety, reliability and exactness of information resources. What matters is protection of anonymity, support of fair treatment and disinterested evaluation".

Information as a product: According to this view, the agent produces information about his/her moral actions. Steinerová (2014:28) asserts that "with regards to information as a product, social agent is the producer of information within the restrictions and possibilities of the information environment". Responsibility concerning creation is the most important value, as is compliance with rules (legislative). Thus, information ethics may cover moral issues arising, for example in such context as plagiarism, advertising, propaganda and misinformation (Al Fedagh, 2010).

Information as a target ethics: This view asserts that information may be subject to ethical analysis when the agent's actions affect the information environment, as in such cases as breach of information privacy, hacking, security and intellectual property (Al Fedagh, 2010). "Ethics of information as a target negotiates the effects of moral judgement on the

information environment; for instance, intentional disturbance of the information environment, including negative activities such as “hacking” (unauthorized access to information systems), infringement of privacy, and piracy on the one hand, and securing of private ownership freedom of speech, censorship, filtering and content control on the other” (Steinerová 2014:28), The Resource, Product, Target Model (Floridi, 2006) is presented in the figure 2.1.

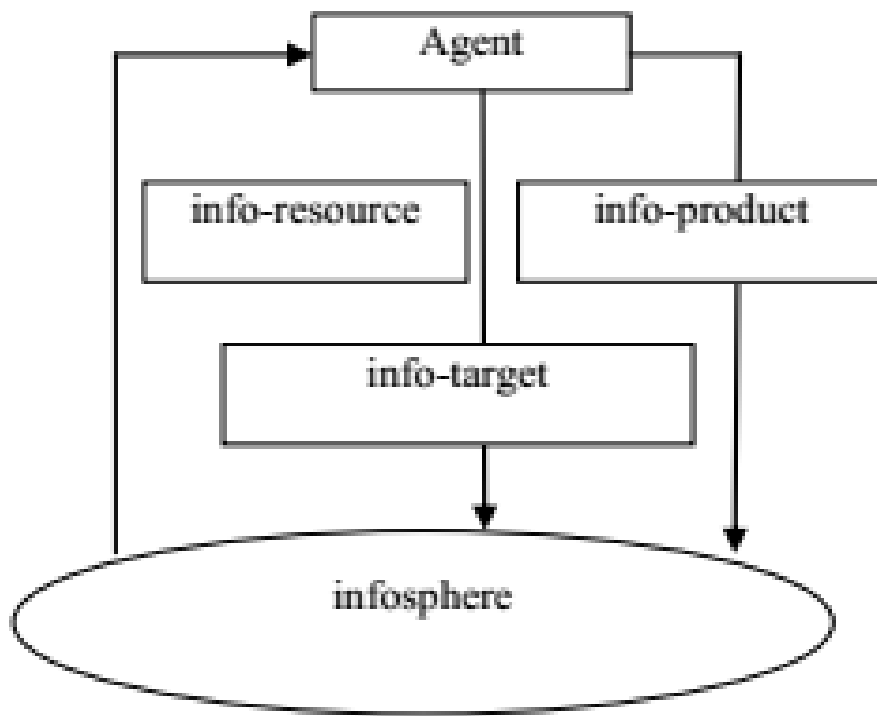


Figure 2.1: The Resource, Product, Target Model (Source: Floridi, 2006).

According to Floridi (2006), the RPT model helps one to get some initial orientation in the multiplicity of issues belonging to different interpretations of information ethics. The model is also useful in explaining why any technology which radically modifies the life of information, is going to have profound implications of any moral agent. At the same time, the model rectifies the excessive emphasis placed on specific technology by concentrating on the more fundamental phenomenon of information in all varieties and long tradition. Floridi however acknowledges that the model is still too simplistic since several important but different issues are included in analysis of just one “informational arrow.” Some authors criticize Floridi RPT model for neglecting the social aspects of information ethics.

Capurro on other hand identifies information ethics pursuant to the values of existence of digital objects, while digital existence in itself and the very information environment also has ethical value in a social and intercultural context. Information ethics is also linked to ecological, political, economic and cultural domains (Capurro, 2005). Therefore, information ethics ought to be applied to the intercultural issues of digital divide or when changes of behavior and moral values of life become affected by developmental changes of the infosphere and internet (Steinerová, 2014). In addition, the model is insufficiently inclusive, since many important issues cannot easily be placed on the map at all, for they really emerge from, or supervene on, the interactions among the informational arrows (Floridi, 2006). Simply put, the RPT model describes limited aspects of the information cycle. Advancement in information technology has raised many important ethical issues including intellectual freedom, access to information, information privacy and intellectual property that go beyond RPT. For these reasons Floridi's RPT model was not applied in this study.

2.7 Summary

This chapter discussed various theories and a model including Consequence-based theory, Duty-based theory, Right-based theory, Virtue-based theory, PAPA (Privacy, Accuracy, Property, Access) model, World Summit on Information Society Action Line 10, African Network for Information Ethics Thematic Framework (ATF) and Luciano Floridi's Resource-Product-Target (RPT) model that are relevant in investigating information ethics problems. The contemporary information professionals believe that to understand information ethics, one need to have firm grasp of the foundation of ethical theories as discussed above, from the review of theoretical models it is apparent the thrust of different models vary. For example PAPA model focuses on privacy, accuracy, property and access. World Summit on Information Society Action Line 10 focus is on privacy, confidentiality, accuracy, ownership access/accessibility and security online and more. African Network for Information Ethics Thematic Framework (ATF) tries to provide an opportunity for studying information ethics in African context. Luciano Floridi's Resource-Product-Target (RPT) model is useful in understanding the concept of information ethics in the information society, since it helps library professionals and other information workers to make moral decision about what can be done in a given circumstances. The model suggests that wrong behavior is the consequences of deficient information. The application of these theories, models and frameworks should generate the knowledge of information ethics in university libraries in Tanzania.

Information ethics being a new field of study does not have its own established theoretical models to define the discipline. This situation is exacerbated by the fact that information ethics in Africa is still in infancy and has largely not been researched thus creating a vacuum in the literature and theory for investigating information ethics on the continent. This scenario is confirmed by Capurro (2008) who points out that information ethics is a new field in Africa and not much has been published on its impact on African societies and cultures from a philosophical perspective; hence Africans do not have a pool of information to draw from in this regard. Scholars are therefore relying on multiple frames including those founded on western ethical traditions to investigate research problems in the field of information ethics. For this reason, a combination of theoretical models outlined above has been selected to underpin the study.

This study applied different kind of theories, models and frameworks because information ethics is a new field with limited theoretical foundation. Therefore, the use of multiple theories and models contributes to the growing body of knowledge in understanding information ethics globally and in a developing countries including Tanzania. Moreover, these theories/models provide a foundation for other information ethics theories and models to be developed.

CHAPTER THREE

LITERATURE REVIEW

3.1 Introduction

Literature review is a comprehensive examination of information that exists related to the research topic (Blankenship, 2010). The purpose of literature review in research is to gather scholarly information about the topic, so that the researcher can build the foundation knowledge related to the study. Blankenship (2010) suggests that by reviewing literature a researcher can;

1. Identify theories and factual information and theories that are related to research topic. This information assists the researcher in developing the research problem, the focus of the study, and justification of the study.
2. Clarify the problem, focus, and justification for the study.
3. Help develop research questions.
4. Identify what has been studied or needs to be investigated further.
5. Save time and effort in the development of the research or instrumentation plan.

The purpose of this study was “to investigate the role of information ethics in the provision of library and information services” in university libraries in Tanzania. The following research questions were addressed: what is the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice?; What is the attitude and perception of library professionals in university libraries in Tanzania towards information ethics?; What are the factors that influence information ethics practice by library professionals in university libraries in Tanzania?; How is information ethics integrated in the library professional practice in university libraries in Tanzania?; What is the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services?

Leedy and Ormrod (2005:64) state that, “a review of literature describes theoretical perspectives and previous research findings that deal with the problem at hand”. The authors suggest that “the function of a literature review is to look at what others have done in similar studies or research, although not necessarily in areas identical to one’s line of investigation”. Kothari (2004) points out that “there are two types of literature; the conceptual literature concerning the concepts and theories and the empirical literature” which discusses studies

related to the variables of the current study. Empirical and conceptual literature reviewed in this chapter was obtained from books, journal articles, book chapters, conference proceedings, online databases, and others related to the topic. The chapter is organised around themes of research questions, key variables of the underlying theory and broader issues on the research problem. Thematic areas from the research questions include; ethics and information ethics; awareness about ethical values in providing information services; attitude and perception of library professionals towards information ethics; factors that influence information ethics practice by library professionals; and integration of information ethics in library professional practice. In addition key variables from the underlying theory are; information access/accessibility, property right, information privacy and information accuracy. Within each theme, international context is reviewed followed by regional and local context.

3.2 Ethics and information ethics

Advancement in information technology has “raised many important ethical issues including intellectual freedom, access to information, information privacy and intellectual property”. Almost every human being faces moral dilemma of determining what is ‘right’ and what is ‘wrong’ or what is ‘ethical action’ and ‘unethical action’ in their daily life. This is because, what is right and wrong depends on the society and time we live (Msongelwa-Njini and Dube, 2013). Although ethical codes existed long before writing existed we need to understand that there is no universality in ethical issues or agreement across cultures. Capurro (2013) asserts that ethics are cultural differences. For example in western countries privacy related to self while Buddhism relies on the tenet of non-self, therefore the social perceptions, as well as concept of privacy are different. Kaddu (2007) asserts that, “ethics examines the rational justification for our moral judgements; it studies what is morally right or wrong, just or unjust. Ethics leads to a set of principles that guide the development of standards for specific professions and groups”.

“The role or purpose of ethics in society is to promote what is good in people, avert chaos, and provide norms and standards of behavior based on human morals and values that are inclusive as opposed to exclusive by creating moral agents” (Ocholla, 2013:21).

Information ethics is growing “as a discipline in library and information science and the field is evolving to embrace many disciplines including media, journalism, library and information science, computer ethics, management information systems, business, and the internet” (Froehlich, 2004). Similarly, Britz (2013) and Steinerová (2014) assert that “information ethics as an interdisciplinary field of study relates, among others, to the fields of computer science, library and information science, philosophy, communication science, journalism and mass media”. He adds that the focus of information ethics is “the right to privacy, the right of access to information, the right to intellectual property and quality of information”. Smith (2011) reviewed the philosophy of knowledge when she first discovered the philosophy of technology and philosophy of science. From there she went on to develop her initial mode of five working categories; which include access, ownership, privacy, security and community, as the first theoretical model for an applied ethics for the field.

This study looks at information ethics as a discipline in library and information science and as the product of information society. It is a discourse concerned with the responsible use of Information Technologies (ICTs) (Mutula, 2013). Bester and Bothman (2013) assert that information ethics is a field of critical reflection on societal moral values and practices with regard to production, storage, distribution and access to knowledge as well as to all kinds of societal processes, systems and media of information and communication. “The main topics of information ethics are intellectual property, privacy, security, information overload, digital divide, gender discrimination and censorship” (Capurro, 2013:9). Mason (1986) classified information ethics issues as; privacy, accuracy, property, and access.

Fallis (2007:24) explained that “information ethics is essentially concerned with the question of who should have access to information”. Fallis views advances in information technology as being responsible for the growth of the field of information ethics and ethical issues thereof. “Fallis believes that some of the ethical dilemmas faced by information professionals such as privacy, accuracy, property and access have arisen due to advances in information technology”. Adam (1999) explains that “information ethics deals with, among other things, the respect given to information when it is generated, processed, transferred, and most importantly, when it is used”. Moreover, “information ethics provides a critical framework for considering moral issues concerning information privacy, moral agency, and new environmental issues (particularly how agents should behave in the infosphere, or

problems arising from the life cycle - creation, collection, recording, distribution, and processing of information, especially ownership and copyright)".

Chuang and Chen (1999) consider "information ethics as a discipline dealing with moral conduct of information users with respect to responsibility". Issues such as anonymity, confidentiality of data, data integrity and data security are identified as critical aspects of information ethics (Buchanan, 2012). Hoq (2012) asserts that the field of information ethics has evolved as a consequence of the 'Information Society', driven by unprecedented advancements in Information and Communications Technologies (ICTs). This has added a new dimension to the age-old debate on 'right' and 'wrong' or 'ethical action' and 'unethical action'. Due to this situation, library and information professionals need to be aware of the values of information ethics. Library and information professionals have been looking for answers to the questions related to information ethics in myriad ways especially issues around privacy, freedom of expression, right to information and accessibility, among other issues" (Hoq, 2012). By addressing these issues, it is hoped information ethics can help us solve this problem and guide us in generating, storing, disseminating and using information in a just and responsible way.

3.3 Awareness of information ethics values

"Due to information explosion, proliferation of information and communication technologies and creating awareness about information ethics should be given due emphasis" (Liton, n.d:9). The study conducted by Cilliers (2017) noted that higher education is increasingly making use of Information and Communication Technology (ICT) to deliver education and information services paramount by information professionals, but they are not much aware how to use ICT ethically. According to IFLANET (2003), IFLA calls upon library professionals to adhere to principles of intellectual freedom uninhibited access to information and freedom of expression and to recognize the privacy of library user. IFLA further urges its members to actively promote the acceptance and realization of these principles. In doing so IFLA affirms that:

- Libraries provide access to information, ideas and works of imagination. They serve as gateway to knowledge, thought and culture

- Libraries provide essential support for lifelong learning, independent decision making and cultural development for both individual and groups
- Libraries contribute to the development and maintenance of intellectual freedom and help to safeguard basic democratic values and universal civil rights
- Libraries have responsibility both to guarantee and to facilitate access to expressions of knowledge and intellectual activity. To this end libraries shall acquire, preserve and make available, the widest variety of materials, reflecting the plurality and diversity of society
- Libraries shall ensure that the selection and availability of library materials and services is governed by professional considerations and not by political, moral and religious views.
- Libraries shall acquire, organize, and disseminate information freely and oppose any form of censorship
- Libraries shall make materials, facilities and services equally accessible to all users. There shall be no discrimination due to race, creed, gender and age or for any other reason
- Library users shall have the right to personal privacy and anonymity. Librarians and other library staff shall not disclose the identity of users or the materials they use to a third party
- Libraries funded from public sources and to which the public have access shall uphold the principles of intellectual freedom
- Libraries and other employees in such libraries have a duty to uphold those principles
- Librarians and other professional library staff shall fulfill the responsibilities both to their employer and to their users. In cases of conflict between those responsibility, the duty toward the user shall take precedence

In order to pursue the above mentioned activities, there is special need to inculcate, develop or increase in library professional an awareness of ethical dimension of their work (Fernandez-Molina n.d). Looking at these activities, the researcher suggests that library professionals need to adhere to ethical principles and be aware on how to use ICT responsibly.

Mbofung and Popoola (2014), and Matingwina (2015) point out that, due to proliferation of information, library and information professionals as providers of information require

awareness about growing complexity of the infosphere and the associated ethical issues. The awareness is needed especially because little progress has been made in addressing the ethical issues associated with ICT (Sherratt, Rogers & Fairweather, 2005). Mbofung and Popoola (2014:1) assert that, “knowledge of ethical issues with commitment to upholding individual and collective responsibilities toward knowledge access and provision, doing right and upholding professionalism form the foundation to quality services provision”. However, personal ethics requires the professional awareness (Smith, 2010).

Fallis (2007) is of the view that good knowledge of ethical issues of providing information services is necessary as part of education LIS education and training. Moreover, there is special need to inculcate, develop or increase in librarians and information professionals’ awareness of the ethical dimension of their work (Fernandez-Molina, n.d). Fallis (2007) asserts that to date, information ethics for the library professionals has focused attention on censorship, collection development, intellectual property and problem of users. It is important for them to be trained in the ethical issues associated with the use of ICTs (Sherratt, Rogers & Fairweather, 2005) especially the moral values of using ICT in the provision of information services. Furthermore, library and information professionals should be encouraged to explore and think more deeply about the social and legal consequences of the use of ICTs.

Batool and Ameen (2010) pointed out that lack of coverage in the curriculum, lack of refresher courses, lack of training workshops were major problems in understanding information ethics issues such as privacy, access, property, accuracy, dignity, trust, integrity and more.

The study of Msongelwa-Njini and Dube (2013) on computer ethical challenges facing professionals in Zimbabwe noted that, Zimbabwe was faced by many challenges including lack of regulations, policies and law pertaining to information ethics and this created a situation in which computer crime were committed unknowingly. That is, the majority of the Zimbabwean population did not know what information ethics is. As a result both professionals and ordinary citizens in the street sell copy righted materials; burned software; photocopied the whole book; used computers in fraud, theft; hacking and so on.

Ocholla (2009) examined in-depth the status of Africa information ethics education in over sixty library and information schools. The study addressed who should be taught, the

education course content and the duration of education. The findings report that the content relating to generation, processing, storage, dissemination and use of information and knowledge, should form part of information ethics education. Douglass (2012) therefore is of the view that, the growing interest in information ethics in Africa presents an opportunity and possibly even a mandate for its inclusion in the curriculum of LIS.

3.3.1 Level of awareness of library professionals about information ethics

Mbofung and Popoola (2014), Ocholla (2009) and Britz (2013) all report that information ethics is not yet understood by most of library professionals in many African countries including Tanzania. Besides, “information ethics is a fairly new field of study having gained prominence after World Summit on Information Society in 2003 and 2005 respectively” (Mutula, 2012). The WSIS Action Line 10 holds that the Information Society should be subject to universally held values and promote the common good while preventing abusive uses of ICTs. These values must be known by library and information professionals. WSIS Action Line 10, PAPA model and classical ethical theories can be used to create awareness among library and information professionals about issues of information ethics.

Liton (n.d:5) asserts that, “the growing threat of intellectual property manifested in plagiarism, making illegal copies of books and other materials and illegal download of software, music and movies, is due to low level of awareness about intellectual property right in the third world countries among librarians”. Cilliers (2017) adds that, internet makes information and software resources readily available and users, therefore believe that it is acceptable practice to download movies or music from websites. This attitude extends to academic work of the student who plagiarises internet resources. Mbofung and Popoola (2014) therefore emphasise that library and information professionals, as providers of information, require awareness of growing complexity in ethical issues and values about the relationship between professionals and society. Similarly, World Summit on Information Society 2003/2005 in paragraph 55-56 part C10 of the plan of action declared that all stakeholders including library professionals should increase their awareness about the ethical dimension of information society because every day they encounter ethical issues such as copyright and other intellectual property, security, confidentiality, and access. In addition, the library professionals must be familiar and apply appropriately the ethos and values of consequence-based, duty-based, right-based, and virtue-based theories in the provision of library and information services to avoid ethical dilemmas.

Adetimirin (2017) noted that the use of ICT is guided by rules and awareness and knowledge of these rules by users will justify their adherence to such rules. Besides, library and information professionals acquire, organise, and disseminate information to users and should be able to apply and practice information ethics in their work. Adetimirin (2017) found that LIS doctoral students were highly aware and adhered to all major ethical values in the PAPA model. Similarly, a study carried out in Bangladesh by Liton (n.d) on information ethics and library professionals revealed that, information professionals needed to maintain highest level of information ethics so that they can serve their clientele in the most fair and just manner. Furthermore library and information professionals have an important role to play in the promotion of information ethics and the creation of a just and equitable society. For them to play this role effectively, they need to gain a deeper and more holistic understanding of ethics in general and information ethics in particular (Hoq, 2012; Buchannan, 1999). The importance of awareness of information ethics by library professionals is underscored by Farmer (2015) who asserts that librarians must be aware of information ethics issues and the implications in providing information services.

Tahat, Elian, Sawalha and Al-Shaikh (2014) in their study about the ethical attitudes of information technology professionals, a comparative study of USA and Middle East, revealed that IT professionals had a general awareness of ethical issues concerning IT, though no significant differences were found between the two samples. However, the study discovered that the same IT professionals were neither ethical nor unethical with respect to behaviours associated with the ongoing consultation on information system development lifecycles and the level of security issues. The findings of Tahat *et al.* (2014) seem consistent with the view that what might be considered ethical in one country might not be so in another. For example in developed countries such as US, more effort is directed towards enforcing copyright laws for copyright owners while in developing countries in the Middle-East more focus is placed on ensuring that the public benefits from creative work, in order to encourage technology transfer and keep creative work affordable and easily accessible.

Literature reviewed from Tanzanian context found that library professionals in university libraries did not have guidelines provided by Tanzania Library Association (TLA) to guide them on how to provide library and information services ethically. This led university libraries to practice ethical values differently from one university to another. TLA officials did not work closely with university library professionals to ensure they were aware of, and

practiced ethical values in the provision of information services. The study by Sherratt, Rogerson and Fairweather (2005) on the challenges of raising ethical awareness, revealed the difficulty of raising awareness in addressing ethical issues associated with ICT. The literature seems to reveal many studies on professional ethics awareness than information ethics awareness among library professionals. The study of Igbeka and Okoroma (2013) investigated awareness and practice of professional ethics amongst librarians in Nigeria and found that “awareness of ethical values was quite low and the degree of practicability of many ethical codes were questionable because there had not been any case of sanction in connection to the violation of ethical values”. Akakandelwa (2010) examined the status of teaching information ethics in Zambia, and established the need to have a code of ethics for librarians in Zambia. Similarly Fallis (2007) in a seminal paper on information ethics for 21st century library professionals revealed that in order to deal effectively with ethical dilemmas, library professionals must have a good working knowledge of information ethics. In addition, a code of professional ethics can help such knowledge, though this is not sufficient.

Mbofung and Popoola (2014) in a study on legal issues of information services delivery and library information science professionals in university libraries in Nigeria, examined “awareness of some of the principles endorsed in professional codes that support legal and ethical workplace; and whether the library and information science professionals (LIS) in federal universities in Nigeria are practicing them in service delivery”. The findings revealed that “a significant number of LIS professionals in federal universities in Nigeria provided services within the legally accepted principles and practices of service delivery”. Onoyeyan, Ajayi, Adesina and Bamidele (2014) revealed that majority of librarians did not have a copy of code of the Librarians’ Registration Council of Nigeria Code of Ethics. Onoyeyan *et al* (2014) noted that the work of library professionals was undermined because they did not have adequate skills to deal with ethical dilemmas. Igbeka and Okoroma (2013) called for strict sanctions for violation of information or professional ethics at work. They proposed an implementation committee to handle ethical issues at the work place and a robust monitoring of librarian behavior in addition to creating awareness through workshops, seminars, and conferences. IFLA (2012) is explicit that professional ethics code is important for library professionals as it embodies a value-rich approach to professional work. Such ethical code according to Shachaf (2005) is a formal statement of professional values regarding ethical behaviors. It focuses on principles and values that govern the behavior of a person or group with respect to what is right or wrong.

Luciano (1999) opined that the usefulness of the professional ethics is effective when accompanied by good policies and clear sanctions as stimulus to ethical conduct of members.

The literature reviewed also show that significant studies have focused on investigating awareness about information ethics among students and teachers but not information ethics awareness among library professionals (Adetimirin, 2017; Beycioglu, 2009 and Özer *et al.*, 2011). Adetimirin (2017) revealed that doctoral students were aware of cyber ethics, but their level of awareness on different aspects of cyber ethics varied. This result was in conflict with the findings of Beycioglu's (2009) study on "Cyber philosophical issues in education, unethical computer use behavior: The case of prospective teachers". The study reported that students in educational institutions in Turkey were involved in unethical use of computers which meant that they were not aware of cyber ethics, which is the regulation guiding the appropriate use of ICT. Özer, Uğurlu, and Beycioglu (2011) concluded that the teachers violated the ethics of using the computers because they were not aware of ethics guiding its use. They strongly recommended that the teachers should be taught about cyber ethics throughout their training programme; that is the ethics guiding the use of the Internet and other ICT.

3.3.2 Awareness of postgraduate students and faculty (users) about ethical values

Liton (n.d) claimed that information professionals need to create awareness with regards to ethics and information services through programs such as literacy campaigns, reading competitions, study cycle training, orientation and related activities for users. For this to happen, library professionals must be aware about the ethos and values of information ethics. Farmer (2015) is of the view that user training on ethical values can increase the confidence level of library professionals and that of users. "A number of authors have developed instruments that are designed to assist in raising awareness about ethical issues posed by the use of ICTs". In this regard Yi (2016:98) asserts that;

"Tools that academic libraries can use to promote ethical values to users include; digital media, such as library's Website, e-mail lists, blogs and podcasts; print material such as posters, handouts and giveaways; events such as orientation tours and workshops; and other tools such as library publications, contests, brochures, direct mail, Web 2.0 applications and displays. A good Website helps to bring information in a unique way, because it is a direct link between the library and specific users (for example students and faculty)".

The study by Otike and Maina (2013) on the use of social media in creating information ethics awareness for universities in Kenya, affirms that the use of social media in information ethics awareness is still a new area”. However, slow internet connection, ICT skills, non-internet enabled phones and resistance to the use of social media inhibit the use of social media in universities. Adetimirin (2017) opines that users need to be aware of information ethics as they source different information especially from the internet such as open access journals, online databases, videos and photographs. They must know about ethical use of these information resources to avoid violating them in terms of referencing by acknowledging the author and source. They must also know about plagiarism and copyright infringement. It is only when users are aware and possess information ethics knowledge guiding these information resources, that they can use these information resources legally and ethically. Farmer (2015) noted “that the use of new technologies such as Web 2.0 such as RSS (Really Simple Syndication) alert services, Blogs, Wikis and Facebooks” can be used to create awareness and also make the interaction with the library more interesting for users.

Igwe and Ibegwam (2014) affirmed that information ethics education is necessary and should be taken seriously to facilitate its integration into professional practice of library professionals so that they can in turn impart to users. The challenge as Mbofung and Popoola (2014), Ocholla (2009) and Britz (2013) point out is that information ethics is not yet understood by most of library professionals in many African countries. Douglass (2012) reports that, the studies surrounding information ethics education in Africa clearly hold practical value for other educators in constructing information ethics workshops, courses and materials. However, current studies lack an overarching theory (separate from information ethics) to frame future research questions and to situate study results in a broader context (Douglass, 2012). Otike and Maina (2013) in their study reported that, information professionals in Kenya have organised regular research methods workshops for their staff and students on how to access and use information.

3.3.3 Professionals ethics awareness

“Professional ethics relates to moral rules that influence a professional’s actions of behavior in discharge of responsibilities” (Onoyeyan, Ajay, Adesina & Bamidele, 2014:77). “Professional ethics help professionals to choose what to do when faced with a problem at work that raises a moral issue”. Bielby (2014:6) states that, “due to burgeoning requirement

for an information ethics, there is need for a code of information ethics for library professionals and library professionals need to be far more aware of ethical questions”. Professional ethics for library organisations are mainly intended to guide the behavior of library professionals. Library and information professionals need to understand ethics and ethical implications of their actions and how they should behave ethically and make the best decision. Therefore, “there is the need to be kept informed in order to safeguard library and information professionals from embarrassments that may arise from ethical impropriety”. Library professionals employ specialist knowledge and expertise in the provision of library and information services. Ethical issues are important in the library profession as in other professions. Indeed, one of the hallmarks of a profession is having its own professional ethics (Jones, 2014). “Library and information professionals are the essential link between information users and information or piece of literature which they require, and therefore occupy a privileged position which carries corresponding responsibilities” (CILIP, 2012). Igbeka and Okoroma (2013:1270) in a study of awareness and practicability of librarianship ethics among librarians in Nigeria, found that;

“The awareness of ethical values is quite low; the degree of practicability of many of the professional ethics is very questionable; and that there has not been any case of confrontation and sanction in connection to the violation of the ethical values. The study further noted that to ensure the practicability and thorough awareness of librarianship ethics, it calls for setting up of an implementation committee to handle ethical issues; proper and regular monitoring of librarians on duty by the professional body and libraries’ sectional heads; enlightenment and awareness programs through workshops, seminars, conferences, and a review; and articulation of the ethical codes in measurable behavioral statements coupled with appropriate sanctions for the defaulters”.

Librarianship like other professionals should have their professional ethics. “However many librarians, carry out their professional duties as though there are no ethical guides”. The reason according to Finks (1991) cited in Igbeka and Okoroma (2013: 1271), is partly to the fact that professional ethics for librarians and information professionals are merely hollow statements written to satisfy the public or library boards. Professional ethics “must be the embodiment of principles and convictions that librarians historically hold dear; and must focus on the way we do our work and whether or not we perform in a way that can honestly be called a profession”. Ethical issues such as confidentiality, privacy, intellectual property,

equitable access and accuracy should be well spelt out in the professional ethics to avoid misinterpretation and should be stated in measurable terms. Igbeka and Okoroma (2013) state that apart from the issue of practicability, lack of adequate awareness of librarianship, professional ethics amongst librarians seem to be another reason for the gap between the existence of the professional ethics and utilisation. Mabawonku (2010) ascertained that if information ethics is treated as an important course in library school curriculum it will enhance the production of Library and Information Science professionals that are well acquainted with the ethics in information provision. Awareness and enforcement of librarianship ethics should start from library school. Furthermore, issues of sanctions and enforcement of the ethical values need to be well addressed. If professional ethics exist without awareness to the target group, it is as good as being non-existent. On the other hand where there is adequate awareness but no measures to enforce the ethics, it is still as good as having none because members will not take the values seriously. It is expected that sanctions should be attached to the violation of librarianship ethical values. Unethical librarians should be held responsible for their actions. This means that certain privileges and benefits have to be withdrawn as well. It is however observed that “library professionals in making professional decisions that affect their service delivery do not have a guide to follow when faced with a problem at work that is of ethical nature”. In the context of Tanzania, there is little being done to help library professionals to understand information ethics and ethical implications of their actions; and how they should behave ethically and make the best decisions when confronted with ethical dilemmas. In the library profession, “the core issues of information ethics include intellectual freedom, equitable access to information, information privacy and intellectual property” (Fallis, 2005).

3.3.4 Role of library associations in promoting ethical practice among library professions

Library and information Associations play a vital role in the development of library and information profession by ensuring that library and information professionals render quality services (Kawooya, 2001). Ghosh (2004:12) asserts that “basic mission of any library association is to develop products and services which offer practical solution to the problems in the ever changing information society; to provide leadership for the development, promotion and improvement of library services; promote excellence through continuing educational program, publication, awards, communication to undertake such other innovative

programs. The purpose is to develop, expand and enhance the professional knowledge and status of the profession”.

Today library associations have to provide the leading role in discussing open access to information, user rights, freedom of expression, management of intellectual property and the problems of copyright and promote development and advancement of profession and encourage the membership participation (Kiluswa, 2007). Ansari (2013) in the study of ICT skills proficiency of library professionals in Pakistan University noted that it is the responsibility of library association to conduct training programs to meet library professional needs in the changing librarianship. Karisiddappa (2002) observes that, in contemporary situation, due to rapid change of technology, library associations are important as means of organising people in order to achieve a new ends, the author continues by saying that they are also of great significance to the professionals in that they reveal cultural values and goals that members themselves are unable to formulate. American Library Association (2002) points out that, whatever the nature of the library Association or its agenda, libraries believe that associations can contribute to the development of information societies by promoting enhanced library and information services by supporting the development of information literacy skills, and by helping to create an enforceable legislative and regulatory framework. In addition, American Library Association (2002) observes that library association should be controlled by the following principles:

- A clear vision of the future
- Non parochial policies
- Bringing on board other stakeholders in information society, and
- Building on international partnerships

However, library and information associations in most of the developing countries experience problems such as lack of office space, lack of fulltime staff, insufficient funds, lack of policies and regulations, and poor communication (Kawooya, 2001). Kawooya, (2001) further noted that situations like these hinder Associations’ effective contribution to the development of the profession and library institutions, seriously undermining participation by members who may perceive as having nothing or little to offer.

Yap and Alejo (n.d) assert that “library associations promote lifelong learning through the conduct of continuing professional development (CPD) programs”. Membership in professional associations influences one’s professional identity and expands the individual’s occupational development. Ossai-Ugbah (2013:266) outlined the role of professional library associations which “include but is not limited to: providing opportunity for library professionals to meet, share experiences, learn from each other, develop local library infrastructure and defend principle of freedom of information”. Furthermore, Ossai-Ugbah (2013:268) noted that, library professional associations “do not communicate and defend the tenets of their profession as well the needs of their communities”. Ossai-Ugbah (2013:268) noted that, library professional associations “are not skilled at communicating to both individuals and groups”. In addition, “library professional associations in Africa do not learn to make responsible choices for the future and the issues that will affect library professionals that may include access versus ownership of materials; dwindling funding for print-based materials; space and facility use for computers; and ongoing technology training for staff”. Moreover, “leaders do not lead by action, writing and researching but by politics”.

Khan and Bhatt (2014) point out that due to the paradigm shift in librarianship occasioned by information technology, “library associations need to play effectively the role of promoting continuing professional education of librarians to keep them abreast with modern trends in their profession. Professional bodies like TLA should offer professional workshops, training programs, conferences, and seminars for librarians on a regular basis to their members”. Moreover, TLA must improve its financial well-being; and develop internal capacity to service its membership. They must put in place a code of professional conduct, strategic plan, policies and regulations. They need also develop strong partnerships with government, non-governmental organisations and private sector to ensure the necessary resources are available to do their work effectively.

Madden (2008) reviewed the current library and information services in UK and the challenges confronting those association. The study revealed that the major challenges facing library association in UK include training members with information technologies, marketing and promoting information services, securing sufficient funding, and developing information policies and strategies. Thomas, Satpathi, and Satpathi (2010) studied the emerging challenges in academic librarianship and the role of library associations in keeping the library professionals up to date. The study found that the majority of library professionals needed

continuing education support. Their study concluded that library associations all over the world, especially in USA and Europe, needed to play dynamic role in keeping libraries abreast of current trends.

Karisiddappa (2002) investigated the role and importance of national and state associations in library development in India. The study found that, library associations were suffering from financial assistance and there are very few associations with funding to expand its activities. Similarly, Alemna (1995) studied the role of library associations in Africa and the case for professionalism. The study found that in Africa, library associations were not successful due to barriers such as finance, legal recognition, and inadequate national legislation. Bannerman (2008) in the study conducted in Ghana on challenges of Ghana Library Association and underlined lack of permanent position, lack of single legislation for libraries, absence of an umbrella body for development of libraries, issue of independence for regional representative to operate, loss of membership and the issue of paraprofessionals who do not want to be referred to as such.

Khan and Bhatti (2014) in their study on professional issues and challenges confronting Pakistan Library Association in development of librarianship in Pakistan identified inadequate finance for libraries, service structure for librarians, implementation of copyright law, weak national information infrastructure, automation and digitalisation of libraries, development of library related standards, redesigning/up-dating of curriculum for LIS schools which would include information ethics issues, production of skillful professionals for better services and creation of network among libraries. In addition, Khan and Bhatti (2014) outlined problems faced by Pakistan Library Association members to include; inadequate training on contemporary trends in profession like responsible use of information and communication technologies, lack of financial assistance offered by the association members to overcome professional problems, lack of article contest organised by Pakistan Library Association members, inadequate training programs for professionals to improve IT skills, lack of sponsorship for its members to participate in international conferences, lack of support from Pakistan Library Association for its members 'publications, and poor collaboration of Pakistan Library Association with other national and international library associations. Similarly, the study conducted by Kiluswa (2007) revealed challenges faced by Tanzania Library Association which included; poor leadership and management, lack of motivation among leadership, inadequate resources, lack of interest and apathy in association

matters among library professionals and lack of guidelines and procedures. Other challenges included; training and qualification problems, different qualification of training levels which results in non-integration of members and lack of commitment of members to the association.

Khan and Bhatti (2014) in a study conducted in Pakistan on challenges for the Pakistan Library Association identified: ineffective leadership, inadequate policies, lack of collaboration, low membership, inadequate finance, inadequate communication, and limited infrastructure among others. Ossai-Ugbah (2013) outlined the challenges of professional library association in Africa to include use of technology such as email, internet access, video conference and faxing. The high cost of implementing technology, lack of partnership between library professionals and professional associations, and between library professionals and other professions were also highlighted. Muswazi (2002) noted that “financial and leadership constraints and lack of commitment are major problems faced by the Swaziland Library Association”. Muswazi recommended that “a strategic plan should be crafted to prioritise legislation and training programmes to increase institutional membership”. In addition Muswazi recommended that professional membership subscription rates should be raised as well as develop partnerships with allied professions. In addition alternative sources of funding beyond membership fees should be found.

3.4 Attitude and perception of library professionals towards information ethics

Klobas and Clyde (2000:6) define the term attitude “refers to a person’s disposition (either favorable or unfavorable) towards an object or event, while perception refers to the way a person sees or interprets characteristics or an event”. Eguavoen (2011) defined attitude “as the total of a man’s inclination and feelings, prejudices or bias, preconceived notions, ideas, fears and convictions about any specific topic”. Attitude and perception are used here to represent inclinations of library professionals and values towards information ethics in university libraries in Tanzania. “Tracing an ethical issue to its source and understanding the individual rights that could be violated help library and information professionals to understand the issue itself” (Zwass, 2012: 81). The variable of attitude and perception is derived from the PAPA model (1986:5). PAPA model focuses on four aspects namely: privacy, accuracy, property and access. Fernandez-Molina (n.d) states that, “there is need to carry out studies that determine the attitude of information profession towards information ethics and how this impacts on the provision of information services”.

Privacy

“Privacy is the right of an individual to be left alone, free from surveillance or interference from other individuals or organisation including the state” (Onoyeyan, Ajay, Adesina, & Bamidele, 2014). Zwass (2012:82) adds that,

“Privacy is the right of an individual to withhold information about themselves without disclosure and to have any information collected about them with their consent protected against unauthorised access. When our privacy is invaded, we are embarrassed, diminished, perceive a loss of autonomy, and a loss of control over our lives. Invasion of privacy is potent threat in an information society”

Rubin (2000) posits that “respect for privacy is a fundamental concept in a democratic society and with the increasing computerisation and networking of information, the problem is magnified further”. However, internet introduces technology which poses new challenges to protection of individual privacy. Zwass (2012) noted that privacy is the most critical issue in the 21st century affecting library and information professionals. Library and information professionals therefore, should protect users’ privacy as much as possible. This is because when the users’ privacy is invaded, they are embarrassed, diminished, experience a loss of autonomy and control over their lives. Zeng (2015:26) opines that “with the development of network information services, the privacy and security of personal information are faced with new threats during handling of user’s personal information, literature search, website access and more”. Therefore library professionals should be careful in handling user information especially in networked and shared environments (Salman, Ocholla, Mostert & Mungwisi, 2013).

However, there are a number of ethical issues that arise in the LIS profession. These include monitoring users’ internet usage, and disclosure of user and circulation records. Rubin and Froehlich (2011) “commented that revealing such information would create a “chilling effect” on borrowers, who, if they believe their reading habit were made public would subject them to embarrassment”. Mason (1986) “predicted two threats to privacy: the growth of information technology and the increased value of information in decision making. Library and information professionals are now being increasingly concerned about protecting privacy of the personal and other information of people held in databases and in other sources. Besides, personal information of library users also needs to be protected from outside

threats”. Zeng (2015:26) opines that, “the development of network information services, the privacy and security of personal information are faced with new threats”.

A study conducted by Matingwina (2015) on privacy, found that the majority of respondents 78% believed that librarians should not divulge for any purpose any format or any administrative record which has been entrusted to them in confidence; 61% thought that they upheld and protected library users right to privacy and confidentiality with respect to information sought or received, acquired or transmitted; 56% believed that libraries should enforce restriction on information when human rights or privacy of another person is violated. Onoyeyan, Ajay, Adesina, and Bamidele (2014) in their study on “assessment of ethical concerns among practicing librarians in Nigeria”, found that “abusing confidential information and using official position for personal advantage were perceived as highly unethical among librarians”. Ponelis (2013) used PAPA model to investigate information services provision and found that information ethics issues such as exposure, loss of control, invasion of private space, intrusion, information security and identity theft were of paramount importance. IFLA (2012) asserts that library professionals “have a responsibility to protect information and records of users”.

Accuracy

The accuracy variable in the PAPA model has influence on the attitude and perception of library professional towards ethical values and information ethics in particular. Ponelis (2013) suggested that accuracy of information on the library activities should always be accurate. This is because in some instances the lack of sufficient context can potentially lead to misinterpretation and unintended meaning. Traditionally, “libraries are used for preserving and disseminating information which is contained in a tangible medium which maintains the integrity of content”. Through the internet’s instability content may be altered (Onoyeyan, Ajay, Adesina, and Bamidele, 2014). Furthermore, Onoyeyan, Ajay, Adesina, and Bamidele, (2014:79) claim that “developing countries whose access to external information is common, the level of accuracy of information cannot be guaranteed”. Mason (1986) “maintained that when designing information systems, it is the designer's responsibility to be "vigilant in the pursuit of accuracy of information" because people might be harmed by inaccurate data”. “The problem of inaccuracy becomes quite grave when deliberate falsification of information such as identity theft happens” (Liton, n.d). “This has direct bearing on information ethics and has been a major cause for concern”. “Information explosion, particularly on the

internet, and its open publishing platform has compromised the accuracy and quality of information” (Matingwina, 2015:91).

