KNOWLEDGE OF COPYRIGHT ISSUES AND STRATEGIES USED IN SOLVING

COPYRIGHT QUERIES AMONG ACADEMIC LIBRARIANS IN KENYA

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by

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KNOWLEDGE OF COPYRIGHT ISSUES AND STRATEGIES USED IN SOLVING COPYRIGHT QUERIES AMONG ACADEMIC LIBRARIANS IN KENYA

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ABSTRACT

Value that people place on information has resulted in information being commodified. Despite being viewed as a product of human creative endeavor, information is also considered as a kind of property, an intellectual property, one that can be owned, exchanged, and traded like any other commodity.

Just like other legally-protected commodities, intellectual property and copyright in particular has become highly regulated through laws, treaties, and contracts. How well intellectual property rights regulations are serving society is debatable. As purveyors of information, librarians are among those who are expected to be responsible for enforcing intellectual property rights regulations in their libraries. In spite of stronger copyright mechanisms such as enactment of stricter laws, use of technology protective measures, use of licenses, better administration, and enforcement that have been put in place in Kenya over the years, copyright infringement has persisted. In addition, there are numerous ongoing copyright issues requiring urgent attention, and the library community looks to the librarian for guidance on such issues. How well librarians are prepared to evaluate and enforce intellectual property rights is little understood, especially in developing countries such as Kenya where copyright infringement seems to be rampant. It thus becomes important to be able to know whether librarians and especially those in developing countries such as Kenya are aware of copyright provisions.

This study thus seeks to find out whether different cadres of academic librarians based on academic qualifications and duration of service differ in knowledge about copyright issues and whether they also differ in type of strategies they employ in solving queries related to copyright.

Data was collected from 167 academic librarians (16 Certificate, 74 Diploma, 30 Bachelors, 42 Masters and 5 PhD holders) using a survey questionnaire. Afterwards, 32 participants (3 Certificate, 10 Diploma, 8 Bachelors, 8 Masters and 3 PhD holders) were conveniently sampled to participate in the think aloud protocol and the interviews/critical incident technique which were used to help in triangulation of the constructs being measured (awareness/knowledge and strategies that librarians employ when presented with copyright queries).

Academic Librarians were found to only be moderately knowledgeable about copyright issues. Significant differences were found in tested knowledge of copyright issues among librarian cadres although the difference was not huge as evidenced by a medium effect size. However, no statistical significant difference was found in any of the 4 factors used in assessing self reported knowledge about copyright issues among the various academic librarian cadres based on their education level. There was also no statistical significant difference is both tested knowledge and in 3 of the 4 factors used in assessing self reported knowledge in relation to the duration that a librarian has worked in libraries. However, self reported knowledge of theoretical principles of copyright was found to be significant in relation to duration librarians had worked in the library.

Only two of the 4 factors measuring self rated knowledge were statistically significant in relation to the department a librarian works in.

Ignorance and misinterpretation of what is contained in the Kenyan Copyright law was evident, and so was the existence of learned helplessness among the lower cadre academic librarians when it comes to trying to tackle copyright infringement. Trying to educate users was employed by users a lot although many users never took in the advice. PhD and Masters Degree holders had a higher tendency to deny users from photocopying documents as opposed to the other cadres.

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CHAPTER ONE: INTRODUCTION

1.0 Overview

Modern society is no longer characterized by land, labor, and capital alone. It is also

characterized by information, which is increasingly playing a critical role in economic,

cultural, and socio-political development (Britz, 2004; Carlaw, Oxley, & Walker, 2006).

Value that people place on information is what has resulted in it being commodified.

Despite being viewed as a product of human creative endeavor, information is also

considered a kind of property: an intellectual property, one that can be owned,

exchanged, and traded like any other commodity.

Just like other legally-protected commodities, intellectual property and copyright in

particular has become highly regulated through laws, treaties, and contracts. How well

intellectual property rights regulations are serving society is debatable. As purveyors of

information, librarians are among those who are expected to be responsible for enforcing

intellectual property rights regulations in their libraries. How well librarians are prepared

to evaluate and enforce intellectual property rights is little understood, especially in

developing countries such as Kenya where copyright infringement seems to be rampant.

It thus becomes important to be able to know whether librarians and especially those in

developing countries such as Kenya are aware of copyright provisions.

 Through comparison between how professors, other staff members, and Librarians in the

United States are perceived in terms of their awareness and knowledge on copyright, Cox

(1998) and Williamson (1992) found that librarians were perceived to be most

knowledgeable on copyright and related issues. However, what is not clear is whether these librarians actually are knowledgeable about copyright provisions.

The commodification of information did not occur spontaneously. In Europe, commodification can be traced to the 15th century, when the first patent was issued in Venice (Prager, 1944). The need for protection of property rights became pronounced during the industrial revolution partly due to the many innovations and developments that were taking place and partly due to trying to deter unscrupulous people from trying to use the inventions for their own economic gain at the expense of the inventor.

Authors in Europe too started to demand ownership of their works during the 17th century. They felt they were the ones who created and brought forth the ideas embodied in their works, hence the need to be the rightful owners of those works. This claim got great impetus when around that time, thinkers such as John Locke started to advocate for the idea of property ownership as a natural right which he viewed as the basis for human freedom. Because Locke advocated that every person has ability to either work physically or mentally, the output of such work ought to be that person's property. This meant that an author's or an artist's intellectual output is his property. It did not take long before society recognized and accepted that an author's work was his property and by extension, his commodity. With works being seen as commodities, printers, booksellers, and authors alike wanted to maximize the amount of money they could earn from the works they published.

Unfortunately, booksellers and printers continued to have more say over an author's work when compared to the author and most authors never benefited much from their own works because printers and booksellers were able to make changes to works, publish, and even republish the works without the author's knowledge nor permission. Authors lobbied the British Parliament to pass a law that would bestow to them property ownership rights to the works that they have produced.

In 1710, the first copyright law was drafted (Guindon, 2006). The Statute of Anne recognized authors' intellectual property rights and protected these works for a period of fourteen years, renewable once for an additional fourteen years (United Kingdom, 1710). These protection initiatives came into being partly because writers and inventors felt a need to guard their works so that their ideas could not be stolen by others who would in turn use the acquired ideas for personal economic gain. The initiative was also used in part as a way to curb and eventually end monopolies in the publishing sector that had for a long time been enjoyed by printers and booksellers. This act was thus intended to be a panacea to regulate the publishing industry. As years went by, the diversity of media and the increase in various forms of intellectual output resulted in a complex intellectual property system.

Intellectual property rights (IPR) include copyright, patents, trade secrets, and trademarks. The benefits that society gets from IPR have at times been contentious. Proponents of more strict control argue that IPR helps grow a country's economy, creates employment, and leads to creation of more works thus IPR are inevitable tools when it

comes to supporting a knowledge society (European Commission, 2008; Software and Information Industry Association [SIIA], 2009). On the other hand, opponents of this notion think that IPR is only being used as a tool to perpetuate political and economic dominance in society (Britz, 2004; May, 2003; Nicholson, 2006). These proponents of looser control argue that this dominance is more often than not, perpetuated by developed nations and huge multinational companies over developing countries.

In spite of the tension between the pro- and the anti-copyright movements, the copyright industry has been shown to have significant economic contribution to nations. In the United States of America, this industry accounted for 3.7% of the country's gross domestic product (GDP), employed 3 million people and created $45.8 billion worth of revenue in foreign sales in 1996 (Rupp-Serrano, 1997). In 2003 it represented 6% GDP and employed 4.7 million people and by 2006, accounted for 11.2% of the United States GDP (Siwek, 2007). In Singapore, this industry had an output of S$8.7 billion, accounting for 5.7% of that country's GDP and employed 118,600 people in 2001 (Chow & Leo, 2005). In the 15 member countries of the European Union, this industry employs 5.2 million people and contributes €1,200 billion to the economy (European Commission, 2008). Based on such statistics, it seems that proceeds from IPR industry are the catalyst that make many developed nations go to great lengths ensuring that stronger intellectual property laws and treaties are put in place. These laws and treaties thus become pillars on which a sizeable part of these countries' GDP grow.

However, Africa's import of goods from copyright industries grew exponentially from a total of $211 million in 1996 to $4.3 billion in 2005 (United Nations Conference on Trade and Development [UNCTAD], 2008). This means that Africa has become a net importer of goods from the copyright industry in other nations. This is partly due to the fact that the copyright industry in many African countries such as Kenya is still young, fragile and developing (Zeleza, 1996), especially the publishing sector (Le Roux & Galloway, 2008). In countries such as Rwanda, publishing houses have for a very long time been nonexistent. It was only in 1995 that the first publishing house meant to publish childrens books was established (Bakame Editions, 2009). Even with the addition of this publishing house, there still exists an extremely low output in the publishing sector compared to the demand for intellectual property products.

Kenya has been at the forefront in ratifying most of the copyright treaties such as the Berne Convention of 1866 for the protection of literary and artistic works; Universal Copyright Convention of 1952; Rome Convention of 1961 for the protection of performers and producers of phonograms and broadcasting organizations; Geneva Convention of 1971 for protection of producers of phonograms; the Paris Convention of 1971; Brussels Convention of 1974 that looked into the distribution of programs carrying signals transmitted by satellite; the World Trade Organization (WTO) Agreement on Trade Related Aspects of Intellectual Property (TRIPS) of 1994; World Intellectual Property Organization Performances and Phonogram Treaty of 1996; and the World Intellectual Property Organization Copyright Treaty (WCT) of 1996.

This might be seen as an indicator of Kenya's government commitment to the protection of intellectual property rights.

Multilateral, regional and bilateral trade agreements between developed nations such as the U.S., U.K, and countries in the European Union on one hand and developing countries on the other, have become commonplace since the inception of TRIPS. These agreements have been used by developed nations to maintain greater influence and control on developing nations due to the insertion of intellectual property clauses that tend to be more stringent than those stipulated in TRIPS and in domestic laws of developing countries (Nicholson, 2006). Non-compliance with any aspect of TRIPS and the bilateral and Free Trade Agreements is likely to lead to trade sanctions or to being blacklisted by institutions such as the Office of the United States Trade Representative (Goburdhun, 2007; Nicholson, 2006). Bilateral agreements that Kenya has gotten into with the United States include the African Growth and Opportunity Act (AGOA) which deals with trade in textile and apparel and which was entered into in the year 2000. In the same year, the Cotonou Agreement regarding trade was signed by members of African Caribbean and Pacific (ACP) countries and the European Community (EC). Article 46 of this agreement was devoted to ensuring that there is enhanced intellectual protection among the member states (Cotonou Agreement, 2000).

The morality for strict copyright protection for many African nations comes into question (Nicholson, 2006). Unfortunately, the vast population is just trying to survive and have lived in a culture where copyright is a foreign concept.

This is coupled with the high cost of books (Matsika, 2007), and lack of books in schools and libraries to support meaningful teaching, learning and research.

The deaf and blind have found themselves at an even bigger disadvantage because of the restrictions in copying documents in alternative formats (Roos, 2005). In Africa, beneficiaries of more strict Intellectual Property Rights tend to be foreign publishers and not authors of those books (Nicholson, 2006).

In 1996, WIPO came up with a treaty on copyright. This was due to Information and Communication Technology (ICT), economic, social, and cultural developments that posed new challenges that the Berne Convention was not able to effectively address. As opposed to the Berne Convention which dealt with the rights of the creators, this new treaty was to try and balance creators' rights and the public interest.

In as much as strict copyright protection is being touted as a tool that will enhance economic development in developing countries, Nicholson (2006) finds that copyright protection regimes have actually become unbearable burdens to many African countries. Similar sentiments are presented by Andreasson (2006), who argues that developed nations are using property rights as tools to advance their own capitalistic agendas. Such agendas seem to be blind towards protecting the interest of developing nations, whose population has been marginalized in this era where capitalism and globalization manifests itself in most aspects of a person's life. These laws have tended to favor rights holders; the public interest has continued to shrink.

That developed countries require developing countries such as Kenya to have strict IPR

mechanisms has been viewed by some as hypocritical because when the copyright

industry in those developed countries was still young, they did not want to be party to

strict IPR protection. The United States only signed the Berne Convention in 1989 after it

realized that IPR products were making significant contribution to its economy.

Copyright infringment has however continued to be a menace to rights holders across the

world. In 1996, Spain lost $400 million dollars annually due to illegal copying (Cornella,

1998). The USA loses $11 to 12 billion of revenue due to piracy of software (SIIA,

2009). In Uganda, copying of books is rampant and a similar situation exists in Kenya

(Makan, 2008). In 2000, the textbook industry in Kenya lost KSH 8 million ($114,285)

due to piracy (Wa Micheni, 2008). By 2010, the estimated worth of the Kenyan book

industry was KSH 10 billion ($14,285,714), although 35% of the earnings were lost

through piracy of books (Ngunjiri, 2010).