Moreover, there are several ethical issues that relate to quality of information in libraries which include timeliness, currency, relevance, easy to understand and use, and that which is delivered by courteous and knowledgeable staff (Bamigboye, 2007). Inaccurate information may result in loss of opportunities, loss of money and resources or even loss of life” (Zwass, 2012). In university libraries users require accurate and reliable information for various purposes but library and information professionals might not be specialists in the concerned field, and therefore may not be able to differentiate accurate and inaccurate information. In addition, with an increase in the use of technology there is need for library and information professionals to be aware of how to authenticate online resources as a whole. Therefore, there is need for library and information professionals to nurture and further enhance their critical evaluative approach to information embodied in their professional training and activities.

Onoyeyan *et al.* (2014:79) suggest “development of information literacy skills programs for use in training of library users at different stages of life, and various levels of education is imperative for empowerment”. Library and information professionals should also educate library and information users on the issue of accuracy, and for this to happen library and information professionals must be aware about accuracy of information. In University libraries, library professionals should be able to help users to detect and evaluate accuracy of information.

Property

Intellectual property according to Ponelis (2013) includes ownership of user created content, third party data collection and ownership of patrons’ usage data, copyright infringement and permanence. Onoyeyan *et al.* (2014:79) assert that “intellectual property is a broad concept that covers several types of legally recognised rights arising from some type of intellectual creativity; these are rights to intangible things, to ideas, as expressed (copyrights), or as embodied in a practical implementation (patents)”. Rubin (2000) postulates that “copyright under intellectual property is an ethical issue because at its heart is the question whether individuals should copy the intellectual work of others without asking the originator’s permission”. “Library professionals feel an ethical tension to protect the rights of both authors and users; they want authors to profit, but not to permit authors and publishers to

unnecessary restrict and control of the flow of information”. Liton (n.d:5) conducted a study in Bangladesh, and found that,

“The growing threat to intellectual property manifested by plagiarism, making illegal copies of books and other materials and illegal downloading of software, music, and movies. Because of low level of awareness about intellectual property rights in third world countries like Bangladesh, many libraries keep photocopies of books and other reading materials without bothering about the violation of copyright. This is in direct violation of information ethics”.

“Library and information professionals have the responsibility to respect and protect intellectual property”. “Authors, editors, producers and distributors of databases have the legitimate right through copyright protection to benefit financially from their intellectual efforts” (Matingwina, 2015:90). “Library and information professionals use a variety of sources that appear in a variety of formats, and copying or transferring such information often arises as a necessity. However, there are several ethical issues that arise in using intellectual property. Ethical tensions arise when the information needed is difficult or impossible to obtain efficiently without violating copyright restrictions”. Rubin and Froehlich (2011) observe that “digital environments further complicate the management of copyright, resulting in new treaties and laws including WIPO treaty, the Digital Millennium Copyright Act, and the Tech Act”.

Zwass (2012) argues that the intangibility of information is the source of many ethical dilemmas. For example, the intellectual property rights embodied in digital goods, such as software, are easily violated because software is intangible and can be copied at marginal cost. At the same time, the development costs of software are very high. Copyright laws protect the form of expression and not the idea itself. However, this is limited protection because the underlying solution is more valuable than its coded expression. Moreover, protection of digital content is difficult because it is not easy to differentiate digital products such as software programmes.

Parrish (2010) argues that information creators “should not post information that they feel they may want to retract at some future date”. Parrish further posits that “users of information should not post information that is the product of the mind of other individuals unless they are given consent by the individuals”.

Onoyeyan, Ajay, Adesina, and Bamidele (2014) in their study on “assessment of ethical concerns among practicing librarians in Nigeria”, found that “intellectual property rights issues are the highest ethical issues confronting library professionals”. Fernández-Molina (2012) asserts that “with the advent of new technologies, reproduction of information materials through photocopying, scanning or otherwise has become much easier”. “This ease of reproduction sometimes violates the intellectual property rights of authors and publishers. It also creates ‘a tension between the desire of information professionals to obtain information at the lowest cost possible and the interest of the owners of this information’”. Liton (n.d) also notes that the growing threat to intellectual property right is facilitated by low level of awareness and limited resources in third world countries. Moreover he notes:

“The ethical dilemmas have led to the need to balance the interests of the user or information intermediary, such as professional librarian or information specialist, with the interest of the copyright owner, through the concept of ‘fair use’ or ‘fair dealing’. However the concept of fair dealing poses further ethical dilemmas to library and information profession because of its elusive, complex, and rigid nature” (Matingwina, 2015:90).

Access

“Access to information is a basic human right in an information society” (Matingwina, 2015:90; McMenemy, Poulter & Burton, 2007). Matingwina (2015) adds that “libraries in 21st century are no longer mere storehouses of information”. Library professionals “have an obligation to proactively provide access to their collections regardless of education, age, gender, location and economic status”. However, McMenemy, Poulter and Burton (2007) aver that equity of access is challenged by several issues among library professionals; geographic obstacles, opening hours and user with disabilities. This is a threatening task for library and information professions in university libraries. Mason (1986) maintained that in order to access information, literacy is the most important tool. Besides, in today’s world, various forms of information literacy, like digital literacy, media literacy, and other forms of literacies have become quite important. Without these literacies, we cannot ensure universal access to knowledge. So library and information centres need to play an increasingly dominant role to ensure people’s access to information. That’s why they are increased efforts to arrange programs like literacy campaigns, book reading competitions, study circles, training, orientation, and more.

Ponelis (2013) in this regard insists that, libraries should be committed to ensuring training on policies and guidelines on responsible use of information technology. Ponelis (2013) further asserts that libraries should consider education to their patrons based on the values of information ethics in order to reduce ethical issues through information or digital literacy courses.

Kaddu (2007) insists that, “the issue of access to information as a welfare right requires library and information professionals” to take positive steps to satisfy those rights. However, the issue of access in the “emergence of a plethora of ICT tools and techniques, the transformation of library and information landscape into highly sophisticated information, and knowledge network and diversification of demands from the users worldwide have made the task of information provision quite difficult and challenging” (Hoq, 2012). Zeng (2015) avers that, “in the network information services, electronic books, electronic journals and others can be used by many people at the same time”. Zeng (2015:26) further explains that,

“The network information service has bought the user freedom and liberation, but there are some obstacles in the specific use. For instance, some network resources data format is not uniform. In accessing network information service, some of the user interface designs are not easy to use, and access to services is also more complicated”.

Buchanan (1999:194) asserts that, “the challenge of ethical issue range from the fair equitable distribution of resources to the availability and provision of education training, to a mutual respect and consideration of cultural specificity and values”. For example, “while the information age has encouraged a major increase in the amount of information produced, the number of available channels through which information is accessible is limited”. “At the same time, inequalities among the rich and poor nations in terms of wealth creation and use have extended to the creation and use of information as well, leading to an information divide between rich and poor nations”. Masmoud (1979) cited in Hoq, (2012:42-43); Buchanan, (1999) and Liton (n.d:3)

“Drew attention to the growing inequalities across the world in terms of information access, control and dissemination. He cited seven significant forms of inequalities existing in the world in terms of information;

1. A fragrant quantitative imbalance between North and South.

2. An inequality in information resources.
3. A de facto hegemony and a will to dominate.
4. A lack of information in developing countries.
5. A survival of colonial era; an alienating influence in economic, social, and cultural spheres.
6. Messages ill-suited to the areas in which they are disseminated.

According to Hoq (2012) and Buchannan (1999) developed countries in the Northern hemisphere continue to dominate the world in terms of enjoyment of materials as well as knowledge assets. They questioned the ethics of information age and its supposed free flow of information and related commodities. Therefore library professionals have found themselves at crossroads in determining how to treat their users in the best possible and ethical manner. Since the idea of ‘good’ or ‘bad’ may vary widely from person to person and society to society, following a way which will be equally accepted and appreciated by the information-seekers (general users), information generators (authors and publishers) and information owners (holders of intellectual property) is difficult”.

Ponelis (2013) pointed out challenges that hinder accessibility in provision of library and information services in university libraries to include lack of ICT tools, limited bandwidth, language barrier, inappropriate technologies especially for the disabled and unavailability of network. Ponelis further added that the language of institution and assistive technologies should support adequately accessibility for people with disability. The study by Ugar (2007) on “obstacles to information access and use in developing countries”, identified challenges which included; “lack of awareness, inaccessibility, information explosion, environment, poor infrastructure, declining budget and rising costs, and staff attitude towards users and crime”.

Familus and Ajay (2015) in a study of information accessibility and utilisation by academic staff in the faculties of agriculture science of selected universities in Southwest Nigeria identified challenges that were limiting access to include epileptic power supply, space, poor ICT maintenance, poor funding, internet connectivity and computer literacy. Adetimirin (2017) states that access to university portals and electronic resources should be made available by Information and Communication Technology (ICT) support. The ICT resources needed should include the internet, computers, laptops, iPods, Tablets and smart phones. This

can enable user's access from different spaces such as library, computer laboratory, classroom, department, home and offices. However, in developing countries like Tanzania limited ICT resources such as internet, computers, laptops, iPods, Tablets, smart phones and language barrier hinder access.

Wellbeing

Matingwina (2015) mentioned wellbeing among ethical issues that relate to library and information services provision. Matingwina (2015) points out that wellbeing is an important ethical value to consider and include in the workplace, that provides comfortable user-friendly and a stress relieving environment to its users. This aspect involves making the library environment more comfortable; increasing its quality and efficiency. "However, there are a number of ethical issues that may arise from facilities and services that are provided to library users". Bamigboye (2007) adds that, "users expect their libraries to be compartmentalised in a manner that eliminates noise and dust, and that separates serious readers from leisure readers. There are a number of ergonomic aspects that may potentially harm library users. These aspects include computer screens, library equipment, furniture, space, and proper ventilation. Therefore LIS professionals have an obligation to provide services that promote general wellbeing of their users through creating conducive environments for their users".

Familus and Ajay (2015) posit that the increased enrolment of students in higher learning institutions in Nigeria increase challenge of space, which affects the access to information. Ugar (2007) asserts that environment is the major challenge to information access and use. The environment includes other factors such as polluted air in urban areas, wide range of temperature, pests and so on. In addition, noise from library staff or equipment is another environmental factor which hinders access to information. Matingwina (2015) adds that LIS profession like any other professions "needs to provide healthy and conducive environments and services that protect clients from physical and emotional harm".

Zeng (2015) reports that, "the advent of the internet and arrival of the era of big data, brought convenience to community but also the problems of equality and freedom of access to information, user privacy and information security, and information organisation". Ponelis, (2013) using PAPA model investigated information services provision and found that information ethics issues in provision of library and information services in university libraries include privacy by outlining exposure, loss of control, invasion of private space, perception and being intrusive, information security and identity theft. Moreover, Ponelis

found that the issue of accuracy and lack of sufficient context could lead to misinterpretation of content, loss of library reputation and loss of patron trust. Ponelis also associated Property with ownership of user created content, third party data collection and ownership of patrons' usage data, copyright infringement and permanence. Furthermore, accessibility was associated with exclusion due to bandwidth limitations language barrier, lack of assistive technologies for disabled and unavailability of network (Ponelis, 2013).

The way to minimise the likelihood of these issues, Ponelis and Britz (2012) suggest that, libraries can take a compliance approach or an integrity approach. A compliance approach attempts to prevent self-interest behavior by employees, violation of laws by the government and industry regulations and criminal conduct by imposing standards of conduct. An integrity approach, on the other hand, goes beyond compliance by attempting to create conditions that support right action by communicating the values and vision of organisation, aligning the standards of employees with those of the organisation. In this context the code of ethics is important in order to make people aware of what they should rely on (Ponelis & Britz, 2012). Parrish (2010) made certain recommendations based on PAPA model. For example, when library professionals disseminate information, "it is not only necessary to consider the privacy of one's personal information, but privacy of the information of others who may be tied to information being disseminated". With regard to accuracy consideration when disseminating information, library and information professionals should "verify the accuracy of the information". As far as property is concerned information creators "should not post information that they feel they may want to retract at some future date". Furthermore, "users of information should not post information that is the product of the mind of another individual unless they are given consent by that individual. In both cases once information is disseminated, it may be impossible to retract". Additionally, it is the responsibility of library and information professionals to determine the authenticity of a person or program before allowing the person or program to be disseminated. Ponelis (2013) insists that, libraries should be committed to ensure training on policies and guidelines on responsive use of information. Libraries should consider education for their patrons to reduce problems associated with ethical issues.

The literature reviewed so far reveal some gaps. For example, the literature reveals limited studies on attitude and perception of library professionals towards information ethics. Mohamud, Zeki and Saidin (2016) explored attitude of students towards information access

issues in international university of Malaysia. Khalil and Seleim (2012) similarly studied “students’ attitudes towards information ethics issues of privacy, access, property, and accuracy in Egypt”. Ball and Oppenheim (2005) also conducted a study in the UK on “attitude of UK librarians and librarianship students towards ethical issues”.

Rosenqvist *et al.* (1996), cited in Ball and Oppenheim (2005), investigated how Nordic librarians would react when faced with practical ethical problems; the findings suggested that Nordic librarians shared common understanding of what constitute ethical values. They hold a position of neutrality, coupled with caring objectivity. Furthermore Juznic *et al.* (2001) cited in Ball and Oppenheim (2005) carried out an investigation in Slovenian public libraries posing as patrons, and requested material on suicide, necrophilia, and photographs of corpses. The librarians’ verbal and non-verbal responses, and the quality and appropriateness of the received material were evaluated. The librarians were not shocked by the questions posed, and did not appear to recognise that they were encountering an ethical dilemma. “The findings of such research suggest that many IS professionals and users tend to neglect or inadequately consider the ethical aspects of their decisions and actions” (Khalil & Seleim, 2012).

3.5 Library and information services provision in university libraries

In order to meet the objectives of parent institutions, the university libraries in Tanzania have designed a group of services to fulfill the institutional mandate. These services include, technical services (such as collection development, cataloguing, classification, etc.), lending services, current awareness services (CAS), selective dissemination of information (SDI), Indexing and abstracting services, interlibrary loans and document delivery services, resource sharing, and others (Madukoma, 2015). Arua (2014) opines that the faculty require the services of well stocked and up-to-date library for preparation of their lecturers and research while students need it for class assignments, research, projects, term papers and further readings. Madukoma (2015) asserts that the ultimate of any university library is to transmit knowledge to library users. This purpose will be only achieved when the library resources are maximized, effectively and efficiently utilized. Therefore the use of university libraries is influenced most by user’s perceived familiarity with a library and its resources; it is the duty of library professionals to thoroughly acquaint users with their information resources and to teach them to profitably use these resources. Sometimes this duty is not well performed by library professionals as a result users are becoming not aware of the resources and services of

the services offered by the university libraries. This is confirmed by the study conducted by Madukoma (2015) who noted that electronic reference services are not adequately utilized in Babcock university library due to lack of awareness of the availability of these services in the library.

Library and information professionals are inspired to serve people through the provision of access to quality information resources in either print or electronic formats through which people's standard of living are improved, dreams are actualized, education is sustained, and sound decisions are preserved for future. The proliferation of information in different formats and the attendant complexity in retrieval processes have promoted and sustained the need for society to share resources, work, ideas and information. The belief in the need for human beings to share information and ideas implies the recognition of information rights as expressed in the United Nations Universal Declaration of Human Rights (1948), Article 19 which sets out the right to freedom of opinion, expression and access to information for all and the right to seek, receive and impart information and ideas in any media, regardless of frontiers (IFLA, 2011).

The Library as an institution exists for the benefit of a given constituency, whether it is the citizens of a community, members of an educational institution or some larger or more specialized group. Those who enter the library profession assume an obligation to maintain ethical standards of behaviour in relation to the governing authority, under which they work, to the library constituency, to the library as an institution, to fellow workers, to colleagues and to society in general. IFLA (2011) posits that the core mission of library and information professionals is to facilitate access to information for all for personal development, education, cultural enrichment, economic activity and informed participation in and enhancement of democracy.

Library and information professionals in university libraries are supposed to make sure that the user's access to available resources regardless of the medium is without restriction. They should always make known to the university community the resources and services available in the library. Users access include ability to access, building design, assistive technology, relevant usable content of resources, suitable format of resources, and language of resources and spoken by staff, accessibility to people with disabilities and their right to library and information services.

In provision of library and information services, the library and information services should promote inclusion and should not discriminate against any library user regardless of sex, ethnic group, nationality, social condition, religion or political opinions. The library and information professionals should provide highest level of service through courteous, prompt, adequate, skillful, accurate and unbiased responses to all requests for assistance to the user. Also library and information professional should respect the right of a user to privacy, except where it is in the public interest and should not share confidential information or user data beyond the original transaction. Library and information professionals should have respect to users right and dignity without prejudice to race, gender, religion, tribe, physical characteristics age and place of origin, library and information professionals should not receive or ask for gift or gratification for themselves or for others in rendering services to the users. Corruption practices include bribery, holding information materials in the wrong shelf and the like. Also they should promote information literacy among users, including ability to identify, locate, evaluate, organize and create, use and communicate information in a legal manner, thereby helping to eliminate plagiarism and other forms of misuse of information. They should teach the user how to use library facilities, locate information resources and library software to enhance access to information and promote lifelong learning (Code of ethics and professional conduct for librarians in Nigeria n.d:5-6).

A critical framework for considering moral issues concerns information privacy, moral agency, new environmental issues and problems arising from the life-cycle of information, especially ownership and copyright in view of the digital divide (Ocholla, 2009). Babik (2006) notes that information ethics concerns all human activity related to our relationship with information, or how we generate, process and distribute information in the form of new technologies and innovations. Mutula (2011) states that, information ethics opens up space for critical reflection by all stakeholders on established moral norms and values, which would enable information professionals to engage in ethical reasoning by determining what is wrong or right in a dilemma situation. Therefore, this study established a theoretical basis for, and development of, an educational course tool that will assist library and information professional to recognize, understand and consider more deeply the ethical issues that may arise from the use of ICT (information ethics in particular).

To develop the relevant ethics and standards of information ethics is an important part of the construction of university library information ethics. From the actual situation of the library,

based on the full use of the existing results on the basis of continuous innovation, to develop the content and the actual needs of the library information ethics and standards can effectively ensure the implementation of the specification and guidelines for the development of information services from the process of information collection, selection, processing, user communication, information push and other aspects of the link, to fully solicit the views of users, providing users with the network environment for the supervision of library information activities to provide the necessary means (Zheng, 2015). Information ethics codes and standards can effectively regulate the behavior of librarians and users, adjust the conflicts of interest, and can help them to deal with the specific situation in time to determine the basic information ethics value orientation of Library under the network environment, to provide the library staff, users and the information activities to provide specific guidance, so as to improve the quality of library information service. In addition, the library should strengthen the theoretical quality of library professionals, and invite experts and scholars to give lectures, so that students and faculty are involved, so as to better understand and master the relevant content of information ethics (Zeng, 2015). As the university libraries have advantages in education, so library professionals should make full use of this advantage of carrying out information ethics education for the students and faculty as main users of university libraries.

3.6 Factors influencing ethical provision of library and information services

Library professionals are influenced by many factors while providing information services. Fernandez-Molina (n.d:2) states that, “most times library professionals are not fully conscious of the ethical implications of their action. This behavior is often shaped most significantly by the customs and habits”. Ethical theories such as consequences-based theory, duty-based theory, right-based theory and virtue-based theory may provide basis for critical reasoning to library professionals when they are faced with ethical dilemma in provision of information services. WSIS Action Line 10 calls for all actors in information society including library professionals to promote the common good and protect privacy and personal data (WSIS, 2005). Library professionals must therefore respect the legitimate rights of the individual such as privacy, confidentiality, accuracy, ownership access/accessibility and security online.

A number of relevant studies have been carried out on the factors that influence the provision of library and information services ethically by library professionals. Rubin and Froehlich

(2011) in their study on “ethical aspects of library and information science” outlined factors which influence library professionals in providing information services. They identified the following factors which include collection development, selecting materials and censorship, privacy, reference services, copyright, administrative issues, information access, technology-related issues, and problems with conflicting loyalties and societal issues. Other factors include social utility, survival, social responsibility and respect for individuality. In addition Rubin and Froehlich (2011) identify other factors influencing library professionals’ provision of information services to include professional code of ethics, and the values that support ethical principle of professional conduct, truth, tolerance, individual liberty, justice and beauty. McMenemy, Poulter and Burton (2007) in their study on “a practical guide to dealing with ethical issues in information and library work” identified factors that influence library professionals in provision of information services that included employees’ ethical code, pressure from customers to provide service, personal ethical beliefs, and society’s ethical norms.

Hoq (2012:41) identifies the factors “which directly and indirectly influence information ethics”, which include globalisation, privacy and information security, diversity of information works; right to information and ethical use of information, access to information, and intellectual property among others.

Globalisation: “One of the most important features of modern society is globalisation which is characterised by extensive use of information and communication technologies an increasingly open society, greater sharing of information and also greater conflict among individuals and societies in asserting their dominance over others” (Hoq, 2012:42). The pervasive use of technology creates global connectivity with attendant challenges of access, privacy, identity theft, cyber-crime and more.

Privacy and information security: “In this increasingly networked world, the security of public and private data held in databases, web sites and other information repositories are always at risk. People become more worried about their privacy and libraries, as preservers and providers of sensitive information have to deal with this concern” (Hoq, 2012:42). “A basic principle in library and information profession is that, information must be supplied to users regardless of an information professional’s stance toward its content or finality of its use” (Fernández-Molina, 2012). In university libraries this is true in general terms, however,

specific instances may present library professionals with ethical dilemmas. For example, should the library deny a depressed student who requests a book on suicide? Should the library professional break the profession duty of privacy by contacting dean of students, parents and friends regarding the situation? Virtue-based theory can be applicable in such kind of situation; the theory states that, the right thing to do is what a virtuous person would do in the same circumstances.

Diversification of information works: “Unlike their predecessors, today’s library and information professionals are burdened with greater and bigger responsibilities. In addition to being information providers, they have to assume the roles of educators, consultants, technology experts, translators and synthesisers, among others. They must achieve new skills and capabilities successfully performing these duties” (Hoq, 2012:42). “Library and information professionals have an important role to play in the promotion of information ethics and creation of just and equitable society. But they need to gain a deeper and more holistic understanding of ethics in general and information ethics in particular to play that role”.

Conflict between ‘right to information’ and ‘ethical use of information’: Many countries around the world have laws that ensure people gain access to information for decision making (Bangladesh Right to Information Act, 2009). “However, there is certain information which cannot be accessed by the general public for security or other reasons. In many instances, library and information professionals find themselves in tricky situations where they have to strike a balance between ‘restricted use of information’ and ‘right to information’” (Hoq, 2012:42-43). Ethical theories such as consequence-based theory can be applied to strike such a balance. Mason (1986) opines that “library and information professionals should be able to decide what information to hold, what information to disseminate, and be confident that shared information would be kept safe”.

Access to information: The issue of universal access to information may create a dilemma for many libraries. As Fernández-Molina (2012) points out, “many public and professional declarations refer unequivocally to free and public access to information”. “For example, the British Library Association code of conduct states that any individual should be granted free and public access to information”. “But, there is the risk that too great an emphasis on providing a service free of charge may result in funding problems that could endanger the

survival of the information center. Similarly, providing a service at zero cost often results in its devaluation, which also has as a consequence the undermining of the prestige and feasibility of the profession” (Hoq, 2012:43). “According to consequence-based theory, what distinguishes right action from wrong action is that they have better consequences”. In order to do the right thing, library and information professionals should perform actions that have good consequences. For the issue of access to information, library professionals should make distinction between that information which should be free of charge and that which should be paid for, by looking at its consequences. However, “this would be determined by the feasibility of the organisation, the necessity of collecting additional funds, the avoidance of the frivolous collections and the need to maintain the respect due to the library and its professionals” (Fernández-Molina, 2012).

Duty-based theory consequences “should not be the guiding principle of determining the right and wrong action, rather there are ethical duties that library professionals must obey regardless of the consequences”. In most democratic countries laws have been passed regulating the right of access to certain information. Library and information professionals have a duty to obey such laws, even if doing so would have very good or bad consequences. Mason (1986) insists on combating information literacy through access to education that will help develop the intellectual skills to cope with information, and access to information itself. However, information access is influenced by other factors such as building design, assistive technology, and relevant usable content of resources, suitable format of resources and the language spoken by staff. People with disabilities should also be taken into consideration. Ugah (2007) identified “obstacles to information access and use in developing countries” to “include lack of awareness, inaccessibility, information explosion, bibliographic obstacles, environment, poor infrastructure, declining budgets and rising costs for users, staff attitudes towards users and crime”.

Intellectual property right: “With the advent of new technologies, reproduction of information materials through photocopying, scanning or otherwise has become much easier. This ease of reproduction sometimes infringes on the intellectual property rights of authors and publishers. It may create tension between the desire of information professionals to obtain information at the lowest cost possible and the interest of the owners of this information” (Fernández-Molina, 2012). Similarly, Liton (n.d) asserts that, the growing threat to intellectual property right is the low level of awareness and limited resources in third world countries.

Provision of library and information services is influenced by other many factors especially where ethical dilemmas arise. This is because “what may be considered to be the ‘right’ and ‘ethical’ action by one individual may appear to be ‘wrong’ and ‘unethical’ by another person. Besides, religion, age, race, nationality, social and economic background and other factors play an instrumental role in shaping the ethical viewpoint of people”. “However, leading international and national library and information associations like International Federation of Library Associations (IFLA), Association of College and Research Libraries (ACRL), Association of Independent Information Professionals (AIIP) and Special Libraries Association (SLA), American Library Association (ALA) and Library Association of UK (LA) – all have long standing code of ethics for guiding the information professionals in discharging their professional duties in a just and ethical way. These codes have commonly held values and ideals which focus on upholding the principles of intellectual freedom, individual privacy and confidentiality, intellectual property rights, fair and ethical use of information resources” (Liton, n.d:5).

These codes however, provide conflicting perspectives making the task of decision making difficult for the library and information professionals. Fallis (2007:26) argues, “Whenever we are guided by more than one ethical principle, there is a possibility that these principles will give us conflicting advice in certain cases”. For example, it has been stated that the duty to protect the privacy of library patrons (by maintaining the confidentiality of their circulation records) conflicts with the duty to protect our society from terrorists. Similarly, respecting intellectual property rights can often get in the way of providing better access to information. Fallis (2007:34) observes that, “although many of the ethical dilemmas can be overcome by following the code of ethics, sometimes, in difficult circumstances, the library and information professionals will have to be guided by their personal judgment and discretion for following a particular course of action”.

Virtue-based theory attempts to define ethical virtues that library and information professionals should aspire to exercise in order to be ethically sound. “However, the generally held view is that, providing people with their desired information is the first and foremost duty of the information professionals if it does not contradict fundamental ethical principles long held by human beings like honesty, mutual respect, social good and so on. Various legal aspects and existing rules and procedures also have to be taken into consideration. Library and information professionals must find ways to strike a balance between upholding intellectual property rights and ensuring access to information by

maximum number of users. Any failure on their part in this regard will put their role as ‘information intermediaries’ under question”.

Halawi and McCathy (2013) proposed model of ethical behavior of knowledge workers which integrates individual factors, deterrent, external variables, major ethical philosophies and ethical/unethical judgement. “Operationally, the model views the ethical/unethical behavior of knowledge workers to be the effects of these variables. It is generally assumed that a number of individual characteristics, situational factors or external factors influence the likelihood an individual will engage in an unethical activity or situation. A variety of demographic factors such as age, gender and work experience among others affect behavior when providing information services to users”. Ndwandwe (2009:12) asserts that, “individual factors have different values. Values affecting one’s behavior include stages of moral development, personal values and mores, family influences, peer influences and life experiences. Such factors would undoubtedly affect ones respect for intellectual property rights and any other applicable piece of legislation and ethical framework relating to information”.

Mason (2016) suggests that “older individuals, who are morally developed, have higher ethical standards than young individuals”. “There is mixed evidence regarding the effect of gender on the choosing of ethical behaviors”. Many studies such as Mason (2016) have concluded that females are more likely than men to be ethically sensitive. Similarly, Khalil and Seleim (2012) “concluded that female students are more concerned about ethical issues than their male counterpart”. Restanti (n.d) noted that, “education becomes an important element for a person's career in the world of work. The level of education is important to determine a person's level of understanding of something specifically information ethics”. “This suggests that the unequal distribution of education of librarians constrains attitude of librarians to the obligations written in the code of conduct for librarians”.

Also personal values and personality can influence information ethics; “an individual’s values and morals will influence his/her ethical standards. A person who stresses honesty will behave very differently from one who does not respect other people’s property or privacy”. Ndwandwe (2009) points out that “this factor is based on the fact that individuals start to form ethical standards from when they are children. This means that children have to be nurtured at an early age in order to respect or adhere to ethical standards”. Similarly, “LIS education should aim to sensitise students at early stages to respect ethical standards with

respect to information by emphasising respect for intellectual property, human dignity, and equitable access to information, among other factors”.

Halawi and McCarthy (2013) proposed that “a person’s ethical judgment (the extent to which an individual feels that an action is ethical) is a function of his/her deontological and teleological norms in resolving ethical dilemmas”. The authors add that ethical behavior is influenced by individual factors such as age, gender, education level, working experience, religion, and locus of control, ethical attitude, professional value, and egoism. Other factors are of a deterrent nature and include policies and codes, and IT guidelines. Other factors are related to external variables such as professional environment, economic condition, competition and characteristics of the job. The figure 3.1 below summarises the factors influencing ethical behavior in providing library and information services.

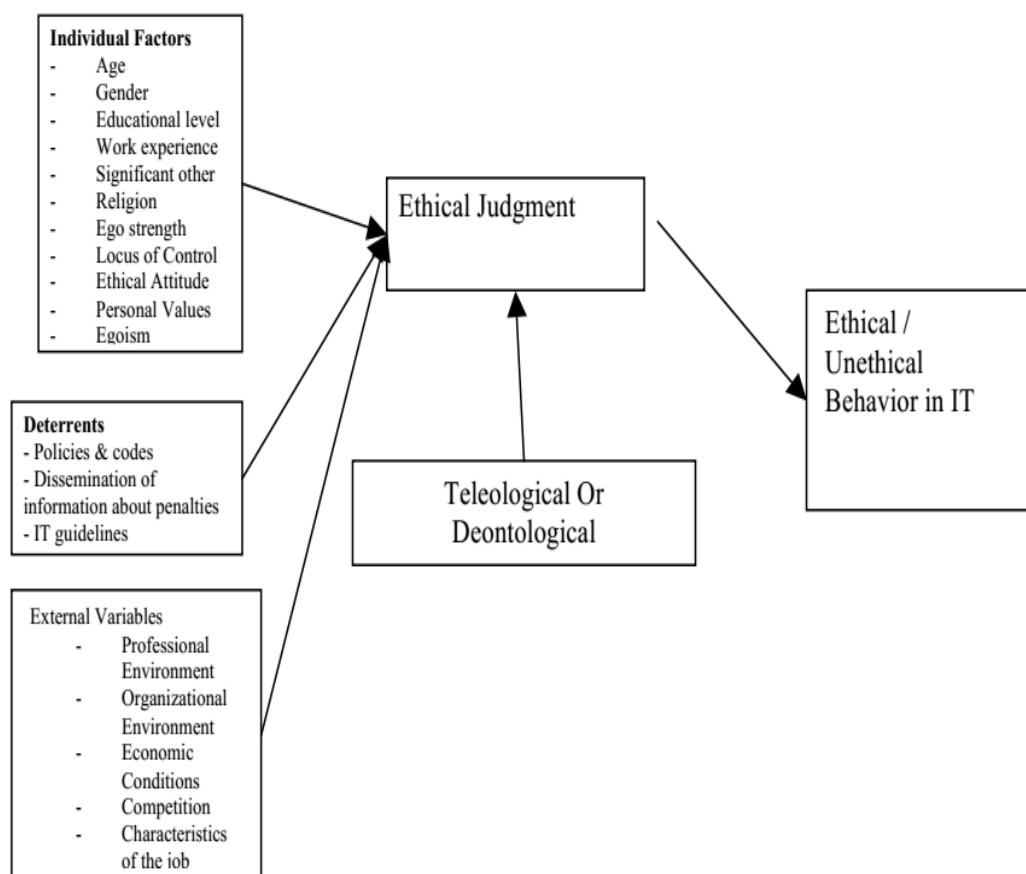


Figure 3. 1: Factors influencing ethical behavior (Source: Halawi and McCarthy, 2013)

Generally, ethical theories such as consequences-based theory, duty-based theory, right-based theory and virtue-based theory, PAPA model and World Summit on Information Society Action Line 10 provide a framework to understand ethical issues influencing provision of library and information services. In order to understand and deal effectively with information ethics issues, library professionals need to have good working knowledge of information ethics (Fallis, 2007). Training on information ethics must be provided regularly to library professionals, and such training should comprise practical cases arising in the information society. Code of professional ethics could help to provide guidance, but in Tanzania the code of professional ethics is not in place.

3.7 Integration of information ethics in library professional practice

WSIS (2005) among other things underscored the importance of promoting the common good, protecting privacy and personal data. Consequently, library professionals as information providers and as actors in the information society have an obligation to integrate information ethics in their professional practice. Otike (2010) in a study conducted in Kenya noted that a deeper understanding is needed on how information ethics can be integrated in professional practice, especially given that “information ethics is a young academic discourse in Africa” (Capurro, 2007). Bester and Bothman (2013) state that, “information ethics in Africa is a new field and is not clearly understood”, therefore there is need for more clarity and description of the field to overcome the confusion currently experienced by library and information professionals. In this regard African Network for Information Ethics (ANIE) and the African Centre of Excellence for Information Ethics (ACEIE) at the University of Pretoria have made significant contribution in promoting information ethics by spearheading campaigns and workshops to integrate it in the curriculum (Bester & Bothman, 2013). Ocholla (2010:19) similarly argues that,

“Information ethics and information ethics education is essential because such would: support information professionals in their understanding and development of ethical values and morals; developing professional identity build upon an information value system; enable information professionals understand today’s information knowledge driven society; recognise the requirements and complexities of access to information (for example equality and fair use); and sensitise them to benefits of research in information ethics development”.

Otike and Maina (2013) argue that recent debates on information ethics have focused on ways of integrating information ethics across library and information science curriculum in universities the world over. Mutula and Mmakola (2013) underscore the importance of integrating information ethics in LIS curriculum in order to combat some of the problems and challenges experienced in media and librarianship, especially with regard to unfair distribution of knowledge as well as information theft. Teaching individuals “the moral codes of handling and disseminating information can contribute to building knowledge about issues of privacy, censorship, copyright, fair use, and access to information”. Technological development brings about some ethical challenges; such as the privacy and confidentiality, accuracy of access to digital technologies and ownership of such information (Cilliers, 2017; Halawi & McCarthy, 2013 and Sturges, 2009). Information ethics education and training would, according to Capurro (2010), “open up space for critical reflection on established moral norms and values, which would enable information professionals to engage in ethical reasoning by determining what is wrong or right in a dilemma situation”. Besides, “threats to information access, accuracy and privacy, and matters relating to digital divide and alternative technologies necessitate the teaching of information ethics” (Smith, 2002). Otike and Maina (2013:71) however, point out that while current debate is focusing on curriculum development, “there is equally need to create awareness among LIS professionals about information ethics”.

The discourse of integrating information ethics in the curriculum must also focus on content and what should be taught, the materials to be used and even the pedagogies. Otike and Maina in the Kenyan context identified information ethics content to include intellectual property, information privacy, information literacy, cultural diversity, equitable and universal access, quality service to clientele, confidentiality and fair use. Amunga (2013) argues that the success of any information ethics curriculum depend on so many interrelated issues that equally need the involvement of many stakeholders including but not limited to university administrators, school and ministry of education, the legal fraternity, parliament and courts, publishers and information creators. Hannabus (1998) on the other hand asserts that information ethics issues should be the responsibility of individuals, their employers and their community at large as well.

Ocholla (2010) underscores the need to also pay attention to challenges facing information ethics education which include “lack of understanding or appreciation of information ethics; inadequate or absent legislation, and weak enforcement where policy exists; negative

legislations that restrict access; censorship, lack of expertise in information ethics at faculty level; poor course design of information ethics content; lack of space in the curriculum; complication arising from ICT use; unsatisfactory professional practice; and digital divide among others”. Cilliers (2017) noted that there is poor understanding of ethical issues in teaching, learning and research. This is common in developing countries where there is also a lack of ethical education, awareness and policy regulation around the issue. Akakandelwa (2010) similarly outlines challenges of integrating information ethics in the curriculum in the Zambian context to include severe shortage of learning and teaching materials, heavy reliance on western literature whose content is not reflecting local context, lack of qualified lecturers and inadequate infrastructure such as lecture rooms, computer laboratory, and equipment. Amunga (2013) added her voice from the Kenyan context and outlined the following challenges of integrating information ethics in the curriculum: lack of expertise to design curriculum, inadequate staff, inadequate facilities and lack of clear policy on information ethics.

3.7.1 Benefits of integrating information ethics in the curriculum

The benefits of integrating information ethics into the curriculum are many. Ocholla (2009) noted that information ethics “can assist to inculcate the culture of responsibility”. Dadzie (2011) opines that “information ethics education is important due to concerns on the negative influence of ICT on moral values, and the unequal access to and use of ICT”. Maina (2016) proposes that information ethics should be integrated “in LIS curriculum to prepare students to be ethically equipped for the information profession”, help librarians to understand ethical issues and provide services ethically and also be able to educate and train users. This would also help create awareness about information ethics among library professionals, ensure consistent provision of library and information services, and enhance image of library professionals. Fallis (2007) proposes that “in order to deal effectively with ethical dilemmas, information professionals should have a good working knowledge of information ethics”. “Equipping information workers with information ethics enables information mediators to verify quality and accuracy of information to clients and enable them to engage in ethical reasoning by determining what is wrong or right in a dilemma situation” (Mutula, 2011).

Ndwandwe (2009) stated that “information ethics is important in LIS curriculum because LIS students as users and future managers of information need to be sensitised to respect

intellectual property rights. Besides, information specialists should know something about the moral and ethical responsibilities they have towards society". Fallis (2007) supports information ethics education because "LIS professionals face ethical dilemmas, and given these dilemmas, they should have exposure to information ethics. The author advocates that information ethics education should be mandatory because of the ethical problems facing the library and information profession. Smith (2007) is of the view that because of threats to information access, accuracy and privacy, teaching information ethics should be prioritised. "Integrating information ethics in LIS curriculum would allow library and information professionals to learn and understand the responsibilities and real consequences of their actions, and learn to use their power ethically and responsibly". This would also help understand the challenges of teaching information ethics and integrating it into professional practice. Mohamudin, Zeki and Saidin (2015) in a study that explored "the International Islamic University of Malaysia (IIUM) students' attitudes towards privacy", concluded that "integrating ethics values in the university's curricula can help students develop an ethical responsibility and proper attitude towards information ethics".

3.8 Summary of literature review

This chapter reviewed various empirical and theoretical literatures from books, journal articles, book chapters, conference proceedings, online data bases and other related topics. The literature reviewed was guided by themes of the research questions, key variables from the theoretical framework and concepts from the broader issues around the research questions. These themes include ethics and information ethics; awareness about ethical values in providing information services; attitude and perception of library professionals towards information ethics; factors that influence information ethics practice by library professionals; and integration of information ethics in library professional practice.

The literature reviewed revealed limited studies on information ethics especially from the developing country context because the field is still in infancy compared to North America and Europe. This is exacerbated by the limited awareness about information ethics, lack of institutional policy, lack of resources, and others. Furthermore information ethics being a new field does not have well developed theoretical frames and therefore investigating research phenomenon in this field has to rely largely on classical western ethical theories to explain emerging and complex issues occasioned by revolution in information technology. Finally

limited studies on information ethics from developing country context are narrow in scope and have not delved critically into complex issues of information society enunciated by World Summit on Information Society Declaration of Principles.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

The purpose of this study was to investigate the role of information ethics in the provision of library and information services in university libraries in Tanzania. The study sought to address the following specific research questions: what is the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice? What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics? What are the factors that influence information ethics practice by library professionals in University libraries in Tanzania? How is information ethics integrated in the library professional practice in university libraries in Tanzania? What is the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services?

This chapter covers the concept and meaning of research methodology, research paradigm, research approaches, research design, population of the study, sampling procedure, data collection procedure, data analysis strategies, validity and reliability, ethical considerations and summary.

4.2 Concept and meaning of research methodology

“Research methodology is the general approach the researcher takes in carrying out the research project”. Furthermore, “research methodology dictates the particular tools the researcher selects and uses in carrying out the research” (Leedy & Ormrod, 2005:12). Ihuah and Eaton (2013) assert that, “research methodology is a philosophical stance of worldview that underlies and informs the style of search”. In contrast Creswell (2009) considers “research methodology as the overall approach to the design process of conducting research including all phases from the theoretical underpinning to the collection and analysis of data. It addresses the assumptions that support the research strategy and the methods chosen as part of research paradigm”. Therefore, research methodology “helps to clarify research design, to know which research design will work and which will not”.

4.3 Research paradigms

Barker (2003:312) defines a paradigm “as a model or pattern containing a set of legitimated assumptions and a design for collecting and interpreting data”. Research paradigm explains the basic set of beliefs that you have (that is philosophical level) and how these influence the way you do research (practical aspect of doing research) (Morgan, 2007). A paradigm is therefore “a belief system (or theory) that guides the way we do things, or more formally established set of practice”. This can range from thought patterns to action. Researchers conduct research with some specific philosophical assumptions concerning the nature of reality, the way they view social world and approaches to understanding such reality. Such assumptions provide philosophical lens for observing, reasoning and understanding social phenomena (Pickard, 2007). The role of a research paradigm is to provide logical structure on how to organise observations, reasoning and perspective or ways of looking at reality (Babbie, 2012).

There are various types of paradigms in research namely: positivist, interpretive, post positivist and pragmatic. The positivist paradigm is associated with quantitative research while, interpretive thinking is associated with qualitative research. On the other hand post positivist paradigm attempts to infuse both qualitative and quantitative research. The pragmatic paradigm is fairly recent in social science research methods and supports work that combines qualitative and quantitative methods (Morgan, 2007). Morgan asserts that, “the strength of pragmatic approach to social science research is its emphasis on the connection between epistemological concerns about the nature of knowledge that we produce and technical concerns about methods that we use to generate knowledge”. “The choice of a particular research paradigm is influenced by certain factors such as the topic to be researched, the objectives, and specific proposed research questions” (Creswell, 2009).

This study was underpinned by the Pragmatic paradigm. Pragmatic paradigm combines the use of both qualitative and quantitative approaches. It helps to look at the “what”, “why” and “how” thus, providing full coverage of research questions outlined. Punch (2009) explains that Pragmatism has two implications: firstly, “the research question(s) is more important than the method used or the paradigm underlying the method; secondly, the decision regarding the use of either qualitative, quantitative methods or mixed methods depends on the research questions being asked”. The pragmatic paradigm acknowledges existence of multiple realities (Saunders, Lewis, & Thornhill, 2009). It provides for the adoption of mixed

methods thus enabling objective and subjective analysis of the points of view of the participants (Saunders, Lewis, & Thornhill, 2009). Ngulube (2005) advocates the combination of qualitative and quantitative methods (mixed method) to complement and strengthen each other in order to provide a comprehensive picture and understanding of a social phenomenon being investigated. The pragmatic paradigm provides for the adoption of mixed methods in data collection (Saunders *et al.*, 2009). Creswell (2009) suggests that pragmatism is commonly applied in mixed method research. Furthermore, pragmatism is suited for studying complex research phenomenon. In addition, the pragmatism is multi-purpose in nature; and therefore, good for addressing questions that are not wholly within quantitative or qualitative realms. The pragmatic approach allows survey design strategy which requires several sources of evidence in cross-sectional research study thus enhancing reliability and validity of research outcomes.

Moreover, recent studies in the field of information studies that have applied the pragmatic paradigm include Majinge (2014) which investigated library services' provision for people with visual impairment and wheelchairs in academic libraries in Tanzania. Nabutto (2014) similarly used Pragmatic paradigm to study staff training and development in Ugandan private chartered university libraries. Furthermore, Maseh (2015) applied pragmatic paradigm to investigate record management readiness for open government in Kenyan judiciary. Likewise, Iwata (2015) used pragmatic paradigm to study management of indigenous human health knowledge in Tanzania

4.4 Research approaches

There are three approaches which are commonly used to underpin research problem. These include; qualitative approach, quantitative approach and mixed methods (Creswell, 2009). The concept triangulation is sometimes used to designate the use of multiple methods in designing research or collecting data (De Vos, Strydom, Fouche & Delport, 2011:434) with a view to increasing the reliability. However, "quantitative and qualitative approaches are two main traditional methods, but, increasingly the mixed method approach has emerged integrating the two main bipolar epistemologies" (Creswell, 2009). "The choice of a particular method or approach is influenced by certain factors such as; the topic to be researched, the objectives, and the specific proposed research questions".

This study applied a combination of qualitative and quantitative approaches in order to address the different perspectives of the research problem. In addition using both qualitative and quantitative approaches was expected to increase the reliability of the results. “A qualitative research approach is described as constructivist, naturalistic or interpretative and inductive techniques of research study which try to explore a subject when the variables and the theory base are not known” (Creswell, 2009).

Babbie and Mouton (2001:53) assert that “qualitative research is concerned with describing understanding rather than explaining and predicting human behaviors; naturalistic observation rather than controlled measurement; and subjective exploration of the reality from the perspective of the insider”. In contrast, “a quantitative research approach is an investigation into a social or human problem, based on testing a theory composed of variables, measured with numbers, and analyzed with numerical procedures, in order to determine whether the prognostic generalisations of the hypothesis hold true” (Creswell, 2009). According to Leedy and Ormrod (2005:95), quantitative research is generally used to “answer questions about relationships among measured variables with the purpose of explaining, predicting and controlling phenomena”. The mixed method approach on the other hand “is a research inquiry that employs both qualitative and quantitative approaches in a research work for the purposes of understanding breadth and depth of research phenomenon” (Johnson, Onwuegbuzie, & Turner, 2007). “The goal of mixed methods research is not to replace either qualitative or quantitative approach to research but rather to draw from the strengths of these approaches and minimise possible weaknesses” (Jonson & Onwuegbuzie, 2004:153).

Saunders *et al.* (2009:153) state that, employing multimethods in the same study has two advantages. “Firstly, different methods can be used for different purposes in the study to give a researcher confidence that they have addressed the most important issues. The second advantage of using mixed method approach is that it enables triangulation to take place” thus providing the opportunity to gain from advantage of respective qualities of both approaches. This study used mixed methods research approach to deepen the understanding of how library professional practice in Tanzania has espoused the values and ethos of information ethics. Mixed method approach helps avoid biases intrinsic to single method approaches. The strength of mixed method approach is that it enables the researcher to collect two types of data simultaneously therefore providing the advantages of both the qualitative and quantitative data.

The mixed method approach has been used in related studies such as: Matingwina (2015) in a study on “Ethical dilemmas confronting information professionals in the 21st century: Zimbabwean perspective”; and Salman, Ocholla and Mungwisi (2013) in their research on “Ethical issues and challenges in the access and use of information services in public libraries in Nigeria”.

4.5 Research design

“Research designs are plans and procedures for research that span the decision from broad assumptions to detailed methods of data collection and analysis. Selection of research design depends on the research problem or issue being addressed, the researcher personal experiences and the audience of the study” (Creswell, 2009). Kothari (2004:31) defines research design as “the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.” The research design constitutes decision regarding what, where, when, how much, by what means concerning an inquiry or a research. The main function of research design is to enable the researcher to anticipate what the appropriate research decisions are likely to be and maximise the validity of the proposed study” (Kothari, 2004).

There are various research designs such as survey, case study, experimental, action research, archival studies, ethnography, grounded theory, phenomenology, and more. This study used survey design. Survey research design is “a research where a sample of population is studied (questioned or observed) to determine its characteristics” (Dawson, 2002). Leedy and Ormrod (2005:183) and Bhattacharjee (2012:73) explain that “survey research involves acquiring information about one or more groups of people, about the characteristics, opinions, attitudes, or previous experiences, by asking questions and tabulating their answers”. “The ultimate goal is to learn about the large population by surveying a sample of that population”. The researcher then “summarises answers to questions in percentages, tables or graphs (Neuman, 2003:35). A survey research design is most suitable for this study because, it provides description of trends of attitude, beliefs, characteristics, behavior and allows for generalisation of results from studying a sample of the population (Pickard, 2007). Also, survey research design produces large amounts of empirical data in a relatively short time and at a fairly low cost; it investigates problems in a realistic setting, and “large amounts of data can be collected with relative ease from variety of people”. The survey technique

allows the researcher to examine many variables such as demographic, perception, attitude and also uses multivariate statistics to analyse data.

The survey research design was used in this study to elicit responses from library professionals, heads/directors of library, faculty, postgraduate students and TLA officials regarding their perceptions and opinions about the role of information ethics in provision of library and information services in university libraries.

Some of the empirical studies in the field of information ethics that have successfully used survey research design include those of Matingwina (2015) in a survey “to gather data from LIS professionals across Zimbabwe”; and Onoyeyan, Ajayi, Adesina and Bamidele (2014) who studied “assessment of ethical concerns among practicing librarians in Nigeria”.

4.6 Population of the study

According to Ngulube (2004:225), “the population of the study refers to a set of objects, whether animate or inanimate, that are the focus of the research and about which the researcher wishes to determine some characteristics”. Leedy and Ormrod (2005:184) define population as “homogeneous group of individuals unit or units which the researcher intends to generalise the research findings on”. In this study, the 33 public and private universities in Tanzania formed the target population. The study sampled part of the target population, since it was not possible to collect data from all 33 universities. Saunders *et al.* (2012) posit that “sampling provides a valid alternative when it is impractical to survey the entire population”. Therefore, four university libraries from among the public and private universities as well as the Tanzania Library Association were purposely selected. In these universities the researcher identified the two largest colleges/faculties from each university. For instance, in university U1, College of Social Sciences, Humanities and Natural and Applied Sciences were sampled; in U2 College of Agriculture and faculty of Social Sciences were sampled; in U3 Faculty of Education, Law and social sciences; and U4 Faculty of Business Administration were sampled respectively. The total population of the study was 4474.

The pseudonyms U1, U2, U3 and U4 were used for ethical reasons to represent the universities that were surveyed. U1 and U4 are situated in Dar es Salaam, U2 in Morogoro and U3 in Mwanza respectively. Universities U3 and U4 are private, while U1 and U2 are public universities. These universities were selected because they are the oldest with the most established libraries with the large number of library professionals (diploma holders, bachelor

and masters with qualifications in library and information science), postgraduate students (masters and PhD students) and faculty (assistant lecturers, lecturers, senior lecturers, associate and full professors) (SARUA, 2015). The U1 comprises seven schools and several colleges and institutes. In U1, this study surveyed three colleges with 2623 postgraduate students (masters and PhD students), 456 faculty and 20 library professionals (Staff and Students List, 2015). Similarly, in U2, 203 faculty, 7 library professionals and 441 postgraduate students were surveyed. In U3, 128 faculty, 6 library professionals and 400 postgraduate students (Staff and Students List, 2015) were surveyed. Finally, in U4, 54 faculty, 8 library professionals and 95 postgraduate students (Staff and Students List, 2015) were involved in the study. Besides faculty and postgraduate students, 4 heads/directors of the selected university libraries and 5 Tanzania Library Association officials (assistant chairperson, Deputy Secretary, secretary of ethics, education and professionals and two retired TLA officials) formed part of the population of study.

The inclusion of postgraduate students, faculty, professional librarians and TLA officials in the study was motivated by various factors. Postgraduate students and faculty are major users of university library resources and services, because of their need to write seminar papers, theses and dissertations (Abubakar & Adetirimirin, 2015). Moreover, as Adeyami and Modupe (2013) point out, “faculty members and postgraduate students form a significant group of researchers in university”. For example, “postgraduate students are expected to acquire and maintain a broad but also highly detailed knowledge of their subject and related discipline”. They are also “expected to carry out original research in partial fulfillment of the award of higher degree”. Faculty on the other hand “are required to do research themselves, take on more postgraduates students, and are assessed based on the output of their research”. These obligations impose demands for faculty and postgraduate students to access information to meet their respective needs. Library professionals and heads/directors of libraries were included in the study because of their role as providers of library and information services. The Tanzania Library Association is responsible for ensuring compliance with professional ethical practice. The TLA officials are involved in policy, planning, advocacy, and networking. Library professionals are expected to have membership with TLA. The population of this study is shown in the table 4.1.

Table 4.1: Relative distribution of populations

S/No	University	No. of lib. professionals	No. of Lib heads/directors	No. of postgraduate students	No. of faculty	TLA officials	Total
1	U1	20	1	2623	456		3100
2	U2	30	1	441	203		675
3	U3	7	1	400	128		536
4	U4	6	1	95	54		156
5	TLA					7	7
	TOTAL	63	4	3559	841	7	4474

4.7 Sampling Procedures

Bhattacharjee (2012:65) defines “sampling as the statistical process of selecting a subset (called a “sample”) of a population of interest for the purpose of making observation and statistical inferences about that population”. The entire population may not be studied because of feasibility and cost constraints, and hence, selection of representative sample from the population of interest. “It is important to choose a sample that is truly representative of the population so that the inferences derived from the sample can be generalised back to the population of interest”. Saunders, Lewis, and Thornhill (2012) are of the view that the larger the sample size, the lower the likelihood of error in generalising the results to the population. They further point out that the choice of sample size is only governed by; the confidence needed in data, the margin error that can be tolerated, type of analysis that will be undertaken, and size of total population from which a sample is being drawn.

A census technique was used to select library professionals in the University libraries surveyed. Kothari (2004) states that when census is used, all items are covered and highest accuracy is obtained. Gay and Airasian cited in Leedy and Ormrod (2005) state that for small population with fewer than 100 people or other units the entire population is surveyed. Census was used in this study because library professionals in selected libraries were less than 100. Purposive sampling was used to select Tanzania Library Association officials; assistant chairperson, Deputy secretary, secretary of ethics, education and professionals and two retired TLA officials because they are responsible for managing the professional body and ensuring professional ethical codes are complied with by the members.

Sampling of the overall number of postgraduate students and faculty was guided by a table for determining a sample size (Saunders *et al.*, 2012) based on a 5% error margin. Accordingly, for a population of 3559 postgraduate students, a sample of 357 (highlighted in table 4.2) was selected as shown in Table 4.2.

Table 4.2: Sample sizes for different sizes of population at a 95 per cent level of certainty (assuming data are collected from all cases in the sample)

<i>Population</i>	<i>Margin of error (under 5%)</i>			
	<i>5%</i>	<i>3%</i>	<i>2%</i>	<i>1%</i>
50	44	48	49	50
100	79	91	96	99
150	108	132	141	148
200	132	168	185	196
250	151	203	226	244
300	168	234	267	291
400	196	291	434	384
500	217	340	414	475
750	254	440	571	696
1000	278	516	706	906
2000	322	696	1091	1655
5000	357	879	1622	3288
10000	370	964	1936	4899
100000	383	1056	2345	8762
1000000	384	1066	2395	9513
10000000	384	1067	2400	9595

(Source: Saunders et al., 2012:266)

The relative distribution of the sample sizes for postgraduate students and faculty was calculated based on the population strength in the universities studied. For example, in U1 with a postgraduate population of 2623, the sample size was calculated as follows $2623/3559 \times 357 = 263$. The table 4.3 below shows the sample sizes for each of the selected universities.

Table 4.3: Sample size for postgraduate students

S/N	University	Population of PG students	Sample size of PG
1	U1	2623	263
2	U2	441	44
3	U3	400	40
4	U4	95	10
	TOTAL	3559	357

Similarly, for the faculty with population 841 (See Table 4.2) sample sizes were calculated based on total population using the Saunders *et al.* model of selecting sample sizes. Thereafter proportionate sampling was done for each university. For example U1 with 456 faculty, the sample size was calculated as follows; $456/841 \times 278 = 151$. The table 4.4 below presents the relative samples of faculty in each university.

Table 4.4: Relative sample distribution of faculty in each university

S/N	University	Population of faculty (PF)	Sample size of faculty
1	U1	456	151
2	U2	203	67
3	U3	128	42
4	U4	54	18
	TOTAL	841	278

The relative sample sizes for library professionals, heads/directors of library, faculty, postgraduate students and TLA office is presented in Table 4.5.

Table 4. 5: Relative sample sizes of library professionals, head/directors, faculty, postgraduate students and TLA officials

S N	University	No. of library professional		No. of Library Heads/Directors		TLA officials		Faculty		Postgraduate students		Total	
		Pop	Samp. Size	Pop	Samp. Size	Pop.	Samp.	Pop.	Samp.	Pop.	Samp.	Pop.	Samp.
1	U1	20	20	1	1			456	151	2623	263	3100	435
2	U2	30	30	1	1			203	67	441	44	675	142
3	U3	7	7	1	1			128	42	400	40	536	90
4	U4	6	6	1	1			54	18	95	10	156	35
5	TLA					7	5					7	5
	TOTAL	63	63	4	4	7	5	841	278	3559	357	4474	707

Convenience and purposive sampling techniques were used to reach the respondents. Purposive sampling was used to select faculty (including assistant lecturers, lecturers, senior lecturers, associate professors and professors) and postgraduate students (masters and PhD). “Purposive sampling is based on judgement of the researcher regarding the characteristics of the representative sample”. Neuman (2006) is of the opinion that, “in purposive sampling, a particular case is chosen because it illustrates some features or process of interest to particular study”. Purposive sampling technique can have some value, especially if used by the experts who know the population under the study, as it is the case in this study. The relative numbers of masters and PhD students on one hand and faculty on the other was proportionately reached in each university. In addition, convenience sampling technique was used to reach faculty and postgraduate students who were available during the time of data collection.

4.8 Data collection procedures

“Data collection is the process of gathering research data about research problem. This is done in a systematic way to enable statistical analysis. Research instruments are the tools used to collect data for a research project. There are various types of data collection/research instruments; such as questionnaires, interviews, observation and document or record reviews” (Dawson, 2002). According to Dawson (2002) “the principle of data collection is that the instrument should be related to the type of information being sought”. In this study

questionnaire and interview were used with the aim of collecting both numerical as well as qualitative data such as perceptions, opinions, views, feelings, attitudes, and more.

The questionnaire contained standardised “series of questions relating to the research topic that were to be answered by participants”. Pickard (2007) identified the following reasons for using questionnaires: “the researcher can reach a large and geographically dispersed community at a relatively low cost; data can be harvested from a larger sample than would be possible using any other technique; anonymity can be offered as well as confidentiality and that data analysis can be determined from the outset, even as far as coding before the questionnaires have been distributed”. Babbie (2012) points out that questionnaires are classified according to the kind of question set. Questions may be closed, open, or both in combination. Closed questions require the respondent to place a tick, make a mark or draw a line alongside one of several provided possible answers. The closed form of questionnaire facilitates answering and makes it easier for the researcher to code and classify the responses. The closed ended questionnaire is particularly useful if details from a large number of questionnaires have to be dealt with. However, the fixed form of alternative answers may have the effect of forcing the respondents to think along certain lines, which they may not have done had they been left to make up their own responses.

In contrast, “open-ended questions enable the respondents to reply as they like and do not confine them to a single alternative. The open-ended form of questionnaire enables the respondent to state his/her case freely, and provide reasons as well. It evokes a fuller and richer response, and probes deeper into the respondents’ opinions than close-ended questions”. Ndwandwe (2009) observes that “the choice between open and close-ended questions depends on the purpose of the survey; the respondent’s level of knowledge about the problem being investigated; and the researcher’s knowledge and insight into the respondent’s situation. In practice, a good questionnaire should contain both open and close ended questions so that the responses from both can be checked and compared”.

In this study both open and close-ended questions were used for faculty (see appendix 13), postgraduate students (appendix 14) and library professionals (see appendix 12). Faculty and postgraduate students completed questionnaires to gather information on their use of libraries and the quality of services they get from the librarians. Similarly, questionnaires elicited information from library professionals on their level of awareness and the extent to which they apply the ethos of information ethics in providing services to clients. The interviews

were used to gather data from university/directors of library and TLA officials. Saunders, Lewis, and Thornhill (2012:372) define an interview “as a purposeful conversation between two or more people requiring the interviewer to establish rapport, to ask concise and unambiguous questions to which the interviewee is willing to respond and to listen attentively.” The main advantages of an interview are: “direct contact with the users often leads to specific, constructive suggestions; they are good at obtaining detailed information; and few participants are needed to gather rich and detailed data”.

According to Dawson (2002) an interview “can be unstructured, structured and semi-structured with individuals”. An unstructured interview “allows the interviewer to pose some open-ended questions and the interviewee to express his/her own opinion freely. This requires both the interviewer and interviewee to be at ease because it is like discussion or brainstorming on the given topic. The direction of interview is determined by both interviewee and interviewer, not predetermined”. The challenge with unstructured interviews is that “it makes it difficult to standardise across different interviewees, since each interview takes on its own format. Nevertheless, it is possible to generate rich data, information and ideas in such conversations because the level of questioning can be varied to suit the context and the interviewer”.

In contrast, “structured interviews use a set of predetermined questions which are short and clearly worded” (Kumar, 2011). “In most cases, these questions are closed and therefore, require precise answers in the form of a set of options read out or presented on paper. This type of interview is easy to conduct, and can be easily standardised as the same questions are asked to all participants. Structured interviews are most appropriate when the goals of the study are clearly understood and specific questions can be identified”. Finally, “a semi-structured interview has features of both structured and unstructured interviews and therefore uses both closed and open-ended questions. As a result, it has the advantage of both methods of interviews”. For consistency the interviewer set “pre-planned core questions for guidance such that the same areas are covered with each interviewee. As the interview progresses, the interviewee is given an opportunity to elaborate or provide more relevant information if he/she opts to do so”. Dawson (2002) suggests that a semi-structured interview is perhaps the most common type of interview in qualitative social research. This study administered a semi-structured interview to Tanzania Library Association officials (see appendix 16) and heads/directors of the library (see appendix 15) to elicit information on their knowledge about professional ethical practice. Table 4.6 maps research questions to sources of data

Table 4. 6: Mapping research questions to sources of data

Research questions	Data sources	Respondents	Data analysis strategies
What is the level of awareness of library profession in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice?	Questionnaire and interview	Head/directors of the libraries, faculty, postgraduate students, library professionals and Tanzania Library Association officials.	SPSS Thematic analysis
What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics?	Questionnaire and interview	Library professionals, faculty, postgraduate students, Head/directors of the libraries and Tanzania library Association officials.	SPSS Thematic analysis
What are the factors that influence information ethics practice by library professional in University libraries in Tanzania	Questionnaire and interview	Library professionals Head/directors of the libraries and Tanzania Library Association officials.	SPSS Thematic analysis
How is information ethics integrated in the library professional practice in university libraries in Tanzania?	Questionnaire and interview	Library professionals Head/directors of the libraries and Tanzania Library Association officials.	SPSS Thematic analysis
What is the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services?	Questionnaire and interview	Library professionals, Head/directors of the libraries Postgraduate students and faculty.	SPSS Thematic analysis

4.9 Data Analysis strategies

Data analysis is the systematic study of data so that its meaning, structure, relationships, and origins can be understood (Ndwandwe, 2009). Data analysis is done in order to extract useful information and facilitate conclusion. According to Creswell (2009:183) “Analysis of data involves making sense out of the text and image data. It involves preparing data for analysis, conducting different analyses, moving deeper and deeper into understanding the data, presenting the data, and making interpretation of the larger meaning of the data”. This study employed both qualitative and quantitative data analysis. Qualitative data collected from heads/directors of university libraries and Tanzania Library Association officials were analysed using thematic analysis. The findings were presented in narrative form, tables and figures.

Data gathered through questionnaires from faculty, postgraduate students and library professionals were analysed using SPSS to generate descriptive and inferential statistics such as cross tabulation, chi-square and principal component analysis. The results were presented in graphs, tables and charts with frequencies and percentages (this is presented in chapter five). SPSS version 16 was found suitable for analysing quantitative data to generate variety of descriptive and inferential statistics. Descriptive and inferential statistics generated were used to describe the distribution and relationship among variables in the study and also to estimate the degree of confidence needed in the generalisation of results from the sample to the population from which the sample were selected (Chambiss & Schutt, 2013)

4.10 Validity and reliability

Reliability refers to the ability of “a particular technique, applied repeatedly to the same object to yield the same result each time” (Babbie & Mouton, 2001). Saunders *et al.* (2012) refer to reliability as “the ability of the data collection techniques and analytic procedures to produce consistent findings if they were repeated on another occasion or if they were replicated by a different researcher”.

In contrast “validity is the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration” (Babbie & Mouton, 2001). Basically validity refers to the effectiveness (or success) of an instrument in measuring the specific property which it intends to measure. Bhattacharjee (2012:58) asserts that, “validity often called construct validity refers to the extent to which a measure adequately represents the underlying construct that it is supposed to measure”. “For instance, if a measure of

information access really measuring information access and not measuring a different construct. Validity can be assessed using theoretical or empirical approaches. Theoretical assessment of validity focuses on how well the idea of theoretical construct is translated into or represented in an operational measure”.

This study adapted questions from questionnaires and interview schedules from existing tools that have been validated, pretested, and had demonstrated validity and reliability. This included tools of Mbofung and Popoola (2014) that tested the reliability of the instrument against items such as legal issues, ethical issues, and obtained Cronbach alpha values of 0.60 and 0.8 respectively. Mbofung and Popoola (2014) prepared a questionnaire “using excerpts from IFLA/FAIFE Intellectual Freedom statements because none was available in literature”. On the other hand Woodward, Martin and Imboden, (2010) tested the reliability and realised a Cronbach alpha value of .80. Validity of the interview schedule was achieved through use of supervisor’s assessment of the interview schedule items. The supervisor of the thesis provided comments on suitability of the interview schedule in relation to information ethics. Kimberlin and Winterstein (2008) states that, “because there is no statistical test to determine whether a measure adequately covers a content area or adequately represents a construct, content validity usually depends on the judgement of the expert in the field”.

4.11 Ethical consideration

“Ethics is defined by Webster’s dictionary as conformance to the standards of conducts of a given profession or group”. “Such standards are often defined at disciplinary level though a professional code of conduct, and sometimes enforced by university committees called even Institutional Review Board” (Bhattacharjee, 2012:137). This study complied with the provisions of research ethics policy of University of KwaZulu-Natal. Consent (see appendix 1) was sought from the respondents to gather data from them. This “informed consent form clearly described their rights to participate and right to withdraw before their response in the study could be recorded”. Permission was obtained from the respective universities (see appendices 3, 5, 7 & 9) in which the studies were carried out. These universities included U1, U2, U3, and U4 respectively. Additionally permission was granted by the TLA (see appendix 11).

4.12 Summary

This chapter presented research methodology that was used in the study titled “Role of information ethics in the provision of library and information services in university libraries in Tanzania”. The chapter discussed the concept and meaning of research methodology, research paradigm, research approaches, research design, population of the study, sampling procedures, data collection procedures, data analysis strategies, validity and reliability, and ethical consideration.

The study population included four university libraries namely U1, U2, U3, and U4 respectively; and TLA officials. Of these universities, two were public and another two private. Purposive sampling was used to select Tanzania Library Association officials and heads/directors of university libraries. A census was used to select library professionals, and purposive sampling was used to select different levels of faculty. Purposive sampling and convenience sampling were used to select postgraduate students from different levels and programmes.

The study applied a combination of qualitative and quantitative approaches in order to address different perspectives of the problem and minimize weaknesses from one approach. This is in line with Majinge (2014) who asserted that combining research approaches in collecting data offers premise of getting a more complete picture in a way that single approach cannot achieve. Similarly, Johnson & Onwuegbuzie (2004) assert that the goal of mixed methods research is not to replace either qualitative or quantitative approach to research but rather draw the strengths of these approaches and minimize possible weaknesses.

Data were collected through the use of survey questionnaire and interview schedules. Quantitative data were analysed using SPSS to generate descriptive and inferential statistics and presented using graphical tools and tables. The qualitative data were analysed thematically and presented through narration. Validity and reliability were attained through adapting data collection tools with acceptable Cronbach values. Ethical compliance was ensured through respondents’ consent, permission from the institutions surveyed and adherence to UKZN ethics protocol.

During data collection process the researcher noted that the use of interview was more suited to Tanzania Library Association officials and heads/directors of university library as they were able to elaborate and provide a relevant information in detail. As for use of the

questionnaire, some respondents tended to provide inappropriate answers for the questions that required more explanation. Some respondents did not respond to open ended questions, for example for 'yes' or 'no' question, where they were needed to explain why 'yes' or why 'no' they left space blank. Some of them were not serious in answering questions, for instance in the questions involving Likert scale (strong agree, agree, neutral, disagree, and strong disagree) respondents just ticked same option throughout. Some of the respondents also complained that the topic was new to them, so it was difficult to respond to all the questions independently. Therefore, the researcher elucidated the questions before they filled the questionnaires in order for them to respond appropriately.

The use of different instruments, questionnaires and interview helped the researcher to validate the data and achieve the expected results. The next chapter presents the findings of the results.

CHAPTER FIVE

DATA ANALYSIS AND PRESENTATION OF FINDINGS

5.1 Introduction

This study was conducted to investigate the role of information ethics in the provision of library and information services in university libraries in Tanzania. Kothari (2004) states that in the process of data analysis, relationships or differences supporting or conflicting with original or new hypotheses should be subjected to statistical tests of significance to determine validity of results.

This chapter presents the results of quantitative and qualitative data that were collected from the respondents through questionnaires administered to faculty, postgraduate students and library professionals on one hand, and interviews administered to Library heads/directors and Tanzania Library Association officials respectively. The study was conducted in four universities pseudo named U1, U2, U3 and U4 respectively. From these universities the biggest colleges/faculties based on students enrollments were sampled as follows: U1 College of Natural and Applied sciences and College of Social Sciences and Humanities, U2 College of Agriculture and College of Social Science and Humanities, U3 Faculty of Education, Law and Social Sciences and Communication, and U4 Faculty of Arts and Social Sciences, Education, Law and Business Administration.

The study sought to understand the role of information ethics in the provision of library and information services in university libraries in Tanzania. The following research questions were addressed;

- 1) What is the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice?
- 2) What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics?
- 3) What are the factors that influence information ethics practice by library professionals in University libraries in Tanzania?
- 4) How is information ethics integrated in the library professional practice in university libraries in Tanzania?
- 5) What is the perception of faculty and postgraduate students towards the ethical conduct of library staff in providing library and information services?

The study was underpinned by PAPA model and WSIS Action Line 10 framework respectively. The other theories such as Consequence-based theory, Duty-based theory, Right-based theory and Virtue-based theory were also reviewed in order to provide a broader understanding of the general field of ethics. Semi-structured interviews and questionnaires were used to collect data. Data collected through interview were analysed thematically while data collected through questionnaire were cleaned, edited, coded and analysed using SPSS software version 16 to generate as cross tabulation, chi-square and principal component analysis.

Therefore this chapter presents the results of analyses on both quantitative and qualitative data. Quantitative data is presented using tables with frequencies and percentage, charts and figures while qualitative data are presented descriptively using thematical categorisation. Data on age, gender, education level and other biographical variables are also presented.

5.1.1 Response rates

Data was gathered from 186 faculty members, 260 postgraduate students (196 masters and 64 PhD students), 45 library professionals, 4 head/directors of university libraries and 5 Tanzania Library Association officials. From a sample of 278 faculty, 186 completed the questionnaire, giving a response rate of 66.9%. Similarly, out of 357 postgraduate students 260 completed questionnaire, giving a response rate of 72.8%. Additionally, 63 library professionals who were surveyed returned a response rate of 71.4%. All heads/directors of university libraries and Tanzania Library Association officials were interviewed, giving a response rate of 100%. The overall response rate was 82.2% $((100+100+66.9 +72.8+71.8))/5$ as reflected in Table 5.1.

Table 5.1: Response rates

Targeted respondents	N	Response (n)	Response rate (%)
Library directors	4	4	100
TLA officials	5	5	100
Faculty	278	186	66.9
Postgraduate students	357	260	72.8
Library professionals	63	45	71.4
TOTAL	707	500	82.8

A survey must have a good response rate in order to produce accurate and useful results”(Saunders *et al.*, 2012). Babbie and Mouton (2001:261) assert that “a response rate of 50 per cent is adequate for analysis and reporting, a response of 60 per cent is good, and a response rate of 70 per cent is very good”. Therefore the response rate obtained in this study is above the norm and acceptable.

5.2 Biographical data of respondents

This section presents the results on the biographical information of the respondents.

5.2.1 Characteristics of respondents

Respondents were asked to indicate their age, gender, qualification and their university of affiliation. The results are shown in tables 5.2 to 5.12 respectively. Information on age, gender, qualification and university of affiliation of respondents was sought to enrich the interpretation of results on the main research questions. There were five categories of respondents namely: library professionals, faculty, postgraduate students, heads/directors of libraries and TLA officials. The library professionals category comprised certificate holders (5; 11.1%), diploma holders 9 (20%), bachelor’s degree holders (8; 17.8%), master’s degree holders (16; 35.6%), PhD degree holders (5; 11.1%) in library and information science and (2; 4.4%) did not indicate their education qualification. In the faculty category, there were assistant lecturers (66; 35.5%), lecturers (63; 33.9%), senior lecturers (12; 6.5%), associate professors (20; 10.7%), professors (17; 9.1%) and (8; 4.3%) did not indicate their highest qualification. The postgraduate students comprised of those studying for master’s degree (196; 75.4%) and those studying for PhD degree (64; 24.6%). Other respondents were (4; 100%) heads/directors of university libraries and (5; 100%) Tanzania Library Association officials comprising of assistant chair person, deputy secretary, secretary ethics, education and professionalism and two retired TLA officials. Table 5.2 presents the results described.

Table 5.2: Cross tabulation of respondents' qualification profile

Category of respondents	Education profile						
Library professionals	Education qualification						
	Certificate	Diploma	Bachelor degree	Masters	PhD	Not indicated	Total
	5 (11.1%)	9 (20%)	8 (17.8%)	16 (35.6%)	5 (11.1%)	2 (4.4%)	45 (100%)
Faculty	Highest qualification						
	Assistant lecturer	Lecturer	Senior lecturer	Associate professor	Professor	Not indicated	Total
	66 (35.5%)	63 (33.9%)	12 (6.5%)	20 (10.7%)	17 (9.1%)	8 (4.3%)	186 (100%)
Postgrad. Students	Program enrolled						
					Master's	PhD	Total
					196 (75.4%)	64 (24.6%)	260 (100%)
Heads/ directors	Education Qualification						
		Certificate	Diploma	Bachelor degree	Master's degree	PhD	Total
		0	0	0	1 (25%)	3 (75%)	4 (100%)
TLA officials		0	0	2 (40%)	2 (40%)	1 (20%)	5 (100%)

5.2.1.1 Library Professionals demographics

This section presents the results of demographic data of the library professionals from four university libraries pseudo named U1, U2, U3 and U4. The information sought included:

affiliation of library professionals, education qualification, Gender, age, Designation or job title and work experience.

5.2.1.1.1 Affiliation of Library professionals

The results in Figure 5.1 present the university libraries of affiliation of the library professionals. There were a total of 45 library professionals with the highest number affiliated to U1 while U4 had the least number of library professionals.

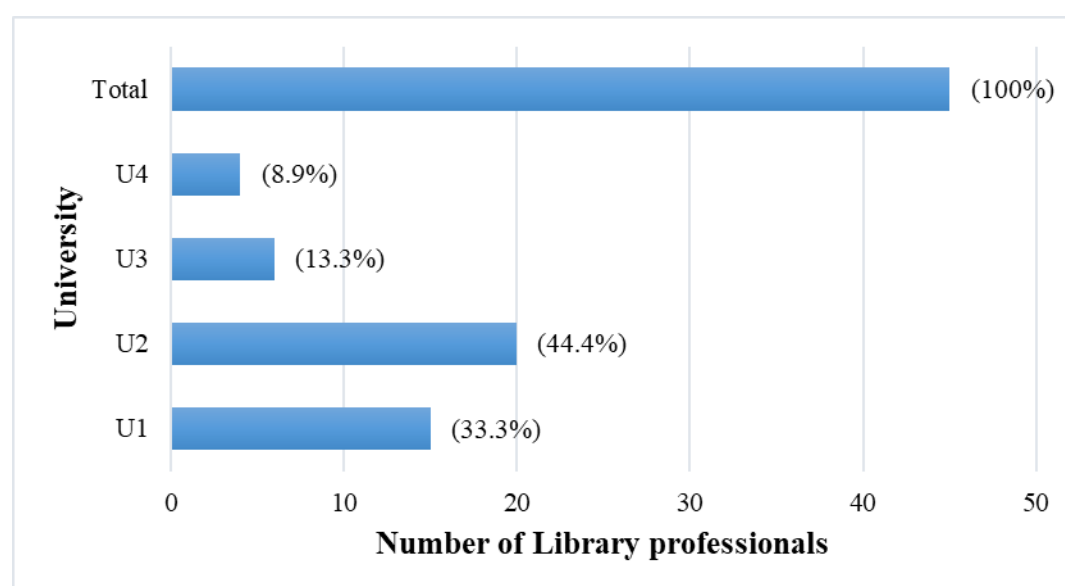


Figure 5.1: University libraries of affiliation of the library professionals (n=45)

5.2.1.1.2 Education qualification of Library professionals

Education qualification may influence understanding of ethical issues in providing information services. The results presented in Table 5.3 show (5; 11.1%) library professionals with PhD qualifications were from U1 and U2. U3 and U4 did not have library professionals with a PhD qualification. U3 had one qualified library professional with a bachelor's degree, and (16; 35.6%) had a master's degree qualification respectively. Two library professionals from U1 and U3 did not indicate their education qualification.

Table 5.3 : Qualifications of library professionals in the universities

University	Education qualification						
	Certificate	Diploma	Bachelor degree	Master's Degree	PhD	Not indicated	Total
U 1	1(6.7%)	1(6.6 %)	2 (13.3 %)	9(60%)	1(6.7%)	1(6.7%)	15(100%)
U 2	1(5%)	7(35 %)	3(15%)	5 (25 %)	4 (20%)	0	20(100%)
U 3	3(50 %)	1(16.6 %)	1(16.7%)	0	0	1(16.7)	6(100%)
U 4	0	0	2(50 %)	2(50 %)	0	0	4(100%)
Total	5 (11.1%)	9 (20%)	8 (17.8%)	16 (35.6%)	5(11.1%)	2(4.4%)	45(100%)

5.2.1.1.3 Gender and age of library professionals

The results presented in table 5.4 show gender and age of library professionals in the universities.

Table 5.4 : Gender and age of library professionals

Gender	Age					
	21-30 years	31-40 years	41-50 years	51-60 years	60 and above	Total
Male	3(6.7%)	9(20%)	8(17.8%)	4(8.9%)	0	24(53.4 %)
Female	6 (13.3%)	7(15.6%)	4(8.9%)	2(4.4%)	1(2.2%)	20(44.4%)
Not indicated						1(2.2%)
Total	9(20%)	16(35.6%)	12(26.7%)	6 (13.3%)	1(2.2%)	45(100)

The results in Table 5.5 reveal that, there were slightly more male library professionals (24; 53.4%) than there were female ones (20; 44.4%). Majority of the library professionals (34; 75.6%) were aged between 31 and 60.

5.2.1.1.4 Designation/job title of the library professionals

Library professionals were asked to state their designation or job title. The targeted library professionals in university libraries were 63, but the library professionals that participated in the study were 45. Figure 5.3 presents the results.

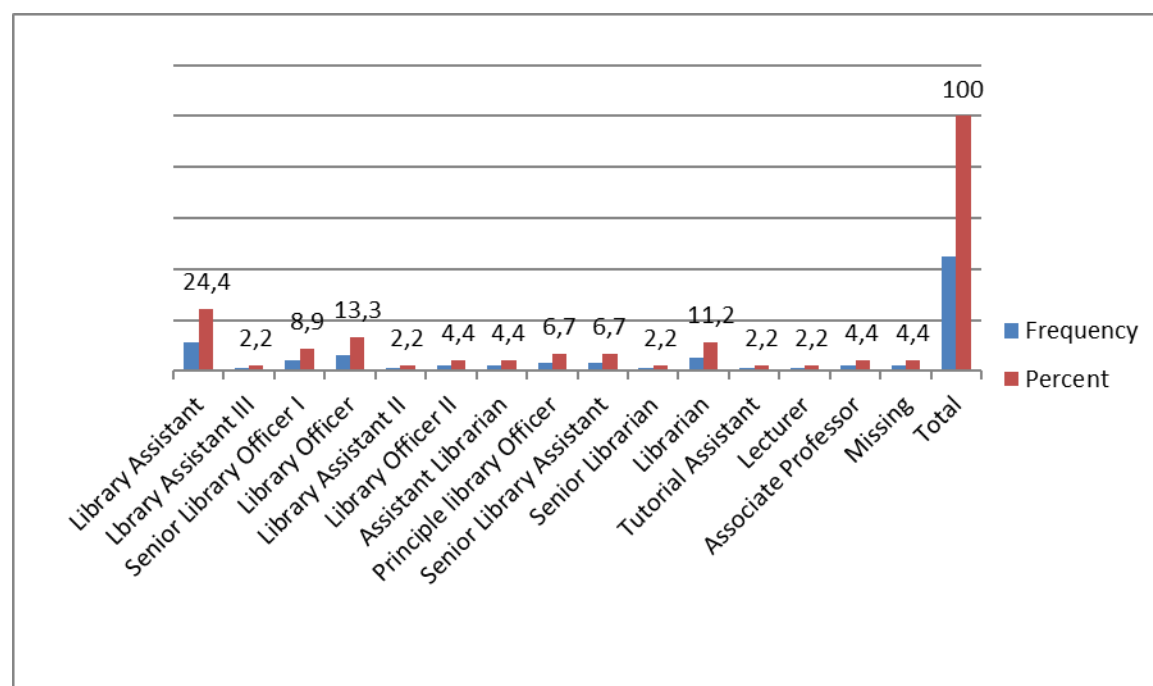


Figure 5.2 : Designation or job title of the library professionals (n=45)

The distribution of the library professionals in the different job titles revealed that majority (11; 24.4%) were library assistants, (6; 13.3%) library officers, (5; 11.1%) librarians, (4 ; 8.9%) senior library officers I, (3; 6.7%) principal library officers, (3; 6.7%) senior library assistants, (2; 4.4%) library officers II, (24.4%) assistant librarians, (1; 2.2%) library assistant III, (1; 2.2%) library assistant II, and (1; 2.2%) senior librarian. In addition, (2; 4.4%) library professionals were designated as associate professors, (1; 2.2%) lecturer, (1; 2.2%) tutorial assistant and (2; 4.4%) did not mention their designation or job title.