1.01 Librarians as Copyright Experts

 Information professionals such as librarians have a role to play in issues relating to

copyright. Copyright has a bearing on acquisition, processing, storage and dissemination

of information and these are the core functions of librarians in their day to day work.

When one of these functions is compromised as a result of implementation of the

copyright provisions, access to much needed information can to a great degree be

jeopardized.

Because copyright can affect access to information which has a great influence on education, decision making and other spheres of society, it becomes important to know whether people offering the service are reliable, competent and have sufficient knowledge to offer guidance or perform the critical task of safeguarding the needs of content creators, rights owners and at the same time try to balance with the users need to get access to information.

Farrington-Darby & Wilson (2006) define expertise as the attribute that one posseses in terms of skills and knowledge in performing a task, engaging in decision making, communicating, and showing a sense of responsibility. It is a general assumption that people/professionals with great expertise will offer reliable, effective, efficient, and hence better service that maximizes a client's satisfaction. This assumption might be based on level of education, experience performing the task at hand among other criteria. However, being able to pinpoint that someone is an expert has at times been controversial because expertise can mean different things to different people. Hoffman, Shadbolt, Burton, & Klein (1995) use seven levels of expertise: Naivette, a person who has no idea about a domain; Novice, one with very little exposure to the domain; Initiate, one who has started learning about the domain; Apprentice, one who is in the domain but still undergoing guidance; Journeyman, one who is competent in performing a task but still needs some guidance; Expert, a person who is accomplished in his domain and has vast skill, knowledge and experience in his domain; Master, one regarded as having exceptional knowledge and vast experience in a domain.

Despite this very elaborate way to classify expertise, other people have tended to use fewer categories to classify expertise. Dreyfus & Dreyfus (2005) were able to classify expertise into five categories: Novice, Advanced beginner, Competence, Proficiency, and finally, Expertise. Kinga et al. (2008) only classified level of expertise in three categories, novice, intermediate, and expert. Several researchers have shown that no one becomes an expert overnight.

1.02 How Expertise is Measured

There is no one acceptable way of measuring level of expertise (Farrington-Darby & Wilson, 2006). What is considered as expertise is subjective, as it can depend on context, level of difficulty of the task at hand, expected outcome, or knowledge of the issues at hand. Among the different ways expertise has been measured include being nominated by peers, having an understanding of contexual issues (Kobus, Proctor, & Holste, 2001; Randel, Pugh, & Reed, 1996;). Years of experience and number of times one performs a task tends to be used as an indicator of experience (Russo Jr, 2002), as well as level of education and training (Bobay, Gentile, & Hagle, 2009); cognitive awareness (Williamson, 1992); metacognition (Tabatabaia & Shoreb, 2005) ; prior experience (Agarwala, Sinha, & Tannirub, 1996); decision-making (Kobus, Proctor, & Holste, 2001).

If we are to fully understand and effectively gauge one's level of expertise, it would be naïve to look at it from only one perspective. Rather, it would be ideal to look at it holistically from a multidimensional perspective. Many studies that have tried to engage in expert measurement end up doing novice and expert comparison in terms of cognitive

load ability, attention, accuracy in task performance (Schriver, Morrow, Wickens, & Talleur, 2008), speed in task performance (Schriver, Morrow, Wickens, & Talleur, 2008), or quality of decisions made (Raab & Johnson, 2007).

The study of expertise has been undertaken in diverse domains of study such a medicine (Kinga et al., 2008), education (Watson et al., 2007), nursing (Bobay, Gentile, & Hagle, 2009), psychology, library science (Tabatabaia & Shoreb, 2005), ergonomics (Kobus, Proctor, & Holste, 2001), auditing (Russo Jr, 2002), criminology (Garcia-Retamero & Dhami, 2009). However, there are few studies that have tried to measure level of copyright expertise among information professionals and especially librarians. Williamson (1992) used a survey to collect data from 151 educators at a university in the United States regarding how they perceive themselves regarding their level of awareness of copyright provisions and compliance to those provisions. She found that most educators unintentionally violate copyright provisions due to lack of awareness.

On the other hand, librarians are perceived to be the most knowledgeable people regarding copyright issues in a school setting (Cox, 1998). Using survey, Cox compared librarians', principals' and teachers' perceptions regarding awareness and compliance of fair use, a limitation in copyright law provision. Her focus were schools in the United States and she found that copyright infringements were taking place and teachers were uncertain that they fully understood the copyright provisions. In addition, most of the studies that have tried to look at librarians' expertise of copyright have mainly focused on peer perception when gathering data on librarians' level of awareness and knowledge of

copyright. Peer perceptions can be misleading due to the fact that they can be extremely subjective.

The weakness of these two studies is that they never solely focused on librarians. Because of this lack of focus, they were not able to tell us what kind of librarian would be considered an expert or novice on issues related to copyright. In addition, the method used to determine whether a librarian is an expert is quite shaky because librarians are all lumped together by society and arbitrarily judged, and conclusion made that these librarians are the experts on copyright issues. What is never taken into account is the fact that librarians may differ in their level of education and number of years of experience among other variables.

There seem to be no studies in Africa, Kenya in particular, focusing on expertise of librarians in matters related to copyright. The few studies of librarians' level of expertise have been conducted in a developed country such as the United States, where someone is required to have a Masters degree in Library and Information Science to be considered a librarian. The Kenyan situation is slightly different because librarians are classified according to their academic qualifications, namely Certificate, Diploma, Bachelor's, Master's, and Ph.D. degree holders. In spite of these differences, users tend not to be able to distinguish librarians by their level of education because they tend to perceive all people working in a library to be librarians.

1.1 Statement of the Problem

In spite of stronger copyright mechanisms such as enactment of more strict laws, use of

technology protective measures, use of licenses, better administration, and enforcement

that have been put in place in Kenya over the years, copyright infringement has persisted.

There are numerous ongoing copyright issues requiring urgent attention, and the library

community looks to the librarian for guidance on such issues. In spite of the varied cadres

of library staff distinguished by their academic qualifications, there seems to be no study

that has attempted to gauge and identify the unique characteristics, level of effectiveness,

and knowledge of the various aspects of copyright among the respective cadres of library

staff in Kenya. It is thus appropriate to be able to measure the level of expertise among

librarians and especially academic librarians in Kenya regarding issues related to

copyright and copyright law in Kenya.

1.2 Purpose

The purpose of this study is to find out whether different cadres of academic librarians in

Kenya differ in awareness/knowledge of copyright issues and in the type of strategies

they employ in solving queries related to copyright.

1.3 Significance of the Study

This study will help us understand the different approaches employed by Kenyan

academic librarians in addressing issues related to copyright, because these issues are not

as easy as the law would wish to put it. It will also help us better understand the

weaknesses or strengths that may exist in the curriculum taught to the various cadres of

librarians regarding the concept of copyright. It will further enable library administrators

be able to make a choice regarding how copyright issues are handled and thus help

inform internal policies regarding copyright. Finally, this study can be used by international institutions such as World Trade Organization in order to better understand copyright issues and how they affect librarians and library users at a micro-level/academic library level. This is particularly so in the year 2013 when all developing countries will be required to have implemented WTO's TRIPS agreement. In addition, it will be a time when WTO and individual countries such as Kenya will be required to take stock of the progress made and challenges being faced in the implementation of the agreement.

1.4 Hypothesis
1. There are differences in regard to awareness/knowledge of copyright issues depending on educational cadre of academic librarians in Kenya.

2. There are differences in regard to awareness/knowledge of copyright issues depending on the duration a librarian has worked in libraries.

3. There are differences in regard to awareness/knowledge of copyright issues depending on the department of the library that a librarian works in.

4. There are differences in the strategies employed by librarians in solving copyright problems depending on educational cadre of academic librarians in Kenya.

1.5 Definition of Terms
Copyright industry: The industry dealing with creation, production, and distribution of goods and services that require use of creativity and intellectual capital. It consists of film, music, radio and television broadcasting, new media, publishing.

Experience: Years one has worked in libraries.

Expertise: Level of mastery of knowledge in a given domain, and the domain in question is copyright issues.

Graduate: A librarian who holds a Masters or a PhD degree.

Intellectual property: Works that have been created as a result of an intellectual endeavor. They include books and music, among others.

Knowledge level: Any of the 5 categories regarding amount one knows about copyright issues. The levels are: Very knowledgeable, Knowledgeable, Moderately knowledgeable; A bit knowledgeable; Not knowledgeable.

Librarian: Someone who works in an academic library and holds at least a certificate in library and information science.

Pre-undergraduate: A librarian who holds a Diploma or a Certificate in Library and Information Science.

Piracy: The act of production, distribution, and selling of unauthorized copies of information resources that are protected by copyright.

Self-Reported Knowledge: Knowledge level reported based on an individual's own assessment/rating of his/her own knowledge.

Tested Knowledge: The researcher's rating of a librarian's knowledge based on a quiz.

TRIPS (Treaty on Trade Related Aspects of Intellectual Property Rights): An international treaty on intellectual property rights that sets the minimum rules for a nation's intellectual property laws.

WIPO (World Intellectual Property Organization): An international organization established to oversee issues on intellectual property rights worldwide.

WTO (World Trade Organization): An international organization established to oversee the adherence of rules of trade between countries.

1.6 Delimitations and Limitations

This study has only focused on copyright, one of the many components that fall under

intellectual property rights, because it is the most relevant to information, knowledge

creation, organization, and dissemination.

The study does not holistically look at all dimensions of expertise, but rather focuses on

awareness/knowledge, decision making and problem solving. This study has a greater

focus on the quantitative aspect of the results and qualitative data is mainly used for

exploratory purposes. This means that quantitative data has been analyzed in greater

detail than qualitative data because the qualitative data is simply used to create a clearer

and more encompassing picture regarding copyright issues in academic libraries in

Kenya.

The study also never made an in-depth focus on the organizational environment dynamics

of the libraries but rather, only focused on the library environment is a more general

aspect in relation to how each library's organizational environment affected copyright

awareness and access to information.

Due to time constraints, this study will be limited to Nairobi because it is cosmopolitan

and happens to be the capital city where consumption of copyright products is high and

where most academic institutions are located. This study will not be generalizable to

other countries due to differences in how different countries define librarians.

CHAPTER TWO: REVIEW OF THE LITERATURE

2.1 Importance of Having Experts

People in all professions and domains of study have sought to determine which of the

people working in that profession are likely to have the highest expertise. This curiosity

has led to research on characteristics of individual persons, environment in which a task

is performed, as well as other characteristics that can be used in order to accurately try to

predict expertise in a given domain. Interest in expertise normally tends to be based on

the assumption that high levels of expertise will translate to better performance in terms

of enhanced efficiency and effectiveness, which would in turn lead to having an edge

over competitors. To most employers, having staff with high levels of expertise is a sign

of quality and a source of pride for the organization. To other employers, having staff

with high levels of expertise is a form of investment that is normally tapped to enable

those organizations to be able to recoup or maximize returns on investment.

Most research on expertise has tended to look at the extreme ends of the expertise,

focusing on experts compared with novices. Rarely do we find research talking about the

people in between those two extreme ends. However, most research has shown that there

is a difference between novices and experts (Glaser, Chi, & Farr, 1988; Haerem & Rau,

2007; Murphy & Wright, 1984).

Differences suggested between novices and experts have demonstrated that experts are

superior to novices. Experts tend to spend more time analyzing problems (Schriver,

Morrow, Wickens, & Talleur, 2008).

They have stronger self monitoring skills and solve problems quickly because they can figure out solutions more easily (Kobus, Proctor, & Holste, 2001). They are able to easily perceive patterns that may exist in given issues (Klein, 2008). Experts have extensive and deeper knowledge of concepts in a given domain, thereby being able to easily delve into the semantic depth of a concept (Chi, Feltovich, & Glaser, 2009). They have better incidental memory and they are able to make finer distinctions among issues due to having better incidental recall (Norman, Brooks, & Allen, 1989).

2.2 How Expertise Has Been Defined.

Expertise is a multifaceted phenomenon and has been defined differently depending on the perspective that one chooses. It can be defined as knowledge and especially at the level when people use the knowledge that they possess. From a cognitive perspective, which can be classified at the knowledge level, Haerem & Rau (2007) view expertise as an individual's degree of sophistication in problem representation. This problem representation is determined by the knowledge and relationship that exists between the different aspects of knowledge structures held by an individual. In order to understand one's knowledge structure, researchers such as Ericsson & Lehmann (1996) and Haerem & Rau (2007) have tended to use task analysis. In most cases, the analysis has focused on the complexity, and variability of tasks and how these aspects affect performance. Expertise is also defined in terms of cultural awareness and problem solving, among other approaches.