The findings seem to reveal that there were no uniformity nomenclatures in the designations/job titles of library professionals in the universities. In some universities library professionals were designated as academic staff and/or administrative staff, while in others all library professionals were designated as administrative staff.

5.2.1.1.5 Work experience of library professionals in the universities

The results in table 5.5 reveal that, most of the library professionals (35; 77.8%) had less than 12 years of work experience. U3 and U4 had no staff members with more than 13 years of work experience perhaps because they are newly established institutions. These are among private universities established in 2002 (SARUA, 2015). U1 and U2 had 10 library professionals each who had 13 or more years of working experience.

Table 5.5 : Work experience of library professionals in the universities (n=45)

University	Working Experience				
	0-4 years	5-8 years	9-12 years	13 years and above	Total
U 1	5(33.3 %)	2(13.3 %)	2(13.3 %)	6(40%)	15(100%)
U 2	5(25%)	9(45 %)	2(10 %)	4(20 %)	20(100 %)
U 3	5(83.3 %)	1(16.7 %)	0	0	6(100%)
U 4	1(25 %)	1(25 %)	2(50 %)	0	4(100 %)
Total	16(35.6%)	13(28.9%)	6(13.3%)	10(22.2%)	45(100%)

5.2.1.2 Faculty demographics

This section presents the results on the demographics of faculty respondents from four universities, pseudo named U1, U2, U3 and U4. The information sought included: faculty affiliation, qualification of faculty, faculty position and highest qualification, working experience of faculty, gender and age of faculty.

5.2.1.2.1 Faculty affiliation

The results presented in Figure 5.3 show that most respondents were drawn from U1. In particular, there were (88; 47.3%) drawn from U1; (50; 26.0%) were from U2, U3 had (33; 17.7%) respondents and U4 had the least number with 15 respondents representing 8.1% respectively

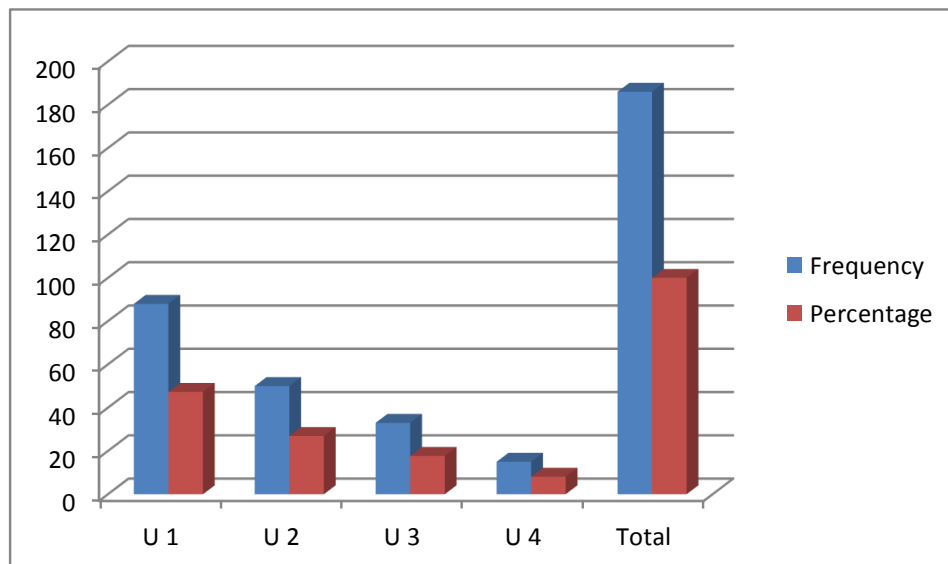


Figure 5.3 : University of affiliation of the faculty (n=186)

5.2.1.2.2 Academic qualification of faculty

The results presented in figure 5.4 reveal that, all the respondents had at least a master's degree. There were more PhD holders (107; 57.5%) among the members of the faculty than there were master's holders. This result reflects the emphasis placed on a PhD qualification for those who wish to pursue lecturing positions in the universities.

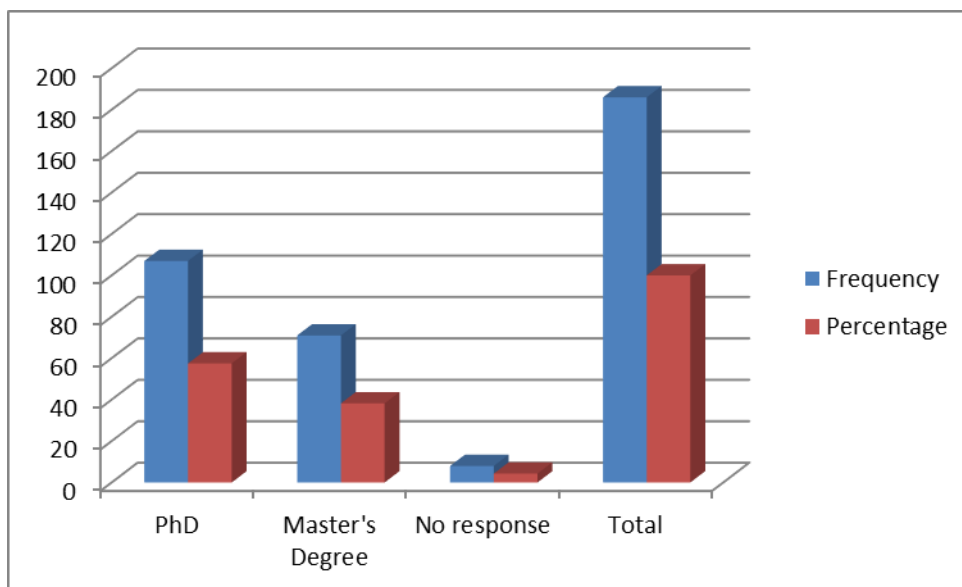


Figure 5.4 : Qualification of faculty (n=186)

Table 5.6: Faculty position and highest qualification (n=186)

Faculty Position	Academic Qualification		
	PhD	Master's Degree	Total
Assistant lecturer	6(3.2%)	60(32.3%)	66(35.5%)
Lecturer	54(29%)	9(4.8%)	63(33.8%)
Senior lecturer	10(5.4%)	2(1.1%)	12(6.5%)
Associate professor	20(10.8%)	0	20(10.8%)
Professor	17(9.1%)	0	17(9.1%)
Not indicated			8(4.3%)
Total	107 (57.5%)	71(38.2%)	186(100%)

The results in Table 5.7 show that, most holders of a master's degree were assistant lecturers accounting for (66; 35.5%) of the respondents. The results also show that (6; 3.2%) of assistant lecturers had PhD degrees but were yet to be elevated to the position of lecturer. This could be attributed perhaps to the fact they had only recently acquired their doctoral degrees or the posts at lecturer levels were not yet available for them to be elevated to. All professors had PhD degrees. There were some senior lecturers that had masters degrees probably suggesting that PhD requirement was not the only criteria for promotion to the level of senior lecturer.

5.2.1.2.3 Working experience of faculty

The researcher in this section sought to find out if faculty, through their experience had noticed ethical issues practice by library professionals in their respective libraries are followed or not. The results in Table 5.7 reveal that work experience of majority of the respondents (64; 34.4%) was 1-4 years, (45; 24.2%) had 5-8 years, (22; 11.8%) had 9-12 years, and (25; 13.4%) had 13 years of working experience respectively. There were (30; 16.1%) individuals who did not respond to this question.

Table 5.7 : Work experience of faculty (n=186)

Experience	Frequency	Percentage
0-4 Years	64	34.4
5-8 Years	45	24.2
9-12 Years	22	11.8
13 Years and above	25	13.4
No response	30	16.1
Total	186	100

5.2.1.2.4 Gender and age of faculty

The researcher in this section involved gender and age of faculty in order to avoid bias among participants. Faculty as library users in university libraries could give their attitude and perception of information ethics practiced by library professionals in ensuring information access to all regardless of age and gender. The results in Table 5.8 show the distribution of the age of the faculty and their gender in the universities surveyed. Most of the faculty was aged between 31 and 50 years (119; 64%). There were also more male faculty members than there were female ones. In particular, male faculty represented about (129; 69.4%) of all the faculty respondents. The 51-60, (1; 0.5%) and 20-30 years (7; 3.8%) age groups of female had the least and the second least number of respondents respectively.

Table 5.8: Cross tabulation of gender and age of faculty (n=186)

Gender	Age					Total
	20-30 Years	31-40 Years	41-50 Years	51-60 Years	61 and above	
Male	9(4.8%)	45(24.1%)	38(20.4%)	13(7%)	24(12.9%)	129(69.4%)
Female	7(3.8%)	24(12.9%)	12(6.5%)	1(0.5%)	4(2.2%)	48(25.8%)
Not indicated						9(4.8%)
Total	16(8.6%)	69(37%)	50(26.9%)	14(7.5%)	28(15.1%)	186(100%)

5.2.1.3 Postgraduate students demographics

This section presents demographic details of postgraduate students from four universities which include U1, U2, U3 and U4. The information sought included: distribution of postgraduate students in the colleges/faculties and universities, academic program in which postgraduate students were enrolled, age and programs of postgraduate students

5.2.1.3.1 Distribution of postgraduate students in the universities

The results in Table 5.9 show distribution of postgraduate students in the universities.

Table 5.9 : Distribution of postgraduate students in the universities (n=260)

College	University				
	U 1	U 2	U 3	U 4	Total
College of Humanities	18 (6.9%)	0	0	0	18(6.9%)
College of Social Sciences	59(22.7%)	0	0	0	59(22.7%)
College of Natural and Applied Science	65(25%)	0	0	0	65(25%)
College of Agriculture	0	54(20.8%)	0	0	54(20.8%)
Faculty of Social Sciences and Humanities	0	15(5.8%)	0	0	15(5.8%)
Faculty of Education	0	0	23(8.8%)	0	23(8.8%)
Faculty of Law	0	0	2(0.8%)	0	2(0.8%)
Faculty of Social Sciences and Communication	0	0	13(5%)	0	13(5%)
Faculty of Business Administration	0	0	0	11(4.2%)	11(4.2%)
Total	142 (54.6%)	69(26.5%)	38(14.6%)	11(4.2%)	260(100%)

From the results presented in Table 5.9 above, the College of Social Sciences, Natural and Applied Science in U1 and College of Agriculture in U2 had the most respondents (178; 68.5%). U1 had (18; 6.9%) postgraduate students in the College of Humanities, (59; 22.7%) in the College Social Sciences and (65; 25%) were in the College of Natural and Applied Science. U2 had (54; 20.8%) respondents from the College of Agriculture and (15; 5.8%) from Faculty of Social Sciences and Humanities. In U3, (23; 8.8%) respondents were drawn from the Faculty of Education, (2; 0.8%) from Faculty of Law and (13; 5%) from Faculty of Social Sciences and Communication. U4 had (11; 4.2%) respondents from the Faculty of Business Administration only. U1 accounted for the highest number of respondents (142; 54.6%) while U4 accounted for the least number of respondents (11; 4.2%).

5.2.1.3.2 Academic program in which postgraduate students were enrolled

The postgraduate students were asked to state the academic program in which they were enrolled. The responses are shown in Table 5.10.

Table 5.10: Academic programs in which postgraduate students are enrolled (n=260)

College/Faculty	Program		
	Masters	PhD	Total
College of Humanities	8 (3.1%)	10 (3.8%)	18(6.9%)
College of Social Sciences	45 (17.3%)	14 (5.4%)	59 (22.7%)
College of Natural and Applied Science	45 (17.3%)	20 (7.7%)	65(25%)
College of Agriculture	42 (16.2%)	12 (4.6%)	54 (20.8%)
Faculty of Social Sciences and Humanities	8 (3.1%)	7 (2.7%)	15 (5.8%)
Faculty of Education	23 (8.8%)	0	23 (8.8%)
Faculty of Law	2 (0.8%)	0	2 (0.8%)
Faculty of Social Sciences and Communication	12 (4.6%)	1 (0.3%)	13 (5%)
Faculty of Business Administration	11 (4.2%)	0	11 (4.2%)
Total	196 (75.4%)	64(24.6%)	260 (100%)

The results in Table 5.10 show that most of the postgraduates, 196 out of 260 representing 74.4% surveyed, were enrolled for master's program. PhD program had an enrollment of 64 individuals representing 25.4% of the respondents. The College of Natural and Applied Science had the highest postgraduate enrollment in general with (65; 25%) students with PhD and masters enrollment accounting for 31.3% and 23% respectively. Three faculties namely, Law, Education and Business and Administration had no PhD enrollment but offered master's programmes.

Table 5.11: Cross tabulation of academic programs in which postgraduate students are enrolled and their year of study (n=260)

Program	Year				
	First year	Second Year	Third Year	Forth Year and above	Total
Masters	109 (41.9%)	84(32.3%)	3(1.2%)	0	196(75.4%)
PhD	18(6.9%)	15(5.8%)	18(6.9%)	13(5%)	64(24.6%)
Total	127 (48.9%)	99 (38%)	21(8.1%)	13(5%)	260(100%)

The results in Table 5.11 show that postgraduate in their first years of study at both masters and PhD levels were in the majority of the respondents (127; 48.8%) followed by second years (99; 38.1%), third year 21 (8.1%) and fourth year and above (13; 5%). Among the masters students, those in the first years of study were also in the majority (109; 41.9%), followed by second year (84; 32.3%), third year (3; 1.2%) and there were no masters students

in fourth year and above. The number of respondents who were enrolled for PhD studies was uniformly distributed from first year to fourth year.

5.2.1.3.3 Age and program of study of the postgraduate students

This section presents a description of age and program of study of postgraduate students of four universities investigated. Table 5.12 summarises the results.

Table 5.12: Cross Tabulation of age and program of study of the postgraduate students (n=260)

Age	Program		
	Masters	PhD	Total
20-30 Years	98(37.7%)	4(1.5%)	102(39.2%)
31-40 Years	76(29.2%)	31(11.9%)	107(41.1%)
41-50 Years	20(7.7%)	26(10%)	46(17.7%)
51-60 Years	2(0.8%)	3(1.2%)	5(2%)
Total	196(75.4%)	64(24.6%)	260(100%)

The results in Table 5.12 show the cross tabulation of age and the programs in which the postgraduate respondents were enrolled. Majority of the respondents were between the age of 20 and 40 years (209; 80.4%). There were (4; 1.5%) students aged between 20 and 30 years who were enrolled for PhD programs across all universities. For (5; 2%) respondents who were aged between 51-60 years, (2; 0.8%) were enrolled for masters and 3 for PhD.

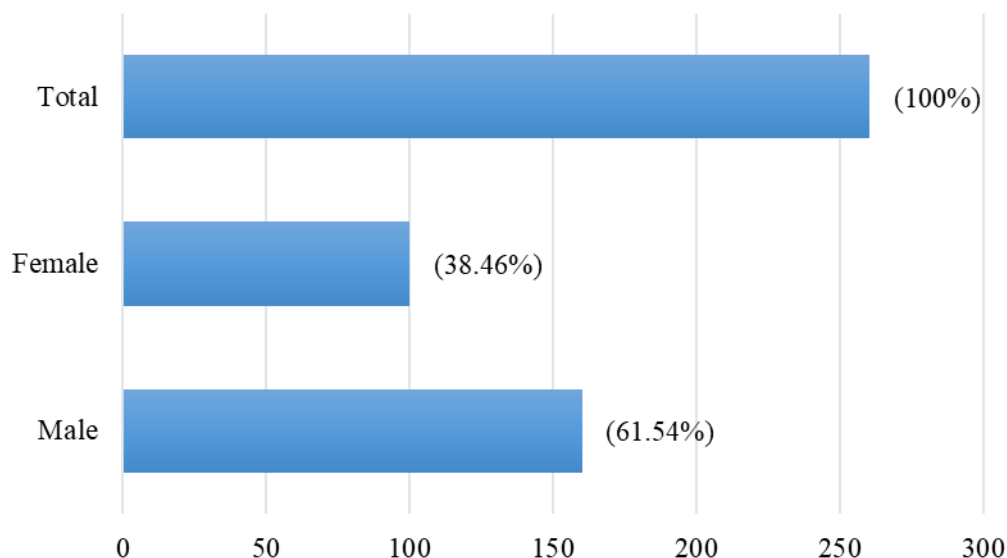


Figure 5.5: Gender of the postgraduate students (n=260)

The results in Figure 5.5 show the distribution of the postgraduate students by gender. There were more male postgraduate respondents (160; 61.5%) than there were female ones (100; 38.5%).

5.2.1.4 Demographic information of TLA officials

This section presents the results on the demographics of TLA officials, information sought included: gender, age, position in TLA, duration in the position and highest qualification.

5.2.1.4.1 Gender of TLA officials

This section presents a description of gender of TLA officials.

Table 5.13 : Gender of TLA officials (n=5)

Gender	Frequency
Male	4
Female	1
Total	5

The results in Table 5.13 show the distribution of TLA officials by gender. There were more male (4) than there were female ones (1). The results suggest that there is gender disparity among TLA officials.

5.2.1.4.2 Age of TLA officials

This section presents a description of age of TLA officials.

Table 5.14: Age of TLA officials (n=5)

Age	Frequency
30-40	1
41-50	1
51-60	1
61 and above	2
Total	5

The results in Table 5.14 show the distribution of TLA officials by age. The results indicate that 61 and above were (2), 51-60 was (1), 41-50 was (1) and 30-40 was (1).

5.2.1.4.3 Positon of TLA officials

This section presents position of TLA officials.

Table 5.15: Position of TLA officials (n=5)

Position in TLA officials	Frequency
Assistant chair person	1
Deputy secretary	1
Secretary, ethics, educ. & professionalism	1
Retired TLA officials	2
Total	5

The results in Table 5.15 show the distribution of TLA officials by position. There was (1) Assistant chair person, (1) Deputy Secretary, and (1) Secretary, ethics, education and professionalism. There were more retired TLA officials (2) than other positions because most of the TLA officials in current positions seemed to be new and did not have much information about TLA itself and the study in particular. The researcher involved retired TLA officials to complement information which current officials did not have.

5.2.1.4.4 Duration of TLA officials in position

This section presents duration of TLA officials in the position.

Table 5.16: Duration of TLA officials in the position (n=5)

Duration	Frequency
1 year	1
2 years	2
3 years	0
Not indicated	2
Total	5

The results in Table 5.16 show duration of TLA officials in the position. (1) of the respondents indicated 1 year, (2) indicated 2 years, (2) did not indicate the duration in respective position. This perhaps, because they were retired and they held different positions at different times.

5.2.1.4.5 Highest qualification of TLA officials

Table 5. 17: Qualification of TLA officials (n=5)

Highest qualification	Frequency
Bachelor degree	2
Masters	2
PhD	1
Total	5

The results in Table 5.17 show the distribution of TLA officials by qualification. There were (2) bachelor's degree holders, (2) master's degree and (1) with PhD qualification. The results show that majority of TLA officials were masters and bachelor degree holders. This was supported by one of the respondents who said "TLA members with highest qualification do not want to take position in the association."

5.2.1.5 Demographic information of heads/directors of university libraries

This section presents the results on the demographics of heads/directors of university libraries from U1, U2, U3 and U4 respectively. The information sought included: university of affiliation, designation, highest qualification, duration in the position, gender and age.

5.2.1.5.1 Gender of heads/directors of university libraries

This section presents a description of gender of heads/directors of university libraries.

Table 5.18: Gender of heads/directors of university libraries (n=4)

Gender	Frequency
Male	2
Female	2
Total	4

The results in Table 5.18 show the distribution of heads/directors of university libraries by gender. There were (2) male and (2) female. The results suggest gender issues in leadership were considered in university libraries in Tanzania.

5.2.1.5.2 Age of heads/directors of university libraries

This section presents a description of age of heads/directors of university libraries.

Table 5.19: Age of heads/directors of university libraries (n=4)

Age	Frequency
41-50	1
51-60	3
61 and above	0
Total	4

The results in Table 5.19 show the distribution of heads/directors of university libraries by age. There were more heads/directors of university libraries (3) aged between 51-60 and (1) was 41-50.

5.2.1.5.3 Designation of heads/directors of university libraries

This section presents designation of heads/directors of university libraries.

Table 5.20: Designation of heads/directors of university libraries (n=4)

Designation	Frequency
Library director	3
Heads of library department	1
Total	4

The results in Table 5.20 show the distribution of heads/directors of university libraries by designation. Most of them (3) were designated library directors and (1) head of library department. The results suggest that there is need for Tanzanian university libraries to set standards for this position.

5.2.1.5.4 Highest qualification of heads/directors of university libraries

This section presents qualification of heads/directors of university libraries.

Table 5.21: Qualification of heads/directors of university libraries (n=4)

Highest qualification	Frequency
Bachelor degree	0
Masters	1
PhD	3
Total	4

The results in Table 5.21 show the distribution of heads/directors of university libraries by qualification. There were more heads/directors of university libraries (3) with PhD while (1) had a master's degree.

5.2.1.5.5 Duration of heads/directors of university libraries in the position

This section presents duration of heads/directors of university libraries in the position.

Table 5.22: Duration of heads/directors of university libraries in the position (n=4)

Duration	Frequency
1 year	0
2 years	0
3 years	2
4 years	1
5 years	0
6 years	1
Total	4

The results in Table 5.22 show the distribution of heads/directors of university libraries by duration in the position. There were (2) heads/directors of university libraries that stayed in the position for 3 years, (1) for 4 years and (1) for 6 years. The results indicate that there is rotation in this position according to university policy.

5.2.2 Summary of demographic results of respondents

The results presented above on demographic information of respondents reveal that for library professionals, there were slightly more male (24; 54.4%) than there were female (20; 45.6%) who participated in the study. Majority of the library professionals (34; 77.3%) were aged between 31 and 60 years. U1 and U2 had many library professionals that had bachelor degree in information science and above; U4 had only bachelor degree and master's degree holders; while at U3 most of the library professionals had certificate and diploma qualification. Among library professionals who participated in this study, majority (24.4%) were library assistants. The findings from this study indicate that most of the library professionals in the university libraries surveyed were library assistants. U1 and U2 had some

library professionals that had more than 13 years but U3 and U4 had no staff with more than 13 years.

In the faculty category most of those who participated in this study were drawn from U1. Moreover, all the faculty members had at least a master's degree. There were more PhD holders (107; 57.5%) among the members of the faculty than there were master's holders. In addition, most holders of a master's degree were assistant lecturers. With regard to working experience of faculty, majority of the respondents (64; 34.4%) had experience of 1-4 years, (45; 24.2%) had 5-8 years, (22; 11.8%) had 9-12 years, (25; 13.4%) had 13 years of experience respectively. Results from this study revealed that, most of postgraduate students who participated in this study were drawn from college of social sciences, natural and applied sciences and agriculture (178, 68.5%). Most of the postgraduates, 196 out of 260 representing 74.4% surveyed were enrolled for master's program. PhD program had an enrollment of 64 individuals representing 25.4% of the respondents.

5.2 Level of awareness of library professionals about information ethics

The study sought to explore the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics. Awareness is one of the constructs of World Summit on Information society (WSIS) Action Line 10 that is useful in understanding ethical concerns of the information society. The PAPA model underscores the values of information ethics to include privacy, accuracy, property and access. Liton (n.d) asserts that, "the growing threat of intellectual property manifested in plagiarism, making illegal copies of books and other materials and illegal download of software, music and movies, is due to low level of awareness about intellectual property right in the third world countries among librarians". The research question on awareness was addressed through interviews administered heads/directors of university libraries, Tanzania Library Association officials and questionnaires administered to library professionals as presented in subsections 5.3.1 part 5.3.1.1 to 5.3.1.4

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5.3.1 Level of library professionals' awareness about information ethics values

The researcher sought to understand the level of awareness of the library professionals about the information ethics values that include privacy, accuracy, intellectual property, information access, copyright and respect for others in the online environment. More than 90% of the respondents were aware of the different information ethical values. In particular,

accuracy, intellectual property and information access, were the ethical values that the respondents were most aware of. The results are reflected in Table 5.23.

Table 5.23: Level of awareness of library professionals about information ethics values (n=45)

Statement I am aware:	Level of awareness				
	Very High	High	Aware	Not Aware	Total
About information privacy	15(33.3%)	15(33.3%)	14(31.1%)	1(2.2%)	45 (100%)
About information accuracy	12(26.7%)	21(46.7%)	11(24.4%)	1(2.2%)	45 (100%)
About intellectual property	16(35.6%)	19(42.2%)	8(17.8%)	2(4.4%)	45 (100%)
About information access	22(48.9%)	15(33.3%)	7(15.6%)	1(2.2 %)	45 (100%)
Copyright violation is wrong	18(40.0%)	10(22.2%)	10(22.2%)	7(15.6%)	45 (100%)
Of respecting others in online environment	20(44.4%)	8(17.8%)	15(33.3%)	2(4.4 %)	45 (100%)

A chi-square test was used to test whether there is a statistically significant difference in the level of awareness of information ethics values among the library professionals from different university libraries. Table 5.24 presents the results.

Table 5.24: Chi-square test on the difference in the level of awareness about information ethics values among library professionals

Statement I am aware:	Value	Df	Significance (P-Value)
About information privacy (Likelihood ratio)	8.404	9	0.494
About information accuracy (Likelihood ratio)	2.563	6	0.861
About intellectual property (Likelihood ratio)	7.099	6	0.312
About information access (Likelihood ratio)	8.069	6	0.023
Copyright violation is wrong (Likelihood ratio)	14.548	12	0.267
Of respecting others in online environment (Likelihood ratio)	17.315	9	0.44

The results in Table 5.24 show that all the p-values are greater than 5%. We therefore conclude that there is no statistically significant difference in the library professional's level of awareness of all the aspects of information ethical values across the different university libraries in Tanzania.

5.3.1.1 Library professionals' level of awareness about professional ethics

The researcher similarly sought to understand if library professionals were aware of the professional ethics which govern their conduct. The responses are shown in figure 5.6

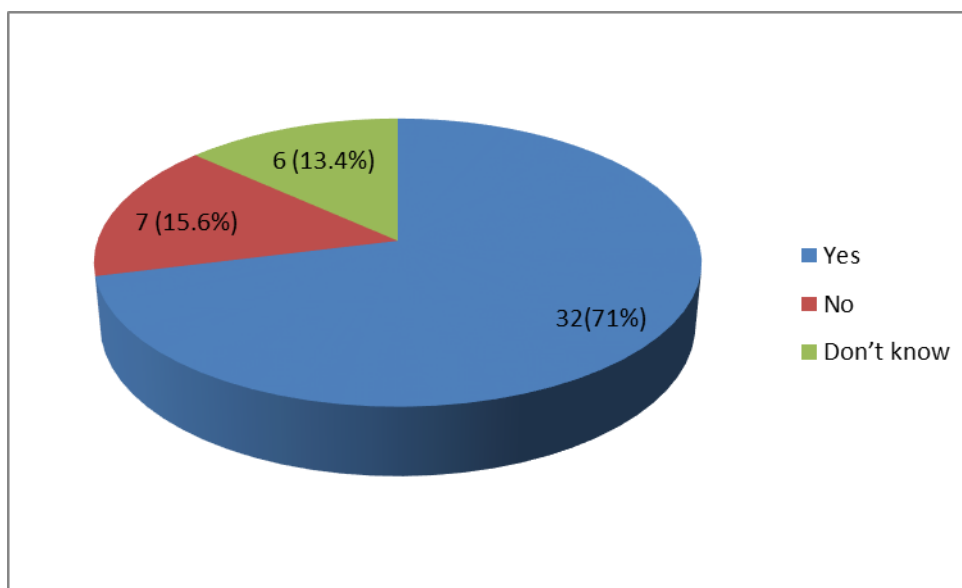


Figure 5. 6: Awareness of library professionals about professional ethics (n=45)

The results presented in Figure 5.6 show most of the respondents agreed that they were aware of the professional ethics. There were (32; 71%) respondents who were aware of the professional ethics, while (7; 15.6%) were not aware of the professional ethics and (6; 13.4 %) did not know about professional ethics.

The interview with heads/directors of the university libraries on their perception about the level of awareness of library professionals about the ethics values returned diverse responses. The results revealed the perception of respondents about level of awareness of library professionals to be average. One of the directors added that because of the shortage of resources library professionals did not adhere strictly to some of information ethics values such as access and intellectual property.

The interview with five Tanzania Library Association officials on their perception about the level of awareness of library professionals about information ethics values revealed that they perceived awareness to be average. In contrast, one respondent was of the opinion that level of awareness of library professionals about information ethics values was very high. This conflicting result may suggest that even within TLA circles there is no common understanding about the meaning of information ethics. The TLA officials were furthermore not aware whether library professionals in university libraries practiced ethical values. As one of them noted, TLA did not work closely with university library professionals; therefore it was difficult to determine the extent to which library professionals were aware of, and

practiced ethical values. Some of the general remarks by respondents regarding level of library professionals' awareness about information ethics values follow:

- “Many library staff practice information ethics values as a result of experience not as strategic coordinated effort”;
- “To most of Tanzanian library users, ethics values in library is a new thing, education is needed”;
- “Library professionals should be made aware of information ethics so as to provide services to users in a responsible manner”;
- “The concept of information ethics is new to most of library professionals, they need more awareness and training to enhance information ethics practice.”

5.3.1.2 Adherence of library professionals to information ethics values

The study sought to examine the adherence of library professionals to information ethics values when providing information services. These values include privacy, accuracy, property and access. The results showed that, (40; 88.9%) agreed or strongly agreed that they adhered to information privacy. There were (40; 88.9%) who agreed or strongly agreed that they adhered to information accuracy and intellectual property. Information accuracy had the highest number of respondents agreeing or strongly agreeing that they adhered to it when providing information services to users (41; 91.1%). The results suggest that library professionals seemed aware of information ethical values and adhered to them in providing information services. The results are summarised in Table 5.25.

Table 5. 25 : Adherence of library professionals to information ethics values (n=45)

Statement I adhere to:	Response					Total
	Strong Agree	Agree	Neutral	Disagree	Strong Disagree	
information privacy	14(31.1%)	26(57.8%)	4(8.9%)	1(2.2%)	0(0%)	45 (100%)
information accuracy	13(28.9%)	28(62.2%)	0(0%)	0(0%)	0(0%)	45 (100%)
intellectual property	14(31.1%)	26(57.8%)	4(8.9%)	1(2.2%)	0(0%)	45 (100%)
information access	18(40%)	19(42.2%)	5(11.1%)	3(6.7%)	0(0 %)	45 (100%)

5.3.1.3 Whether library professionals promoted ethical values to users

The question which was directed to faculty and postgraduate students sought to know if library professionals promoted awareness about ethical values to the users. The results are presented in Tables 5.26 - 5.27 respectively.

Table 5.26: Faculty responses (n=186)

University	Response			Total
	Yes	No	Don't Know	
U 1	40(45.5%)	29(32.9)	19(21.6%)	88(100%)
U 2	25(50%)	12(24%)	13(26%)	50(100%)
U 3	17(51.5%)	6(18.2%)	10(30.3%)	33(100 %)
U 4	7(46.7%)	3(20%)	5(33.3%)	15(100%)
Total	89(47.8%)	50(26.9)	47(25.3%)	186(100%)

The results in Table 5.26, revealed that (89; 47.8%) of faculty responded positively that they were made aware of the ethical values by library professionals, (50; 26.9%) were negative, (47; 25.3%) did not know that library professionals promoted ethical values to them. The proportion of respondents who responded negatively and those who answered “don’t know” respectively comprised (97; 52.2%). For those who responded positively they noted that they were appraised about information ethics through library education programs, seminars and workshops, online communication, posters and when visiting the library. Those who responded negatively said they have never heard library professionals educating users about ethical values. The responses obtained from postgraduate students are presented in Table 5.27.

Table 5.27: Postgraduate students responses (n=260)

Responses	U1	U2	U3	U4	Total
Yes	69 (48.6%)	39 (56.5%)	24 (63.2%)	0	138 (53.1%)
No	40 (28.2%)	15 (21.7%)	5 (13.2%)	6 (54.5%)	63 (24.2%)
Don't know	33 (23.2%)	15 (21.7%)	9 (23.6%)	5 (45.5%)	59 (22.7%)
Total	142 (100%)	69 (100%)	38 (100%)	11 (100%)	260 (100)

The results in Table 5.27 show that, (138; 53.1%) of the respondents were made aware of information ethics by the library professionals, (63; 24.2%) were not made aware while (59; 22.7%) did not know. In relative terms, U3 had the highest awareness rate among the four

universities (24 out of 38 or 63.2%). No postgraduate respondents from U4 among the respondents were made aware of information ethics by the library professionals in their university. For those who responded positively they said they were made aware about information ethics through orientation at the beginning of the year, at the reference desk (face to face or online conversation), through seminars, brochures, posters, fliers, university library website, and noticeboard. For the respondents who expressed negative view they pointed out that no information was given to them about information ethics. One respondent summed it all saying: 'library professionals do not provide information about ethics issues instead; they provided library rules and regulations which do not explain ethical values. Besides, the orientation which is done for new students at the beginning of the year is not attended by many students who at the time are still embroiled in registration.

In addition, heads/directors of the university libraries through interviews gave the diverse responses on whether library professionals created awareness about ethical values among the users. The head of library of U1 responded that the library professionals promoted awareness through information literacy. It was pointed out that masters' programmes offered had some courses that cover information ethics topics such as intellectual property; information policy and ethics, user education and information literacy. In U2 awareness of users about ethical values was promoted through library regulations published on the university website, through training on e-resources and through brochures. In U3 awareness of users about ethical values was promoted through meetings, lectures and during orientation. In U4 library professionals promoted awareness about information ethics through face book, posters, noticeboard and university website. The results generally revealed that though some efforts were made by library professionals to promote ethical values, this was not adequate.

5.3.1.4 TLA role in ensuring compliance with information ethical practice in libraries

Respondents who comprised TLA officials were asked through interview to explain how they ensured ethical values were complied with in university libraries in Tanzania. They explained that this was achieved through TLA general meetings, and through training on the TLA ethical code of conduct. Other respondents were of the view that TLA does not promote ethical values among library professionals in university libraries. They also pointed out the situation was not made better by the fact that libraries lacked policy on information ethics.

5.3.1.5 Challenges TLA faces in ensuring ethical compliance in university libraries

TLA officials were further asked to state challenges they faced in ensuring its membership provided library and information services ethically. The results revealed the following challenges; financial constraints, institutions failure to allow its members to attend TLA meetings, apathy of library professionals towards TLA, lack of commitment among TLA officials towards university libraries, most universities are not TLA members, inadequate awareness about TLA by library professionals, inadequate support from the government, TLA mandate not understood by members, Library professionals are not keen to take up leadership roles in TLA because the term of office is considered short at only three years.

Furthermore, the respondents were asked how the challenges outlined above could be alleviated. They suggested that TLA should find alternative sources of funding beyond membership fee; individual members should be persuaded to pay annual fee on time; sensitise members on the role of TLA; redefine role of TLA so that it can appeal to members; promote TLA code of ethics; term of office for TLA leadership should be extended from 3-5 years; and LIS education and training institutions should incorporate information ethics in their curricula.

5.3 Attitude and perception of library professionals towards information ethics

The study sought to understand the attitude and perception of library professionals towards information ethics. PAPA model was used to illuminate Mason's (1986, p. 5) information ethics values of privacy, access, property, and accuracy. The respondents were drawn from U1, U2, U3, and U4 respectively. The results are provided in Table 5.28.

Table 5. 28: Attitude and perception of library professionals towards information ethics (n=45)

Statement	Always	Sometimes	Never	Neutral	Don't know
Libraries shall enforce restriction on information when human right or privacy of another person are violated	19(42.2%)	22(48.9%)	2(4.4%)	1(2.2%)	1(2.2%)
Librarians shall not disclose for any purpose any format or administrative records which has been delivered to them in confidence	23(51.1%)	14(31.1%)	3(6.7%)	2(4.4%)	3(6.7%)
We uphold and protect library user's rights to privacy and confidentiality with respect to information sought or received, acquired or transmitted.	33(73.3%)	11(24.4%)	1(2.2%)	0(0%)	0(0%)
No library material should be excluded from the libraries because of the race, nationality, or political, social, moral or religious view of their author	32(71.1%)	7(15.6%)	5(11.1%)	1(2.2%)	0(0%)
The libraries should consider each individual information query to be of equal merits regardless of age, gender, ethnicity, status	37(82.2%)	5(11.1%)	3(6.7%)	0(0%)	0(0%)
We provide access to information to everyone regardless of their skills, geographical location and access to internet.	30(66.7%)	12(26.7%)	1(2.2%)	2(4.4%)	0(0%)
Libraries should not endorse the use of filtering software in libraries to restrict or block access to materials in the internet	7(15.6%)	26(57.8%)	5(11.1%)	4(8.9%)	3(6.7 %)

Table 5:28: attitude and perception of library professionals towards information ethics (cont...)

Library should respect the right of authors	40(88.9%)	2(4.4%)	1(2.2%)	1(2.2%)	1(2.2%)
Library should not infringe copyright for the benefit of their users	26(57.8%)	14(31.1%)	4(8.9%)	1(2.2%)	0(0%)
We abide by our contractual obligations regarding copyrighted materials	19(42.2%)	20(44.4%)	1(2.2%)	1(2.2%)	4(8.9 %)
Library shall seek to provide users with complete, accurate answers to their information queries regardless of the complexity of the queries.	33(73.3%)	11(24.4%)	1(2.2%)	0(0%)	0(0%)
We provide the highest level of services using the most appropriate resources.	31(68.9%)	13(28.9%)	1(2.2%)	0(0%)	0(0%)
We keep well-informed of development in librarianship in those branches of professional practice in which qualification and experience entitle us to engage	27(60.0%)	13(28.9%)	0(0%)	0(0%)	5(11.1 %)
Libraries should provide conducive environment for library users	41(91.1%)	2(4.4%)	0(0%)	0(0%)	2(4.4%)
Libraries should address ergonomic aspects such as increase its quality and efficiency for library users	38(84.4%)	7(15.6%)	0(0%)	0(0%)	0(0%)
Libraries should be held responsible for any form of harm caused by using library facilities	22(48.9%)	21(46.7%)	1(2.2%)	0(0%)	1(2.2%)

The results in Table 5.28 show that (19; 42.2%) of respondents agreed that restrictions should always be enforced when human rights or privacy of another person are violated, while (22; 48.9%) said that restrictions should sometimes be enforced. More than half of the respondents (23; 51.1%) felt that always, librarians should not disclose administrative records which have been delivered to them in confidence while (14; 31.1%) felt that this disclosure should be done sometimes. Most of the respondents (33; 73.3%) felt that they upheld and

protected the library user's rights to privacy and confidentiality with respect to information sought or received, acquired or transmitted. A good number of the respondents (32; 71.1%) felt that no library material should be excluded from the libraries because of the race, nationality, or political, social, moral or religious view of the authors, while about (7; 15.6%) felt that this should be done sometimes. Almost all of the respondents (41; 91.1%) felt that libraries should provide an environment that is conducive for library users. On the whole, the results showed that library professionals were inclined toward enforcing ethical values in providing library and information services.

5.4 Perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services

The study sought to explore the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services. PAPA model and WSIS Action Line 10 were used to underpin this aspect of the study. The respondents were drawn from U1, U2, U3, and U4 respectively. The results are provided in Table 5.29 to 5.38.

5.5.1 The postgraduate students perspective on whether Library professionals practiced information ethics in providing information services

The postgraduate students were also asked to indicate whether library professionals practiced information ethics values in providing information services. The results are presented in Table 5.29.

Table 5.29: The postgraduate students' perspective on whether Library professionals practiced information ethics in providing information services (n=260)

Aspects of information ethics	Strongly Agree	Agree	Neutral	Disagree	Strong Disagree
Privacy	71(27.3%)	145(55.8%)	42(16.1%)	2(0.8%)	0(0%)
Access	73(28.1%)	141(54.2%)	41(15.8%)	5(1.9%)	0(0%)
Accuracy	57(21.9%)	128(49.2%)	68(26.2%)	7(2.7%)	0(0%)
Trust	55(21.1 %)	139(53.4 %)	59(22.6%)	7(2.7%)	1(0.4%)
Intellectual property	75(28.8%)	129(49.6%)	49(18.8 %)	6(2.3%)	1(0.4%)
Dignity	51(19.6%)	138(53.1%)	64(24.6%)	6(2.3%)	1(0.4%)
Quality of services	61(23.5%)	134(51.5%)	58(22.3%)	7(2.7%)	0(0%)

The results reveal that more than 70% of the respondents agreed that the library professionals practiced ethics values in providing information services. However, 16.1% were neutral on the issue of privacy and (68; 26.2%) were neutral on the issue of accuracy as they were not sure whether the library professionals practiced these values. There were (7; 2.7%) respondents who were of the view that the library professionals complied with quality criteria in providing information services.

5.5.2 The faculty perspective on whether Library professionals practiced information ethics in providing information services

The faculty were also asked to indicate whether library professionals practiced information ethics values in providing information services. The results are presented in Table 5.30.

Table 5.30: The faculty perspective on whether Library professionals practiced information ethics in providing information services (n=186)

Aspects of information ethics	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Privacy	52(28.0%)	95(51.1%)	36(19.3%)	2(1.1%)	1(0.5%)
Access	54(29.0%)	103(55.4%)	26(13.9 %)	2(1.1%)	1 (0.5%)
Accuracy	35(18.8%)	100(53.8%)	48(25.8%)	2(1.1%)	1(0.5%)
Trust	34(18.3%)	99(53.2%)	49(26.3%)	3(1.6%)	1(0.5%)
Intellectual property	37(19.9%)	96(51.6%)	48(25.8%)	2(1.1%)	3(1.6%)
Dignity	34(18.3%)	99(53.2%)	50(26.9%)	1(0.5%)	2(1.1%)
Quality of services	30(16.1%)	110(59.1%)	36(19.4%)	5(2.7%)	5(2.7%)

The results in Table 5.30 show that more than 70% of the faculty members agreed or strongly agreed that library professionals provided information services ethically. In particular, (147; 79.1%) respondents agreed or strongly agreed that privacy was practiced by the library professionals, while only (3; 1.6%) disagreed. Another (36; 19.3%) of respondents were neutral. There were (10; 5.4%) respondents who were of the view that quality information service was lacking.

5.5.2.1 Availability and adequacy of information resources and services

The respondents who comprised of postgraduate students were asked to provide an assessment of the availability and adequacy of information resources in the university libraries surveyed. The responses are shown in table 5.31.

Table 5.31: Postgraduate perspective on the availability and adequacy of information resources and services (n=260)

Library resources and services	Available and very adequate	Available and adequate	Available but not adequate	Not available
Books	43(16.5%)	127(48.8%)	86(33.1%)	4(1.5%)
Journals	38(14.6%)	123(47.3%)	85(32.7%)	14(5.4%)
Reference sources such as encyclopedia, dictionary, year book, atlas, gazettes, etc.	57(21.9%)	112(43.1%)	83(31.9%)	8(3.1%)
Selective Dissemination of Information (SDI)	18(6.9%)	103(39.6%)	107(41.2%)	32(12.3%)
Interlibrary loan/cooperation	21(8.1%)	73(28.1%)	74(28.5%)	92(35.3%)
Current awareness services (CAS)	32(12.3%)	109(41.9%)	93(35.8 %)	26(10%)
Indexing and abstracting services	25(9.6%)	102(39.2%)	106(40.8 %)	27(10.4%)
Answering users' queries	39(15.0%)	110(42.3%)	96(36.9%)	15(5.8%)
User education i.e. Teaching users how best to exploit library resources	47(18.1%)	111(42.7%)	81(31.1 %)	21(8.1%)
Library display and publicity	46(17.7%)	113(43.5%)	82(31.5%)	19(7.3%)
Internet facilities	54(20.8%)	102(39.2%)	93(35.8%)	11(4.2%)
Loan services	27(10.4 %)	74(28.5%)	59(22.7%)	100(38.4%)
Photocopying services	38(14.6%)	67(25.8%)	77(29.6%)	78(30%)
Reference services	44(16.9%)	113(43.5%)	80(30.8 %)	23(8.8%)
Online Public Access Catalogue	64(24.6%)	88(33.8%)	86(33.1%)	22(8.5%)

The results in Table 5.31 reveal that 170 out of 260 representing 65.3% of the respondents agreed that books were either available and adequate or available and very adequate, (86; 33.1%) agreed books were available but they were not adequate while (4; 1.5%) said that books were not available at all. Some services that were lacking according to the respondents were Selective Dissemination of Information (SDI), interlibrary loan/cooperation, current awareness services (CAS, indexing and abstracting services, loan services and photocopying services). About (107; 41.2%) of the respondents said that though SDI service was available,

it was not adequate, while (32; 12.3%) said that the SDI service was not available at all. For interlibrary loan/cooperation, (74; 28.5%) agreed that it was available but not adequate, while (92; 35.3%) said it was not available at all. A huge percentage of the respondents reported that loan services (59; 22.7%) and photocopying services (78; 30%) were not available.

5.5.2.1.1 Principal component analysis on availability and adequacy of information resources and services

Principal component “analysis is a procedure for identifying a smaller number of uncorrelated variables, from a large set of data. The goal of principal component analysis is to explain the maximum amount of variance with the fewest number of principal components”. Each principal component is then correlated with the variables of interest. A high value of the correlation between the variable and the principal component (correlation= $r > 0.5$ or $r < -0.5$) suggests that the Principal component measures that variable. Principal component analysis enables one to determine which variables vary together or have the same effect on the factor being measured. In this subsection principal component analysis was used to measure availability and adequacy of information and services. Table 5:32 shows the results.

Table 5.32: Principal component analysis table on availability and adequacy of information resources and services: Postgraduate students’ perspectives

Library resources and services	Component
Journals	0.775
Current Awareness Services (CAS)	0.748
Reference services	0.731
Reference sources such as encyclopedia, dictionary, year book, atlas, gazettes, etc.	0.716
Internet facilities	0.713
User education i.e. Teaching users how best to exploit library resources	0.702
Library display and publicity	0.701
Books	0.693
Selective Dissemination of Information (SDI)	0.690
Answering users' queries	0.684
Interlibrary loan/cooperation	0.655
Loan services	0.654
Indexing and abstracting services	0.644
Online Public Access	0.644
Photocopy services	0.614

From the results in table 5.32 of principal component analysis gleaned from the response of the postgraduate students on the availability and adequacy of information resources and services; journals, current awareness services, reference services, reference sources such as encyclopedia, dictionary, year book, atlas, gazettes, etc.; internet facilities, user education and library display and publicity were the most available.

5.5.2.2 Faculty perspective on the availability and adequacy of information resources and services

The results presented in Table 5.33 capture perspective of faculty on the availability and adequacy of information resources and services.

Table 5.33: Faculty perspective on the availability and adequacy of information resources and services (n=186)

Library resources and services	Available and very adequate	Available and adequate	Available but not adequate	Not available
Books	30(16.1%)	52(28.0%)	99(53.2%)	5(2.7%)
Journals	25(13.4%)	51(27.4%)	97(52.2%)	13(7.0%)
Reference sources such as encyclopedia, dictionary, year book, atlas, gazettes, etc.	15(8.1%)	67(36.0%)	94(50.5%)	10(5.4%)
Selective Dissemination of Information (SDI)	4(2.2%)	58(31.2%)	85(45.6%)	39(21.0%)
Interlibrary loan/cooperation	6(3.2%)	45(24.2%)	50(26.9%)	85(45.7%)
Current awareness services (CAS)	12(6.5%)	67(36.0%)	79(42.4%)	28(15.1%)
Indexing and abstracting services	21(11.3%)	65(34.9%)	74(39.8%)	26(14.0%)
Answering users' queries	27(14.5%)	74(39.8%)	76(40.9%)	9(4.8%)
User education i.e. Teaching users how best to exploit library resources	23(12.4%)	84(45.2%)	72(38.6%)	7(3.8%)
Library display and publicity	13(7.0%)	82(44.1%)	75(40.3%)	16(8.6%)
Internet facilities	16(8.6%)	74(39.8%)	89(47.8%)	7(3.8%)
Loan services	23(12.4%)	63(33.8%)	64(34.4%)	36(19.4%)
Photocopying services	12(6.5%)	61(32.8%)	60(32.3%)	53(28.4%)
Reference services	11(5.9%)	78(41.9%)	82(44.1%)	15(8.1%)
Online Public Access Catalogue	26(14.0%)	67(36.0%)	76(40.9 %)	17(9.1%)

The results show that answering users' queries (101; 54.3%), User education i.e. teaching users how best to exploit library resources (107; 57.6%), library display and publicity (95; 51.1%) and online public access catalogue (93; 50%) were the service or resources that had more than 50% of the faculty members agreeing that they were available and very adequate. The rest of the library resources were either available but not adequate or not available at all. In particular, books, journals, Selective Dissemination of Information (SDI) and interlibrary loan/cooperation were the least available services or resources.

The results presented in Table 5.34 illustrate Principal Component analysis on the availability and adequacy of information resources and services from the responses extracted from the faculty.

Table 5. 34: Principal Component analysis on the availability and adequacy of information resources and services from faculty perspective

Library resources and services	Component
Reference services	0.767
Journals	0.762
Current awareness services (CAS)	0.753
Books	0.741
Interlibrary loan/cooperation	0.722
Online Public Access Catalogue	0.712
Reference sources such as encyclopedia, dictionary, atlas, gazettes etc.	0.710
Selective Dissemination of Information (SDI)	0.704
Library display and publicity	0.697
User education i.e. Teaching users how best to exploit library resources	0.694
Internet facilities	0.673
Answering users' queries	0.670
Loan services	0.542
Photocopy services	0.490
Indexing and abstracting services	0.447

From the results above the first principal component is the one that is strongly correlated with the variables: reference services, current awareness services, interlibrary loan/cooperation services, and selective dissemination of information (SDI) services.

5.5.2.3 Satisfaction with library environment

This section presents the findings of the satisfaction of postgraduate students and faculty with the library environment. Matingwina (2015) asserts that library needs to provide health services and environments that are conducive to protect users from physical and emotional harm. Table 5.35 shows the responses of postgraduate students from the four universities surveyed regarding their satisfaction with the library environment.

Table 5.35: Postgraduates' satisfaction with library environment (n=260)

Library environment	Very satisfied	Satisfied	Average	Dissatisfied	Very Dissatisfied
Library building	62(23.8%)	120(46.2%)	65(25%)	7(2.7%)	6(2.3%)
Reading area	66(25.4%)	93(35.8%)	86(33.1%)	11(4.2%)	4(1.5%)
Lighting system	65(25%)	112(43.1%)	72(27.7%)	10(3.8%)	1(0.4%)
Reading tables and chairs	52(20.0%)	115(44.2%)	78(30%)	12(4.6%)	3(1.2%)
Ventilation in the library	57(21.9%)	105(40.4%)	85(32.7%)	9(3.5%)	4(1.5%)
Individual study carrels	38(14.6%)	93(35.8%)	89(34.2%)	20(7.7%)	20(7.7%)
Silence in the library	84(32.3%)	109(41.9%)	57(21.9%)	9(3.5%)	1(0.4%)
Toilet facilities	36(13.8%)	64(24.6%)	89(34.2%)	48(18.5%)	23(8.8%)
Level of cleanness	46(17.7%)	101(38.8%)	84(32.3%)	23(8.8%)	6(2.3%)
Security of personal property	61(23.5%)	83(31.9%)	79(30.4%)	30(11.5%)	7(2.7%)

The results in Table 5.35 show that most of the responses ranged from very satisfied to average. Toilet facilities offered the least level of satisfaction with (71; 27.3%) reporting that they were either dissatisfied or very dissatisfied with the toilet facilities. Library building, lighting system and silence in the library had the highest numbers of respondents reporting that they were either very satisfied or satisfied with them, (182; 70%), (117; 68.1%) and (193; 74.2%) respectively.

Table 5.36: Principal component analysis on the postgraduates' level of satisfaction with the library environment

Library environment	Component
Reading area	0.859
Reading tables and chairs	0.857
Lighting system	0.822
Individual study carrels	0.821
Ventilation in the library	0.816
Library building	0.782
Level of cleanness	0.756
Toilet facilities	0.706
Silence in the library	0.698
Security of personal property	0.626

The results in table 5.36 above only consider the first principal component as it is the one strongly correlated with the variables. Based on the correlation of over 0.8, the first component is primarily a measure of reading area, tables and chairs, lighting system, individual study carrels and ventilation in the library. All the variables are however strongly correlated with the first component meaning that all these variables vary together. This means that the satisfaction with the library environment is derived from each aspect of library environment and not just specific ones. The question of satisfaction with the library environment was also asked to the faculty. Table 5.37 shows the results.

Table 5.37: Satisfaction of faculty with library environment (n=186)

Library environment	Very satisfied	Satisfied	Average	Dissatisfied	Very Dissatisfied
Library building	43(23.1%)	66(35.5%)	63(33.9%)	10(5.4%)	4(2.2%)
Reading area	37(19.9%)	60(32.3%)	68(36.5%)	15(8.1%)	6(3.2%)
Lighting system	39(20.9%)	79(42.5%)	51(27.4%)	15(8.1%)	2(1.1%)
Reading tables and chairs	23(12.4%)	75(40.3%)	64(34.4%)	20(10.8%)	4(2.2%)

Table 5: Satisfaction of faculty with library environment (cont...)

Ventilation in the library	34(18.3%)	83(44.6%)	49(26.3%)	16(8.6%)	4(2.2%)
Individual study carrels	15(8.1%)	55(29.6%)	76(40.9%)	25(13.4%)	15(8.1%)
Silence in the library	42(22.6%)	81(43.5%)	50(26.9%)	11(5.9%)	2(1.1%)
Toilet facilities	19(10.2%)	43(23.1%)	59(31.7%)	50(26.9%)	15(8.1%)
Level of cleanness	26(13.9%)	56(30.1%)	79(42.5%)	20(10.8%)	5(2.7%)
Security of personal property	22(11.8%)	72(38.7%)	64(34.4%)	19(10.2%)	9(4.8%)

The results in Table 5.37 show the response of the faculty members on their satisfaction with the library environment. There were (109; 58.6%) faculty members who were satisfied or very satisfied with the library building, (63; 33.9%) who said that the library building was average, while (14; 7.6%) of the faculty members were either dissatisfied or very dissatisfied with the library building. In general, the level of satisfaction of the faculty with the library environment was average with the number of those who were satisfied and those who were not or said that the library environment was average being almost equal. Toilet facilities were the least satisfying of the library environment aspects surveyed. There were (65; 35%) faculty members who were either dissatisfied or very dissatisfied with the toilet environment.

Principal component analysis of the satisfaction with the library environment was undertaken and the results are presented in Table 5.38.

Table 5.38: Principal component analysis of the satisfaction of faculty with the library environment

Library environment	Component
Library building	0.881
Reading tables and chairs	0.880
Ventilation in the library	0.795
Individual study carrels	0.708
Level of cleanness	0.539
Toilet facilities	0.538
Silence in the library	0.453
Security of personal property	0.478

The results presented in Table 5.29 reveal that the respondents were most satisfied with the library building, reading tables and chairs, ventilation and individual study carrels. Security of personal property silences in the library and toilet facilities were among the aspects of the library environment that the faculty members were least satisfied with.

5.5 Factors influencing ethical conduct of library professionals in providing information services

The study sought to investigate factors influencing ethical conduct of library professionals in providing information services. The results are presented in Table 5.39.

Table 5.39: Factors influencing ethical conduct of library professionals in providing information services (n=45)

Factors	Multiple Responses	
	Frequency	Percentage
Training/awareness on information ethics	13	28.9
Availability of information	8	17.8
Personal characteristics and attitude	5	11.1
ICT knowledge and skills	4	8.9
Motivation	4	8.9
Conducive environment	3	6.7
Education level	3	6.7
Changing IT environment	3	6.7
Inadequate knowledge of information ethics	3	6.7
Good management	3	6.7
Age	2	4.4
Guidelines and policies on information ethics	2	4.4
Qualified staff	2	4.4
Globalization	1	2.2
Shortage of staff	1	2.2
Experience	1	2.2
Code of conduct	1	2.2

The results in Table 5.39 show that the factors that influence ethical conduct of library professionals in the provision of library services were many and varied. For example, (13; 28.9%) of respondents mentioned training and awareness about information ethics; (8; 17.8%) stated availability of information; (5; 11.1%) noted personal characteristics and attitude; (4; 8.9%) indicated motivation; (4; 8.9%) said ICT knowledge and skills; 3 (6.7%) stated changing IT environment; (3; 6.7%) education level; (3; 6.7%) inadequate knowledge on information ethics; and (2; 4.4%) mentioned lack of guidelines and policies on information ethics. Other factors were age, qualified staff and working experience.

The same question on factors influencing ethical conduct of library professionals was posed to heads/directors of university libraries and Tanzania Library Association officials through interview. They outlined the following factors as influencing ethical conduct: availability of resources, lack of awareness about information ethics, technological changes, individual characteristics, qualification of library staff; level of education, size of library, quality of the available resources, remuneration, motivation, IL skills of users, organisation policies, leadership to teach people about information ethics, education and training, kind of service offered and client served, good governance, and organisation culture, among others.

The results are consistent with those outlined by Halawi and McCathy (2013) who found that ethical behavior of library professionals was influenced by individual factors such as age, gender, education level, working experience, religion, locus of control, ethical attitude, professional value and egoism. Other factors identified by Halawi and McCarthy were of a deterrent nature that included policies and codes, dissemination of information about penalties and IT guidelines. In addition other factors were related to external variables such as professional environment, economic condition, competition and characteristics of the job.

5.6 Integration of information ethics in the library professional practice in university libraries in Tanzania

The research question on this theme sought to assess how information ethics is integrated in library professional practice in university libraries. The question was asked to library professionals and heads/directors of university libraries. The World Summit on Information society (WSIS) Action Line 10 and PAPA model informed the research question. WSIS (2005) noted that all actors in information society should promote the common good, protect privacy and personal data and take appropriate actions and preventive measures as determined by law, against abusive uses of ICTs for illegal and other acts such as racism,

racial discrimination, xenophobia and child pornography, and trafficking on the exploitation of human beings. Therefore, library professionals as information providers have the obligation to integrate information ethics in their professional practice.

5.7.1 Support for staff to provide information services to users in an ethical manner

Library professionals were asked to state the support they were provided with to ensure they provided information services ethically. The results revealed that (18; 40%) stated training, seminars, and short courses, (9; 20%) said they were provided with internet and computers, (7; 15.6%) were provided with guidelines, rules and regulations, (3; 6.7%) said no support was provided, (1; 2.2%) said seminars provided by COTUL, (1; 2.2%) said provision of code of ethics, (1; 2.2%) said through policy and (1; 2.2%) said financial support.

Similarly 4 heads/directors of the university libraries were asked to state the support that was provided by libraries to ensure responsible use of information by users. They all were unanimous that libraries provided training and workshops. One of the respondents noted that, staff training is provided 2-5 times per year. In addition, the library through teams organised seminars depending on specific needs of the users. The training would cover e-resources and other databases available and how they are accessed.

Table 5.39: Support provided to staff to ensure they provide information services to users in an ethical and responsible manner (n=45)

Responses	Frequency	Percentage (%)
Training, seminars, and short courses	18	40
Library facilities such as internet and computers	9	20
Guidelines, rules and regulations	7	15.6
Not responded	4	8.9
No support was provided	3	6.7
Seminars provided by COTUL	1	2.2
Provision of code of ethics	1	2.2
Formulation of policy	1	2.2
Financial support	1	2.2
Total	45	100

5.7.2 Sanctions for staff who do not comply with information ethical values

The respondents were asked to state the sanctions they meted to staff who do not comply with information ethical values. This question was posed to heads/directors of university libraries

and to the library professionals. This was a multiple response question. The results are presented in table 5.41.

Table 5. 40: Sanctions meted to staff who do not comply with ethical requirements

Responses	Multiple Responses	
	Frequency	Percentage
No specific sanction stipulated	21	46.7
Not responded	20	44.4
Warning	17	37.8
Job dismissal	5	11.1
Demotion	2	4.4

Respondents from among library professionals (17; 37.8%) said warning, (5; 11.1%) said job dismissal, (21; 46.7%) said no specific sanction was meted out, (2; 4.4%) said demotion and (20; 44.4%) did not respond. When the same question was asked through interviews to heads/directors of university libraries, they noted that warning is usually issued to staff and if the problem persists they are dismissed from work. In addition, they explained that because they do not have library standards in information ethics, they relied on university rules. One of the respondents commented that “my opinion is training of the librarians would be more effective than taking punitive action. The respondents from TLA officials’ showed no action had been taken by TLA as there were no cases of ethical violations by professional librarians that were reported to them. They pointed out that most ethical violations seem to be addressed within the organisation using staff rules and regulations. Respondents noted that TLA is not yet a regulatory board, it is just an association and it has no authority of disciplining professional librarians.

5.7.3 Mechanisms for users to voice concerns for poor library and information services

The respondents who were heads/directors of the university libraries were asked to state mechanisms available for users to voice concerns regarding poor provision of library and information services. The results revealed library website, face book or reference desk, through meetings and other administrative structures. However, these mechanisms did not seem known to most students as one of the students complained that, “university library should provide opportunity for students to give their opinion or views” on services provided

5.7.4 Policy for entrenching information ethical practice in University libraries

Respondents who were heads/directors of the university libraries as well as library professionals were asked to state the policy they used to entrench ethical practice in the provision of library and information services. The findings from library professionals are provided in Table 5.42 below.

Table 5.41: Policy for entrenching information ethical practice (n=45)

Responses	Frequency	Percentage
Not sure	30	66.7
No policy	12	26.7
Collection development policy	2	4.4
ICT policy	1	2.2
TOTAL	45	100

Majority of library professionals (30; 66.7) were not sure if any policy was available, (12; 26.7%) said there was no policy which is used to entrench information ethical practice, (2; 4.4%) were aware of existence of collection development policy, and (1; 2.2%) were aware of existence of ICT policy. When same question was posed through interview to heads/directors of university libraries they responded that they have library rules and regulations that guide day to day operations of the library. One of the respondents said the policy is still in a draft form. They concurred with library professionals that collection development policy and ICT policy existed to help entrench ethical practice in the provision of library and information services.

5.7.5 Challenges of integrating IE in the provision of library and information services

The respondents who were heads/directors of the university libraries were asked to state challenges that were faced in integrating information ethics (IE) in the provision of library and information services in their libraries. They gave the following responses; financial constraints, lack of code of ethics, most of library staff are unprofessional, lack of awareness about information ethics by users and librarians, inadequate facilities, limited experts or library staff, Amunga (2013) also underlines lack of expertise to design information ethics

curriculum, inadequate staff, inadequate facilities and lack of clear policy on information ethics as affecting the integration of information ethics in the curriculum. The library professionals similarly provided the challenges presented in table 5.43.

Table 5.42 : Challenges of integrating information ethics in library services

Responses	Multiple Responses	
	Frequency	Percentage
Inadequate working facilities eg. Computer, photocopier	12	26.7
Illiteracy of users on ethical use of information	11	24.4
Lack of awareness	8	17.8
Contradiction between copyright and freedom of information	2	4.4
Poor internet connectivity	2	4.4
Technology obsolescence	2	4.4
Lack of well qualified professionals	2	4.4
Lack of electronic gadgets such as smartphone, iPhone, iPod etc.	2	4.4
Inadequate staff	2	4.4
Budgetary constraints	2	4.4
Fraud by library professionals	1	2.2
Poor support from the university	1	2.2
Work overload	1	2.2

The results shown in Table 5.43 above revealed that (12; 26.7%) of respondents reported inadequate working facilities such as computers, photocopiers, (11; 24.4%) reported illiteracy of users, and (8; 17.8%) mentioned lack of awareness. Other challenges outlined were budgetary constraints, inadequate staff, and non-availability of electronic gadgets such as smartphone, iPhone and iPod, lack of qualified personnel, fraud by library professionals, poor internet connectivity, and technology obsolescence. When the respondents were asked how these challenges could be alleviated they proposed: training, increasing the budget, TLA working closely with libraries, TLA educating users on library services and information ethics.

5.7.6 Importance of integrating information ethics into LIS curriculum

Respondents were asked to state the importance of integrating information ethics into LIS curriculum. This question was asked to the heads/directors of the university libraries and TLA officials. The heads/directors of university libraries said it would help librarians to entrench responsible conduct of library professionals in order to provide services ethically. In addition, librarians would be able to educate users about ethical use of information. On the other hand TLA officials said it would help to create information ethics awareness and compliance among library professionals.

The results from faculty and postgraduate students revealed the need to incorporate “ethics in information studies curriculum to enable students appreciate responsible conduct in information management. Moreover, they felt that “Ethics should be taught in library schools for librarians to gain understanding of ethics in general and information ethics in particular.” Similarly, library professionals were asked to state the importance of integrating information ethics in provision of library and information services in university libraries. The results are provided in Table 5.44.

Table 5.43: Importance of integrating information ethics in library services (n=45)

Responses	Multiple Responses	
	Frequency	Percentage
Help to provide quality services	11	24.4
Not responded	10	22.2
Create consistency in provision of library and information services	6	13.3
Bring awareness to library professionals	3	6.2
Promote solidarity among library staff	3	6.7
Users will be provided with accurate and timely services	2	4.4
Library and information services will be provided professionally	2	4.4
Help to avoid plagiarism	1	2.2
Library and information professionals will be respected	1	2.2

The results in Table 5.44 show that (6; 13.3%) of respondents mentioned creating consistency in provision of library and information services, (11; 24.4%) said it would help to provide

quality services, (3; 6.2%) of respondents felt that this would bring awareness to library professionals, (2; 4.4%) felt that users will be provided with accurate and timely information services, (2; 4.4%) were of the view that library and information services would be provided professionally, and (1; 2.2%) was of the view that library professions would be respected.

5.7.7 Strategies to improve information ethical practice in university libraries

The study sought from the postgraduate students the strategies that should be applied to improve ethical practice in university libraries in Tanzania. The results are reflected in Table 5.45.

Table 5.44: Strategies to improve information ethical practice (n=260)

Responses	Multiple Responses	
	Frequency	Percentage
Regular training/seminars on information ethics to librarians	63	23.6
Improve library facilities	53	58.8
More awareness to users on information ethics	40	15.4
University library should provide current and relevant materials to users	38	14.6
Increase accessibility of online resources	34	13.1
Renovate and expand library space to accommodate all users	21	8.1
Employ competent and qualified staff	20	7.7
Install CCTV camera for security	14	5.4
Increase number of library staff	12	4.6
Inform users on the available information	11	4.2
Improve quality services to meet users demand	10	3.8
Publicize library services	10	3.8
Library staff need good management and close supervision	6	2.3
Librarians need exposure outside Tanzania	4	1.5

The results in Table 5.45 show that (63; 23.6%) of respondents mentioned regular training/seminars on information ethics for librarians, (53; 58.8%) stated improved library facilities, (38; 14.6%) said University library should provide current and relevant materials to

users, (36; 13.8%) wanted more awareness to users on information ethics, (34; 13.1%) said increase accessibility of online resources, (21; 8.1%) wanted renovation and expansion of library space to accommodate all users, (20; 7.7%) said employment of competent and qualified staff was needed, (14; 5.4%) wanted CCTV camera installed for security, (11; 4.2%) wanted users informed on the available information, (10; 3.8%) wanted improved quality services to meet users demand, (12; 4.6%) mentioned increasing number of library staff, (6; 2.3%) said library staff needed good management and close supervision, (10; 3.8%) said library services should be publicised and (4; 1.5%) said librarians need exposure outside Tanzania. Faculty were also asked to suggest the strategies needed to improve ethical practice in university libraries in Tanzania. Table 5.46 provides results.

Table 5.45: Strategies to improve ethical practice from views of faculty (n=186)

Responses	Multiple Responses	
	Frequency	Percentage
On service training on information ethics to library professionals	55	29.7
Education on information ethics to users and public	45	24.2
Recruit competent and professional librarians	30	16.4
Government, universities and stakeholders should invest to improve library staff and infrastructure	10	5.4
Provision of current information to academic departments	9	4.8
Encourage interlibrary loan to allow information access	8	4.3
Provision of facilities to assist people with disabilities	8	4.3
Publicize library services	7	3.8
Cooperation between librarians and users	6	3.2
Establish policies, regulations and guidelines on ethical issues	6	3.2
Install CCTV to enhance security and safety	6	3.2
Improve library education to users	4	2.2
Frequent communication with users	4	2.2
Motivation to ethical staff	2	1.1

The results in table 5.46 above show the responses of faculty to improve ethical practice in the provision of library and information services in university libraries in Tanzania.

Responses were as follows: (55; 29.7%) noted provision of training on information ethics to library professionals; 45 (24.2%) noted provision of education on information ethics to users and public; (30; 16.4%) want recruitment of competent and professional librarians; (10; 5.4%) said government, universities and stakeholders should invest in improving library staff and infrastructure; (9; 4.8%) want provision of current information to academic departments; (7; 3.8%) said there is need to publicise library services, establish policies, regulations and guidelines on ethical issues; (6; 3.2%) asked for cooperation between librarians and users; (6; 3.2%) want installation of CCTV to enhance security and safety; (4; 2.2%) said it was important to improve library education to users; (8; 4.3%) advocated for encouraging interlibrary loan to allow information access; (4; 2.2%) wanted frequent communication with users; and (2; 1.1%) motivation to ethical staff to encourage ethical practice.

On the other hand Postgraduate students suggested that libraries should provide services for 24 hours; the need for the university to integrate information ethics into curriculum; customer care should be improved; the staff should use polite language when serving users; most librarians are taking business as usual and need to change; signage should be put up to remind users about library rules; and access to people with disabilities must be provided. Similarly, faculty suggestions included: improved library facilities, improved quality services, and librarians should keep abreast with the changes in ICT. The heads/directors of libraries suggested that TLA should examine their code of ethics in the light of Information Technology development; they advocated for library and information policy; TLA officials must learn about information ethics; information ethics must be integrated in the LIS curriculum. The TLA officials on their part should be actively involved in promoting information ethics; Library staff who provide day to day library services should be professionals and not non-professionals; and there must be a code of ethics for both professionals and non-professionals.

5.7 Summary

This chapter presented the results of data analysis from survey questionnaire and semi-structured interviews to investigate the role of information ethics in the provision of library and information services in university libraries in Tanzania. The main purpose of the chapter was to provide an analysis of the data collected which were converted into meaningful

information. Data were analysed, summarised and presented using descriptive and graphical tools.

The key findings revealed that library professionals were aware about the information ethical values such as information privacy, intellectual property, information access, dignity of users, quality of library, and information services. However, the level of awareness about information ethical values varied from one university library to another. The study also revealed that there were diverse responses from library professionals, heads/directors of university libraries and Tanzania Library Association officials about the level of awareness of library professionals. These conflicting results suggest that there is no common understanding about the meaning of information ethics. This is because TLA as governing board for library professionals did not work closely with university library professionals. Findings further revealed that there were some efforts made by library professionals to promote ethical values, but it was not adequate. The findings suggest that absence of code of ethics for library professionals, policies, and guidelines make promoting information ethics difficult.

The findings have further shown that attitude and perception of library professionals towards information ethics was positive; however, this was affected by low level of awareness due to lack of policies, guidelines and regulations on information ethics. The results suggest that library professionals were inclined toward enforcing ethical value in providing library and information services.

The study found factors influencing information ethics practice by library professionals in university libraries to include lack of awareness on information ethics, technological change, limited information, personal characteristics, lack of policies, guidelines and regulations on information ethics and more.

The importance of integrating information ethics in library professional practice was acknowledged by all respondents. However, the findings revealed many challenges of integrating information ethics in the provision of library and information services in university libraries in Tanzania which include; financial constraints, lack of code of ethics, most of library staff are unprofessional, lack of awareness about information ethics by users and librarians, inadequate facilities, limited experts or library staff, non-availability of electronic gadgets such as smartphone, iPhone and iPod, fraud by library professionals, poor

internet connectivity, technology obsolescence, and more. Nevertheless, solutions to these challenges were suggested which could assuage their effects.

Perception of faculty and postgraduate students towards librarians with respect to ethical provision of library and information services were generally positive. This was discussed together with research question number two as stated earlier as both questions covered common ground about library professionals' attitude and perception towards information ethics.

Generally, this chapter presented the analysis of the responses obtained from five sets of the study population which included; library professionals, heads/directors of university libraries, Tanzania Library Association Officials, faculty and postgraduate students from four university libraries. From the results, there appear some discrepancies regarding the level of awareness about information ethics values in the university libraries surveyed.

This study also examined the applicability of PAPA model of Mason (1986) and WSIS Action Line 10 (the ethical dimension of information society) in the provision of library and information services. The study found that, despite the wider use of PAPA model in studying ethical issues such as privacy, accuracy, property and access, the model does not provide explanation when library professionals face ethical dilemma. Basically the finding of the study have shown that despite of usefulness of PAPA model the model may not capture all possible ethical issues. Also the model does not deal direct with the issue of equity in access. This is especially that access in developing countries including Tanzania is challenged by various factors such as geographic obstacles, economic constraints, poor infrastructure, computer literacy, users with disabilities and more. The next chapter discusses and interprets the findings presented in chapter five.

CHAPTER SIX

DISCUSSIONS OF FINDINGS

6.1 Introduction

The purpose of this study was to investigate the role of information ethics in the provision of library and information services in university libraries in Tanzania. The study sought to address the following research questions:

1. What is the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice?
2. What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics?
3. What are the factors that influence information ethics practice by library professionals in University libraries in Tanzania?
4. How is information ethics integrated in the library professional practice in university libraries in Tanzania?
5. What is the perception of faculty and postgraduate students towards ethical conduct of library staff in providing library and information services?

This chapter therefore, discusses and interprets the findings presented in the previous chapter. Discussion and interpretation of findings is aimed at “drawing inferences from the collected facts after an analytical and/or experimental study” (Kothari, 2004:344). It is through discussion and interpretation of findings “that the researcher can expose relations and processes that underlie the outcome of the study”. The discussion and the interpretations of the findings are supported by the theories that underpinned the study as well as the extant literature.

The respondents were library professionals, heads/directors of university libraries, faculty, postgraduate students (in universities code named U1, U2, U3 and U4) and officials of Tanzania Library Association respectively. U1 and U2 are public universities while U3 and U4 are private universities. This study was underpinned by PAPA model and WSIS Action Line 10 framework. The other theories such as Consequence-based theory, Duty-based theory, Right based theory and Virtue-based theory were also reviewed in order to enrich and provide a broader understanding of the general field of ethics. The study achieved an acceptable response rate from all universities surveyed of 82.2%. This high response was

achieved through regular follow-ups of the respondents to ensure they completed the survey questionnaire and also made time for the interview.

This chapter is structured around the research questions and broader issues related to the research problem. Research question 2 (what is the attitude and perception of library professionals in university libraries in Tanzania towards information ethics?) and research question 5 (what is the perception of faculty and postgraduate students towards ethical conduct of library staff in providing library and information services?) are merged and discussed together since they are closely addressing issues of attitude and perception that are often confused to mean the same thing.

The chapter is therefore organised into the following thematic areas: biographical data of respondents, level of awareness of library professionals about information ethics, attitude and perception of library professionals towards information ethics, factors influencing ethical conduct of library professionals in providing information services and integration of information ethics in the library professional practice.

6.2 Biographical data of respondents

Respondents were required to provide their biographical information with regard to age, gender and education level. In addition the research sought to know how age, gender and education level influenced ethical conduct of the library professionals.

The results revealed that the highest number of library professionals were drawn from U1 and U2, while, U4 had the least number of respondents. The study revealed that among library professionals males were slightly more at (24; 54.4%) than females who were numbered (20; 45.6%). The study by Igbeka and Okoroma (2013) on awareness and practice of professional ethics amongst librarians in Nigeria revealed that both male and female librarians were equally distributed. Another study conducted by Salman, Ocholla, Mostert and Mungwisi (2013) about “ethical issues in the access and use of information services in public libraries in Nigeria” had female respondents at 25% and 75% male. Similarly, in a related study conducted by Matingwina (2015) about ethical issues affecting LIS in Zimbabwe, 56% of library professionals were female, while 44% were male. Generally results from across the world tend to suggest that among library professionals in the universities, females are usually the majority. For example the study by Hoffmam (2005) about professional ethics and librarianship found that majority of surveyed respondents were 90% female and 10% male.

Likewise a study by Adetimirin (2017) revealed that there were more female respondents than males.

With regard to age in the current study, majority of the library professionals (34; 77.3%) were aged between 31 and 60 years. This result suggests that the majority of library professionals were adults. A study by Hoffman (2005) on professional ethics and librarianship found that “more than half of the respondents were over 50 years of age (58%) and nearly one-half (46%) were between the ages of 50-59 respectively”.

U1 and U2 had majority of library professionals with bachelor's degree (or above) in information science. On the other hand, U4 had only bachelors and master's degree holders while at U3 most of the library professionals had certificate and diploma qualifications. The results suggest that U3 and U4 had the least number of library professionals. According to Tanzania Library Association constitution (2005) article IV 1 (b) a professional librarian shall have a minimum of bachelor's degree in/with library and information studies and more than three years library work experience. Among library professionals who participated in the study, majority 24.4% were library assistants. In the Matingwina study referred to above, majority of library staff at 61% were assistant librarians, followed by 23% who were librarians with minimum qualification of bachelor's degree in library and information science. In addition, 7% were library assistants with a certificate and diploma in library and information science. The findings from this study revealed that most of the day to day activities in the university libraries surveyed were carried out by library assistants. Some library professionals with bachelor degree and above were designated academic or administrative staff. Academic staff are involved in teaching, consultation and research while administrative staff are involved in administrative work and day to day operations in the library. There seemed to be no consistent way of designating library staff either as academic or administrative staff in the libraries surveyed. The Tanzania Library Association as the professional body with the responsibility of providing appropriate nomenclatures for each category library staff, has not been helpful in addressing this variation in university libraries in Tanzania. Consequently titles such as librarians, senior librarians, assistant librarians, library assistant, and senior library assistants are applied inconsistently to staff with same professional and academic qualifications.

Regarding years of working experience, U1 and U2 had library professionals with more than 13 years while, U3 and U4 had no staff with more than 13 years of work experience. U1 and

U2 are the oldest universities in Tanzania having been established in 1961 and 1980s respectively compared to U3 and U4 which were established in 2002 (SARUA, 2015). Perhaps because as pioneer universities, U1 and U2 have more explicit staff retention policy with most staff being on permanent and pensionable terms, while U3 and U4 are private universities where most staff are largely employed on fixed term contracts and temporary basis. Besides, most library professionals with masters and PhD qualifications tended to switch to lecturing positions either fully or in combination with library work.

Biographical information of faculty: For faculty, there was more male faculty (132; 71%) than their female (54; 29%) counterparts. The study revealed that gender imbalance continued to be one of the major challenges facing universities in Tanzania (DSM, 2014). Most faculty who participated in this study were drawn from U1 (88; 47.3%) followed by U2 (50; 26.0%), U3 (33; 17.7 %) and U4 had the least number with (15; 8.1%). Most of the faculty working in the universities surveyed were at lecturer level. DHE (2010) confirmed that majority of faculty (60; 70%) in both private and public universities in Tanzania are in the rank of lecturer and below. Furthermore, new and private universities such as U3 and U4 depend largely on temporary lecturers from the public universities.

The findings on qualification of faculty revealed that, all the respondents had at least a master's degree. There were more PhD holders (107; 57.5%) among the members of the faculty than there were master's holders (71; 38.2%). U1 and U2 had the greatest number of faculty with PhD perhaps because they are the biggest in terms of staff (88; 47.3%) from U1 and (50; 26%) from U2: and student's numbers (142; 54.6%) from U1 and (69; 26.5%) from U2 and oldest universities in the country. These universities place great emphasis on recruiting academic staff who possess a PhD degree or if they do not already have a doctorate degree they must study towards doctoral degree in order to attain tenure status and also for promotion purposes (HEDP, 2010).

Biographical information of heads/directors of university libraries: The results revealed that (2; 50%) of heads/directors of university libraries were male and (2; 50%) were female, (1; 25%) was in the age category of 41-50, while (4; 75%) were in the age range of 51-60 years. Of those surveyed, (1; 25%) was a designated head of library department, while (3; 75%) were library directors. The result suggests as for library professionals lack of uniformity in the way the heads of libraries are nomenclated. Moreover TLA can assist to establish consistent nomenclatures for heads of university libraries in Tanzania. The results

revealed that the academic qualification of these heads/directors of university libraries ranged from masters to PhD. There were (3; 75%) respondents who were PhD holders and (1; 25%) master's holder. On the question of how long they had served in their current position as heads/directors of libraries, majority (3; 75%) had served for 3-4 years while (1; 25%) had served for 5-6 years respectively in their current positions.

6.3 Awareness about ethical values in providing information services

The importance of awareness about information ethical values is important for both library professionals and users of the information services they provide.