A more comprehensive definition is given by Farrington-Darby & Wilson (2006), who looked at expertise from a rather holistic perspective and included knowledge, skills, problem solving, decision making and ability to communicate. All these can be viewed as aspects that build up expertise.

Expertise has also been defined as a measurable process and as behavior. Herling (2000: 20) has defined expertise as *"displayed behavior within a specialized domain and/or related domain in the form of consistently demonstrated actions of an individual that are both optimally efficient in their execution and effective in their results."* In almost all these definitions, expertise is characterized by experience in a given domain and the ability to solve problems and make decisions related to the problem in a way that tends to be consistent. Unlike competence, where one has to perform a specific task to a minimally acceptable standard, in expertise, outstanding performance is looked at. It is all about optimization of performing a given task.

McCraken & Marsh (2008) view expertise from a psychological perspective and define it as a set of cognitive tools that aids in the thought process. These tools develop over time, particularly when one is engaged in deliberate and extended practice. The purpose of the tools is to help individuals in the interpretation and application of evidence that has been presented in order to solve a problem and make decisions. It is challenging to fix the exact duration one must spend in order to be an expert. It has been proposed that one needs 10,000 hours or 10 years as the minimum duration of deliberate practice that is needed to become an expert (Herling, 2000).

Unfortunately, most of the research on expertise tends to focus on cognition in the development of expertise, hence definitions of expertise tend to focus on the cognitive aspect. There has been little focus on the cultural and social aspects of expertise.

2.3 Perspectives on Expertise

2.3.1 Expertise and decision making

There has been raging debate regarding whether experts always make better and more informed decisions than novices. The most commonly held assumption is that the more an individual moves up the expertise continuum, the greater that individual's ability to make better decisions. This assumption and the corresponding belief are indicators of what people naturally expect to happen in society. Most people find it disturbing whenever a person they consider to be an expert does not make decisions that conform to the general public's expectation.

In order to enhance people's expertise and to think like experts, Klein (1997) suggests several skills that experts ought to possess. These skills include being able to make in-depth distinctions between issues and detection of cues, being aware of situations at hand, the ability to critically evaluate options that are available, the ability to outline actions one is likely to take, the ability to justify the action and options that were chosen, and being able to adapt and reflect on issues at hand.

Decision making by experts tends to be viewed as an intuitive, effortless or automatic activity. Dreyfus & Dreyfus (2005) hold the view that an expert ought to be able to make decisions intuitively as opposed to a novice. However, the assumption that experts make superior or better decisions than novices was refuted by a study on decision making among petroleum engineers (Malhotraa, Leeb, & Khuranaa, 2007). Other researchers such as Kahneman & Klein (2009) found that using intuitive judgement could substantially lead to incorrect judgement despite vast experience.

Nonetheless, other studies have shown that experts make better and more informed decisions (Schriver, Morrow, Wickens, & Talleur, 2008). It has been found that experts tend to recall twice as much information as novices when presented with instruction. They also recalled more non critical data than novices, and when they make decisions, they tend to take into consideration other related data that may be viewed as non critical (Norman, Brooks, & Allen, 1989). Due to the fact that they use cues to aid them in reaching decision, experts have the ability to access a lot of information by simply relying on cues in making decisions, as opposed to novices who are not as good at recognizing and interpreting cues.

Decisions are never made in a vacuum. An individual making a decision tends to tie that decision to a given context. In order to improve the quality of decisions made, and also to improve the level of expertise, being able to assess situations becomes critical (Klein, 1997).

There are few studies regarding librarians' decision making skills, particularly studies that try to find out whether librarians assess situations before making decisions regarding patron services when presented with queries related to copyright.

In spite of the many methods that can be used to differentiate between experts and novices, the most appropriate seems to be one that requires experts and novices to work in a naturalistic environment where solving ill-structured problems is one of the characteristic (Chu, 2007). Such an exercise easily shows how much reflection has taken place and the way evidence is produced to support the decisions that have been reached and the diverse subtle aspects of an issue. In this way, one is able to better understand how members of either group arrive at their decisions.

Research in naturalistic decision making surged in the 1980's when there was curiosity regarding how people make decisions in a real world setting where most of the problems tend to be ill-structured. Contexts in which people make decisions tend to have an interplay of multiple variables such as time pressure, uncertainity, changing conditions among a host of others (Macquet & Fluerance, 2007). This dynamism of working in an ever changing environment in which the context tends to be considered makes predicting decisions challenging. Librarians in many African countries are faced with diverse variables that they have to consider regarding copyright and the implication of the decisions that they take. They are faced with a choice of whether to follow the copyright law to the letter or whether to allow it to be infringed but provide the user with information which happens to be scarce.

Making such decisions means being aware of the problem at hand and taking risk by weighing the risk against the outcome and goals of the library which entails provision of information to all users. Based on this backdrop, it will be interesting to evaluate how librarians in different cadres are able to make decisions and how they justify the decisions that they have made.

2.3.2 Expertise and Experience

Whenever the general public talk of expertise, experience seems to be given a lot of consideration because it is viewed as an indicator of expertise. The amount of practice in itself does not necessarily have greater impact on enhancing expertise, particularly as compared to engaging in deliberate and effortful practice, which was found to enhance superior performance (Moulaert, Verwijnen, Rikers, & Scherpbier, 2004). Motivation, metacognition, perserverence and continous performance of the same task are the likely factor that drives most people to engage in deliberate practice in order to enhance their performance. Ericsson & Lehmann (1996) argue that in most domains, one is able to reach peak performance after 10 years of deliberate practice. However, this duration may differ from one domain to another.

While deliberate practice can be used as a pointer to better performance, measuring years one has worked in a domain was found to be a bad indicator of expertise (Malhotraa, Leeb, & Khuranaa, 2007). Despite having vast number of years of experience in a given field, if the expert ceases to practice for a certain period of time, this disruption often leads to a decline in the expert's level of performance.

Similarly, mere repetition of a task does not optimize one's performance. Optimal performance is only attained where there is deliberate effort and practice in trying to perform the task which is in most cases a result of enthusiasm and motivation to achieve.

Experience due to undertaking deliberate practice in a give field seems to thus be the reason why most experts were found to use case-based and analogical reasoning while solving problems. Experts tend to use analogical reasoning more than novices (Ahmed & Christensen, 2009). Analogical reasoning is critical in decision making and in problem solving because experts use it to explain situations and issues that arise yet seem to be slightly different from the normal problems that have been previously encountered. In addition, they may also use such reasoning in being able to identify the problem and in actual problem solving, by being able to transfer knowledge used in previous cases and contexts to the one at hand. It is by comparing previously encountered cases that it becomes easier to understand the problem at hand. Such a way of solving a problem and making a decision is best acquired by people who have long and rich experience in the domain. This kind of reasoning shaped by experience has been commonly found in medical practitioners and firefighters. It is especially used when a decision has to be reached quickly as a result of being in a time pressured and uncertain context (Kobus, Proctor, & Holste, 2001).

When people make decisions, they tend to rely on past experiences to analyze and evaluate a problem at hand as opposed to coming up with options and trying to compare such options (Klein, 2008).

This type of model has been researched at length by Klein, who is a proponent of Recognition-Primed Decision model. In this model, people make decisions based on a collection of patterns that they have acquired from prior experiences. They then match the patterns and problems at hand. These patterns are able to help provide cues regarding things one is likely to do in a given context and situation, particularly where there is time constraint and uncertainity.

As a result of continous copyright violations, it is unclear to what extent academic librarians in Kenya engage in deliberate practice of learning about copyright, and the way they try to ensure that users comply with copyright provisions. What is least understood is the reasoning that takes place when presented with queries related to copyright.

2.3.3 Schooling and Expertise

People attend school in order to gain knowledge so that they can learn and become experts in the field they have studied or to help them in being able to effectively accomplish certain tasks. Educating students so as to attain certification (Alungbe, Stepp, Li, & Zargari, 2008) is one of the methods that has been touted to develop someone into an expert. Surveying 156 nurses with different qualifications ranging from Baccalaureate, Diploma, Associate degree, Bachelors degree, and those who were certified specialists and with varying years of service, Bobay, Gentile, & Hagle (2009) found that there is no correlation between education level and certification in relation to one being an expert. They also found that experience has a positive correlation to expertise.

In spite of there being different levels of librarians based on level of schooling, there seem to be no research that has solely focused on the expertise of academic librarians in Kenya. Nonetheless, to a great degree, the way librarians perform when it comes to provision of information to users determine whether users will return back to the library (Martensen & Gronholdt, 2003; Kerr, 2010).

2.3.4 Expertise and Context

Expertise tends to be affected by the context/situation in which one finds oneself. Kobus, Proctor, & Holste (2001) studied the relationship between the context in which one finds oneself and one's experience. Using a sample of 52 U.S. Marines, the researchers provided participants with simulations of different contexts in a combat environment. They found that, when faced with a new situation, people who have a lot of experience working in varied contexts tend to spend more time in asssessing the situation compared to those with less experience of working in varied contexts. Similar sentiments were expressed by Tabatabaia & Shoreb (2005) . However, when it comes to taking action, people who had vast experience of working in varied contexts, tended to make their decisions faster. The researchers went on to show that people with a lot of experience normally tend to make more accurate decisions than those with less experience when faced with a new situation. Findings from this study provide evidence that the way we make decisions tends to be a function of context.

Other researchers have shown that knowledge or understanding a person's cognitive process can be challenging if the focus of study is tacit knowledge. The only way we can understand this knowledge is by trying to understand circumstances in which a task is performed or knowledge is acquired. The context in which a task was performed or a decision was made has to be appreciated (Klein, Calderwood, & MacGregor, 1989). Unfortunately, context seem not to have been given much thought when drawing copyright laws and when considering the implementation of copyright provisions (Nicholson, 2006). This is particularly so when one considers the disparity that exists in the socio-economic conditions that communities find themselves in. Some researchers have argued that copyright has tended to be treated as if context of information consumption never actually exists (Nicholson, 2006). This is due to the fact that developed nations seems to be advocating for a uniform stringent universal copyright regime. There seems to be no research focusing on whether library staff actually take their context into consideration when they are making decisions regarding copyright.

2.3.5 Expertise, Cognition, and Metacognition

Cognitive and metacognitive strategies are approaches that people use to reflect on actions they engage in. These strategies are critical in the way people make judgements. In a study that focused on the comparison between prior knowledge, affect, cognitive, and metacognitive strategies employed by experts and novices in searching for information, Tabatabaia & Shoreb (2005) used three levels of expertise, namely: experts, intermediates, and novices. These researchers described experts to be librarians with many years working experience in different aspects of the library.

Intermediates represented Master of Library Studies students; novices were undergraduate preservice teachers. Tabatabaia & Shoreb (2005) found that there are significant differences that exist between novices, intermediates, and experts regarding metacognitive strategies, cognitives strategies, and prior knowledge employed in searching for information. However, in spite of the significant differences between experts and novices when it came to being able to reflect and support their reasons for the decision they made, there were no significant differences between experts and intermediates in the metacognitive strategies that they employed. The study also found that older participants in each of the three categories tended to use more metacognitive strategies. Due to the likelihood that experts have a greater knowledge base in a specific domain and also due to the fact that they are able to have a better represention of the problem or the task at hand, they are able to engage in more reflection, leading them to better predict how difficult a problem/task is likely to be. In addition, experts are also better equiped to reflect and understand principles that form the basis for the problem or task at hand.

The study also found significant differences in cognitive strategies: thinking, reading, planning among others. Experts tended to spend more time on planning and thinking before performing a task. Kobus, Proctor, & Holste (2001) also reported similar findings. In addition, experts have been found to be able to express their intentions faster and there was significant difference in this aspect when compared with novices and intermediates (Tabatabaia & Shoreb, 2005). This significant difference in cognitive strategies shows that experts are simply better at planning.

Other studies have shown that experts tend to have better cognitive strategies than novices. This might be due to differences in mental schema that tends to be acquired and grows in complexity with experience in the domain (Sakai & Nasserbakh, 1997).

Regarding expressing their anxiety, experts tended to be more positive as opposed to intermediates who always expressed their frustration (Tabatabaia & Shoreb, 2005). These findings are an indicator about the likelihood of novices being able to get frustrated and falling in a state of learned helplessness if they have to keep on encountering situations or issues that they are not familiar with. Because most copyright queries posed to library staff are likely to be ill-structured, affect has to be taken into consideration, as there is a likelihood that it may have an impact on performance of the tasks at hand.