6.3.1 Library professionals' awareness about ethical values in providing information services

Mbofung and Popoola (2014) therefore emphasise "that library and information professionals, as providers of information, require awareness of growing complexity in ethical issues and values manifested through relationship between professionals and society". Similarly, WSIS 2003/2005 in paragraph 55-56 part C10 of the plan of action declared that all stakeholders including library professionals should increase their awareness about the ethical dimension of information society because every day they encounter ethical issues such as copyright and other intellectual property: security, confidentiality, and access.

The library professionals must therefore strive to become familiar with WSIS Action Line 10 and the PAPA model values in the provision of library and information services. In addition, the library professionals must be familiar and apply appropriately the ethos and values of consequence-based, duty-based, right-based, and virtue-based theories in the provision of library and information services to avoid ethical dilemmas.

The results in all the universities surveyed suggested that library professionals were aware of information ethics values and adhered to all the four values in the PAPA model namely privacy, accuracy, property and access. About 90% of the respondents were highly aware of information ethics values such as accuracy, intellectual property and information access and they practiced them in providing information services. Adetimirin, (2017) noted that the use of ICT is guided by rules and their awareness and knowledge of these rules by users will justify their adherence to such rules. Besides, library and information professionals acquire, organise, disseminate information to users and should be able to apply practice information

ethics in their work. Adetimirin (2017) , in a study on the level of awareness and knowledge of cyber ethics by library and information science doctoral students in two Nigerian universities, found that LIS doctoral students were highly aware and adhered to all major ethical values in the PAPA. A study carried out in Bangladesh by Liton (n.d) on information ethics and library professionals revealed that, “information professionals needed to maintain the highest level of information ethics so that they can serve their clientele in the most fair and just manner”. Furthermore, “library and information professionals have an important role to play in the promotion of information ethics and the creation of a just and equitable society”. For them to play this role effectively, “they need to gain a deeper and more holistic understanding of ethics in general and information ethics in particular” (Hoq, 2012; Buchannan, 1999). The importance of awareness of information ethics by library professionals is underscored by Farmer (2015) who asserts that librarians must be aware of information ethics issues and the implications in providing information services.

Tahat, Elian, Sawalha and Al-Shaikh (2014) in their study about “the ethical attitudes of information technology professionals, a comparative study of USA and Middle East”, revealed that IT professionals had “a general awareness of ethical issues concerning IT, though no significant differences were found between the two samples. However, the study discovered that the same IT professionals were neither ethical nor unethical with respect to behaviours associated with the ongoing consultation on information system development lifecycles and the level of security issues”. The findings of Tahat *et al.* (2014) seem consistent with the view that what might be considered ethical in one country might not be so in another. For example, in developed countries such as US, more effort is directed towards enforcing copyright laws for copyright owners; while in developing countries in the Middle-East more focus is placed on ensuring that the public benefits from creative work in order to encourage technology transfer and keep creative work affordable and easily accessible.

Despite the fact that library professionals were found to be aware and adhered to ethical values such as property, accuracy, privacy and access in all the university libraries surveyed, there were no guidelines provided by Tanzania Library Association (TLA) which guided them on how to provide library and information services ethically. In addition, the researcher also observed that library professionals in each library practiced ethical values differently as confirmed by TLA officials that “they did not work closely with university library professionals to ensure they were aware of, and practiced ethical values” in the provision of

information services. The study by Sherratt, Rogerson and Fairweather (2005) on the challenges of raising ethical awareness, suggested the difficulty of raising awareness in addressing ethical issues associated with ICT.

The literature seems to reveal many studies on professional ethics awareness than information ethics awareness among library professionals. The study of Igbeka and Okoroma (2013) investigated “awareness and practice of professional ethics amongst librarians in Nigeria” and found that “awareness of ethical values was quite low and the degree of practicability of many ethical codes were questionable because there had not been any case of sanction in connection to the violation of ethical values”. Akakandelwa (2010) examined the status of teaching information ethics in Zambia and established the need to have a code of ethics for librarians in Zambia. Similarly Fallis (2007) in a seminal paper on “information ethics for 21st century library professionals” revealed that “in order to deal effectively with ethical dilemmas, library professionals must have a good working knowledge of information ethics”. In addition, “a code of professional ethics can help such knowledge, though this is not sufficient”.

Mbofung and Popoola (2014) in a study on “legal issues of information services delivery and library information science professionals in university libraries in Nigeria”, examined “awareness of some of the principles endorsed in professional codes that support legal and ethical workplace and whether the library and information science professionals (LIS) in federal universities in Nigeria are practicing them in service delivery”. The findings revealed that “a significant number of LIS professionals in federal universities in Nigeria provided services within the legally accepted principles and practices of service delivery”. Onoyeyan, Ajayi, Adesina and Bamidele (2014) also in a study on “assessment of ethical concerns among practicing librarians in Nigeria”, revealed that “majority of librarians did not have a copy of code of the Librarians’ Registration Council of Nigeria Code of Ethics”. Onoyeyan *et al.* noted that the work of library professionals was undermined because they did not have adequate skills to deal with ethical dilemmas. Igbeka and Okoroma (2013) called for strict sanctions for violation of information or professional ethics at work. They proposed an implementation committee to handle ethical issues at the work place and a robust monitoring of librarian behavior in addition to creating awareness through workshops, seminars, and conferences. IFLA (2012) is explicit that professional ethics code is important for library professionals as it embodies a value-rich approach to professional work. Such ethical code

according to Shachaf (2005) is a formal statement of professional values regarding ethical behaviors. “It focuses on principles and values that govern the behavior of a person or group with respect to what is right or wrong”. Luciano (1999) opined that “the usefulness of the professional ethics is effective when accompanied by good policies and clear sanctions as stimulus to ethical conduct of members”.

The literature reviewed also show that other studies have focused on investigating awareness about information ethics among students and teachers but not information ethics awareness among library professionals (Adetimirin, 2017; Beycioglu, 2009; and Özer *et al.*, 2011). Adetimirin (2017) in a study about “awareness and knowledge of cyber ethics by library and information science doctoral students in Nigerian universities” revealed that doctoral students were aware of cyber ethics, but their level of awareness on different aspects of cyber ethics varied. This result was in conflict with the findings of Beycioglu’s (2009) study on cyber-philosophical issues in education, unethical computer using behavior, the case of prospective teachers who reported that students in educational institutions in Turkey were involved in unethical use of computers; which meant that they were not aware of cyber ethics which is the regulation guiding the appropriate use of ICT. Özer, Uğurlu, and Beycioglu (2011) concluded that the teachers violated the ethics of using the computers because they were not aware of ethics guiding its use. They strongly recommended that the teachers should be taught about cyber ethics throughout their programme that is the ethics guiding the use of the Internet and other ICT to make them abide by such ethics.

6.3.2 Awareness of postgraduate students and faculty about ethical values

Liton (n.d) claimed that information professionals need to create awareness to users with regards to ethics and information services through programs such as literacy campaigns, reading competitions, study cycle training, orientation and related activities. For this to happen, library professionals must be aware about the ethos and values of information ethics. Farmer (2015) is of the view that user training on ethical values can increase the confidence level of library professionals and that of users.

The findings of the current study revealed that 52.4% of postgraduate students and 46.8% of faculty were positive that they were made aware of information services available and information ethics values by library professionals through: library education programs,

seminars and workshops, online communication, when visiting the library, orientation at the beginning of the year, at the reference desk (face to face or online conversation), brochures, posters and fliers, university library website, and noticeboard. “A number of authors have developed instruments that are designed to assist in raising awareness of ethical issues posed by the use of ICTs”. In this regard Yi (2016) asserts that “tools that academic libraries can use to promote ethical values to users include; digital media, such as library’s Website, e-mail lists, blogs and podcasts; print material such as posters, handouts and giveaways; events such as orientation tours and workshops; and other tools such as library publications, contests, brochures, direct mail, Web 2.0 applications and displays”. A good Website helps to bring information “in a unique way, because it is a direct link between the library and specific users (for example students and faculty)”.

The study by Otiike and Maina (2013) on “the use of social media in creating information ethics awareness for universities in Kenya”, affirm that “the use of social media in information ethics awareness is still a new area”. However, slow internet connection, ICT skills, non-internet enabled phones and resistance to the use of social media inhibit the use of social media in universities. Adetimirin (2017) opines that users need to be aware of information ethics as they source different information especially from the internet such as open access journals, online databases, videos and photographs. They must know about ethical use of these information resources to avoid violating them in terms of referencing by acknowledging the author and source from where they got the information sources. They must also know about plagiarism and copyright infringement. It is only when users are aware, possessing information ethics knowledge that guides these information resources, that they can use the information resources legally and ethically. The findings of the current study revealed the methods used to promote awareness to users which included personal visits, user training, using brochures, posters and displays. Farmer (2015) noted that “the use of new technologies such as Web 2.0 such as RSS (Really Simple Syndication) alert services, Blogs, Wikis and Facebooks” can be used to create awareness and also make the interaction with the library more interesting for users.

However, postgraduate students from U4 complained that library professionals did not create awareness to them about information ethics values. Instead, they obtained information ethics values through self-efforts. This was supported by 47.6% of postgraduate students and 53.2% of faculty who claimed that no information was given to them about information ethics values.

Furthermore the findings revealed that despite the efforts by library professionals to promote awareness about information ethics values, users were not being updated regularly and the methods used were not effective and known to users. Igwe and Ibegwam (2014) affirmed that information ethics education is necessary and should be taken seriously to facilitate its integration into professional practice of library professionals. The challenge as Mbofung and Popoola (2014), Ocholla (2009) and Britz (2013) point out is that information ethics is not yet understood by most of library professionals in many African countries.

6.3.3 Role of TLA in promoting ethical practice among library professionals

Yap and Alejo (n.d) assert that “library associations promote lifelong learning through the conduct of continuing professional development (CPD) programs. Membership in professional associations influences one’s professional identification and expands the individual’s occupational development”. Ossai-Ugbah (2013) outlined the role of professional library associations which include but is not limited to providing opportunity for library professionals to meet, share experiences, learn from each other, develop local library infrastructure, and defend principle of freedom of information. The findings from the current study revealed that TLA made attempts to inculcate ethical practice in library professionals through the annual general meetings. However, some respondents were of the view that TLA did not promote ethical practice among library professionals. Generally, the findings seemed to suggest that TLA provided minimal or no support to promote ethical practice among library professionals.

These findings concur with the study conducted by Kiluswa (2007) which found that, Tanzania Library Association members were not satisfied with the services offered by the association. The findings further revealed that, Tanzania Library Association does not have enough resources and ability to meet the ever-increasing needs of its members. This situation was caused by poor leadership and management, lack of motivation among leaders, inadequate resources, lack of guidelines and procedures, lack of commitment in the association (Kiluswa, 2007). Ossai-Ugbah (2013) on the role of professional library associations and institutions in facilitating access to information in Africa observed that, library professional associations do not communicate and defend the tenets of their profession as well as the needs of their communities. Ossai-Ugbah (2013) notes that, library professional associations are not skilled at communicating to both individuals and groups. In addition,

library professional associations in Africa do not learn to make responsible choices for the future and the issues that will face library professionals that may include access versus ownership of materials; dwindling funding for print-based materials; space and facilities use for computers; and ongoing technology training for staff”. Also “leaders do not lead by action, writing and researching, but by politics.

The results from this study also seem to suggest that any efforts to promote ethical practice among library professionals was undermined by the fact that TLA did not have a strategic plan to guide its activities, and some of the TLA officials were not aware of ethical values. This result suggests that Tanzania Library Association has not been able to operate fully as a professional body in Tanzania. This finding does not tally with Tanzania Library Association constitution (2005) one of whose objectives is “to represent and act as the professional body for persons working in or interested in library and information services”. Similarly, TLA constitution states that one of its functions is “to play an advisory role to the government and private organizations in matters affecting quality in establishing and managing library and information services”. Khan and Bhatt (2014) point out that due to the paradigm shift in librarianship occasioned by information technology, “library associations need to play effectively the role of promoting continuing professional education of librarians to keep them abreast with modern trends in their profession”. Professional bodies “should offer professional workshops, training programs, conferences, and seminars for librarians on a regular basis to their members”. Likewise Tanzania Library Association constitution (2005) asserts that the body should organise meetings, seminars, workshops, conferences, and run courses so as to impart new knowledge and skills”.

Moreover, TLA must improve its financial well-being and develop internal capacity to service its membership. They must put in place a code of professional conduct, strategic plan, policies and regulations. They need also develop strong partnerships with government, non-governmental organisations and private sector to ensure the necessary resources are available to do their work effectively. Khan and Bhatti (2014) in their study conducted in Pakistan on challenges for the Pakistan Library Association identified ineffective leadership, inadequate policies, lack of collaboration, low membership, inadequate finance, inadequate communication, and limited infrastructure among others. Ossai-Ugbah (2013) outlined the challenges of professional library association in Africa to include use of technology such as email, internet access, video conference and faxing. The high cost of implementing

technology, lack of partnership between library professionals and professional associations, and between library professionals and other professions were also highlighted. Muswazi (2002) observed that “financial and leadership constraints and lack of commitment are major problems faced by the Swaziland Library Association”. Muswazi recommended that “a strategic plan should be crafted to prioritise legislation and training programmes to increase institutional membership”. In addition Muswazi recommended that professional membership subscription rates should be raised as well as develop partnerships with allied professions. In addition alternative sources of funding beyond membership fees should be found.

6.4 Attitude and perception of library professionals towards information ethics

This section discusses both research questions 2 (what is the attitude and perception of library professionals in university libraries in Tanzania towards information ethics?) and research question 5 (what is the perception of faculty and postgraduate students towards ethical conduct of library staff in providing library and information services?) because both research questions have overlapping issues of attitude and perception. Section 6.4.1 discusses the findings from research question 5.

Eguavoen (2011) defined attitude “as the total of a man’s inclination and feelings, prejudices or bias, preconceived notions, ideas, fears and convictions about any specific topic”. Attitude and perception are used here to represent inclinations of library professionals and values towards information ethics in university libraries in Tanzania. The variable of attitude and perception is derived from the PAPA model (1986:5). PAPA model focuses four aspects namely: privacy, accuracy, property and access. These variables have been found to influence library professional’s ethical practice. Fernandez-Molina (n.d) states that, there is need to carry out studies that determine the attitude of information profession towards information ethics and how this impacts on the provision of information services. The current study investigated perception and attitude of library professionals in university libraries towards information ethics values.

The attitude and perception of library professionals is in part informed by privacy considerations. The privacy variable in the PAPA model can be defined as “the right of an individual to be left alone, free from surveillance or interference from other individuals or organisation including the state” (Onoyeyan, Ajay, Adesina, & Bamidele, 2014). Zwass (2012:82) is of the view that “privacy is the right of an individual to withhold information about him/herself without disclosure and to have any information collected about them with

their consent protected against unauthorised access”. Invasion of privacy is a potent threat in an information society. Findings from this study revealed that most of library professionals understood and practiced privacy in providing information services. Asked whether libraries should enforce restriction on information when human rights or privacy of another person are violated, (19; 42.2%) agreed that restrictions should always be enforced on information, while (22; 48.9%) said that restrictions should sometimes be enforced on information when human rights or privacy of another person are violated. More than half of the respondents (23; 51.1%) felt that librarians should not disclose for any purpose any format or administrative records which have been delivered to them in confidence, while (14; 31.1%) felt that this disclosure should be done sometimes. Most of the respondents (33; 73.3%) believed they upheld and protected the library user’s rights to privacy and confidentiality with respect to information sought or received, acquired or transmitted.

A related study conducted by Matingwina (2015) on privacy, found that the majority of respondents 78% believed that librarians should not divulge for any purpose any format or any administrative records which have been entrusted to them in confidence. 61% thought that they upheld and protected library users’ right to privacy and confidentiality with respect to information sought or received, acquired or transmitted; while 56% believed that libraries should enforce restriction on information when human rights or privacy of another person is violated. Onoyeyan, Ajay, Adesina, and Bamidele (2014) in their study on “assessment of ethical concerns among practicing librarians in Nigeria”, found that “abusing confidential information and using official position for personal advantage were perceived as highly unethical among librarians”. Ponelis (2013) used PAPA model to investigate information services provision and found that information ethics issues such as exposure, loss of control, invasion of private space, intrusion, information security and identity theft were of paramount importance. IFLA (2012) asserts that “library professionals have a responsibility to protect information and records of users”.

Zwass (2012) noted that “privacy is the most important issue in the 21st century and consequently information professionals should protect users’ privacy as much as possible”. This is because when the users’ “privacy is invaded, they are embarrassed, diminished, and they experience a loss of autonomy and control over their lives”. Zeng (2015:26) opines that “with the development of network information services, the privacy and security of personal information are faced with new threats during handling of user’s personal information, literature search, website access and more”. Therefore library professionals should be careful

in handling user information especially in networked and shared environments (Salman, Ocholla, Mostert & Mungwisi, 2013).

The variable of access in the PAPA model also influences the attitude and perception of library professionals towards information ethics or ethical values. Findings from this study revealed that a good number of the respondents (32; 71.1%) felt that no library material should be excluded from the libraries because of the race, nationality, or political, social, moral or religious leanings of the author. Meanwhile 15.6% felt that this should be done sometimes; (37; 82.2%) felt that the libraries should consider each individual information query to be of equal merits regardless of age, gender, ethnicity, and status; and (5; 11%) said this aspect should only be considered sometimes; (30; 66.7%) felt access should be provided to everyone regardless of their standing; (12; 26.7%) noted only sometimes should information be provided to everybody. Matingwina (2015:90) asserted that access to information is a basic human right and everybody without distinction should be accorded access to it. Libraries in 21st century are no longer mere storehouses of information but have an obligation to proactively provide access to their collections to all regardless of education, age, gender, location and economic status of the user. Ponelis (2013) pointed out challenges that hinder accessibility in provision of library and information services in university libraries to include lack of ICT tools, limited bandwidth, language barrier, inappropriate technologies especially for the disabled and unavailability of network. Ponelis further added that the language of institution and assistive technologies should support adequate accessibility for people with disability.

Mason (1986) “maintained that, in order to enhance universal access to information, literacy is the most important tool”. Ponelis in this regard insists that libraries should be committed to ensure that training on policies and guidelines on responsible use of information technology is provided to library professionals. Ponelis further asserts that libraries should consider education to their patrons based on the values of information ethics in order to reduce ethical issues through information or digital literacy courses. Zeng (2015) noted that “in the networked information environments, electronic books, electronic journals and more can be used by many people at the same time to enhance access”. Most of the universities surveyed had several challenges such as inadequate computers, poor connectivity, low bandwidth, space and unreliable electricity that limited access. One user noted:

“Access to electronic journals prescribed by university library is possible only within the university premises and sometimes due to low bandwidth and inadequate computers we cannot access the information”.

Another respondent complained that;

“The university has inadequate computers to meet the needs of all users, and most of these computers are not connected to the internet. Also most of the time some computers are out of order and not maintained in time”.

The study by Ugar (2007) identified challenges which included; “lack of awareness, inaccessibility, information explosion, environment, poor infrastructure, declining budget and rising costs, and staff attitude towards users and crime”. Familus and Ajay (2015) identified challenges that were limiting access to include epileptic power supply, space, poor ICT maintenance, poor funding, internet connectivity and computer literacy. Adetimirin (2017) states that access to university portal and electronic resources should be made available by Information and Communication Technology (ICT) support. The ICT resources needed should include the internet, computers, laptops, iPods, Tablets and smart phones. This can enable user’s access from different point spaces such as library, computer laboratory, classroom, department, home and offices.

The property perspective in the PAPA model according to Ponelis (2013) includes ownership of user created content, third party data collection and ownership of patrons’ usage data, copyright infringement and permanence. Onoyeyan *et al.* (2014) assert that “intellectual property is a broad concept that covers several types of legally recognised rights arising from some type of intellectual creativity; these rights are rights to intangible things to ideas, as expressed (copyrights) or as embodied in a practical implementation (patents)”. The property variable has influence on the attitude and perception of library professional ethical values, and in the way they deliver information services to the users. The results revealed that respondents were of the view that library professionals should respect the right of authors with (40; 88.9%) of library professionals agreeing; (26; 57.8%) said libraries should not infringe copyright for the benefit of their users; and (14; 31.1%) said sometimes libraries should not infringe on copyright and (19; 42.2%) said libraries should abide by their contractual obligations regarding copyright materials, (20; 44.4%) said sometimes they abide

by their contractual obligations. Majority of respondents who participated in the study agreed that library professionals should respect the right of authors.

Furthermore, the respondents noted that often copyright was infringed especially in developing countries because of many factors such as low level of awareness about intellectual property right, lack of resources and facilities. As one of the respondents noted:

“Lack of photocopier machines in the library may lead to violation of intellectual property, because by allowing users going out with library materials to photocopy you cannot limit them to reproduce the whole book if they want in violation of intellectual property rights.”

Another respondent complained that:

“Availability of electronic gadgets such as iPod, iPad, smartphone and more make it easy for users to copy information as they wish without being monitored.”

Parrish (2010) argues that information creators “should not post information that they feel they may want to retract at some future date”. Parrish further posits that “users of information should not post information that is the product of the mind of other individuals unless they are given consent by the individuals. In both cases once information is disseminated, it may be impossible to retract”. Onoyeyan, Ajay, Adesina, and Bamidele (2014) found that intellectual property rights issues are the highest of ethical issues confronting library professionals.

Fernández-Molina (2012) asserted that with the advent of new technologies, reproduction of information materials through photocopying, scanning or otherwise has become much easier. This ease of reproduction sometimes violates the intellectual property rights of authors and publishers. It also creates ‘a tension between the desire of information professionals to obtain information at the lowest cost possible and the interest of the owners of this information. Liton (n.d) also note that the growing threat to intellectual property right is facilitated by low level of awareness and limited resources in third world countries.

The accuracy variable in the PAPA model has influence on the attitude and perception of library professional towards ethical values and information ethics in particular. Ponelis (2013) in this regard is of the view that accuracy of information should always be verified by library professionals before it’s disseminated to the users. This is because in some instances

the lack of sufficient context can potentially lead to misinterpretation and unintended meaning. Mason (1986) maintained that “when developing information systems, it is the designer's responsibility to be "vigilant in the pursuit of accuracy of information" because people might be harmed by inaccurate data”. Findings in this study revealed that, library professionals were of the views that libraries should seek to provide users with complete, accurate answers to their information queries regardless of the complexity of the queries. Generally most of library professionals who participated in this study agreed that they followed principles of accuracy. Fallis (2004) points out that the mere fact that an information source contains some amount of inaccurate information is not necessarily a problem as long as people can distinguish accurate and inaccurate information so that they are not misled. In addition, “library professionals may not be specialised in a certain field, and therefore may not be able to differentiate accurate and inaccurate information”.

Besides the variables of ethics provided by the PAPA model, there are other ethical values that are important and which library professionals must espouse in providing information services to the users. For example, wellbeing from Matingwina (2015) perspective is an important ethical value to consider and includes a workplace that provides comfortable user-friendly and stress relieving environment to its users, making things comfortable for its utilisation. This aspect involves making library environment more comfortable; increasing its quality and efficiency. Familus and Ajay (2015) posit that the increase in enrolment of students in higher learning institutions in Nigeria increases the challenge of space, which affects the access to information. In this regard one of the respondents in the universities surveyed noted, “we do not go to the library because there is no enough space”. Ugar (2007) asserts that environment is the major challenge to information access and use. The environment includes other factors such as polluted air in urban areas, wide range of temperature, pests and so on. In addition, noise from library staff or equipment is another environmental factor which hinders access to information.

Matingwina (2015) adds that LIS profession like any other professions needs to provide healthy conducive environments and services that protect clients from physical and emotional harm. The findings from this study showed that almost all of the respondents (41; 91.1%) felt that libraries should provide environments that are conducive for library users; (38; 84.4%) agreed libraries should address ergonomic aspects; and (22; 48.9%) agreed libraries should be held responsible for any form of harm caused by using library facilities. Bamigboye (2007) asserts that, users expect their libraries to be compartmentalised in a manner that eliminates

noise and dust, and that which separates serious readers from leisure readers. There are a number of ergonomic aspects that may potentially harm library users. These aspects include computer screens, library equipment, furniture, space, and proper ventilation. Therefore LIS professionals have an obligation to provide services that promote general wellbeing of their users and as such, should provide environments that are conducive for their users (Matingwina, 2015).

Generally, the respondents were of the view that, library professionals guided users to observe library rules and regulations, by telling them the do's and don'ts while in the library. For example, issues of information accuracy and other values of ethics were taught in information literacy module by training users how to evaluate and select information. The findings revealed that, perception and attitude of library professionals towards information ethics was generally positive.

The PAPA model underscores the importance of privacy, access, property and accuracy to library professionals in their quest to provide an effective and efficient information service to the library users. Zeng (2015) insists that with the advent of the internet and the arrival of big data, calls for library and information professionals to develop the corresponding information ethics standards and guidelines have intensified. The results have also revealed a dearth of studies on attitude and perception of library professionals towards information ethics. Most studies done on attitude and perception seem to focus more on students. For instance Mohamud, Zeki and Saidin (2016) explored on "attitude of students towards information access issues in international university" of Malaysia. Khalil and Seleim (2012) studied "students' attitudes towards information ethics issues of privacy, access, property, and accuracy in Egypt".

Most studies that have investigated attitude and perception of library professionals towards information ethics or ethical values have focused largely around four PAPA variables or less. For instance a study carried out by Salman, Ocholla, Mostert and Mungwisi (2013) on "ethical issues in access and use of information services in public libraries in Nigeria", focused only on issues of privacy and accuracy of information. Matingwina (2015) analysed ethical dilemma confronting information professionals in the 21st Century in Zimbabwe and reported results that were confined to the four constructs of PAPA model which include privacy, accuracy, property and access. Smith (2002) advises that "today the global information environment presents complex issues of access, intellectual property, privacy,

security, and human rights that demand critical reflection and dialogue across boundaries of geography, language, and cultural background”. Ponelis (2013) insists that, libraries should be committed to ensure training on policies and guidelines on responsible use of information technology.

6.4.1 Faculty and postgraduate students view of LIS professionals’ perception and attitudes towards information ethics

Klobas and Clyde (2000:6) define the term attitude to refer to “a person’s disposition (either favorable or unfavorable) towards an object or event, while perception refers to the way a person sees or interprets characteristics or an event”. The goal of library and information services is “to aid the individual in achieving success in their education by providing the resources and enabling environments that will foster intellectual, emotional, and social development” (Bamigboye, 2007:152). The World Summit on Information Society (WSIS) Action Line 10 provides a broader framework for the implementation of ethical dimension of information society. Mutula (2013) points out that WSIS Action Line 10 is useful in understanding the responsible use of ICTs. The attitude and perception of LIS professionals as information providers should be positive in order to provide useful and relevant information to users in an ethical manner in line with WSIS aspirations. Bester and Bothma (2013) assert that principles of WSIS envisage a people-centered, “inclusive and developmental oriented society in accordance with the purposes and principles of charter of the United Nations Declaration of Human Rights”. The library professionals must create an enabling environment where everybody without distinction can create, access, utilise and share information and knowledge, to achieve their full potential. In addition, LIS professionals in compliance with WSIS principles should be committed to promoting the equitable access and use of information for all.

The findings showed that faculty and postgraduate students view about library professionals’ perceptions and attitude towards information ethics were positive. The faculty respondents who participated in the study strongly agreed and agreed that library professionals observed privacy of users 79.1%, while for postgraduate students 93.1% agreed that library professionals observed privacy of the users. On access faculty (84.4%) and postgraduate students 88.3% concurred that library professionals provided access to information resources. In addition, 72.6% of faculty and 71.1% of postgraduate students were in agreement that library professionals ensured accuracy of information. In addition, 71.5% of faculty agreed

that library professionals ensured trust, intellectual property, and dignity compared to 74.7% of postgraduate students who agreed on the same issue. Moreover, 78.4% of postgraduate students agreed that intellectual property was respected. The postgraduate students (70.9%) also agreed that dignity was observed and another 75% of postgraduate students also agreed quality of services provided was acceptable.

Peslak (2006) in an empirical study of Mason framework: the PAPA issues found that overall there were high levels of concern with all four ethical issues; however, privacy was viewed as most important followed by accessibility and accuracy which were viewed equally, and property which was viewed lowest but still important.

The findings of this study revealed that in the opinion of postgraduate students, the ethical values that were most practiced by the library professionals were privacy; access, intellectual property and quality of services. They also noted that the least ethical values practiced were trust, accuracy and dignity. While in the opinion of the faculty, the most practiced ethical values were access, followed by privacy and quality of services, and the least practiced were accuracy, trust, intellectual property and dignity. The slight disparities between faculty and postgraduate students could be attributed to individual characteristics such as level of education and experience. Mohamud (2015) noted that differences in the attitude may be caused by different levels of education.

Most studies that have investigated attitude of librarians and librarianship students in providing information services in relation to ethical issues are limited. Ball and Oppenheim (2005) revealed that both students and librarians hold similar ethical attitudes. Students were expected “to be more liberal, more willing to uphold idealistic principles, and given their status, with attitudes balanced in favour of other students’ and patrons’ rights in terms of fees, and accessibility, and copyright law”. Similarly, Rosenqvist *et al.* (1996) cited in Ball and Oppenheim (2005), “investigated how Nordic librarians would react when faced with practical ethical problems”. The findings suggested that “Nordic librarians shared common understanding of what constituted ethical values”. They held “a position of neutrality, coupled with caring objectivity”.

A related study conducted in Nigeria by Nkechi (2015) on “users perception of university library resources and services” revealed that, “university libraries did not have a general standard that guided them to assess if actually users of the libraries were satisfied with the

library or not”. “A good library and information service is rated based on how satisfactorily it meets the users’ needs” (Bamigboye, 2007). “Library users seek an information service that is timely, accurate, reliable, and authentic, meets their needs, easy to understand and use, and delivered by courteous and knowledgeable staff”.

Namaganda and Sekikome (2013) conducted a study in Makerere University aimed at gaining “an insight into the attitudes of users towards the library and information services to determine whether the users’ needs were being met”. The study found that, the library user’s needs are being met.

6.4.1.1 Availability and adequacy of information resources and services

The study sought to know from postgraduate students and faculty the availability and adequacy of information resources and services in the university libraries surveyed. The respondents identified the following resources and services as inadequate or least available: internet facilities, user education, library display and publicity, loan services, photocopy services and indexing, and abstracting services. Aru (2014) asserts that in university libraries, the lecturers require well stocked and up-to-date library for teaching and research, while students need library resources for class assignments, research, projects, writing term papers and more. Therefore it is the duty of library professionals to thoroughly acquaint users with the information resources available and train them how to use these resources. This eventually is the ultimate goal of any university library, to transmit knowledge to library users (Madukoma, 2015). A study conducted in Babcock University in Nigeria by Madukoma (2015) on users’ perception of electronic reference services concluded that electronic reference services were not adequately utilised in Babcock university library due to lack of awareness of the availability of these services in the library.

A related study conducted by Tamrakar and Garg (2016) in India on “user perception towards e-resources and services of IIT-Guwahat library” found challenges of utilizing library and information services to include; lack awareness of users about e-resources, slow internet speed, frequent power cut, inadequate search skills and lack of training about e-resources. All these challenges were obstacles to information access.

The PAPA model underscores the importance of access. In this regard, Mason (1986) states that “access is the main avenue to information through literacy, in order to access information library users must therefore possess intellectual skills such as writing, reasoning and

calculating to deal with information”. “Library users must have access to information technologies which store, convey and process information that include libraries, radios, televisions, telephones, personal computers or terminals linked via networks to mainframes”. With regard to the universities surveyed, the researcher noted that education provided to users by library professionals was not sufficient; resources and facilities were inadequate; and information access was hindered by various factors such as lack of internet facilities and inadequate education.

6.5 Factors influencing ethical conduct of library professionals in providing information services

WSIS Action Line 10 calls for all actors in information society including library professionals “to promote the common good, protect privacy and personal data and take appropriate actions and preventive measures, as determined by law, against abusive uses of ICTs for illegal and other acts such as racism, racial discrimination, xenophobia and child pornography, and trafficking and exploitation of human beings” (WSIS, 2005). Library professionals must therefore in accordance with WSIS Action Line 10 respect the legitimate rights of the individual such as privacy, confidentiality, accuracy, ownership access/accessibility and online security.

Halawi and McCathy (2013) state that ethical behavior is influenced by individual factors such as age, gender, education level, working experience, religion, locus of control, ethical attitude, professional value and egoism. Other factors are of a deterrent nature and include policies and codes, and IT guidelines. Other factors are related to external variables such as professional environment, economic condition, competition and characteristics of the job. These factors are discussed as follows:

Age: Age is a factor that influences information ethics practice and takes two forms; the first takes into account age, societal or policy factors. The second form takes into account the capacity of an individual to make decisions regarding their own care. Chiu (2003) “predicts the relationship between age and strictness of ethical judgment to be positive, thus, people tend to be ethical as they become older”. However, some empirical studies such as Ede, Panigrahi, Stuart, and Calcich (2000) have shown that “younger people render stricter ethical judgment than older people”. Mason (2016) suggests that “older individuals, who are morally

developed, have higher ethical standards than young individuals”. “Other studies report no significant relationship between age and ethical judgments” (Barnett & Valentine, 2004).

Gender: Galligan (1992) believes that “while men are likely to consider rules, rights and fairness, women are more likely to be concerned with relationships, compassion and caring”. Many studies such as that of Mason (2016) have concluded that “females are more likely than men to be ethically sensitive”. Similarly, Khalil and Seleim (2012) concluded that “female students are more concerned about ethical issues than their male counterparts”. Moores and Chang (2006) are also of the view that gender does not have relationship with unethical behavior. Findings from this study also revealed that there was no difference between male and female on how they were influenced by ethical issues but instead this was dependent on the awareness of ethical issues and the rules and regulations of the particular library.

Education level: Findings showed that education qualification may influence understanding of ethical issues outlined in PAPA model that include privacy, accuracy, property and access. Restanti (n.d) noted that, “education becomes an important element for a person's career in the world of work”. “The level of education is important to determine a person's level of understanding of information ethics issues”. Consequently low education levels of library professionals may constrain information ethics practice. Chiu (2003) noted that “people who better understand complex and nuanced issues will display more sophisticated level of moral reasoning”. “Higher education levels tend to encourage people to fully consider alternative perspectives of extenuating circumstances rather than judging complex ethical issues in narrow absolute sense”. As one of the postgraduate students commented:

“Some librarians have limited knowledge about information ethics and therefore use inappropriate language when interacting with library users.”

Another respondent was of the view that,

“The level of services provided are not satisfactory to users.”

Furthermore, most of the procedures of accessing materials were not clear and discouraged most of the students from going to the library. Information professionals must maintain the “highest level of ethical standards so that they serve the clientele in the most fair and just manner” (Liton, n.d). “Library and information professionals have an important role to play in the promotion of information ethics and creation of a just and equitable society; and must

therefore have a deeper and more holistic understanding of ethics in general and information ethics in particular to play that role” (Hoq, 2012; Buchannan, 1999).

Working experience: The findings gathered at U1 and U2 revealed that library professionals had more working experience than at U3 and U4 respectively. Chiu (2003) asserts that “work experience lessens the strictness of ethical judgments”. On the contrary, Weeks *et al.* (1999) found that “work experience leads to stricter ethical judgments. According to Hunt and Vitell (2007), socialisation may actually raise the ethical standards”.

Findings showed that other factors influencing information ethics practice by library professionals in Tanzania included: limited resources, technological changes, ICT knowledge and skills; individual characteristics, size and space of the library; education level, quality of available resources, education and training to staff; motivation/remuneration, organisational policies, information ethics policy, knowledge of information ethics, staffing, experience, work environment, and more. All these issues influenced how library professionals approached issues of respect to intellectual property, privacy, accuracy and access to information. Ndwandwe (2009), Halawi and McCathy (2013), and Hoq (2012) identified “areas which directly and indirectly influenced information ethics practice, which include; globalisation, individualism, privacy, conflict between ‘right to information’ and ‘ethical use of information’, access to information, and intellectual property right”.

Ndwandwe (2009:14) noted that, “individual factors that affect one’s behavior include stages of moral development, personal values, family influences, peer influences and life experiences”. “Such factors would undoubtedly affect ones respect for intellectual property rights and any other applicable piece of legislation and ethical framework relating to information”. Ndwandwe (2009:13) points out that,

“An organisation can affect or influence a person’s behaviour. One of the key sources of organisational influence is the degree to which the organisation’s leader endorses ethical conduct. The desirable conduct can be communicated through a code of ethics, policy statements, speeches, publications, etc. This is usually the case in a library or any information environment where information professionals would be guided by a professional code of ethics. These codes make claims about which actions information professionals should take and under what circumstances. In addition, personal values and personality, individual’s values and morals can influence ethical standards and behaviour”.

Hoq (2012) states that “while the primary concern of the library and information professionals is to provide information ethically, they have to uphold their professional ethics as well which relates to the application of principles to the actions and decision taken by library and information professionals”. Hoq identified the following areas which directly and indirectly influence the decisions library professionals make in providing information services ethically or otherwise to users:

Globalisation: “One of the most important features of modern society is globalisation which is characterised by extensive use of information and communication technologies an increasingly open society, greater sharing of information and also greater conflict among individuals and societies in asserting their dominance over others” (Hoq, 2012:42). In the current study respondents mentioned globalisation as one of the factors that influences information ethical practice.

Individualism: “People tend to be more individualistic by frequently placing more importance upon individual good rather than social good. As a result, there has been an increase demand for individualised and customised services from library to information centres” (Hoq, 2012:42)

Privacy and information security: “In an increasingly globalised networked world, the security of public and private data held in databases, web sites and other information repositories are always at risk. People become more worried about their privacy and libraries, as preservers and providers of sensitive information have to deal with this concern” (Hoq, 2012:42). “A basic principle in library and information profession is that, information must be supplied to users regardless of information professional’s stance toward its content or finality of its use” (Fernández-Molina, 2012). In university libraries “this is true in general terms, however, specific instances may present library professionals with ethical dilemmas”. For example, “do you or not provide a depressed student who requests a book on suicide. Should the library professional deny him or her access to this information, or even break the profession duty of privacy by contacting dean of students, parents and friends regarding the situation?” Virtue-based theory can be applicable in such a situation; the theory states that, “the right thing is to be what a virtuous person would in the same circumstances”.

Diversification of information works: “Unlike their predecessors, today’s library and information professionals are burdened with greater and bigger responsibilities. In addition to being information providers, they now frequently have to assume the roles of educators, consultants, technology experts, translators and synthesisers, among others. They must achieve new skills and capabilities successfully performing these duties” (Hoq, 2012:42). “Library and information professionals have an important role to play in the promotion of information ethics and creation of a just and equitable society. But they need to gain a deeper and more holistic understanding of ethics in general and information ethics in particular to play that role”.

Conflict between ‘right to information’ and ‘ethical use of information’: “Many countries around the world have laws ensuring that people receive and use information (Bangladesh Right Act to Information Act, 2009)”. “However, there is certain information which cannot be accessed by general public for security or other reasons. In many instances, library and informational professionals find themselves in tricky situations where they have to strike a balance between ‘restricted use of information’ and ‘right to information’” (Hoq, 2012:42-43). Ethical theories such as consequence-based theory must be applied for library professionals in order to make ethical decisions in such situations. Similarly, Mason (1986) opines that library and information professionals “should be able to decide what information to hold, what information to disseminate, and be confident that shared information would be kept safe”.

Access to information: “The issue of universal access to information may create a dilemma for many libraries”. As Fernández-Molina (2012) points out, “many public and professional declarations refer unequivocally to free and public access to information. For example, the British Library Association code of conduct states that any individual should be granted free and public access to information”. “But, there is the risk that too great an emphasis on providing a service free of charge may result in funding problems that could endanger the survival of the information center. Similarly, providing a service at zero cost often results in its devaluation, which also has as a consequence the undermining of the prestige and feasibility of the profession” (Hoq, 2012:43). In application of ethical theories, “according to consequence-based theory, what distinguishes right action from wrong action is that which has better consequences. In order to do the right thing, library and information professionals should perform actions that have good consequences”. “For the issue of access to

information, library professionals should make a distinction between that information which should be free of charge and that which should be paid for, by looking at its consequences". However, "this distinction is required by the feasibility of the organisation, the necessity of collecting additional funds, the avoidance of the frivolous of collections and the need to maintain the respect due to the library and its professionals" (Fernández-Molina, 2012). Also, "duty-based theory can be applied to address ethical dilemmas". According to this theory consequences "should not be the guiding principle of determining the right and wrong action, rather there are ethical duties that library professionals must obey regardless of the consequences". "For example information policies, most democratic countries have passed laws regulating the right of access to certain information; library and information professionals have a duty to obey, even if doing so would have very good or bad consequences". Mason (1986) insists on combating information literacy, access to education "will develop the intellectual skills to cope with information, and access to information itself". However, information access is influenced by other factors such as "building design, assistive technology, and relevant usable content of resources, suitable format of resources and the language of the resources spoken by staff". People with disabilities also should be put into consideration. Ugah (2007) identified "obstacles to information access and use in developing countries that include lack of awareness, inaccessibility, information explosion, bibliographic obstacles, environment, poor infrastructure, declining budgets and rising costs for users, staff attitudes towards users and crime". Therefore, all these may influence ethical conduct of library professionals in providing information services.

Intellectual property right: "With the advent of new technologies, reproduction of information materials through photocopying, scanning or otherwise has become much easier. This ease of reproduction sometimes hampers the intellectual property rights of authors and publishers. It may create 'a tension between the desire of information professionals to obtain information at the lowest cost possible and the interest of the owners of this information'" (Fernández-Molina, 2012). Liton (n.d) asserts that, the growing threat to intellectual property right is facilitated by low level of awareness and limited resources in third world countries.

From the discussion of Hoq above on the factors influencing ethical conduct of library professionals in providing information services, in all university libraries surveyed the researcher noted that library professionals can behave ethically or not depending on level of awareness, availability of resources, globalisation and more. Therefore, ethical theories such

as consequence-based theory, duty-based theory, right-based theory and virtue-based theories should be applied by library professionals in any case of a dilemma.

6.6 Integration of information ethics in library professional practice in universities

WSIS (2005) stated that “all actors in information society should promote the common good, protect privacy and personal data and take appropriate actions and preventive measures, as determined by law, against abusive uses of ICTs for illegal and other acts such as racism, racial discrimination, xenophobia and child pornography, trafficking and exploitation of human beings”. Library professionals as information providers are actors in the information society and have an obligation to integrate information ethics in their professional practice. Otike (2010) in a study conducted in Kenya noted that a deeper understanding is needed on how information ethics can be integrated in professional practice. Findings from this study revealed that, 65.4% of postgraduate students believed that information ethics was practiced by library professionals, and 67.2% of faculty believed the same.

The respondents pointed out that library professionals allowed access to information; adhered to ethical issues in provision of library and information services; ensured systematic utilisation of library materials; respected all users; provided quality services; ensured access and observed privacy. In addition, the respondents noted that the library professionals provided accurate, reliable and timely information, they ensured access to all and handled information professionally. There were a relatively large number of faculty (130; 31.7%) and postgraduate students (74; 28.5%) who did not know whether information ethics was practiced or not. They gave reasons such as they have not closely examined the situation because they are not regular users of the library and that they access information from their departments. The researcher observed that a relatively sizeable number of faculty (65; 34%) and postgraduate students (90; 34.6%) were not familiar with the subject of information ethics and could not confirm whether information ethics was integrated or not in library profession practice. As one of the respondents asserted, “This is my first time to hear about information ethics.”

Therefore the importance of information ethics integration in library practice cannot be underestimated. Mbofung and Popoola (2014:10) noted that “information service delivery of Library and Information Science professionals in federal universities in Nigeria is guided by

legal and ethical principles that govern their behavior with respect to what is right or wrong while ensuring fairness, equity and justice”. However, the study does not allude to specific information ethics values as they relate to responsible use of ICT in the information society. Similarly, the study carried out in Bangladesh by Liton (n.d) reveals that, “information professionals are expected to maintain the highest level of ethical standards so that they can serve their clientele in the most fair and just manner”. The Liton’s study does not make specific reference to information ethics but ethics in general. Ossai-Ugbah (2013) points out that “the librarian profession in Africa has been lacking the knowledge of the right steps to take in facilitating information for development” (especially with regard to access and its responsible use) in the emerging knowledge economy. Khalil and Seleim (2012) in their study in Egypt on issues of information privacy, information accuracy and information access expressed the need for universities “to consider integrating ethics education into the curricula”.

Capurro (2007) pointed out that “information ethics is a young academic field in Africa and is not yet well understood”. Similarly, Bester and Bothma (2013) noted that “information ethics in Africa is a new field of study” and needs clarity and description of the field to overcome the confusion currently experienced by library and information professionals. Ocholla (2008) and Ocholla (2010:19) added his voice to the conversation noting that:

“information ethics and information ethics education is essential because such education would support information professionals in their understanding; and development of ethical values and morals with regard to protection (for example privacy and confidentiality of the individual and information respectively); provide them with professional identity build upon an information value system (such as the services value of information professionals); allow them understand today’s information knowledge driven society and find jobs; recognise the requirements and complexities of access to information (for example equality and fair use), and sensitise them to the benefits of research in information ethics development”.

Most of the respondents felt that accuracy and integrity of information, trust, intellectual property, dignity of users, quality of library and information services and confidentiality were moderately integrated in library services. However, there were marked differences on the level of integration of respective ethical values especially accuracy, integrity, trust, confidentiality and quality of services in the libraries surveyed ($P < 0.05$). The TLA officials

seemed not to know the extent to which information ethics values were integrated in the professional practice in the universities. This result demonstrated the disjuncture between TLA and library professionals working in university libraries on matters of professional ethical code and information ethics. This was supported by the observation made by one of the TLA officials who said that “TLA was working closely with public library rather than university libraries.” In addition, the TLA 2004 annual meeting chairperson’s annual report noted that, in order to revive the professional body and make it more functional, the TLA officials needed to visit the institutions and library professionals amongst other things. Although TLA remained the only national professional association existing in Tanzania to assist all types of libraries and library professionals in their professional development, TLA had failed in this role.

This result contradicted the suggestion made by Kiluswa (2007) that TLA was doing well in filling gaps in the library and information service professional activities. Kawooya (2001) maintained that library and information professional associations have the role to play in the development of library professional staff. Shachaf (2005) claims that, “library associations in many countries have developed and published codes of ethics” but the operationalisation of codes remains problematic. Similarly, Hauptman (2002) claims that “generally, ethical values are discussed in professional conferences and in literature, but they are not often implemented”. The study echoes the results of Ossai-Ugbah’s (2013) view “on the role of professional library associations and institutions in facilitating access to information in Africa that, library professional associations do not communicate and defend the tenets of their profession as well as the needs of their communities”.

The results revealed that library professionals were supported by their universities to ensure integration of information ethics values in the professional practice through various training workshops and by providing them with library facilities such as computers, internet, financial support, and more. The results revealed that there were no specific sanctions to library professionals who did not integrate ethical values in their professional practice. As one of the respondent explained:

“Because libraries do not have library standards in this area, they have relied on university rules.”

They pointed out that most ethical violations were addressed within the organisation using staff rules and regulations. The study conducted by Kiluswa (2007) on market research of Tanzania Library Association revealed that TLA did not do well in developing professional standards. TLA's five rolling strategic plan for 2004-2008, observed that one of the important functions of any library association is to ensure standards of the profession are realised by library institutions, education establishments and individuals. But all these intents were not fulfilled. Respondents identified some challenges of integrating information ethics in the professional practice to include; financial constraints, lack of code of ethics, unqualified staff, lack of awareness about information ethics, inadequate facilities, and illiteracy. Amunga (2013) underlines lack of expertise to design IE curriculum, inadequate staff, inadequate facilities and lack of clear policy on information ethics as some of the challenges affecting the integration of information ethics in the professional practice curriculum.

6.6.1 Importance of integrating information ethics into library professional practice

Ocholla (2009) noted that information ethics can “assist to inculcate the culture of responsibility”. Several scholars have underlined the importance of integrating information ethics in LIS curricula and professional practice. Dadzie (2011) opines that “information ethics education is important due to concerns on the influence of ICT usage on moral values, and the unequal access to and use of ICT”. Maina (2016) proposes that information ethics should be integrated in LIS “curriculum to prepare students to be ethically equipped for the information profession”. The results revealed a strong feeling among respondents who participated in this study, that integrating information ethics in professional practice would help librarians to understand ethical issues and provide services ethically and also be able to educate and train users. This would also help create awareness about information ethics among library professionals, ensure consistent provision of library and information services, and enhance image of library professionals. Fallis (2007:34) proposes that in “order to deal effectively with ethical dilemmas, information professionals should have a good working knowledge of information ethics”. “Equipping information workers with information ethics enables information mediators to verify quality and accuracy of information to clients and enable them to engage in ethical reasoning by determining what is wrong or right in a dilemma situation” (Mutula, 2011).

The importance of integrating information ethics in professional practice is also captured in the verbatim statements of the respondents:

“Ethics need to be incorporated in information studies program curriculum to enable new students to understand code of ethics for librarian, because some of the library staff are not ethical in their work. There is also a need to set up an implementation committee or Centre for handling ethical issues.”

“There is need to increase the level of integration and implementation of ethical values in every aspect of information services provision in university libraries...ethics should be taught in library schools for librarians to gain understanding of ethics in general and information ethics in particular.”

These findings mirror Maina (2017), Mabowonku (2010), Ndwandwe (2009), Mutula (2011) and Falli (2007). Maina (2017:5) emphasises that “integrating information ethics in LIS curriculum is essential in order to equip students with knowledge in ethics and inculcate a culture of responsibility in using ICT”. Moreover, “a course in information ethics would assist in checking and addressing emergent moral decadence in LIS, foster in LIS professionals a culture of responsibility, and help breach the lapse in legal systems with regard to ethical provision of information services”.

Ndwandwe (2009) stated that “information ethics is important in LIS curriculum because LIS students as users and future managers of information need to be sensitised to respect intellectual property rights”. Besides, “information specialists should know something about the moral and ethical responsibilities they have towards society”. Fallis (2007) supports information ethics education because “LIS professionals face ethical dilemmas, and given these dilemmas, they should have exposure to information ethics”. The author advocates that “information ethics education should be mandatory because the ethical problems facing library and information profession”. Smith (2007) is of the view that “because of threats to information access, accuracy and privacy, teaching information ethics should be prioritised”. In addition, “the rapid changes in the information landscape, which are a threat, have created greater urgency for information ethics education in LIS”.

Integrating information ethics in LIS curriculum would allow library and information professionals to learn and understand the responsibilities and real consequences of their

actions, and learn to use their power ethically and responsibly. This would also help understand the challenges of teaching information ethics and integrating it into the professional practice. These challenges identified by Akakandelwa (2010) in his study on the status of teaching information ethics in Zambia include: severe shortage of learning and teaching materials, heavy reliance on western literature whose content is not reflecting local context, lack of information ethics expertise and inadequate infrastructure.

Ocholla (2010) also outlines “lack of understanding or appreciation of information ethics; inadequate or absence of legislation that restrict access; censorship sensitivity, poor course design, complication arising from ICT use; unsatisfactory professional practice among others; and digital divide for example dilemma of access and protection as some of the challenges facing library professionals in their quest to integrate information ethics in their practice in order to benefit fully from it”. Mohamudin, Zeki and Saidin (2015) in a study that “explored the attitude of International Islamic University of Malaysia (IIUM) students’ towards privacy” concluded that, “integrating ethics values in the university’s curricula can help students develop an ethical responsibility and proper attitude towards information ethics”.

6.7 Summary

The purpose of this chapter was to discuss and interpret the results presented in chapter five. This discussion of the results was guided by the research problem, literature review, PAPA model of Mason (1986) and WSIS Action Line 10 (the ethical dimension of information in society) framework as discussed in section 6.3.1, 6.4.1, 6.5 and 6.6 respectively.

The findings from the study revealed library professionals were aware about information ethics values such as privacy, accuracy, intellectual property, information access, dignity of users; quality of library and information services. Despite the fact that library professionals were found to be aware and adhered to information ethics values such as privacy, accuracy, property and access in all universities surveyed, there were no guidelines provided by TLA which could help them understand how to provide library and information services in an ethical manner. This was exacerbated by the absence of professional code of ethics, policies and guidelines on information ethics in Tanzania. Most of library professionals did not seem to distinguish between information ethics and professional ethics. Most library professionals believed incorrectly that professional ethics is information ethics.

The study's findings confirmed that attitude and perception of library professionals towards information ethics to library professionals was positive. Also faculty and postgraduate students' view of LIS professions' perception and attitude towards information ethics were positive. All the variables in PAPA model of Mason (1986) which are privacy, accuracy, property and accuracy were emphasised by library professionals as important in their quest to provide effective and efficient information to library users. With regards to factors that influence information ethics practice, these included age, gender, work experience, education level, resources and facilities, technological changes, policies and guidelines. With regard to integration of information ethics in library professional practice in universities surveyed, the findings revealed that library professionals by and large integrated information ethics in library professional practice. Both faculty and postgraduate students believed that information ethics was practiced by library professionals. The importance of integrating information ethics in professional practice was discussed. The results revealed that integrating information ethics in professional practice would help librarians to understand ethical issues and provide services in an ethical manner to the users. Despite the usefulness of PAPA model in this study, the model does not cater for the recent trends in the provision of library and information services; therefore this study was complemented by World Summit on Information Society Action Line 10 (the ethical dimension of information society), consequence-based theory, duty-based theory, virtue-based theory and right-based theory. Nevertheless, the findings from this study suggest that education on information ethics is still needed as technology keep on changing. Tanzania Library Association should provide information ethics policies and guidelines to library professionals in order to help them to understand information ethics issues in the provision of library and information services. The next chapter presents summary of findings, conclusion and recommendations.

CHAPTER SEVEN

SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

This chapter provides a summary of the findings, conclusions and recommendations based on the results presented and interpreted in chapter five and six respectively. The chapter also looks at the contribution of the study to policy, practice, theory and suggestions. It also makes suggestions for future research areas.

The purpose of this study was to investigate the role of information ethics in the provision of library and information services in university libraries in Tanzania. Four universities were surveyed namely: U1, U2, U3 and U4 respectively.

The study investigated the following research questions;

1. What is the level of awareness of library professionals in university libraries in Tanzania about the role of information ethics in promoting LIS professional practice?
2. What is the attitude and perception of library professionals in University libraries in Tanzania towards information ethics?
3. What are the factors that influence information ethics practice by library professionals in university libraries in Tanzania?
4. How is information ethics integrated in the library professional practice in university libraries in Tanzania?
5. What is the perception of faculty and postgraduate students about ethical conduct of library staff in providing library and information services?

The study was underpinned by Privacy, Accuracy, Property and Access (PAPA) model of Mason (1986) and WSIS Action Line 10 (the ethical dimension of information society). The population of the study consisted of library professionals, heads/directors of university libraries, faculty, postgraduate students and Tanzania Library Association officials. Data were collected using survey questionnaires and interviews. Quantitative data were analysed using SPSS while qualitative data were analysed thematically. The chapter is organised around the following sections: summary of findings, conclusion, recommendations, contribution of the study and suggestions for further research areas.

7.2 Summary of the findings

This section provides a summary of research findings based on the research questions presented in chapter one section 1.3.2. Respondents from four universities and Tanzania Library Association officials (male and female) were involved in the study. The respondents were from different age range, education, work experience and academic programs for postgraduate students. In addition, designation and duration in the position for heads/directors of university libraries, faculty, and Tanzania Library Association officials was studied.

7.2.1 Summary on biographic findings of respondents

Biographical analysis was conducted to determine education, work experience, age, gender and program enrolled for by postgraduate students in the universities surveyed. The findings revealed that the majority of library professionals were drawn from U1 15 (33.3%) and U2 20 (44.4%) followed by U3 6 (13.3%). Moreover, U4 4 (8.8%) had the least number of respondents. The study revealed that among library professionals, males were slightly more at 24 (54.4%) than females who numbered 20 (45.6%). With regard to age, majority of the library professionals 34 (77.3%) were aged between 31 and 60 years. Regarding years of working experience, U1 and U2 had library professionals with more than 13 years of experience while, U3 and U4 had no staff with more than 13 years of work experience. U1 and U2 had majority of library professionals with bachelor's degree (or above) in information science. On the other hand, U4 had only bachelors and master's degree holders while at U3 most of the library professionals had certificate and diploma qualifications. The results suggest that U3 and U4 had the least number of library professionals (those holding degree qualifications).

For faculty, there were more male faculty 132 (71%) than their female 54 (29%) counterparts. Most faculty who participated in this study were drawn from U1 88 (47.3%) followed by U2 50 (26.0%), U3 33 (17.7 %) and U4 had the least number with 15 (8.1%). The findings on qualification of faculty revealed that, all the respondents had at least a master's degree. There were more PhD holders 107 (57.5%) among faculty than there were master's holders 71 (38.2%).

The results revealed that 2 (50%) of heads/directors of university libraries were male and 2 (50%) were female. The results further revealed that 1 (25%) was in the age category of 41-

50 while 4 (75%) were in the age range of 51-60 years. Of those surveyed 1 (25%) was designated head of library department while 3 (75%) were library directors. There were 3 (75%) respondents who were PhD holders and 1 (25%) who was a master's holder. On the question of how long they had served in their current position as heads/directors of libraries, majority 3 (75%) had served for 3-4 years, while 1 (25%) had served for 5-6 years respectively in their current positions.

7.2.2 Awareness of library professionals about ethical practice

The first research question of the study sought to explore the level of awareness of library professionals about the role of information ethics in promoting LIS professional practice. The findings revealed that Tanzanian library professionals were aware about ethical values and possessed knowledge on information ethics. They also adhered to all four ethical values in PAPA model comprising property, accuracy, privacy and access. However the level of awareness varied from one university to another among the library professionals. The disparity of awareness among library professionals in different university could be attributed to the fact that the Tanzania Library Association was not proactive in promoting ethical practice and instead the university libraries took their own initiatives. Mason's (1986) PAPA model presents four broad categories of ethical values in an electronic environment that affect access and use of the information namely: privacy, accuracy, property, and access. In Mason's model "access consists of access to education so that citizens of the information society can develop the intellectual skills to cope with information, and the access to information itself". Mason adds that, awareness about the role of information ethics in promoting LIS professional practice has the potential to promote universal and equitable access to information as envisaged in the World Summit on Information Society (WSIS) Action Line 10 on ethical dimension of the information society. However, despite the transformative nature of awareness in promoting information ethical practice by LIS professionals, this has not been inculcated in all library professionals in the university libraries surveyed. This is because Tanzania Library Association provides minimal or no support to promote ethical practice among library professionals. Therefore any efforts to promote ethical practice among library professionals was undermined by the fact that TLA did not have a strategic plan to guide its activities, and some of the TLA officials were not aware of ethical values. Singh (2014) asserts that ethical values are significant to library professionals for them to provide information services effectively. This is because ethical

values “determine the limits of acceptable conduct and point out actions regarded as right and wrong in the occupation” (Odero, 2012).

7.2.3 Attitude and perception of library professionals towards information ethics

The second research question and fifth research question are merged and discussed together since they both seem to address issues of attitude and perception. The study in this regard wanted to understand the attitude and perception of library professionals within the university libraries surveyed towards information ethics. The findings revealed that perception and attitude of library professionals towards information ethics especially on the values of access, intellectual property, information privacy, and information accuracy was positive. This was corroborated by faculty and postgraduate students’ view of LIS professions’ perception and attitude towards information ethics. All the ethical values in the PAPA model namely privacy, accuracy, property and access were emphasised by library professionals as important in their quest to provide effective and efficient information service to library users.

7.2.4 Factors that influence information ethics practice by library professionals

The third research question aimed at investigating factors that influence information ethics practice by library professionals in university libraries in Tanzania. Halawi and McCathy (2013) state that ethical behavior is influenced by individual factors such as age, gender, education level, working experience, religion, locus of control, ethical attitude, professional value and egoism. Other factors are of a deterrent nature and include policies and codes, dissemination of information about penalties and IT guidelines. Other factors are related to external variables such as professional environment, economic condition, competition and characteristics of the job. All these factors can influence ethical behavior towards information ethics. In addition, Ndwandwe (2009) and Hoq (2012) identified factors which directly and indirectly influenced information ethics that include globalisation, individualism, privacy, information security, diversity of information works, conflict between ‘right to information’ and ‘ethical use of information’ access to information and intellectual property right.

Rubin and Froehlich (2011) outlined factors which influence library professionals in providing information services that included collection development, selecting materials and censorship, privacy, reference services, copyright, administrative issues, information access, technology-related issues, and problems with conflicting loyalties and societal issues. Other factors included social utility, survival, social responsibility and respect for individuality. In

addition they identified other factors influencing library professionals in providing information services such as professional code of ethics, and the values that support ethical principle of professional conduct, truth, tolerance, individual liberty, justice and beauty. McMenemy, Poulter and Burton (2007) also identified factors that influence library professionals in provision of information services that included employees' ethical code, pressure from customers to provide service, personal ethical beliefs, and society's ethical norms.

The findings in this study revealed factors influencing information ethics practice by library profession in Tanzania to include limited resources, technological changes, ICT knowledge and skills, individual characteristics, size and space of the library, education level, quality of available resources, education and training of staff, motivation/remuneration, organisational policies, information ethics policy, knowledge of information ethics, staffing, experience, work environment, and more. All these issues influenced how library professionals approached issues with regard to intellectual property, privacy, accuracy and access to information.

7.2.5 Integration of information ethics in library professional practice

The fourth research question sought to assess how information ethics was integrated in library professional practice in university libraries. The findings confirmed that information ethics was integrated in library professional practice, but the practice differed from one university to another because of the lack of common guidelines and policies to guide the library professionals in Tanzania. The respondents generally acknowledged the importance of integrating information ethics into LIS curriculum.

7.3 Conclusions

The conclusions are based on the findings of each research questions presented in chapter one section 1.3.2 of the study covering the following themes: level of awareness of library professionals in university libraries in Tanzania about importance of ethical values in providing information services; attitude and perception of library professionals in university libraries in Tanzania towards information ethics; factors influencing information ethics by library professionals in university libraries in Tanzania; integration of information ethics in library professional practice in university libraries in Tanzania. The study used PAPA model and World Society on Information Society Action Line 10. In addition, theories such as consequence-based theory, duty-based theory, right-based theory and virtue-based theory as

well as universal declaration of human rights were applied in the context of the university libraries. The pragmatic paradigm was employed in the study as it fits to approaches used. Both qualitative and quantitative methods were used. Regarding respondents, library professionals, faculty and postgraduate students were surveyed by questionnaires and Tanzania Library Association officials and heads/directors were interviewed. The population of the study was drawn from four universities and Tanzania Library Association. Census technique were used to select library professionals in the universities surveyed, purposive sampling technique were used to select Tanzania Library Association officials and heads/directors of university libraries, purposive and convenience sampling were used to select postgraduate students and faculty from different levels of programs. Questionnaire and interview schedule were used to collect data from the respondents. Data gathered through questionnaire were analysed using SPSS and data from interview were analysed using thematic analysis.

The study surveyed respondents representing both male and female from the four universities studied and Tanzania Library Association officials. The respondents represented different age groups, level of education, work experience, job designation and duration in the position.

The study confirmed that library professionals were aware about information ethics values such as privacy, accuracy, intellectual property, information access, dignity of users; quality of library and information services. Attitude and perception of library professionals towards information ethics was positive; however, this was affected by low level of awareness due to lack of policies, guidelines and regulations on information ethics education and training. Furthermore, the study found factors influencing information ethics practice by library professionals in university libraries to include lack of awareness on information ethics, limited information, personal characteristics, lack of policies, guidelines and regulations on information ethics and more. In addition, the respondents acknowledged the role of integrating information ethics in Library and Information Science curriculum.

Overall, the results of the study revealed that while library professionals seem to understand the ethical values needed in the provision of information services, the field of information ethics in university libraries in Tanzania is not widely understood and practiced by all library professionals especially from the perspective of responsible use of technology. Similarly, officials of Tanzania Library Association are not conversant with the field of information ethics, raising questions of how they can effectively promote ethical practice among its

membership. The research findings have shown that little has been done by Tanzania Library Association concerning promotion of research and publications in the field of information ethics. This goes contrary to Tanzania Library Association constitution (2005) which maintains aspires among other things “to encourage and facilitate the study and research in library and information management.” Hauptman (2002) in this regard notes that, ethical values discussed in literature and conferences are hardly implemented by library professional associations. The Tanzania Library Association must take a proactive and leadership role in ensuring current developments in the library and information science field which are known and brought to the attention of its membership through continuous professional development.

7.3.1 Awareness about ethical values in providing information services

The importance of creating awareness about information ethical values among library professionals need to be given great emphasis. Library professionals need to be kept abreast with information ethics issues in order to fulfill their mandate of providing an effective information service to the clients in an ethical manner. The results revealed that in all the universities surveyed library professionals were aware of information ethics values and claimed they adhered to all the four values in the PAPA model namely privacy, accuracy, property and access. However, there are many other ethical issues beyond PAPA as revealed by the ethical theories/models reviewed in chapter two of this thesis, and that library professionals in university libraries in Tanzania must strive to comply with and practice.

The faculty and postgraduate students acknowledge that they were made aware of information ethics values by library professionals through library education programs, seminars and workshops, online communication, when visiting library, through orientation at the beginning of the year, at the reference desk (face to face or online conversation), through brochures, posters and fliers, through university library websites, and noticeboards. However, postgraduate students from U4 complained that library professionals did not educate them about information ethics values. Instead, they learned about information ethics values through their own initiatives. Furthermore the findings revealed that despite the efforts by library professionals to promote awareness about information ethics values, users were not being updated regularly and the methods used were not effective and known to users. The study concludes that in spite of some knowledge and practice of information ethical practice by library professionals in university libraries in providing information services to the clientele.

More was needed as information ethics is important in library professional practice, awareness is still needed. There is need to create awareness among stakeholders about information ethics. In addition, education and training is needed to equip library professionals with the skills and knowledge of information ethics.

7.3.2 Attitude and perception of library professionals towards information ethics

Generally, findings of the study revealed that the attitude and perception of library professionals towards information ethics especially with regard to PAPA variables of privacy, access, property and accuracy was positive. However, PAPA model has been criticised for focusing only on four ethical values, therefore compliance of the library professionals on the wide range of ethical values cannot be ascertained. This situation is exacerbated by the fact that information ethics in Africa is still in infancy and has largely not been researched thus creating a vacuum in the literature and theory for investing information ethics on the African continent.

7.3.3 Factors that influence information ethical practice by library professionals

Findings from the study revealed that there were several factors beyond those in the PAPA model and WSIS Action Line 10 that influence information ethical practice by library professionals in university libraries in Tanzania. These factors include lack of awareness on information ethics, limited information, personal characteristics, lack of policies, technological changes, qualification of library staff, level of education, guidelines and regulations on information ethics and more.

7.3.4 Integration of information ethics in library professional practice

Findings from the study revealed that information ethics was integrated in library professional practice in university libraries in Tanzania especially from the scope of PAPA model. However, the extent of integration of information ethics in library professional practice was limited by several challenges such as financial constraints, lack of code of ethics, lack of awareness about information ethics by users and librarians, inadequate facilities, and small number of professional library staff. Nevertheless the respondents acknowledged the importance of integrating information ethics in professional practice in their quest to provide information services in an ethical manner.

7.3.5 Study gap

The gap and novelty of this study is based on the fact that information ethics is a new field and the developing country context is yet to be addressed in extant literature. In addition the study was underpinned by the PAPA model of Mason (1986) complemented by the WSIS Action Line 10, and other ethical theories such as consequence based theory, duty based theory, right based theory and virtue based theory to compensate for the shortcomings of fall of the PAPA model. The study makes a contribution to the field of information ethics which is still in the embryonic stage of development.

7.4 Recommendations

The recommendations presented in this sections are based on the findings of each of the research questions presented in chapter one section 1.3.2 covering awareness of library professionals about ethical values in providing information services; attitude and perception of library professionals towards information ethics; factors that influence information ethical practice by library professionals; and integration of information ethics in library professional practice.

7.4.1 Awareness of library professionals about ethical values in providing information services

The findings from the study showed that library professionals were generally aware about information ethics values such as privacy, accuracy, intellectual property and access. They also seemed to understand the importance of dignity of users; quality of library and information services in the library professional practice. However, there was lack of professional guidelines from the Tanzania Library Association to help institutionalise information ethical practice in the work of library professionals in the universities surveyed.

It is therefore recommended that Tanzania Library Association rise up to the occasion to play its rightful role in promoting the interest of its membership through education and training. In addition the professional body must learn from other library professional bodies internationally on how to promote information ethics among its membership. This would also help them to develop professional code of ethics that is consistent with global trends. In this regard Adetimirin (2017) asserts that “information ethics education should be provided to LIS professionals” to enable continuous adherence to information ethics practice. The Tanzania Library Association should consider initiating a process of engaging library schools to integrate information ethics in the curriculum.

7.4.2 Attitude and perception of library professionals towards information ethics

The study established that attitude and perception of library professionals towards information ethics was generally positive especially with regard to the four variables in PAPA model of privacy, accuracy, property and access. The information ethical practice in the university libraries can be buttressed by relevant policies, education and training programmes. In this regard, Ponelis (2013) asserts that libraries should be committed to ensuring appropriate policies and guidelines on the responsible use of information technology by library professionals.

7.4.3 Factors that influence information ethics by library professionals

The study established that the major factors that influence information ethical practice by library professionals in university libraries in Tanzania include: lack of awareness and understanding of information ethics, personal characteristics, lack of policies, technological changes, qualification of library staff, level of education of library staff, guidelines and regulations on information ethics and more. The study recommends that appropriate interventions be put in place by the relevant university libraries and the Tanzania Library Association to address these shortcomings. The interventions could include among others: education and training, continuous professional development, and enactment of requisite policy. TLA being a national professional association should organize workshops, meetings, and seminars to evaluate how information ethics is integrated in the library professional practice in Tanzania. In addition, the Tanzania Library Association should work closely with researchers to identify potent areas of research in information ethics.

7.4.4 Integration of information ethics in library professional practice

The findings of the study established that information ethics was integrated in library professional practice. For example, postgraduate students and faculty acknowledged that library professionals adhered to ethical values in providing information services to the clientele, ensured full access to library materials, respected all users, provided quality services, and observed privacy. In addition, the respondents noted that the library professionals provided accurate, reliable and timely information. The study recommends that integration of information ethics in library professional practice should be encouraged throughout all the university libraries by strengthening existing policies or formulating new policies as well as providing continuous professional development. Besides, more awareness

should be created among library professionals on the importance of information ethics in the provision of library and information services. Tanzania Library Association should pay regular visits to its members in order to discuss and share current developments in the library profession. In addition, Tanzania Library Association should work LIS educators to integrate information ethics in the curriculum of library schools.

7.4.5 Recommendations to TLA

The study in addition recommends that, TLA must put in place a code of professional conduct, strategic plan, policies and regulations. TLA also needs to develop a strong partnership with government, non-governmental organisations and private sectors to ensure the necessary resources are available to do their work effectively. TLA must develop internal capacity to serve their membership. Furthermore, TLA must improve its financial wellbeing.

In order to promote good ethical conduct among library professionals TLA should impart knowledge to their members about information ethics values in order to improve and strengthen quality education, research and training. Furthermore, Tanzania Library Association should advocate for recognition of their professional body by government on the same pedestal as for lawyers, teachers, doctors, engineers and accountants to mention just a few. TLA should also strive to promote international professional collaboration in research and practice in order to effectively address issues of information ethics. This will uplift the association in the realm of government, donors, non-governmental organisations and the public in general to attract necessary support and funding. Besides, Tanzania Library Association should ensure that university libraries and other types of libraries adhere to information ethics values in order to help library professionals to gain more insight into ethical issues and practice relating to the provision of library and information services.

The Tanzania Library Association must play an effective and dynamic role and mobile stakeholder in order to establish a comprehensive and robust information system in the country.

7.4.6 Recommendations to University libraries

Universities and institutions should find new ways of teaching information ethics as a new and emerging discipline. Universities also need to recruit competent library professionals to serve in university libraries. In addition, University libraries should conduct regular training workshops for library professionals; users (including students and faculty) and public about

information ethics so that they can use new information technologies responsibly. Furthermore, information ethics surveys should be conducted periodically to gather data that would help monitor the level of awareness of library professionals about information ethics. As already stated, Information ethics should be introduced into curriculum for Library and Information Science schools in Tanzania.

7.4.7 Library policy

The study noted that, the National Information and Communication Technologies policy of 2003 does not address the issues of library professional practice with regard to information ethics. Furthermore, there are no written library policies on information ethics in university libraries. It is recommended that policy on the responsible use of Information and Communication Technologies should be established. Formulating policy on information ethics for university libraries would help library professionals provide information services in ethical manner as envisaged by the PAPA model and WSIS Action Line 10.

7.4.8 Library budget

The researcher recommends the allocation of sufficient funds by the government through university libraries to support information services to all users including people with disabilities to ensure digital inclusion in the quest to enhance information access to the users. Adequate allocation of funds would help university libraries to acquire and improve library facilities, improve and expand library space to accommodate all users, employ competent and qualified staff.

7.5 Originality, contribution and constraints of the study

The researcher reviewed various related studies (Matingwina, 2015; Hoq, 2012; Ndwandwe, 2009; Parrish, 2010; Liton, n.d; Ponelis, 2013; Cilliers, 2017; Maina, 2017; Fallis, 2007; Mutula, 2013, Britz, 2013, Mbofung & Poopola, 2014; Salma, Ocholla, Mostert & Mungwisi 2013). These studies provided framework for research phenomenon on the role of information ethics in the provision of library and information services in university libraries. This research adopted Mason's (1986) PAPA model and WSIS Action Line 10 to explore and understand Tanzanian library professionals' attitudes and perception towards the four information ethics issues of privacy, access, property, and accuracy (Mason, 1986). The findings of this research should extend the understanding of the library professional ethical

practice as well as their attitudes in providing information services to users in university libraries in Tanzania.

This study is the first of its kind in university libraries in Tanzania because information ethics is still in nascent stages of development both in Tanzania and the world (Mutula, 2013). This study therefore contributes to the growing body of knowledge on global information ethics from a developing country perspective such as Tanzania. Moreover, the study provides a cogent foundation upon which a national information ethics policy for Tanzania can be developed. Also it provides a framework for the integration of information ethics in the curriculum in LIS schools in Tanzania in order to encourage and incubate information ethical values among the library professionals.

Despite the contribution of the study provided above, Information ethics as a discipline of study is still in the early stage of development and consequently there is scarcity of literature in this area. This meant that the researcher had to rely on sources from the wider field of ethics and emerging seminal works on the subject. In addition, there is not yet a well-established proven theory of information ethics. The study was therefore to rely on PAPA model and WSIS Action Line 10 to provide the lens for investigating the research phenomenon. The study was based on a sample data collected from postgraduate students, faculty, and library professionals from only four universities in Tanzania. The results may not fully be generalisable to the rest of the Universities in Tanzania. Therefore, the research designs with large samples from postgraduate students, faculty, and library professionals of various universities can be used. In addition having postgraduate and faculty as respondents without library professional practice to appreciate ethical issues in the provision of information services is limitation. Their responses were largely limited from the user's perspective and not from the service provider's angle.

Moreover, data collection started in the second semester when the target sample, specifically postgraduate students (masters and PhD), were in the field; therefore, it was difficult to reach all of them to participate in the study. Additionally, some respondents did not answer open ended questions claiming that they had no time and also that they were not conversant with the information ethics field. Others said they did not make use of the library so they could not provide valuable information. However, through persuasion and education many accepted to participate in the study.

7.6 Contribution of the study

The study makes contribution to the growing field of information ethics from theoretical, policy and practical perspectives.

7.6.1 Contribution of the study to theory

This section examines the theoretical implication of the study on role of information ethics in the provision of library and information service in university libraries in Tanzania. The study applied PAPA model and World Summit on Information Society (WSIS) Action Line 10 to underpin the research problem. While PAPA model focuses on responsible use of information technology with regard to privacy, accuracy, property and access, the WSIS Action Line 10 goes beyond and includes confidentiality, dignity, identity, human rights and more. Other theories from the broader field of information ethics such as consequence-based theory, duty-based theory, right-based theory, and virtue-based theory were also reviewed. A combination of these variables may provide a framework for the development of an integrated information ethics framework that goes beyond information technology and include human aspects. Such framework would be helpful in understanding the multi-dimension and complex nature of information ethics. Such framework should take cognisance of African contexts where many challenges of economic, social, political and cultural nature exist.

7.6.2 Contribution of the study to policy

The study provides baseline information upon which relevant policies on information ethics can be entrenched into library professionals. Such policies would be predicated from the ICT perspective on the PAPA model and World Summit on Information Society (WSIS) Action Line 10. While for non ICT issues, they could draw on theories such as consequence-based theory, duty-based theory, right-based theory and virtue-based theory as well as universal declaration of human rights.

7.6.3 Contribution of the study to practice

The study examined the role of information ethics in the provision of library and information services in university libraries in Tanzania. The findings of this study were significant as they helped bridge the gap between the PAPA model, World Summit on Information Society (WSIS) Action Line 10 and other theories such as consequence-based theory, duty-based

theory, right-based theory and virtue-based theory in relation to library professional practice in Tanzanian university libraries. By having this research in place possible choices for information ethics practice by library and information professionals can be established and if they are acted upon the quality of university libraries could be improved. Moreover, the findings of the study provide a framework for Tanzania Library Association to develop a more robust code of ethics that would include ethos of information ethics. The study provides a framework to improve the application of information ethics values in the library professional practice. The findings further create awareness among library professionals, policy makers and professional bodies such as TLA on the responsible use of information technology in the information society. The findings provide a foundation for the curriculum of information ethics to be developed and offered in LIS schools. In addition, the findings provide new research areas that may be explored by scholars interested in the field of information ethics especially from the developing country perspective where understanding of the field is limited. The study provides basis for Scholars, library professionals and all stakeholders to debate and dialog the ethical issues in the responsible use of ICT and develop appropriate interventions. This study provides room for university libraries in Tanzania to develop education and continuous educational programmes to promote the information ethics field in professional practice and in education. In addition, this study would be useful for library schools, professional library associations, and other relevant authorities for the planning of training programs and refresher courses in information ethics. The findings may also be helpful for library educators to develop curriculum that meets the needs of the library professionals.

7.7 Suggestion for future research direction

The current study examined the role of information ethics in the provision of library and information services in university libraries in Tanzania. The findings were reached based on the dataset that was collected from the sample of four universities from which two were public and two private universities. The results can therefore be generalised with certainty; future research should consider extending the scope to cover all universities in Tanzania. Similarly, the current study is limited because it focused only on university libraries; further studies should extend to other types of libraries. The study also did not cover mitigation strategies for library professionals who do not comply with ethical practice. Future research

should explore the extent of integration of information ethics in the LIS curriculum in Tanzania.

The literature reviewed showed that library professional were aware about information ethics values such as privacy, accuracy, intellectual property, information access, dignity of users; quality of library and information services. However the level of awareness differed from one university to another. The researcher therefore suggests that that a comprehensive study to be conducted on causes of these differences among library professionals in university libraries in Tanzania.

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APPENDICES

Appendix 1: Informed consent form university of KwaZulu-Natal



**UNIVERSITY OF
KWAZULU-NATAL**

School of Social Sciences
Private Bag X01 Scottsville,
Pietermaritzburg
South Africa

Informed Consent Letter

Researcher: Rehema Ndumbaro

Institution; University of KwaZulu-Natal

Telephone number: +27712130657/+255768283609

Email address: 215081656@ukzn.ac.za/rehemandumbaro09@gmail.com

Supervisor: Prof. Stephen M. Mutula

Institution: University of KwaZulu-Natal

Telephone number: 033-260 5093

Email address: mutulas@ukzn.ac.za

You may also contact the Research Office through:

P. Mohun

HSSREC Research Office,

Tel: 031 260 4557 E-mail: mohunp@ukzn.ac.za

I, Rehema Ndumbaro, of University of KwaZulu-Natal, kindly invite you to participate in the research project entitled **role of information ethics in the provision of library and information services in university libraries in Tanzania.**

This research project is undertaken as part of the requirements of the PhD, which is undertaken through the University of KwaZulu-Natal, Information Studies Department.

The aim of this study is to investigate the role of information ethics in the provision of library and information services in university libraries in Tanzania

Participation in this research project is voluntary. You may refuse to participate or withdraw from the research project at any stage and for any reason without any form of disadvantage. There will be no monetary gain from participating in this research project. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Department of Information Studies, at the University of KwaZulu-Natal.

If you have any questions or concerns about participating in this study, please feel free to contact myself or my supervisor at the numbers indicated above.

It should take you about 15 minutes to complete the questionnaire.

Thank you for participating in this research project.



November, 2016

Signature

Date

*I.....(full names of participant)
hereby confirm that I understand the contents of this document and the nature of the research project, and I consent/do not consent to participating in the research project. I understand that I am at liberty to withdraw from the project at any time, should I so desire.*

Additional consent, where applicable I hereby provide consent to (Delete which is not necessary)

Audio-record my interview YES NO

Video-record my interview YES NO

Use of my photographs for research purposes YES NO

SIGNATURE OF PARTICIPANT DATE

.....

Appendix 2: Application letter for data collection at the University of Dar es Salaam



Information Studies

School of Social Sciences

University of KwaZulu-Natal Private
Bag X01

Scottsville 3209, South Africa

Tel: +27 (0) 33 2605571

Fax: +27 (0) 33 2605092

mutulas@ukzn.ac.za

20th July, 2016

Directorate of Research,
University of Dar es Salaam
P.O.Box 35091,
Dar es Salaam.
Tanzania.