In spite of expertise being multifaced, most people tend to view it in terms of explicit and objective knowledge that can be expressed. However, tacit knowledge, which in most cases is not able to easily be articulated, seems not to be considered by most people when judging who is an expert. The medical field has for a long time been fascinated in understanding tacit knowledge held by both novice and experienced practitioners and how this knowledge is manifested in decision making.

Nilson & Pilhammar (2009), investigated tacit knowledge of junior and senior medical doctors and used critical incident technique. The advantage of this technique is that it requires reflection on past activities and particularly when those tasks that were

performed in the past are to be related to the problem at hand. In order to elicit tacit

knowledge of librarians, this study is utilizing critical incident technique (Angelides,

2001; Flanagan, 1954), to allow participants to reflect on copyright issues they have

encountered and what those issues meant to them.

2.3.6 Expertise is Flexible and Changes

Level of expertise is a continuum and someone in one level is able to move to another

level. It is generally accepted that if an expert engineer does not practice for five years,

that person is likely to lose touch with what is taking place in the field and will require

retraining. This situation is not different from the one that exists in libraries. A library

may have its staff specialize in different aspects of library operation, depending on the

number of staff available and size of the library. Despite these specializations, the

assumption has been that librarians ought to be knowledgeable in copyright issues.

Unfortunately, there seem to be no research that tries to make comparison between the

section of the library that the Kenyan academic librarian works in and how

knowledgeable they are in terms of expertise on copyright issues.

Expertise tends to be domain specific. Whenever one moves from one domain to another,

even in instances where the person is an expert in one field and gets retrained to carry out

tasks in another field, that particular person might not be as effective in the new field

(Watson et al., 2007). This means that the level of expertise can change over time. It is

particularly so when looking at copyright issues which change as technology changes.

Different libraries have different policies regarding handling copyrighted materials.

Because libraries are now exchanging information through interlibrary loan, a librarian

who tries to be updated with the different policies of partner institutions is likely to appreciate copyright issues better. After undergoing a six month retraining of teachers in other subjects so that they can teach Physics, Watson et.al (2007) found that these teachers lacked content knowledge of physics and could not manage to effectively handle issues that were considered as normal occurrence in a Physics laboratory. It is evident that they lacked the ability to transfer the skills from previous teaching experience into the new environment where they had to teach Physics and handle laboratory work. It is that ability to be able to adapt to new environments that Mylopoulos & Regehr (2007) describe as "Adaptive Expertise" which they not only find to be a core component of expertise but they have classified it as a different type of expertise.

2.3.7 Expertise and Problem Representation

Problem representation is the mental image that a person creates to represent a particular problem at hand (Chi, Feltovich, & Glaser, 2009). Several researchers have found that novices and experts rarely pay attention to the same aspect of a task or a problem. This is because the degree of expertise in a given field is determined by one's perception of a task. The way one perceives a task is likely to be an indicator of how well the person is likely to perform the task or approach a problem situation (Haerem & Rau, 2007).

An expert's problem representation was found to be more complex than that of novices (Bedard & Chi, 1992). A problem representation is how people go about understanding a problem and how they interpret this problem in terms of its structure, features, cues and meaning. These characteristics help experts perceive problems differently from novices.

Novices will almost always view a problem from a superficial perspective, as opposed to

experts who rely more on deeper structures of the problem (Bedard & Chi, 1992;

Haerem & Rau, 2007). These deep structures mean that experts rely on being able to

focus on principles that underlie a problem or a task as opposed to simply relying on its

face value. In most cases, they are able to easily perceive meaningful patterns and

relations that exist between concepts. Even in a dynamic situation, experts are able to

make more rapid and accurate responses when compared to novices (Ericsson &

Charness, 1994). By extension, we can deduce that the quality of a problem

representation determines the ease or the difficulty with which a user is able to solve the

problem. Experts are thus better at analyzing a problem situation because they are able to

easily dissect the subtle aspects of the problem and analyze these issues better by being

more creative and innovative in seeking a solution, as opposed to novices who would in

most cases prefer to do repetitive tasks.

2.3.8 Expertise and Knowledge

To a greater extent, the knowledge that one possesses is what determines one's level of

expertise. A study focusing on how users of varying expertise use procedural and

declarative knowledge (Arnold, Clark, Collier, Leech, & Sutton, 2006) found that novices

tend to use more declarative knowledge while experts tended to use more procedural

knowledge. Users who had lower skill level tended to be satisfied with declarative

knowledge which comprises facts and definitions. Declarative knowledge is normally

acquired through asking "what" questions.

However, experts tend to be more satisfied when presented with procedural knowledge, which deals with and seeks to find out "how" and "why" things are the way they are.

It is very challenging to unanimously pinpoint constructs that make one an expert. Studies have looked at diverse constructs, utilized different methodologies, and used different ways and metrics to determine who is a novice and whom they would call an expert. Cognitive ability, accuracy in performing a task, experience, awareness, problem solving, and working memory are among the constructs that have been studied in order to understand expertise. What is also evident is that qualities required in one domain may differ from those required in another. There are some domains that lay great emphasis on the end product, yet others lay great emphasis in the process that has been used. However, there has been a substantial number of studies measuring expertise in the sciences as opposed to the social sciences.

When it comes to finding expert librarians on copyright issues, we should not lose sight of the process and the decisions we make. However, there are multiple perspectives on these issues. Perspectives change and can change fast, so does society. Having an understanding of the way society works might just help in understanding a given perspective and how it came into being.

2.4 Awareness and Expertise on Copyright

Awareness is the first step towards deeper understanding. Most people tend to gauge expertise by the level of knowledge and skill that a particular individual possesses in a

given field. In order to measure the level of understanding copyright and related issues, the few studies that have tried to undertake this task have tended to use surveys. Williamson (1992) studied awareness of copyright by faculty and teaching assistants in a university in the U.S. Cox (1998) was interested in the awareness of copyright by principals, teachers and librarians in the United States. Smith et al. (2006) surveyed 446 faculty members in the health sciences at a U.S. university and found that 56% had limited knowledge, 6% had no knowledge of copyright, and 88% reported that they did not have any formal instruction in copyright. All respondents had either published a book or an article in the newspaper. Despite these surveys being critical in providing insight into awareness of copyright, they are not comprehensive. They did not try to classify the stages of expertise the respondents were in, nor did try they try to make a comparison between other issues such as perception of the problem or problem representation.

2.5 What Makes People Infringe on Copyright.

An expert is believed to have vast knowledge in the domain field and its subdomains. Because being an expert can be context specific (Kobus, Proctor, & Holste, 2001), it would be of interest to also know what makes people to infringe on copyright, the contexts they find themselves in, and the context the librarian would be in when dealing with a copyright issue. Multiple variables are shown to contribute to copyright infringement. Researchers have looked at some of these variables, including cultural factors , technological factors, legal, political, social, and economic factors. In addition, there are individual characteristics such as attitude and one's perception that incline some people toward copyright infringement (Rwalinson & Lupton, 2007).

Though all these factors contribute to infringement, some are more pronounced in certain parts of the world . Due to the complexity of society, there tends to always be more than one of the factors working at any one moment and it is challenging to isolate one factor from the others.

2.6 Social Influence and Norms
We all live in a society where people influence and are influenced by others. Our social nature brings out factors such as social influence from peers and family members. To some degree, copyright compliance is a function of social sanction and self sanction. Societal norms have a great impact on the way people operate, and to some extent, noncompliance with those norms can lead to one being censured, or even more severe consequences such as being ostracized from that community or society. Social norms, values, and expectations normally go beyond written laws as they are used to regulate behavior through implicit rules that are more often than not internalized by their members.

Social sanction comes in three forms: regulative, normative, and cultural-cognitive (Gerlach, Kuo, & Lin, 2009). The regulative form is normally comprised of well established laws which are used to coerce society to conform. This form of social sanction tends to use established institutions such as courts or officially recognized arbitration mechanisms.

The normative form is based on morals and norms that have been established by that society. The cultural-cognitive form is based on practicing what that culture supports or

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what it generally accepts and is manifested in collectivism and societal consensus on issues. Surveying consumers of software in Taiwan, Hsu & Shiue (2008) found that people had a high degree of willingness to pay for software products if people close to them, such as family members and peers, considered it as inappropriate to use pirated software.

Educating users to be able to self-regulate regarding how they perceive and conform to copyright compliance is critical to any efforts to curb infringement. Comparing students from China and those from the United States, Gerlach, Kuo, & Lin (2009) found that students from the United States were able to exhibit higher levels of self-regulation efficacy when compared to those from China. As a result of more strict enforcement of copyright laws in the U.S., American students exhibited a higher level of perceived risk as compared to those from China, where enforcement is not as strict. In order to curtail infringement, efficacy in ethical self-regulation was found to be significantly more important than the role of regulatory sanction in either of the two countries.

Attitudes towards an issue such as copyright is ingrained in the belief system of a person. Such beliefs can take a long time to change, and this change would require concerted effort from most of the social institutions, including family.

2.7 Fear of Prosecution

All copyright laws have clauses that stipulate the punishment meted out to persons who

violate the law by infringing on copyright. The main purpose is to deter people who may

infringe on copyright from doing so.

However, fear of being prosecuted did not have a significant increase in willingness to

pay for software products because people felt that chances of being caught were minimal

(Hsu & Shiue, 2008).

Unfortunately, awareness of the law has been found to play very little role to deter people

from infringing on copyrighted materials online (Li & Nergadze, 2009). Severity of the

punishment was also found to have no consequences in deterring copyright infringement.

This might be the reason why despite having tougher sanctions incorporated into

copyright laws of developing nations such as Kenya, infringement continues to be

rampant.

2.8 Economic Factors

Countries where people have less income and therefore less purchasing power tend to

have a higher rate of software protection violations (Ronkainen & Guerrero-Cusumano,

2001). Okiy (2005) supports this sentiment as she found that only 5% of university

students in Nigeria could afford to buy a new textbook. May (2006) found that it would

take an average American to work for four days to purchase the Microsoft's Windows XP

operating system while it would require an average person in Africa to work for at least

one year to be able to purchase the same software.

Inflation of about 11% and 46% of the people living below the poverty line is likely to be a good recipe for the increase in copyright infringement.

The size of the copyright industry also has a bearing on how widespread infringement becomes. It has been found by some researchers that there is a negative correlation between the size of the copyright industry in a country and copyright infringement. Most countries with very well established copyright industries also tend to have less rampant infringement as opposed to those with less established copyright industries. The likelihood of having more established enforcement mechanism tends to be higher in countries with more established industries thus leading to less infringement.

2.9 Ethics
People tend to comply with rules either due to fear of punishment, social obligation, or due to social pressure (May, 2004). Looking at what motivates home builders to comply with regulations, May (2004) found that inspection practices were more likely to influence negative motivation to comply with regulations. However, the home builders' willingness to comply tended to be greatly influenced by their beliefs, attitudes, and knowledge of the rules. There was also a higher degree of will to comply if the inspectors tended to be facilitators and in the process educate the builder. This was not found with inspectors who were outright rigid and formal. This shows that to some degree, the way inspectors do their inspection has a bearing on compliance.

Enforcement of copyright law in Kenya is more inclined toward deterrence as a way to enforce compliance rather than investing energy in seeking alternative modes to enhance

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compliance. Although the Kenya Copyright Board has been mandated to educate people about copyright issues, there is no evidence that it has done so.

Suter, Kopp, & Hardesty (2004) investigated the ethics of photocopying among workers in a work environment in the United States of America. They used questionnaires developed by Forsyth in 1980 to measure ethical position regarding idealism and relativism and another set of questionnaires developed by Vitell and Muncy in 1991, measuring relationship between preferred moral belief and ethically questionable activities. Suter, Kopp, & Hardesty found that photocopying at the workplace is viewed as questionable but not illegal. They also found that belief about ethical behavior cuts across different technologies and media.

Irrespective of the media type, if the belief that is held requires members to comply, then they will tend not to infringe on other media formats and vice versa. This might be an indicator that workers might never be aware of copyright laws.

2.10 Education and Copyright Infringement
Not many studies have tried to examine how an individual's level of education predicts that person's likelihood of infringing on copyright. What has not been looked at in depth is the tendency to curb copyright infringement by various individuals with different levels of education.

The assumption normally made is that as people become more educated, they become more knowledgeable of the law. The implication is that the chance of being able to abide by the law is enhanced with increased levels of education. This assumption should mean that the more an information professional advances in his education level, the better he is able to comprehend complexities of the various aspects of copyright.

2.11 People's Attitude towards Sharing

For any law to be considered a success, there have to be mechanisms to enable its enforcement, in addition to people wanting to respect the law or regulations that have been put in place. Kenya is a country that can be described as communitarian because it is a cultural norm to cooperate, share things, and have a sense of social responsibility for others. Sharing, giving away, and even loaning things to colleagues are always welcome because relations between individuals are much more valued in such societies. Sharing is thus viewed as a virtue; individualism tends to be discouraged and sometimes punished in some communities because societal gain takes priority over individual gain. Such collectivist traditions are likely to be in conflict with many provisions of copyright regimes and information licensing agreements that tend to discourage sharing. Rwalinson & Lupton (2007) found that students from communitarian countries did not view sharing of software as a criminal activity. Ronkainen & Guerrero-Cusumano (2001) similarly found that countries with a culture that values individualism had less software piracy.

Cultural traits seem to be one of the major factors that provide a great impetus as to whether copyright infringement is viewed as an acceptable phenomenon or whether it is viewed as an act of theft which ought to be avoided at all times. Decline in software piracy rates has been found to be a result of cultural factors (Moores, 2008).

CHAPTER THREE: METHODOLOGY

3.0 Introduction

There has been rampant copyright infringement in Kenya over the years. Librarians, who are perceived as being critical players in the dissemination of information, have a role to play in balancing the needs of rights owners and the need of users in terms of access to information. In order to understand how they play this role, we have to focus on these librarians' expertise in copyright and related issues. This study seeks to find out whether there are any differences in awareness/knowledge of copyright and the type of strategies librarians of different cadres and different duration of service employ when solving queries related to copyright.

In Kenya, there are five cadres of librarians, based on the level of Library and Information Science education. They include those librarians who hold a Ph.D., Master's degree, Bachelor's degree, Diploma, and Certificate in Library and Information Science.

3.1 Hypotheses

1. There are differences in regard to awareness/knowledge of copyright issues depending on educational cadre of academic librarians in Kenya.

2. There are differences in regard to awareness/knowledge of copyright issues depending on the duration a librarian has worked in libraries.

3. There are differences in regard to awareness/knowledge of copyright issues depending on the department of the library that a librarian works in.

4. There are differences in the strategies employed by librarians in solving copyright problems depending on educational cadre of academic librarians in Kenya.

3.2 Research Questions and Explanation

Operationalizing these hypotheses produces some research questions that should be answered in order to test the hypotheses. Hypothesis 1 was represented by research question 1; hypothesis 2 was represented by research question 2; hypothesis 3 was represented by research question 3; and finally hypothesis 4 was represented by research questions 4 and 5. These research questions are as follows:

1. Does level of copyright awareness/knowledge differ among the various cadres of academic librarians in Kenya?

That copyright awareness differs between cadres of librarians can be inferred from a couple of studies that have compared the differences that exist regarding awareness of copyright provisions among information professionals. Cox (1998) found that there are differences in perceived awareness of copyright among different types of staff members who work in the same University. Smith et al. (2006) showed that 62% of faculty in an academic institution in the United States had little or no knowledge of copyright. Gould, Lipinski, & Buchanan (2005) used peer assessement and found that library administrators of research libraries in the U.S. had higher level of awareness of copyright provision of the 1976 USA Copyright Act when compared to other library staff of those research libraries.

2. Does level of copyright awareness differ among the various academic librarians in Kenya based on the duration a librarian has worked in libraries?

Duration that one has worked seems to be given great importance and tends to be seen as an indicator of one's expertise.

Bobay, Gentile, & Hagle (2009) found that duration that one has worked has a correlation with nursing expertise. However, for one to enhance his knowledge and performance, it has been argued that duration of service in itself does not account for much unless combined with deliberate practice (Mylopoulos & Regehr, 2007).

3.   Does level of copyright awareness/knowledge differ among librarians based on the department of the library where they work? There is normally an assumption that because library staff at the circulation desk and the Reference desk encounter more users hence are faced with more copyright queries, they are bound to be more knowledgeable about copyright issues than librarians who work in other sections of the library. Using peer rating, Gould, Lipinski, & Buchanan (2005) found that 73.6% of library administrators were rated as having high to very high awareness of copyright issues, as opposed to 54.3% of the other library staff. Regarding familiarity of the copyright act provisions, 57.3% of library administrators and 42.6% of general library staff were rated as having high or very high levels of familiarity of provision in the copyright act. A higher number of general librarians had low level of awareness and familiarity of the copyright act provisions compared to library administrators.

4.   What strategies do academic librarians in Kenya use to solve copyright queries that have been presented to them? There seems to be no research in library science looking at the strategies that librarians employ in solving copyright queries. However, other fields of study have tried to show how practitioners in various fields solve problems. Whenever people find themselves in high stakes and time constrained

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environments, Klein (2008) and Kobus, Proctor, & Holste (2001) found that people only used one option instead of considering multiple options before they make a decision. Ahmed & Christensen (2009) found that novices and experts use analogies in different ways. Experts tend to use analogies for problem identification, elaborating on the underlying functions and for predicting outcome of the issue at hand . However, novices were poor at being able to appropriately use analogies to solve problems in a new environment. This means that they faced a problem in applying knowledge they possess to new situations.

Klein (1997) was able to show that for one to be an expert, it is critical that the person is able to easily recognize cues thus be able to easily solve the problem at hand. In most cases, ability to recognize cues tends to be a function of experience which comes about as a result of deliberate practice. Context awareness is also a critical way by which people solve problems at hand (Klein, Calderwood, & MacGregor, 1989; Kobus, Proctor, & Holste, 2001).

5. Do the strategies used to solve copyright problems vary by cadre?

Research studies in fields other than library and information science suggest that education and years of service affect decision-making and problem-solving, with increased education and increased experience favoring better decision-making. Looking at various education levels of registered nurses, Aiken, Clarke, Sloane, Lake, & Cheney (2008) found that patient mortality due to care reduced as the education level of registered nurses increased from Baccalaureate, Associate degree, to Bachelor's degree.

They also found that a patient's survival increased if the registered nurse attending to the patient had a Bachelor's degree when compared to nurses with other education levels. Ericsson & Lehmann (1996) have shown that one normally reaches peak performance after 10 years of deliberate practice. We can thus make the assumption that one gathers experience and encounters more cases with time of working in a given domain. Bobay, Gentile, & Hagle (2009) have also shown that experience/years one had worked as a registered nurse is a predictor of nursing expertise. Ahmed & Christensen (2009) were able to show the differences that exist in usage of analogical reasoning when solving problems occur as a result of difference in experience. More experienced participants tended to use analogies in order to understand the problem and reasons behind the mechanisms of a component so as to help in predicting the task at hand. However, novices were unable to use analogies in the same way experts did when solving problems at hand. Despite these findings, years one has worked tends to be a catalyst in developing expertise. Deliberate practice is what is critical in solving problems.

However, when it comes to making decisions in a naturalistic environment such as the one that academic librarians encounter when presented with copyright queries, many competing issues come into play. These librarians thus have to operate in an environment that is characterized by competing goals, time constraint, institutional policies among other parameters. Klein (2008) found that people tend to try and use least effort whereby they do not consider multiple logical options before they arrive at a decision, but they tend to only stick to one option which they tend to base on to make their decision. It thus becomes a curiosity to find out how academic librarians operating in high stakes

environment react to copyright queries they are presented with, decisions they make and justification they offer for their decisions.

3.3 Setting

This study was based in Nairobi, Kenya's capital city, which also happens to have the highest concentration of academic libraries in Kenya. At the time of this investigation, there were fifteen public and private universities located in Nairobi, per the Kenya Commission of Higher Education (Kenya, Commission for Higher Education, 2009). They include the University of Nairobi, Kenyatta University, Jomo Kenyatta University of Agriculture and Technology, Catholic University of Eastern Africa, Daystar University, United States International University, Strathmore University, Africa Nazarene University, the Pan African Christian University, Kiriri Women's University of Science and Technology, Aga Khan University, KCA University, Kenya Methodist University, Inoorero University, and Adventist University.

For the sake of this study, the identity of the above-mentioned universities has been masked in order to protect the privacy of each of the institutions. This is also because this study was most interested in the librarians and their education level in Library and Information Science and not necessarily the institution these librarians came from. The researcher has thus used pseudonyms for each of the universities and the list given below does not correspond to the order of the Universities listed earlier. The pseudonyms chosen are: Katherine University, Elisha University, Mwanzo University, Rais Hayati University, Ukulima University, Nyota University, Obukosia University, Zadock

University, James University, Warembo University, Tabibu University, Account Hasibu University, Nyamo University, Sabasaba University, and Veve University.

3.4 Participants

There are five levels of Library and Information Science Education in Kenya. The lowest of these levels is Certificate level whereby library staff in this category/cadre study Library and Information Science for two years. Diploma level holders study for three years. At the Bachelor's Degree level, holders study for four years, Master's Degree level takes at least two years beyond the Bachelor's degree, while it takes a minimum of three years beyond the Masters degree to complete a Ph.D., the fifth level. As one advances from Certificate to Ph.D. level, the depth and degree of sophistication in the content being taught increases. In addition, there is a gradual move from performing menial jobs in the library such as shelving into more administrative, technical and policy conception and evaluation tasks.

Unfortunately, of all the institutions that offer Library and Information Science courses in Kenya, none has an entire course that solely focuses on copyright. Copyright is given negligible treatment, and in most cases is barely mentioned in introductory courses that deal with information in society. Nonetheless, libraries can face dire consequences if librarians violate copyright provisions. Some of the consequences have included threats of lawsuits. University of California and Cornell University libraries have been threatened with lawsuits over distribution of copyrighted learning materials through their libraries' E-Reserve system (Andy, 2007).

Content providers have also tended to include harsh penalties such as discontinuation of service inserted in their license agreement with libraries just in case library users engage in copyright violation of materials provided by that content provider. Some libraries have also ended up in protracted litigation which has cost them enormous amounts of money in legal fees and fines. In 2008, Georgia State University was sued by Oxford University Press and Sage publications over what the plaintiffs viewed as unauthorized distribution of copyrighted materials through the Electronic Reserve system of the Georgia State University Library (Albanese, 2008). Had violation of copyright not have taken place, librarians could have used their limited finances to enhance services to users. It would also have saved lots of man hours thinking about litigations instead of providing services to users.

Fourteen of the 15 academic libraries in Nairobi met the requirement to participate in this study, which was to have at least one staff member of the library be a holder of a Certificate in Library and Information Science. One university library was removed from the study because it could not meet the criteria set for participation. Neither of the staff members who worked in that university library met the minimum requirement.

A total of 295 librarians work in the 14 university libraries located in Nairobi that participated in the study. The researcher included all librarians in the study in order to avoid sampling bias and in order to get rich data that truly represents the awareness and knowledge of copyright among the librarians. All the members of this population were required to at least be holders of a certificate in Library and information Science.

Six members of the population held Ph.D. degrees, 65 Masters Degree, 53 Bachelors degree, 136 Diploma, and 35 held Certificates. Because most librarians in Kenya retire at the age of 55, the librarians in this study will have work experience falling between a couple months to about 35 years of experience.

Survey questionnaires were administered to 253 out of a total of 295 librarians in the 14 university libraries that had met the requirement to participate in the study. The researcher had anticipated administering questionnaires to all 295 librarians. However, the researcher was never given an official authorization letter from the Vice Chancellor of Mwanzo University to collect data in that university. After making frantic effort to meet the Vice Chancellor of Mwanzo University, the researcher was only able to unofficially administer 20 questionnaires to Librarians at Mwanzo University.

Of the 253 questionnaires, 167 were returned, for a 66% return rate. From Table 1, the composition of those who returned their questionnaires was as follows: 16 Certificate, 74 Diploma, 30 Bachelor's degree, 42 Master's degree, and 5 Ph.D. holders. A convenient sample of a total of 32 out of the 167 participants who returned the questionnaire were further subjected to the think-aloud protocol and the Interview/Critical Incident technique. Three were PhD, holders, 8 were Master's degree holders, 10 were Diploma holders, and 3 were Certificate holders.

Table 1 : Library staff in each of the universities and the qualification they hold.