Attn: The Library Director,
Dr. Wilbert K Chagula Library,
University of Dar es Salaam

Dear Sir/Madam,

RE: APPLICATION FOR RESEARCH DATA COLLECTION

Reference is made to the above subject.

Ms. Rehema Ndumbaro is a duly registered PhD student in the Information Studies Programme at the University of KwaZulu-Natal, in South Africa. As part of the requirement for the award of the doctoral degree, she is undertaking a study on "Role of information ethics in the provision of library and information services in university libraries in Tanzania". The study covers four university libraries in Tanzania.

The purpose of this letter is to kindly request a written permission from your office to enable her collect data from your University. Possible dates for data collection are flexible within November, 2016 to April, 2017. The data will be collected through survey questionnaire and interviews. Your authorization to this request will be highly appreciated.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Stephen Mutula', followed by a horizontal line.

Professor Stephen Mutula
Dean & Head: School of Social Sciences

Appendix 3: Research Permit from university of Dar es Salaam

UNIVERSITY OF DAR ES SALAAM
DIRECTORATE OF RESEARCH
P.O. Box 35091 ■ DAR ES SALAAM ■ TANZANIA

General Line: 2410500-8 Ext. 2084 Fax: 255 022 2410743
Direct Line: 2410727 255 022 2410023
Website: www.udsm.ac.tz E-mail: research@udsm.ac.tz



Our Ref. Z10/S.4Vol.XIV 24th August 2016

Director
Dr. Wilbert K. Chagula University Library
University of Dar es Salaam

RE: REQUEST FOR DATA COLLECTION

This is to introduce **Ms. Rehema Ndumbaro** who is a bonifide PhD student in the Information Studies Programme at University of KwaZulu-Natal South Africa and a member of staff of the Mwalimu Nyerere Memorial Academy. **Ms. Ndumbaro** is at the moment conducting data collection as part of her study programme. The title of her research is **"Role of Information Ethics in the Provision of Library and Information Services in University Libraries in Tanzania"**.

This is to request you to grant the above-mentioned student any help that may enable her to achieve her study objectives. The period for which this permission has been granted is **November 2016 to April 2017** and will cover **Dr. Wilbert K. Chagula University Library**


Prof. S. Many
DIRECTOR OF RESEARCH
P.O. Box 35091
UNIVERSITY OF DAR-ES-SALAAM

cc: Vice Chancellor
cc: Deputy Vice Chancellor - Academic
cc: Deputy Vice Chancellor - Administration
cc: Deputy Vice Chancellor – Research

UDSM is an 'Equal-Opportunity' Institution of Higher Learning

Appendix 4: Application letter for data collection at Sokoine University of Agriculture



Information Studies

School of Social Sciences

University of KwaZulu-Natal Private Bag X01

Scottsville 3209, South Africa

Tel: +27 (0) 33 2605571

Fax: +27 (0) 33 2605092

mutulas@ukzn.ac.za

29th July, 2016

Vice Chancellor,
Sokoine University of Agriculture,
P.O.Box 3000,
Morogoro.
Tanzania.

Attn: Library Director

Dear Sir/Madam,

RE: APPLICATION FOR RESEARCH DATA COLLECTION

Reference is made to the above subject.

Ms. Rehema Ndumbaro is a duly registered PhD student in the Information Studies Programme at the University of KwaZulu-Natal, in South Africa. As part of the requirement for the award of the doctoral degree, she is undertaking a study on "Role of information ethics in the provision of library and information services in university libraries in Tanzania". The study covers four university libraries in Tanzania.

The purpose of this letter is to kindly request a written permission from your office to enable her collect data from your University. Possible dates for data collection are flexible within November, 2016 to April, 2017. The data will be collected through survey questionnaire and interviews. Your authorization to this request will be highly appreciated.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Stephen Mutula", followed by a horizontal line.

Professor Stephen Mutula
Dean & Head: School of Social Sciences

Appendix 5: Research permit from Sokoine University of Agriculture

CLEARANCE PERMIT FOR CONDUCTING RESEARCH IN TANZANIA



SOKOINE UNIVERSITY OF AGRICULTURE
OFFICE OF THE VICE-CHANCELLOR
P.O. Box 3000, MOROGORO, TANZANIA

Phone: 023-2604523/2603511-4; Fax: 023-2604651

Our Ref. SUA/ADM/R.1/8

Date: 12th August 2016

Prof. Stephen Mutula
Dean & Head: School of Social Sciences
Information Studies
University of KwaZulu-Natal
Private Bag X01
Scottsville 3209, South Africa
email: mutulas@ukzn.ac.za

Re: UNIVERSITY STAFF, STUDENTS AND RESEARCHERS CLEARANCE

The Sokoine University of Agriculture was established by Universities Act No.7 of 2005 and SUA Charter of 2007 which became operational on 1st January 2007 repealing Act No.6 of 1984. One of the mission objectives of the University is to generate and apply knowledge through research. For this reason the staff, students and researchers undertake research activities from time to time.

To facilitate the research function, the Vice-Chancellor of the Sokoine University of Agriculture (SUA) is empowered under the provisions of SUA Charter to issue research clearance to both, staff, students and researchers of SUA.

The purpose of this letter is to introduce to you **Ms. Rehema Ndumbaro** a bonafide **Ph.D (Information Studies Programme)** student of KwaZulu-Natal, in South Africa. By this letter **Ms. Rehema** has been granted clearance to conduct research in the country. The title of the research in question is "*Role of information ethics in the provision of library and information services in university libraries in Tanzania*".

The period for which this permission has been granted is from **November 2016 to April 2017**. The research will be conducted in **Sokoine National Agriculture Library (SNAL)**.

Should some of these areas/institutions/offices be restricted, you are requested to kindly advise the researcher(s) on alternative areas/institutions/offices which could be visited. In case you may require further information on the researcher please contact me.

We thank you in advance for your cooperation and facilitation of this research activity.

Yours sincerely,


Prof. Gerald C. Monela
VICE CHANCELLOR

VICE CHANCELLOR
SOKOINE UNIVERSITY OF AGRICULTURE
P. O. Box 3000
MOROGORO, TANZANIA

Copy: Rehema Ndumbaro

Appendix 6: Application letter for data collection at St. Augustine university of Tanzania



Information Studies
School of Social Sciences
University of KwaZulu-Natal Private Bag X01
Scottsville 3209, South Africa
Tel: +27 (0) 33 2605571
Fax: +27 (0) 33 2605092
mutulas@ukzn.ac.za

19th July, 2016

Vice Chancellor,
St. Augustine University of Tanzania,
P.O.Box 307,
Mwanza.
Tanzania.

Attn: Library Director

Dear Sir/Madam,

RE: APPLICATION FOR RESEARCH DATA COLLECTION

Reference is made to the above subject.

Ms. Rehema Ndumbaro is a duly registered PhD student in the Information Studies Programme at the University of KwaZulu-Natal, in South Africa. As part of the requirement for the award of the doctoral degree, she is undertaking a study on "Role of information ethics in the provision of library and information services in university libraries in Tanzania". The study covers four university libraries in Tanzania.

The purpose of this letter is to kindly request a written permission from your office to enable her collect data from your University. Possible dates for data collection are flexible within November, 2016 to April, 2017. The data will be collected through survey questionnaire and interviews. Your authorization to this request will be highly appreciated.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Stephen Mutula", followed by a horizontal line.

Professor Stephen Mutula
Dean & Head: School of Social Sciences

Appendix 7: Research permit from St. Augustine university of Tanzania

ST. AUGUSTINE UNIVERSITY OF TANZANIA
DIRECTORATE OF POSTGRADUATE STUDIES, RESEARCH AND
CONSULTANCY
P. O. BOX 307, MWANZA - TANZANIA



August 17th, 2016

Information Studies
School of Social Sciences
University of KwaZulu-Natal Private Bag X01
Scottsville 3209, South Africa

Dear Professor Stephen Mutula,

RE: Permission to Collect Data for Research to be conducted by Ms. Rehema Ndumbaro at St. Augustine University of Tanzania.

Kindly refer to the heading above.

The office of Postgraduate Studies, Research and Consultancy at St. Augustine University of Tanzania, is happy to grant Ms. Rehema Ndumbaro a permission to collect data for her Doctoral research on the "Role of Information Ethics in the Provision of Library and Information Services in University Libraries in Tanzania." This permit is effective from November 2016 to April, 2017. We wish Ms. Ndumbaro success in this endeavor and we promise her our cooperation.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Lekule', is written over a horizontal line.

Dr. Chrispina Lekule, PhD.
Director of Postgraduate Studies, Research and Consultancy

Tel. 255-28-2552725, 2550560, 2550090
E-mail: postgraduatestudies@saut.ac.tz

Fax: 255-028-2550167
Website: www.saut.ac.tz



Appendix 8: Application letter for data collection at Tumaini University Dar es Salaam College-TUDARCo



Information Studies
School of Social Sciences
University of KwaZulu-Natal Private
Bag X01
Scottsville 3209, South Africa
Tel: +27 (0) 33 2605571
Fax: +27 (0) 33 2605092
mutulas@ukzn.ac.za

19th July, 2016
The Provost,
Tumaini University Dar es Salaam College,
P.O.Box 77588,
Dar es Salaam.
Tanzania.

Attn: Library Director

Dear Sir/Madam,

RE: APPLICATION FOR RESEARCH DATA COLLECTION

Reference is made to the above subject.

Ms. Rehema Ndumbaro is a duly registered PhD student in the Information Studies Programme at the University of KwaZulu-Natal, in South Africa. As part of the requirement for the award of the doctoral degree, she is undertaking a study on "Role of information ethics in the provision of library and information services in university libraries in Tanzania". The study covers four university libraries in Tanzania.

The purpose of this letter is to kindly request a written permission from your office to enable her collect data from your University. Possible dates for data collection are flexible within November, 2016 to April, 2017. The data will be collected through survey questionnaire and interviews. Your authorization to this request will be highly appreciated.

Yours sincerely,



Professor Stephen Mutula
Dean & Head: School of Social Sciences

**Appendix 9: Research permit from Tumaini University Dar es Salaam College-
TUDARCo**



TUMAINI UNIVERSITY DAR ES SALAAM COLLEGE – TUDARCo

(A Constituent College of Tumaini University Makumira)

Coca Cola Road, Plot no. 10 Mikochoeni Light Industrial Area

Telephone: +255-22-2701316/2760426 Fax +255-22-2760432

Website: www.tudarco.ac.tz; Email: provost@tudarco.ac.tz,

P.O. Box 77588, Dar es Salaam, Tanzania

21st July, 2016

Professor Stephen Mutula
Dean & Head: School of Social Sciences
University of KwaZulu-Natal
Private Bag X01
Scottsville 3209, South Africa.

Dear Sir,

RE: PERMISSION TO COLLECT DATA FROM OUR UNIVERSITY

Please refer to the above subject.

I have received your request for your student Ms. Rehema Ndumbaro to collect data from our University for her PhD studies.

I am pleased to inform you that permission has been granted for your student to come and collect data for her PhD studies here at our University. Please be advised that your student should come with an introductory letter from your University as well as an appropriate ID.

Sincerely,

Ms. Margaret Sarai
Head of Library

Appendix 10: Application letter for Data collection at Tanzania Library Association



Information Studies

School of Social Sciences

University of KwaZulu-Natal Private Bag X01

Scottsville 3209, South Africa

Tel: +27 (0) 33 2605571

Fax: +27 (0) 33 2605092

mutulas@ukzn.ac.za

25th July, 2016

Chairperson,
Tanzania Library Association,
P.O.Box 33433,
Dar es Salaam.
Tanzania.

Dear Sir/Madam,

RE: APPLICATION FOR RESEARCH DATA COLLECTION

Reference is made to the above subject.

Ms. Rehema Ndumbaro is a duly registered PhD student in the Information Studies Programme at the University of KwaZulu-Natal, in South Africa. As part of the requirement for the award of the doctoral degree, she is undertaking a study on "Role of information ethics in the provision of library and information services in university libraries in Tanzania". The study covers four university libraries and Tanzania Library Association in Tanzania.

The purpose of this letter is to kindly request a written permission from your office to enable her collect data from your Association. Possible dates for data collection are flexible within November, 2016 to April, 2017. The data will be collected through survey questionnaire and interviews. Your authorization to this request will be highly appreciated.

Yours sincerely,

A handwritten signature in black ink, appearing to be "Stephen Mutula", written over a horizontal line.

Professor Stephen Mutula
Dean & Head: School of Social Sciences

Appendix 11: Research permit from Tanzania Library Association

TANZANIA LIBRARY AND INFORMATION ASSOCIATION



P.O. Box 33433
Dar es Salaam
TANZANIA
Tel: +255 (0) 759 344 122; 754 371 062
Email: tla_tanzania@yahoo.com
Website: www.tla.or.tz

9th August 2016

TLA/HO/ADM/12/001

Information Studies,
School of Social Sciences,
University of KwaZulu-Natal Private Bag X01,
Scottsville 3209,
Pietermaritzburg,
South Africa.

RE: RESEARCH PERMIT

The reference is made to your letter dated 25th July 2016.

On behalf of Tanzania Library and Information Association (TLA), I am writing to formally indicate our awareness of the research on *"Role of information ethics in the provision of library and information services in university libraries in Tanzania"* by Rehema Ndumbaro, a PhD student in the Information Studies Programme at the University of KwaZulu-Natal, in South Africa. I am aware that Rehema Ndumbaro intends to conduct her research by administering a survey questionnaire and interviews to our Association.

As Chairperson of TLA I grant Rehema Ndumbaro permission to conduct her research at our Association.

If you have any questions or concerns, please feel free to contact our office.

Sincerely,

Dr. J. J. Manyerere
TLA Chairperson

Cc: Ms. Rehema Ndumbaro

Appendix 12: Research ethical clearance certificate from the University of KwaZulu-Natal



28 September 2016

Ms Rehema Ndumbaro (215081656)
School of Social Sciences
Pietermaritzburg Campus

Dear Ms Ndumbaro,

Protocol reference number: HSS/1359/016D

Project title: Role of Information Ethics in the Provision of Library and Information Services in University Libraries in Tanzania

Full Approval – Expedited Application

In response to your application received on 28 August 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of **3 years** from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Professor Stephen Mutula
Cc Academic Leader Research: Professor M Naidu
Cc School Administrator: Ms Nancy Mudau

Humanities & Social Sciences Research Ethics Committee

Dr Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/8360/4557 Facsimile: +27 (0) 31 260 4806 Email: ximbap@ukzn.ac.za / seymenm@ukzn.ac.za / mchunp@ukzn.ac.za

Website: www.ukzn.ac.za



100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

Appendix 13: Contract with supervisor

School of Social Sciences

CONTRACT BETWEEN SUPERVISOR AND CANDIDATE



The relationship between supervisor and a candidate for a research degree is one of mentorship. A supervisor should advise about the structure of the degree, should direct the candidate to sources and material, may suggest better forms of expression, but in the end the dissertation or thesis must be the candidates own work.

CORRECTION OF STYLE AND GRAMMAR

A completed dissertation or thesis must be satisfactory as regards form and literary expression. Although the supervisor will point out any passages in it which are stylistically poor, or which are grammatically weak, it is not possible for a supervisor to correct great numbers of language errors, nor is it the supervisor's responsibility to do so. A student may, if necessary, and at his or her own cost, employ a copy editor to proofread the dissertation or thesis and correct errors of expression or style.

PLAGIARISM

A candidate may not include in the dissertation or thesis any quotations from another writer, or adopt substantial ideas from another writer, without acknowledgement and without reference to the source of the quotation. Direct quotations must be indicated by the use of quotation marks. All cases of plagiarism will be reported to the University Proctor for disciplinary action, and may lead to the dissertation or thesis and the degree being failed.

EXPECTATIONS OF SUPERVISOR AND CANDIDATE

Projected date for the submission of the research proposal 4th May, 2016

Will the candidate be expected to attend group seminars? Yes

Approximate frequency of such seminars whenever they are organised within the University

How often will the candidate present written work? E.g. monthly, quarterly, etc. After 2 Weeks.

How often will the supervisor and the candidate expect to meet? e.g. monthly, every two months, etc. Every 2 weeks.

Approximately how soon after submission of written work may the candidate expect comments from the supervisor? After 2 Weeks.

Any other special provisions agreed on? **None**

Candidate



Supervisor



Signed

Signed

Rehema Ndumbaro.
Full Name: (print)

Prof. Stephen M. Mutula
Full Name: (print)

215081656
Student number:

29 April, March 2016
Date:

3rd May, March 2016
Date:

NOTE:

The supervisor's consent is required in order to submit the completed dissertation or thesis for examination and no thesis will be accepted by the Faculty Office for examination without the supervisor's approval. The supervisor must see the final version of the thesis before submission. A candidate may, if he/she wishes, insist on submission without the supervisor's consent, but this fact will be noted in the supervisor's report.

Appendix 14: Form IP2 from the University of KwaZulu-Natal

IP
TTO

THE UNIVERSITY OF KWAZULU-NATAL



FORM IP2

INTELLECTUAL PROPERTY AND PROPRIETARY INFORMATION AGREEMENT

Entered into by and between

THE UNIVERSITY OF KWAZULU-NATAL
("UKZN")

a higher education institution and a juristic person in terms of the Higher Education Act 101 of 1997, as amended

represented herein by **PROFESSOR NELSON MUTATINA IJUMBA** in his capacity as
DEPUTY VICE-CHANCELLOR: RESEARCH, duly authorized,

and

***Legal Name: First, Middle & Last (Please print or type):**

Rehema Corbinian Ndumbaro

(hereinafter "IP Creator"/"I"/"my")

***Title (Dr/Mr, etc.) Ms.**

***UKZN Staff/Student No.:215081656**

***E-mail address rehemandumbaro09@gmail.com**

***UKZN Tel. Ext. _____**

***Cellphone +2771 213 0657/+255768 283 609**

***Faculty, School and Department: Humanities, School of Social Sciences and Information Studies**

***All items above must be completed in full before returning to the IP & Technology Transfer Office.**

This agreement is made in consideration of the following:

- my continuing or anticipated employment at the University of KwaZulu-Natal (UKZN); and/or
- my performance of research at UKZN; and /or
- opportunities made or to be made available to me to make significant use of UKZN administered funds and/or UKZN facilities; and/or

- opportunities to share in royalties and other inventor/author rights outlined in the UKZN Commercial Initiatives Policy and/or UKZN Intellectual Property Policy.

In exchange for the consideration listed above, I agree to each of the following:

1. To disclose to UKZN promptly (within 90 days of its identification and before it is made public) all intellectual property, including inventions, designs, copyrightable materials, trade marks, domain names, computer software, semiconductor mask works, plant breeders' rights and tangible research property ("Intellectual Property") conceived, invented, authored, or reduced to practice by me, either solely or jointly with others, which:
 - a. has been developed in the course of or pursuant to a sponsored research or other agreement in which I was or am a participant as defined in Part 2 of UKZN's Intellectual Property Policy; and/or
 - b. results from the significant use of UKZN administered funds or UKZN facilities as defined in Paragraph 2.1.2. in the UKZN Intellectual Property Policy; and/or
 - c. results from a "work for hire" funded by UKZN as defined in Paragraph 2.1.4. of the UKZN Intellectual Property Policy; and/or
 - d. emanates from publicly financed research and development as contemplated in the *Intellectual Property Rights from Publicly Financed Research and Development Act No. 51 of 2008*;

and I hereby assign (and/or confirm assignment of, as appropriate) all such Intellectual Property, as well as my rights in and to such property, to UKZN subject to the understanding that I shall share in the benefits of any commercialization of such property and/or rights, such benefit sharing to be arranged in accordance with UKZN's Intellectual Property Policy and legal requirements existing as at the date of my signature of this Agreement.
2. To execute all necessary papers and otherwise provide proper assistance, promptly upon UKZN's request and at UKZN's expense, during and subsequent to the period of my UKZN affiliation, to enable UKZN to obtain, maintain, and/or enforce for itself or its nominees, patents, registered designs, trade marks, copyrights, domain names, plant breeders' rights or other legal protection for such Intellectual Property.
3. To prepare and maintain for UKZN adequate and current written records of all such

UKZN Intellectual Property together with proposed routes for exploitation thereof, commercial or otherwise, and frameworks for compensation of UKZN and the relevant IP Creators.

4. To deliver promptly to UKZN when I leave UKZN for whatever reason, and at any other time as UKZN may request, copies of all written records referred to in Paragraph 3 above as well as all related memoranda, notes, records, schedules, plans or other documents, and Tangible Research Property made by, compiled by, delivered to, or manufactured, used, developed or investigated by UKZN, which will at all times be the property of UKZN.
5. Not to disclose to UKZN or use in my work at UKZN (unless otherwise agreed in writing with UKZN):
 - a. any proprietary information of any of my prior employers or of any third party, such information to include, without limitation, any trade secrets or confidential information with respect to the business, work or investigations of such prior employer or other third party; or
 - b. any ideas, writings, or Intellectual Property of my own which are not included in Paragraph 1 above within the scope of this Agreement (please note that inventions previously conceived, even though a patent application has been filed or a patent issued, are subject to this Agreement if they are actually first reduced to practice under the circumstances included in Paragraph 1 above).
6. That the ownership of the full copyright in any treatise, dissertation and/or thesis created by me, relating to any degree conferred by UKZN (whether undergraduate or postgraduate), vests in UKZN if any of the Fundamental Ownership Rules of Paragraph 2.1.1 of UKZN's Intellectual Property Policy is satisfied, and that in circumstances where the Fundamental Ownership Rules of Paragraph 2.1.1 are not satisfied, ownership of limited pre-publication copyright rights shall vest in UKZN by virtue of the fact that UKZN has conferred the degree giving rise to the treatise, dissertation or thesis. In such circumstances, I hereby grant to UKZN a perpetual, non-exclusive, royalty-free licence (i.e. permission) to digitize, reproduce, share, disseminate and/or publicly distribute copies of my treatise, dissertation or thesis for research and study purposes only. Such licence shall be understood to take effect immediately and automatically upon creation of said treatise, dissertation or thesis; however, if UKZN requests a written document recording the licence, I agree to do all things necessary to give effect to such document and UKZN shall bear the costs of

such written licence document.

7. In the event that my whereabouts cannot be traced and authorisation is required to include the whole or part of a treatise, dissertation or thesis created by me in a publication by any other person, and/or subsequently to reproduce it, I hereby agree that the IP Steering Committee of UKZN may, in Consultation with the UKZN Copyright Office, and on condition that it has been shown evidence of reasonable attempts to trace me and to make provision for remuneration of me, and provided further that it has considered all relevant factors, including my moral rights, make an assessment and recommendation regarding the requested inclusion and subsequent publication of the treatise, dissertation or thesis; and I hereby agree to abide by said recommendation.
8. I undertake to forward master copies and electronic copies of all treatises, dissertations and/or theses created by me to UKZN Libraries by the date, in the numbers and in the format stipulated by UKZN Libraries in their policies as at the time of creation of the treatise, dissertation or thesis concerned.
9. I agree that any software code, patentable subject matter and/or other underlying intellectual property contained in or referenced by any treatise, dissertation or thesis created by me is owned by UKZN subject to the Fundamental Ownership Rules of UKZN's Intellectual Property Policy.

This Agreement replaces all previous agreements relating in whole or in part to the same or similar matters that I may have entered into with UKZN. It may not be modified or terminated, in whole or in part, except by agreement in writing signed by an authorised representative of UKZN. Discharge of my undertakings in this Agreement will be an obligation of my executors, administrators or other legal representatives or assignees.

I represent that, except as identified on pages attached hereto, I have no agreements with or obligations to others in conflict with the foregoing.



Your signature (i.e. signature of IP Creator) (include full first name)

Rehema Ndumbaro

Print name

SIGNED ATPMB..... on this. 28thday of.....APRIL. .2016

FOR THE UNIVERSITY OF KWAZULU-NATAL

PROFESSOR NELSON MUTATINA IJUMBA in his capacity as DEPUTY VICE-
CHANCELLOR: RESEARCH

SIGNED AT WESTVILLE on this.....day of.....20....

Please return to: UKZN Intellectual Property & Technology Transfer Office ("IPTTO"), 8th Floor, Library Building, Westville Campus. For further information see the UKZN Intellectual Property Policy, visit the IPTTO website (which may be accessed from the Research Office webpage) or contact the Director of the IPTTO on Tel. +27 (0) 31 260 3326.

Appendix 15: Editor's letter



Barbara Mutula
Associate Member

Membership number: MUT001
Membership year: March 2017 to February 2018

078 643 9029
kabangebarbara@gmail.com

www.editors.org.za

12 December 2017

TO WHOM IT MAY CONCERN

This is to confirm that the dissertation written by Mrs. Rehema Ndumbaro and titled '**Role of Information Ethics in the Provision of Library and Information Services in University Libraries in Tanzania**' was copy edited for layout (including numbering, pagination, heading format, justification of figures and tables) grammar, spelling and punctuation by the undersigned. The document was subsequently proofread and a number of additional corrections were advised.

The undersigned takes no responsibility for corrections/amendments not carried out in the final copy submitted for examination purposes.

A handwritten signature in blue ink, appearing to read 'Barbara', written over a horizontal line.

Mrs. Barbara L. Mutula-Kabange

Copy Editor, Proof reader
BEd (UBotswana), BSSc Hons Psychology,
MEd Educational Psychology (UKZN)

Appendix 16: Questionnaire for library professionals

Dear respondent,

I am Rehema Ndumbaro, a PhD student in information studies programme at the University of KwaZulu-Natal in South Africa, Pietermaritzburg campus. I am conducting research on **“Role of Information Ethics in the Provision of Library and Information Services in University Libraries in Tanzania.”**

For the purpose of this study, information ethics refers to the field of ethics that deals with the values arising from the development and application of information technology (i.e. responsible use of information technology). Information ethics values include privacy, dignity, integrity, accuracy of information, quality of services, confidentiality, protecting intellectual property, data protection, respecting human rights and more

I would like to invite you to complete this questionnaire. Any information provided will be used only for the purpose of this research and treated confidentially. I will greatly appreciate for your cooperation.

Please fill in the blank space or tick in the appropriate box for each question.

Section 1: Demographic information

1. Name of university library
2. Gender
 - ☐ Male
 - ☐ Female
3. Age
 - ☐ 21-30 years
 - ☐ 31-40 years
 - ☐ 41-50 years
 - ☐ 51-60 years
 - ☐ 61 and above
4. Your highest qualification
 - ☐ Certificate
 - ☐ Diploma
 - ☐ Bachelor's Degree
 - ☐ Master's Degree
 - ☐ PhD
5. Your designation/title at work.....
6. Working experience in this position
 - ☐ 0-4 years
 - ☐ 5-8 years
 - ☐ 9-12 years
 - ☐ 13 years and above

Section 2: Level of awareness of library professionals with respect to information ethics in the university libraries in Tanzania

7. Level of awareness of information ethics

Statement				
I am aware:	Very High Aware	High Aware	Aware	Not Aware
About information privacy				
About information accuracy				
About intellectual property				
About information access				
Copyright violation is wrong				
Of respecting others in online environment				

8. Adherence of library professionals to information ethical practice (based on PAPA model)

Statement					
I adhere to:	Strong Agree	Agree	Neutral	Disagree	Strong Disagree
information privacy					
information accuracy					
intellectual property					
information access					

9. Are you aware of your professional ethics?

Yes ☐ No ☐ don't know ☐

Section 3: Attitudes and Perception of library professionals in the University Libraries in Tanzania towards Information Ethics

10. Attitude and perception of Library Professionals towards Information ethics

Statement	Always	Sometimes	Never	Neural	Don't know
Libraries shall enforce restriction on information when human right or privacy of another person are violated					
Librarians shall not disclose for any purpose any format or administrative records which has been delivered to them in confidence					
We uphold and protect library user's rights to privacy and confidentiality with respect to information sought or received, acquired or transmitted.					
No library material should be excluded from the libraries because of the race, nationality, or political, social, moral or religious view of their author					
The libraries should consider each individual information query to be of equal merits regardless of age, gender, ethnicity, status					
We provide access to information to everyone regardless of their skills, geographical location and access to internet.					
Libraries should not endorse the use of filtering software in libraries to restrict or block access to materials in the internet					
Library should respect the right of authors					
Library should not infringe copyright for the benefit of their users					
We abide by our contractual obligations regarding copyrighted materials					
Library shall seek to provide users with complete, accurate answers to their information queries regardless of the complexity of the queries.					
We provide the highest level of services using the most appropriate resources.					
We keep well-informed of development in librarianship in those branches of professional practice in which qualification and experience entitle us to engage					
Libraries should provide conducive environment for library users					
Libraries should address ergonomic aspects such as increase its quality and efficiency for library users					
Libraries should be held responsible for any form of harm caused by using library facilities					

Section 4: Factors that influence information ethics practice by library professionals in university libraries in Tanzania.

11. What do you think are the factors that influencing ethical conduct of library professionals in providing information services in university libraries?

.....

.....

.....

.....

.....

Section 5: Integration of information ethics in the library professional practice in university libraries in Tanzania

12. What support are you provided by the university library to ensure you provide library and information services ethically to the users?

.....

.....

.....

.....

13. What challenges do you face in providing library and information services in an ethical manner?

.....

.....

.....

.....

14. How can the challenges identified in 14 above be resolved?

.....

.....

.....

15. What sanctions are meted to staff who do not comply with ethical requirements in providing library and information services to users?

.....

.....

16. In your opinion, what is the importance of integrating information ethics in provision of library and information services in your university library? (Please explain)

.....

.....

.....

.....

17. What in your opinion should be done to ensure library professionals in the university library integrate information ethics in their professional practice? (Please explain)

.....
.....
.....
.....

18. What policy is available if any to entrench information ethics in the provision of library and information services?

.....
.....
.....

19. How is Tanzania Library Association involved in the provision of policy/guideline with regard to information ethics?

.....
.....
.....
.....

20. What support are you provided by Tanzania Library Association to ensure ethical provision of library and information services?

.....
.....
.....

21. Please provide any other comments about information ethical practice in the provision of library and information services by the professional library staff in the university library.

.....
.....
.....
.....
.....

Thank you for your cooperation

Appendix 17: Questionnaire for faculty

Dear respondent,

I am Rehema Ndumbaro, a PhD student in information studies programme at the University of KwaZulu-Natal in South Africa, Pietermaritzburg campus. I am conducting research on **“Role of Information Ethics in the Provision of Library and Information Services in University Libraries in Tanzania.”**

For the purpose of this study, information ethics refers to the field of ethics that deals with the values arising from the development and application of information technology (i.e. responsible use of information technology). Information ethics values include privacy, dignity, integrity, accuracy of information, quality of services, confidentiality, protecting intellectual property, data protection, respecting human rights and more

I would like to invite you to complete this questionnaire. Any information provided will be used only for the purpose of this research and treated confidentially. I will greatly appreciate for your cooperation.

Please fill in the blank space or tick in the appropriate box for each question.

Section 1: Demographic Information

1. Name of the University.....
2. Please indicate your highest qualification
3. Position/Title/qualification
 - ☐ Assistant Lecturer
 - ☐ Lecturer
 - ☐ Senior Lecturer
 - ☐ Associate Professor
 - ☐ Professor
 - ☐ Others (specify)
4. Working experience (years) in your current position
5. Gender: Male ☐ Female ☐
6. Age: 20-30 years ☐ 31-40 years ☐ 41-50 years ☐ 51-60 years ☐ 61 and above ☐

Section 2: Perceptions of faculty towards professional librarians with respect to providing library and information services in an ethical manner

7. Library professionals practice the following ethical values in providing library and information services

Ethical values	Strongly Agree	Agree	Neutral	Disagree	Strong Disagree
a) Privacy					
b) Access					
c) Accuracy					
d) Trust					
e) Intellectual property					
f) Dignity					
g) Quality of services					

8. Are you made aware on the above ethical values by library professionals?

Yes ☐ No ☐ don't know ☐

If YES please explain how?

.....

If NO, explain why?

.....

9. Availability and adequacy of information resources and services.

Library resources and services	Available and very adequate	Available and adequate	Available but not adequate	Not available
Books				
Journals				
Reference sources such as encyclopedia, dictionary, year book,				

atlas, gazettes, etc.				
Selective Dissemination of Information (SDI)				
Interlibrary loan/cooperation				
Current awareness services (CAS)				
Indexing and abstracting services				
Answering users' queries				
User education i.e. Teaching users how best to exploit library resources				
Library display and publicity				
Internet facilities				
Loan services				
Photocopying services				
Reference services				
Online Public Access Catalogue				

10. Satisfaction with library environment

Library environment	Very satisfied	Satisfied	Average	Dissatisfied	Very Dissatisfied
Library building					
Reading area					
Lighting system					
Reading tables and chairs					
Ventilation in the library					
Individual study carrels					
Silence in the library					
Toilet facilities					

Level of cleanness					
Security of personal property					

11. What strategy can you recommend to the university to improve ethical practice in the provision of library and information services in university libraries in Tanzania?

.....

12. Please provide any other suggestions you may have with regards to information ethics practice by professional library staff in the provision of library and information services in university libraries.

.....

Thank you for your cooperation

Appendix 18: Questionnaire for Postgraduate students

Dear respondent,

I am Rehema Ndumbaro, a PhD student in information studies programme at the University of KwaZulu-Natal in South Africa, Pietermaritzburg campus. I am conducting research on **“Role of Information Ethics in the Provision of Library and Information Services in University Libraries in Tanzania.”**

For the purpose of this study, information ethics refers to the field of ethics that deals with the values arising from the development and application of information technology (i.e. responsible use of information technology). Information ethics values include privacy, dignity, empathy, integrity, accuracy of information, quality of services, confidentiality, protecting intellectual property, data protection, respecting human rights and more.

I would like to invite you to complete this questionnaire. Any information provided will be used only for the purpose of this research and treated confidentially. I will greatly appreciate your cooperation.

Please fill in the blank space or tick in the appropriate box for each question.

Section 1: Demographic Information

1. Name of the University Library-----
2. Please indicate your College/Faculty -----
3. Program enrolled for:
 - ☐ Masters
 - ☐ PhD
 - ☐ Others..... (Specify)
4. Year of study
 - ☐ First Year
 - ☐ Second Year
 - ☐ Third Year
 - ☐ Fourth year and above
5. Gender
 - ☐ Male
 - ☐ Female
6. Age
 - ☐ 20-30 years
 - ☐ 31-40 years
 - ☐ 41-50 years
 - ☐ 51-60 years
 - ☐ 61 and above

Section 2: Perception of postgraduate students towards librarians with respect to ethical provision of library and information services

7. Library professionals practice the following ethical values in providing library and information services

Ethical issues	Strongly Agree	Agree	Neutral	Disagree	Strong Disagree
h) Privacy					
i) Access					
j) Accuracy					
k) Trust					
l) Intellectual property					
m) Dignity					
n) Quality of services					

8. Are you made aware by library professionals on the above information ethics values?

Yes ☐ No ☐ don't know ☐

If YES please explain how?

.....

If NO, explain why?

.....

9. Availability and adequacy of information resources and services

Library resources and services	Available and very adequate	Available and adequate	Available but not adequate	Not available
Books				
Journals				
Reference sources such as encyclopedia, dictionary, year book, atlas, gazettes, etc.				
Selective Dissemination of Information (SDI)				
Interlibrary loan/cooperation				
Current awareness services (CAS)				
Indexing and abstracting services				
Answering users' queries				
User education i.e. Teaching users how best to exploit library resources				
Library display and publicity				
Internet facilities				
Loan services				
Photocopying services				
Reference services				
Online Public Access Catalogue				

10. Satisfaction with library environment

Library environment	Very satisfied	Satisfied	Average	Dissatisfied	Very Dissatisfied
Library building					
Reading area					
Lighting system					
Reading tables and chairs					
Ventilation in the library					
Individual study carrels					
Silence in the library					
Toilet facilities					
Level of cleanness					
Security of personal property					

11. What strategy can you recommend to the university library to improve information ethical practice in university libraries in Tanzania?

.....

.....

.....

12. Please provide any other suggestions with regards to information ethical practice in provision of library and information services in the university library.

.....

.....

Thank you for your cooperation

Appendix 19: Semi-structured interview schedule for heads/directors of university libraries

Dear respondent,

I am Rehema Ndumbaro, a PhD student in information studies programme at the University of KwaZulu-Natal in South Africa, Pietermaritzburg campus. I am conducting research on **“Role of Information Ethics in the Provision of Library and Information Services in University Libraries in Tanzania.”**

For the purpose of this study, information ethics refers to the field of ethics that deals with the values arising from the development and application of information technology (i.e. responsible use of information technology). Information ethics values include privacy, integrity, accuracy of information, information access, quality of services, confidentiality, protecting intellectual property, data protection, respecting human rights and more

I would like to invite you to respond to the questions provided in this schedule. Any information provided will be used only for the purpose of this research and treated confidentially to uphold your privacy. I will greatly appreciate your cooperation.

Section 1: Preliminary Information

1. Please state the name of the University library.....
2. Please state your designation.....
3. State your highest qualification.....
4. State the duration you have served in this position (in years) in this library
5. Please state your gender
6. Please indicate your age.....

Section 2: Level of awareness of librarians with respect to information ethics in the university libraries in Tanzania

7. In your opinion, describe the level of librarians’ awareness about the values of information privacy, accuracy, intellectual property, information access, dignity of users, quality of library and information services, and dignity of users
8. How does the library promote awareness about ethical practice to library users in the provision of library and information services?

Section 3: Attitude and perception of professional librarians in the university libraries in Tanzania towards information ethics

9. In your opinion, what is the perception and attitude of library professionals in university libraries towards information ethics issues such as privacy, accuracy, intellectual property and access?
10. How do librarians apply information ethics in university libraries to promote the provision of library and information services to the users?

Section 4: Factors that influence information ethics practice by library professionals in university libraries in Tanzania

11. What in your opinion are the factors that influence information ethics practice by library professionals in your university library?

Section 5: Integration of information ethics in the library professional practice in university libraries in Tanzania.

12. What kind of support is provided by library to staff to ensure they provide information services to users in an ethical and responsible manner?

13. What sanctions are meted to staff who do not comply with ethical requirements in providing information services?

14. What mechanisms are available for users to voice their concern as far as provision of library and information services is concerned?

15. What policy is available if any to entrench ethical practice in the provision of library and information services?

16. What challenges are faced or likely to be faced in integrating information ethics in the provision of library and information services your library?

17. How can the challenges identified in 18 above be addressed?

18. What is the importance of integrating information ethics into LIS curriculum?

19. Please provide any other comments with regard to information ethics practice in the provision of library and information services in University libraries in Tanzania

THANK YOU FOR YOUR COOPERATION.

Appendix 20: Semi-structured interview for Tanzania Library Association officials

Dear respondent,

I am Rehema Ndumbaro, a PhD student in information studies programme at the University of KwaZulu-Natal in South Africa, Pietermaritzburg campus. I am conducting research on **“Role of Information Ethics in the Provision of Library and Information Services in University Libraries in Tanzania.”**

For the purpose of this study, information ethics refers to the field of ethics that deals with the values arising from the development and application of information technology (i.e. responsible use of information technology). Information ethics values include privacy, integrity, accuracy of information, information access, quality of services, confidentiality, protecting intellectual property, data protection, respecting human rights and more

I would like to invite you to complete the questions in this interview schedule. Any information provided will be used only for the purpose of this research and treated confidentially. I will greatly appreciate for your cooperation.

Section 1: Preliminary Information

1. Please state your gender.....
2. Please state your position in Tanzania Library Association.....
3. Please state the duration (in years) you have served in the current position.....
4. Please state your highest qualification
5. Please indicate your age range (e.g. 51-60 years).....

Section 2: Level of awareness of librarians with respect to information ethics practice in university libraries in Tanzania

6. To what extent are the librarians aware of information ethics practice in the provision of library and information services in university libraries in Tanzania?
7. What is the role of TLA in promoting information ethical practice among professional librarians in university libraries in Tanzania?
8. What policy/guideline/other support does TLA have to ensure ethical compliance in the provision of library and information services by professional librarians in university libraries in Tanzania?
9. How does TLA promote awareness about compliance with ethical practice to library professionals in the provision of library and information services in university libraries in Tanzania?

10. What challenges does TLA face in executing its mandate with regard to ensuring its membership provide library and information services ethically in university libraries in Tanzania?
11. How can the challenges identified in 12 above be alleviated?

Section 3: Attitude and perception of professional librarians in the university libraries in Tanzania towards information ethics

12. What in your opinion is the perception and attitude of library professionals in university library towards information ethics?

Section 4: Factors that influence information ethics practice by library professionals in university libraries in Tanzania.

13. What in your opinion are the factors that influence information ethics practice by library professionals in university libraries in Tanzania?

Section 5: Integration of information ethics in the library professional practice in university libraries in Tanzania.

14. What is the importance of integrating information ethics into LIS curriculum?
15. What mechanisms are used by TLA to ensure library professionals provide information services in an ethical manner?
16. What sanctions are meted out by TLA to professional librarians in university libraries who do not comply with ethical requirements of providing library and information services to the users?
17. Please provide any other observations you may have with regard to ethical aspects of providing library and information services in university libraries in Tanzania

THANK YOU FOR YOUR COOPERATION