	Pseudonym of University	PhD Holders	Masters Degree holders	Bachelors Degree holders	Diploma Holders	Certificate Holders	Total
1	Katherine University	0	2	1	2	0	5
2	Elisha University	2	3	1	6	17	29
3	Mwanzo University	0	15	20	40	7	82
4	Rais Hayati University	1	12	6	37	4	60
5	Ukulima University	0	5	1	1	0	7
6	Nyota University	0	8	1	18	0	27
7	Obukosia University	1	4	1	11	0	17
8	Zadock University	1	1	6	4	1	13
9	James University	1	7	1	4	4	17
10	Warembo University	0	0	0	1	0	1
11	Tabibu University	0	2	2	2	0	6
12	Account Hasibu University	0	2	4	6	0	12
13	Nyamo University	0	2	3	1	2	8
14	Sabasaba University	0	0	0	0	0	0
15	Veve University	0	3	5	3	0	11
	Total	6	65	53	136	35	295

3.5 Sampling

The entire population of academic librarians, 295 librarians in all 5 cadres, was included

to take the survey so as to improve accuracy in the conclusions that were to be drawn.

However, only 253 questionnaires were administered as a result of the reluctance of the

management of Mwanzo University to allow the researcher to collect data in their library.

Data was collected from the entire population because original research plans called for

the use of the Chi-Square (χ^2), which requires a large sample size in order to enhance its

statistical power.

In order to participate in the think aloud protocol and in the Interview/Critical Incident

technique, 32 participants were conveniently sampled from the pool of 167 librarians

who had participated in the first part of the study which was to fill in and return a survey

questionnaire.

The researcher conveniently selected 3 of the 16 librarians who were holders of a

Certificate, 10 of the 74 librarians with a Diploma, 8 of the 30 librarians with Bachelor's

degrees, 8 of the 42 with Master's degrees, and 3 of the 5 with a Ph.D. degree. The

reason fewer people were interviewed is because not many librarians were willing to be

interviewed, others were busy with work, and yet others never had a flexible schedule to

allow the researcher to interview them. In addition, this small number of participants

were selected to take part in the think aloud and critical incident technique in order to

avoid being overwhelmed by qualitative data which takes a longer time to analyze, and to

also be able to analyze the data within the timeframe set to complete this research.

Whenever a participant chose not to participate in the think aloud/critical incident technique after completing the questionnaire, the researcher replaced that participant with another participant in the same cadre.

3.6 Data Collection
Several instruments were used in order for the researcher to be in a better position to support the finding. Both the survey questionnaire, the think aloud protocol and the interviews/critical incident technique were used to help in triangulation of the constructs being measured: awareness/knowledge of copyright and strategies employed when presented with copyright queries. The survey questionnaire was to a greater part used to collect quantitative data. Data from the questionnaire mainly focused on capturing librarians' awareness/knowledge of copyright and also some strategies librarians employ to solve queries on copyright. The think aloud protocol and the critical incident technique were solely used to collect in-depth qualitative data regarding the strategies that librarians use when presented with queries on copyright. Each tool is discussed in greater detail below.

3.6.1 Questionnaire

A questionnaire (Appendix A) was used to enable the researcher get data on a participant's cadre, years of service, department the librarian mostly works in and information related to awareness/knowledge of content on copyright. All questionnaires were paper-based and were handed personally to one participant in the library who acted as a point person and whose duty was to distribute the questionnaires to the other participants and then collect them on behalf of the researcher after they have been filled

in. The aim of using a point person was to enhance the return rate and save the researcher time of having to get all library staff despite them working in different shifts of the day.

The questionnaire was used to address Hypothesis 1, 2 and 3, to determine if there was any difference in level of copyright awareness/knowledge among the different librarian cadres. Questions 1-6 solicited demographic data, including cadre and years of service. These were used as independent variables in the study. Questions 7-12 were used to provide information about knowledge of copyright. Questions 13-17 assessed participants' perceptions of the seriousness of copyright restrictions in their libraries. Questions 21-35 were designed to compare librarians' self-reported awareness/ knowledge of copyright laws with the perceived importance of those copyright laws. Questions 36-38 were designed to provide information on strategies librarians would use when presented with queries on copyright. Hypothesis 4 was addressed by using the questionnaire in conjunction with the think-aloud protocol and Interview/Critical Incident technique. This was meant to provide the strategies librarians use in solving copyright queries.

3.6.2 Think Aloud Protocol

A think aloud protocol (Appendix B), was used to answer research questions 4 and 5, to find out strategies that librarians use in solving queries related to copyright and whether a librarian's education level determine the use of a particular type of strategy to solve copyright queries.

These strategies were best captured by presenting participants with two scenarios which were read silently by the participant and then the researcher read them out aloud to participants so that they could better comprehend them.

Use of scenarios closely replicate a naturalistic environment/setting which tends to be characterized by a combination or any of the following issues: dynamic events such as changing conditions, ill-structured problems, ill defined goals or there can be existing competing goals, multiple players, the existence of institutional norms and goals, constraints in regard to time, and a lot of information content that can be presented or be processed (Klein, Calderwood, & MacGregor, 1989). This makes use of a think aloud protocol to be suitable for studying problem solving processes (Crandall, 1989) because it helped the researcher to better understand solutions and decisions that librarians will utilize when faced with copyright issues.

Two scenarios were used. The first scenario depicted the dilemma most users find themselves in regarding what to photocopy, how much of a work they could photocopy and when to photocopy. The second scenario depicted conflict between photocopying for education purposes versus for commercial purposes. Both scenarios have an underlying theme of what is really regarded as fair use of copyrighted materials.

When this protocol was administered, only the researcher and the participant were in the room. This arrangement helped the participant the privacy needed to freely articulate his thoughts.

To be systematic, each participant was presented with one scenario at a time and was not interrupted during the Think-aloud session. However, after the verbalization session, the researcher probed the participant regarding how he went about solving the problem at hand to enable the participant to clarify issues that emerged or that were not fully articulated in depth.

3.6.3 Critical Incident Technique/Interviews

After the think aloud protocol, participants were interviewed by the researcher who used the critical incident technique (Appendix C). This technique was employed by the researcher in order to be able to better understand the reasons for the judgment and decisions made by the librarians when they had been confronted with copyright tasks in a naturalistic setting.

Critical incident technique as a data collection method was popularized by John Flanagan as early as the 1950s and is best used in collecting data on specific behavior exhibited by persons undertaking a given task or activity (Flanagan, 1954). This method tends to use specific recalled events, a technique employed in order to understand the basis for decisions that are undertaken (Klein, Calderwood, & MacGregor, 1989). It is thus a Knowledge elicitation tool that has been used in studying the proficiency of novices and experts in performing tasks in a naturalistic environment and in trying to understand the subtle cues that were used to facilitate unique tasks to be performed or how the person was able to handle a unique situation.

Strength of the method includes that fact that people recall and narrate past events/tasks that they observed or participated in performing. In addition, it tends not to affect performance of a task because the task would already have been done.

Critical incidents are everyday events that need not necessarily be major incidents. However, non-routine events tend to have the potential of offering very rich data that can help provide a clear indication regarding the level of expertise among the participants' performance on given tasks. Irrespective of whether an incident is routine or not, what makes that incident critical depends on the significance and meaning we attach to the incidents and how we are able to justify them (Angelides, 2001).

The researcher personally interviewed participants regarding how they solve problems related to copyright, justification of the strategies used and decisions made. A semi-structured interview was used by audio recording it so as to be transcribed for later analysis. Appendix C provides the questions and an example of question prompts that were used. However, the order in which the question prompts and the type of prompt used by the researcher depended on how the participant progressed in the interview. If need arose, newer prompts were used. This tool helped the researcher get rich data and a better understanding of issues that could not be captured by the questionnaire alone or even by the think aloud protocol. At the time when the interviews were conducted, there were no other persons in the room where the interview took place. This arrangement not only helped the interviewees to be more open, but also guarded their confidentiality.

3.7 Data Analysis

Initially, Chi-Square (χ^2) was to be used to analyze quantitative data from the questionnaires. Unfortunately, the data violated Chi-Square (χ^2) assumptions that require each cell in the table to have at least 5 items. It thus meant that we had to use a better non-parametric test.

The researcher ended up using the Kruskal-Wallis Test to analyze the data. This is a non-parametric test that does not require data to be normally distributed nor to meet all the assumptions of Chi-Square (χ^2) or ANOVA. Kruskal-Wallis was also chosen because both the independent variables (different cadres of librarians, years of service) and the dependent variable (strategies used in solving copyright queries, awareness/knowledge of copyright) are categorical /ordinal in nature. In this test, medians among the groups/categorical groups are computed then compared through use of ranking order. Appropriateness of using Kruskal-Wallis Test as a data analysis method is also due to the fact that the researcher was not trying to make predictions but more interested in the relationship that exists between the variables.

The researcher also used Factor Analysis to analyze part of the quantitative data dealing with self-reported Knowledge. There were 18 items to test self-reported knowledge. The researcher wanted to first reduce the 18 test items into fewer common underlying concepts /factors which would then be used as dependent variables. After the analysis, 4 factors emerged out of the 18 test items.

Awareness /knowledge of copyright were categorized into five levels, namely: Very knowledgeable; Knowledgeable; Moderately knowledgeable; A bit knowledgeable; and Not knowledgeable. In questions 7-12, the correct answer was given a score of 5 while an incorrect response is given 0. Each response in questions 18-35 in the questionnaire asking about awareness/knowledge was given a weight with 5 as very knowledgeable to 0 which represented not knowledgeable. Score given to each of the above participant's questions from the questionnaire was computed and each participant categorized accordingly based on the five levels.

In questions 13-17 and questions 18b to 35b, which ask about perception of participants on given issues, the researcher only reported the number of participants who gave a particular response.

To analyze the quantitative data, the researcher used SPSS version 17.

Qualitative data regarding the strategies that librarians use when faced with queries on copyright was gathered from the Interview/Critical Incident technique and from the think aloud protocol, both recorded in audio format. Questions 36-38 in the questionnaire were also used to extract data regarding strategies used in solving copyright queries. After the interview, the researcher transcribed both the critical incident technique/interview and the think aloud protocol before starting to code the data for themes that were emerging. What counts as a strategy was based on the coding scheme that the researcher had developed and this coding scheme assisted in picking out the emerging themes/strategies.

However, themes/strategies that emerged were considered and given a code. The process of coming up with a coding scheme started by looking at what strategies other studies found when people were engaged in problem solving and decision making. Strategies from the literature were harmonized with those that emerged from the pilot study in order to get the coding scheme to be used in the study. In each of the questions providing qualitative data from the questionnaire, think-aloud protocol, and the critical incident technique, each strategy was assigned a code and then each type of code used was counted for that particular question in order to help us know which strategy was used most for each question. Selected quotes from the in-depth data also showed the strategies used and the justification for deciding on the strategy chosen.

3.8 Validity, Reliability, Trustworthiness in the Research and Data
3.8.1 Content Validity

The researcher used two experienced researchers in the copyright field to evaluate the questions in the instruments to find out how representative the questions in the instruments are and how comprehensively they cover the concept being researched.

3.8.2 Construct Validity

The researcher operationalized most of the constructs that have been used in the study. In addition, he piloted the instruments with a few librarians in all the cadres to ensure that the questions used to collect data from scenarios and those used in the interview schedule meant what they were meant to ask and did not have multiple meaning.

In order to assess self-reported knowledge, the researcher used Factor Analysis in order to be able to cluster the 18 items used to assess this construct into fewer factors that could then be analyzed.

3.8.3 Internal Validity

The researcher used both the questionnaire, think-aloud protocol and critical incident technique/interview to help in triangulation of the constructs being measured, awareness/knowledge and strategies used when solving copyright queries.

As this was a cross-sectional study, there was no concern about participants dropping out or being influenced by other people or events. However, when participants filled in the questionnaire, the researcher reminded the point-person in each library to remind participants that they should fill in the questionnaire by themselves. This action was necessary in order stem other people from influencing the responses that participants would provide.

3.8.4 External Validity

This study was conducted in Nairobi which is cosmopolitan and has librarians who come from all the regions in Kenya. Of the thirty universities in Kenya, fifteen are located in Nairobi. Of those located in Nairobi, the researcher drew his sample from the 14 university libraries that met the set criteria to participate in the study. Participants were thus drawn from both public and private universities, including librarians with diverse qualifications, years of service, and from different types and sizes of academic libraries.

However, findings from this study should not to be generalized to other countries due to differences that exist among countries in the way cadres of librarians are composed.

For questions in the questionnaire asking for qualitative data, the think aloud protocol and for the interviews/critical incident technique, the researcher and one other person coded the qualitative data gotten from these tools. Each coder independently coded a sample of the qualitative data and later, as a team, discussed how each coder coded in order to reduce the differences in the way they coded the data. Not only did this exercise help the coders reach a consensus on rating of the codes, it also enhanced the inter-rater reliability. The inter-rater reliability was calculated so as to ensure consistency is maintained and it was calculated by the number of times the raters coding the scripts agreed on the codes that they had assigned.

To enhance trustworthiness of the qualitative data, the researcher conducted the Think aloud protocol and the Interview/Critical Incident technique with each individual participant in the absence of other people in one of the offices in the library. After each interview, the researcher held an informal discussion with each interviewee in order to check whether the interviewee agreed with the core issues he had provided.

3.8.5 Reliability

To ensure that the scores from the questionnaire are reliable, two experienced researchers evaluated it to ensure that the questions were valid. This exercise helped the researcher readjust the questions accordingly.

After readjusting the questionnaire, the researcher undertook a pilot study to ensure that

participants correctly interpreted the questions. In addition, the researcher calculated the

Cronbach alpha to determine the coefficient of reliability which was to indicate how well

the items in the questionnaire are able to help measure the variables

(Awareness/Knowledge), 4 factors use in assessing self-reported knowledge of copyright

issues, and perception of copyright issues that we are measuring. Cronbach alpha is a tool

that helps measure the internal consistency of a test. The Cronbach alpha for the 24

questions measuring Knowledge/Awareness was found to be .87, while that for the 32

questions that were meant to measure Perception of Copyright Issues was .838, when the

alpha level had been set at .05.

CHAPTER FOUR: DATA COLLECTION EXPERIENCE

4.1 Introduction

Data was collected in 14 academic libraries in Nairobi, Kenya over a nine-week Period

that ran from January 18th to March 23rd 2010. The researcher visited all the libraries in

person so that he could conduct interviews. However, for logistical reasons, he made use

of a point person in each library to administer the questionnaires because library staff

work in shifts and it could have been very challenging for the researcher to be in each

library for all the shifts. The reason that the researcher had to visit each library in person

was to have firsthand experience in knowing about the library and also coming to know

librarians.

In this study, the researcher faced challenges that included a lengthy process to secure a

research permit from the government of Kenya, reluctance among some participants to

participate in the study, sheer bureaucracy in seeking authorization from heads of

institutions to collect data in libraries, among a host of other challenges. These challenges

have been enumerated here for two reasons: first is to point out difficulties of data

collection in other countries and especially those intending to collect data outside the

United States. Secondly, it is to illustrate how cultural differences and especially

institutional culture between the United States and Kenya can have a bearing on research.

Management of academic institutions and government offices in Kenya are highly

centralized to enhance accountability but unfortunately ends up breeding inefficiency. In

some instances, it took the researcher over 3 weeks to get a letter authorizing him to

collect data in a University in Kenya. This delay is partly due to the fact that request to

collect data has to be approved by at least 3 officers, work that can actually be done by one person in less than a day.

What is also amazing is how secretaries who are lowly ranked staff members in a university wield immense power and act as gatekeepers regarding to who will see their boss/administrator or what documents will get onto the administrator's desk.

4.2 Research Permit
Securing a research permit in Kenya started as a challenge, because it took half a day to locate the Kenya National Council for Science and Technology (KNCST), the agency charged with issuing of research permits. KNCST has changed the location of its offices many times around Nairobi. A researcher has to physically visit the KNCST offices to obtain a research permit. If all the required papers are in order, it takes between two and three weeks to process the permit. Unfortunately, the researcher did not know of the requirements beforehand. Some of these requirements included providing two stamped and signed copies of one's research proposal by the institution the applicant is enrolled in and being affiliated with one of the universities in Kenya. One of the sections of the research permit application form requires a signature and stamp from the head of the Kenyan institution the researcher is affiliated with, as testimony that the applicant is truly affiliated to that institution.

Being affiliated with an institution in Kenya was the most challenging obstacle in this project, because the administrators in the university where the researcher undertook his undergraduate and Master's Degree studies did not understand this requirement and what it meant.

The research permit application form required that the Vice Chancellor of the University (President of the University) approve that the researcher was affiliated with his University. This requirement sounded bizarre to the Vice Chancellor's secretaries, and it is no wonder that the researcher never received back a copy of the research permit application form. Unfortunately, it is almost impossible to be allowed to have a face to face dialogue with senior university administrators in this university.

The researcher had to beg KNCST to issue him the permit because getting to be affiliated to a Kenyan institution was likely never to materialize. After seeing several officers and presenting his predicament, KNCST was willing to process the research permit without meeting all the conditions set in the research permit application form. It took three weeks from the time the researcher made the application for the research permit to the time he got it.

Initially, the researcher had set aside seven weeks to collect data and later realized that waiting for approval of the government-issued research permit before seeking approval in individual universities would cost him more time than expected. He started panicking because his academic department in the U.S. had set a strict deadline for the completion of the dissertation. In order not to be delayed, he had to start visiting libraries to learn their requirements for collecting data in those libraries. Whenever he was fortunate enough for a library to allow him to administer the questionnaire without having the research permit, he could begin collecting data.

Among the first universities to visit were the newly established church-based universities which the researcher thought might not give him any trouble in allowing him to collect data. In addition, he also targeted libraries whose Chief Librarians happened to have been his classmates. In Africa, such personal connections normally work very well.

In all the libraries except one, the libraries did not allow the researcher to collect the questionnaires on the same day they were administered. Most of the libraries required that the researcher go back after one week to collect the filled in questionnaires. Even with the assurance that they would be filled in after a week, most of the questionnaires got filled in the moment the librarian went to collect them.

4.3 Description of Experience in Each University
Katherine University Library

This is a religious-based university whose Chief Librarian was also the researcher's classmate during undergraduate studies. This Chief Librarian was more than willing to help the researcher because she had been awarded a fellowship and wanted to know more about. In return for the information the researcher provided about the fellowship, the Librarian was more than eager to request other staff members to fill in the questionnaire and also be interviewed. On requesting to be interviewed, the Chief Librarian refused, although the researcher was allowed to interview three staff members a week from the date he collected the filled in questionnaire because they were very busy with work in previous weeks.

Account Hasibu University

This is a private university that had been upgraded from a college. The researcher was introduced to the Chief Librarian of Account Hasibu University by the Chief Librarian of Katherine University Library. At first, the chief librarian was very skeptical and was reluctant to cooperate. Apparently, libraries had been harassed by KOPIKEN, a reprographic services organization that collects royalties on behalf of authors when their materials are photocopied. KOPIKEN employees had been visiting libraries and disguising themselves as library users or researchers only to adversely make a report about the library in relation to copyright infringement. The Chief Librarian at Katherine University intervened and assured the Chief Librarian at Account Hasibu that the researcher was not a part of KOPIKEN.

On asking whether the researcher could interview staff members, the Chief librarian was okay with it although he wanted a day when most library staff was around and was anticipating that the researcher interviews the staff members for at most five minutes per person because these librarians were busy and could not leave their work.

Nyamo University

This is a private university that had recently been upgraded to university status. The researcher had the easiest time in this university. The Chief Librarian was eager to get information regarding how he could advance his education in the United States, which the researcher readily provided. The Chief Librarian distributed questionnaires to his staff members and six of the eight questionnaires were returned. Because there were few staff

members on the day of the interview, the researcher was forced to interview one of the staff members at the circulation desk. As a result, the interview kept on being interrupted from time to time when clients came to be served.

Sabasaba University

After visiting the Library and leaving a note for the Chief Librarian, it took over two weeks before the researcher was able to talk to the Chief Librarian over the phone because this librarian was always out of office. Unfortunately, the library could not be included in the study because it did not meet the minimum criteria needed to participate in the study because none of the staff members held at least a Certificate in Library and Information Science.

Veve University

This is a newly established university founded by a religious organization. On the first visit to the library, the researcher talked to the Deputy Librarian who was very receptive because she was also pursuing a Ph.D. degree. Due to the fact that the Chief Librarian was on leave for a whole week, the Deputy Librarian could not divulge the number of librarians the library had and their qualifications. She referred the researcher to the Chief Librarian who was the only one authorized to provide such "sensitive" information. We spent most of the time talking about libraries in the United States and those in Kenya. The researcher returned afterwards, and the Chief Librarian was eager to help. This librarian, however, requested that that the researcher write a Letter to the Deputy Vice Chancellor Academic and attach all the necessary documents such as research

instruments and government research permit. This librarian said that it was just a formality and the researcher could go ahead to collect data with the aid of one of the library staff members who could distributed and collect the questionnaires on behalf of the researcher.

On the day the researcher was to collect questionnaires the university was abruptly closed, apparently because of wrangles between the Vice Chancellor and the University Council. Students, faculty, and staff were all ushered out of the university premises. Nonetheless, calm was restored later in the day. Unfortunately, the day the researcher was to interview the Chief Librarian, the newly appointed Vice Chancellor had earlier been in the library and informed the Chief Librarian and all heads of departments that they must relocate to another campus away from Nairobi. This did not go well with the Chief Librarian. As she was in a foul mood, the researcher cancelled the interview with her and no Librarian could be interviewed that day because they were apparently very busy.

Warembo University

Warembo University library is headed by only one person. It is the only library that the researcher administered and collected the filled in questionnaire on the same day, an indicator that the librarian was eager to assist the researcher get the data he needed.

Ukulima University

This is a public university. The researcher was introduced to the Chief Librarian of this university by a librarian working in another university because the two used to be

workmates. The Chief Librarian requested the researcher to write a letter to the Vice Chancellor seeking authorization to collect data. This was in addition to attaching a research permit and the entire research proposal.

The Vice Chancellor's secretary was very instrumental in requesting the Deputy Vice Chancellor to approve the researcher's request to collect data in the library because the Vice Chancellor was headed for a meeting in town. The manner in which the Deputy Vice Chancellor received the researcher was shocking. The Deputy Vice Chancellor never even glanced for a moment when the researcher entered his office, a sign of utter disrespect for others in the Kenyan culture.

The next hurdle the researcher faced was being allowed to see the Chief Librarian. Security personnel at the library were very reluctant to allow the researcher to carry a bag into the library. The Chief Librarian never treated the researcher any better until the moment he realized that the researcher was his distant blood relative.

Unfortunately, the Chief Librarian was reluctant to give the number and qualifications of his staff members. He also insisted that the researcher only administer 10 questionnaires. The researcher's argument that he needed all librarians to fill in the questionnaire fell on deaf ears. However, the Chief Librarian accepted that the researcher leave behind 15 questionnaires that he could distribute to staff members. The researcher came back after two weeks but was only able to get back seven filled in questionnaires.

Tabibu University

Library staff was very welcoming and eager to fill in the questionnaire and participate in the interviews. However, they could not do so before getting clearance from the University Research Ethics committee. Apart from demanding an application letter, the committee required the researcher's proposal, government issued research permit and IRB approval letter. After giving all this information, it took three weeks before the researcher was authorized to go ahead to start collecting data.

James University

This university is sponsored by a religious group. The Chief Librarian requested the researcher to make an application letter to the Vice Chancellor and to attach the government issued research permit and research proposal. After handing in all these documents, it took almost four weeks before the university gave the go ahead to collect data. This delay in getting authorization led the researcher to extend his data collection by two weeks so that he could get more respondents.

Out of the 17 staff members, the researcher managed to get back 15 questionnaires that had been filled in. This might have been due to the fact that the Chief Librarian had been one of the researcher's Masters Degree thesis advisors.

Zadock University

This is a newly established private university sponsored by a religious organization and has a reputable Business Studies program. When the researcher visited the Library, the

Chief Librarian was away. Knowing how difficult it is to collect data in Kenya, the senior librarian on duty who also happened to be completing her master's thesis, promised that she would distribute the questionnaires on behalf of the researcher.

When the Chief Librarian was later on contacted, he said the researcher could not collect data from the Library until he got clearance from the University. The researcher was referred to the Director of Research, who happened to have at some time enrolled in a Masters in Library Science program in the university where the researcher undertook a Masters degree.

A week after handing in all the required documents, the researcher went to collect the authorization letter, which only started being typed while the researcher was waiting. Fortunately, the Director of Research came in and signed the authorization letter. On taking the letter to the Chief Librarian, he agreed that the researcher could begin collecting data. However, he reminded the researcher it was up to the researcher to convince library staff members to fill in the questionnaire and participate in the interviews.

When the researcher talked to librarians after filling in the questionnaire, most complained that the questionnaire was very difficult. However, the researcher was able to conduct several interviews over a four day period and all was smooth sailing.

Obukosia University

This is a private university. The researcher wrote to the Chief Librarian to find out the procedure one follows before being allowed to collect data in that library, and was astonished that it took slightly over a week before the Chief Librarian provided any feedback. The Chief Librarian had been out of office for all that time. The researcher then emailed the Director of Research but never got any reply even after sending a reminder. After a week, the Researcher physically went to the university to meet the Director of Research.

It was fortunate that the Director of Research had studied and worked as a professor in the United States for well over 23 years. He said he had been busy with other university programs and that is why he never replied to the emails. As a whole, it took about three and a half weeks before the researcher got the authorization letter to collect data and to start issuing questionnaires to participants.

The Chief Librarian requested that the researcher leave the questionnaires so that she could distribute them. She knew that if he tried to distribute them himself, most of the staff members were unlikely to cooperate, and she wanted the researcher to get sufficient data. This may have been due to the fact that she taught the researcher when he was undertaking a master's degree.

After collecting the questionnaires, the researcher interviewed staff on two separate days and did not have problems getting librarians to participate. Most of the librarians

complained that the questionnaire was very difficult. One said, "Why have you decided to examine us and yet we left school a long time ago."

Nyota University

After realizing that phone calls and emails were never acted upon, the researcher decided to walk to the office of the Chief Librarian of this University. Unfortunately the Chief Librarian was not there, so one senior librarian helped the researcher. This senior librarian requested the researcher to hand him the questionnaires to distribute on behalf of the researcher. Unfortunately, after the senior librarian started distributing the questionnaires, the Chief Librarian stopped the exercise and requested that the researcher get a letter of authorization to collect data from the Vice Chancellor of this university. The researcher attached all the necessary documents such as research proposal and the government research permit and handed them to the office of the Vice Chancellor. It took two and a half weeks before the researcher was given the go ahead to collect data. However, the researcher was requested to report to the Director of Research before starting to collect data. Unfortunately, after visiting the office of the Director of Research for over a week and not meeting anybody, the researcher gave up. He made a copy of the letter authorizing him to collect data and gave it to the senior librarian who was assisting with distribution of questionnaires.

Elisha University

Elisha University is sponsored by a religious organization and most of the senior staff in the library is well-known to the researcher. Because of this close friendship, they did not

require the researcher to request authorization from the Vice or Deputy Vice Chancellor of the university before collecting data. When these librarians were either doing their master's or Ph.D. degrees, they went through so much bureaucracy that they have since resolved to make life easier for all people conducting research.

Many participants said that the questionnaire was too difficult and thus never filled it in while some simply ignored the questionnaire. While interviewing staff members, the researcher had to go to that university many times because it was difficult getting people to interview. Most of the ones the researcher approached had an excuse or another. With time, one of the junior staff hinted to the researcher that he was not the problem. The problem was actually the senior librarian whom the researcher was sharing an office with whenever he went to that University. This senior librarian was very unpopular with most staff members, and they disdained anything associated with him.

Rais Hayati University

This is a public university. The university delayed in issuing the authorization letter to collect data. However, the researcher kept the Deputy Librarian informed about the delay in getting authorization. The Deputy Librarian was shocked by the bureaucracy and became very sympathetic. Being a Ph.D. student and also being a Christian, she was eager to help the researcher collect data. After getting the authorization letter the Chief and Deputy Librarians decided to write a memo to all heads of department in the library so that all the librarians could fill in the questionnaire. Because the Deputy Librarian was in a very good relationship with other staff members, the response rate was much higher

than the researcher had expected, with 48 questionnaires returned of the 60

questionnaires that were handed out.

Conducting interviews was also not difficult and all the people the researcher approached

accepted to be interviewed. After the interview, most of the librarians lamented that the

questionnaire was very challenging because it required them to reflect on issues they

studied long ago. Others said they were actually going to read the Kenya Copyright Act

in order to be more conversant with this piece of law. As a whole, the researcher felt that

collecting data on copyright was able to create an awareness regarding this issue.

Mwanzo University

This is a large public university. Even after visiting the office of the Chief Librarian for a

whole week, I was not able to meet her because she was always in a meeting. What was

surprising is that for one to set an appointment with the Chief Librarian, the person had to

first be cleared by the Circulation Librarian.

After a week of trying to see the Chief Librarian, her secretary informed the researcher

that the Chief Librarian could not see him and he ought to seek authorization to collect

data by writing to the Vice Chancellor. On 27th January, the researcher presented a letter

to the Vice Chancellor's office and was told to check later that week. On March 23rd,

two weeks before the researcher departing back to the United States, he visited the office

of the Public Relations Officer to express his frustration.

The secretary explained to him why the researcher was there. The Public Relations Officer's response was, "Tell him that if it is the Vice Chancellor sitting on his letter, then there is nothing I can do."

The secretary, a very religious person, felt the University should not operate the way it was doing. She called a couple Librarian friends and told the researcher to hand her 20 questionnaires. She distributed them to some of her librarian friends. Three days before departure, the researcher went to her office and she was able to collect 13 questionnaires that had been filled in out of the 20 that were issued.

4.4 Summary

Data collection can be grueling. Knowing procedures beforehand is critical to the success in collecting data. However, having a strong network of friends will in most cases reduce hurdles that one would have experienced. Anybody undertaking research ought not to ever think that by virtue of the government giving him a research permit, he will be able to collect data. The level of bureaucracy in many Kenyan institutions seems to cause many researchers frustration. It is very unfortunate that there is too much centralization of management in most of the academic institutions in Kenya, meaning data collection took longer than the researcher had anticipated. Potential researchers ought to be wary of doing studies in one institution least they have their request to collect data in that institution denied. However, doing research in multiple institutions also brings about increased hurdles to overcome and thus it takes longer to collect data. Secretaries of administrators play a critical role in either enabling documents to be processed faster or simply acting as obstacles.

On the other hand, religious persons and especially born-again Christians tended to be pretty supportive in ensuring that the researcher had fewer obstacles in the data collection. This might be a virtue of serving others which is advocated by religious groups.

CHAPTER FIVE: RESULTS

5.0 Introduction

Data from the questionnaire was used to find out demographic information relating to

participants' cadre, gender, chronological age, years of service, section of the library that

the participant works in, information related to tested awareness/knowledge of content on

copyright, awareness/ knowledge of copyright as self-reported by participants, perception

of various issues related to copyright; perception regarding infringement of specific types

of materials in the library and finally, strategies used by librarians to solve copyright

queries.

The researcher starts by providing a description of demographic characteristics of

participants, followed by results of the analysis which are presented in terms of tested

knowledge/awareness of copyright issues, self-reported knowledge of copyright issues,

perception regarding infringement of specific information resources, and then perception

of various issues related to copyright. Finally, the researcher presents a section of

qualitative data that highlights strategies that librarians employ when presented with

issues regarding making sense of underlying copyright issues such as discerning fair use

principles and reasons that librarians use to justify decisions they make when presented

with queries regarding copyright. This section includes results from the critical incident

technique and from the Think-Aloud protocol that had been administered.

5.0.1 Demographic Data

A total of 167 participants filled in and returned the questionnaire that had been

administered in the 14 academic libraries where data was collected. Of these 167

participants, 16 (9.6%) were Certificate holders, 74 (44.3%) were Diploma holders, 30

(18%) were Bachelor's degree holders, 42(25.1%) were Master's degree holders, and 5 (3%) were Ph.D. holders.

Of the 167 participants, 79 (47.3%) were male while 88 (52.7%) were female. There were 23 (13.8%) participants between the ages of 18-28 years, 68 (40.7%) were between the ages of 29-39 years, 47 (28.1%) had ages between 40-49 years, 21 (12.6%) had ages between 50-59 years and 7 (4.2%) were 60 years old or older.

The researcher was also interested in knowing the duration that librarians have worked in libraries. Forty-six (27.5%) had worked for less than 5 years in libraries. An additional 33 (19.8%) had worked for between 6-10 years, 30 (18%) had worked for between 11-15 years, 24 (14.4%) had worked for between 16-20 years, 12 (7.2%) had worked for between 21-25 years, and 22 (13.2%) had worked in libraries for more than 25 years.

The departments in the Library that these participants reported they worked in most were as follows: 59 (35.3%) worked in Circulation services, 23 (13.8%) worked in Reference service, 38 (22.8%) worked in Cataloging section, 13 (7.8%) worked in Library Administration section, 9 (5.4%) worked in the ICT section, 7 (4.2%) worked the Acquisitions section, 2 (1.2%) worked in the Archives section, while 15 (9%) worked in other departments of the library that had not been listed.

5.0.2 Research Questions

1. Does level of copyright awareness/knowledge differ among the various cadres of

   academic librarians in Kenya?

2. Does level of copyright awareness/knowledge differ among librarian cadres based on

   the duration they have worked in the library?

3. Does level of copyright awareness/knowledge differ among librarians based on the

   department of the library where they works?

4. What strategies do academic librarians in Kenya use to solve copyright queries that

   have been presented to them?

5. Do strategies that academic librarians use to solve copyright queries vary by cadre?

5.1 Cadre/Education Level

Results were analyzed by focusing on self-reported knowledge and tested knowledge in

relation to librarians' cadre/education level.

5.1.0 Tested Knowledge Regarding Copyright Issues

Six test items were used to evaluate participants' knowledge of copyright issues:

- Duration of protection for printed documents under the Kenyan copyright law;

- Organizations meant to register and oversee protection of copyrighted materials;

- Steps to determine fair use;

- What copyright entails;

- Copyright treaties; and

- Type of ideas that copyright protects.

The above six test items help answer the following question: Does level of copyright

awareness/knowledge differ among the various cadres of academic librarians in Kenya?

5.1.0.1 Total Tested Knowledge by Librarian Cadre

All items assessing Tested Knowledge (Q7-Q12) were summed up and a Kruskal-Wallis

test was conducted, to evaluate whether there are any differences among the five librarian

cadres (Ph.D., Masters, Bachelors, Diploma, Certificate) on tested knowledge of

copyright issues. Results show that there is a statistical significant difference among the

librarian cadres based on education level in relation to Tested knowledge of issues on

copyright. $\chi 2$ (4, N=167) =13.446, p=.009, η^2=.081. Median is 17 (Moderately

Knowledgeable). These results support the first hypothesis of the study which states that

there are differences that exist in respect to awareness/knowledge of copyright issues

among the different cadres of academic librarians in Kenya. There is a significant though

medium effect size (η^2=.081) indicating a moderate strength relationship between tested

knowledge and librarians' education level. The highest mean rank was for those

librarians with a Master's degree (n=42, mean rank 103.8), followed by Ph.D. holders

(n=5, mean rank 99.80), Certificate holders (n=16, mean rank 84.09), Diploma holders

(n=74, mean rank 79.61) and Bachelor's degree holders (n=30, mean rank of 64.40).

Table 2: Librarian Cadre and Tested Copyright Knowledge

Cadre/Education level	Level of Tested Copyright Knowledge					Total
	Not Knowledgeable	A bit Knowledgeable	Moderately Knowledgeable	Knowledgeable	Very Knowledgeable	
Certificate	2	2	4	6	2	16
Diploma	0	9	37	19	9	74
Bachelors	1	10	9	8	2	30
Masters	0	5	9	17	11	42
Ph.D.	1	0	1	2	1	5
Total	4	26	60	52	25	167

Table 2 shows the number of librarians in each cadre and how they are classified based on their tested knowledge of copyright issues. Twenty-five (15%) of the librarians were rated as Very knowledgeable; 52(31.1%) could be rated as Knowledgeable; 60(35.9%) could be rated as Moderately knowledgeable; 26(15.6%) were rated as A bit knowledgeable; while 4(2.4%) were Not knowledgeable in Tested Knowledge.

Because the Kruskal-Wallis Omnibus test was statistically significant, a Mann-Whitney Test was carried out to find the specific librarian cadres that differed in terms of Tested Knowledge of copyright issues. Results from the Mann-Whitney test show that there is a statistically significant difference between librarians who are Master's degree holders (n=42, mean rank 69.49) and those who are Diploma holders (n=74, mean rank 52.26) when it comes to tested knowledge of copyright issues (Mann-Whitney U=1092.500, p=.007, Z=-2.694, r=.157, r^2=.0246). Librarians who are Master's degree holders thus have significantly higher tested knowledge of copyright when compared to those librarians who hold a Diploma. However, the result shows a small effect size where only 2.46% of the total variance in the dependent variable (total tested knowledge) is accounted for by the independent variable (librarian cadre).

The Mann-Whitney Test also showed that there is a statistically significant difference between Librarians who are Master's degree holders (n=42, mean rank 43.32) and those who hold a Bachelor's degree (n=30, mean rank 26.95) when it comes to tested knowledge of copyright issues (U=343.500, p=.001, Z=-3.302, r=.39, r^2=.152).

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These results show that there is a large effect size; 15.2% of variability in the dependent

variable (total tested knowledge) is accounted for by the independent variable (librarian

cadre). The results show that librarians with a Master's degree have significantly higher

tested knowledge of copyright than those librarians who hold a Bachelor's degree.

5.1.0.2 Copyright Duration (Q.7).
Question 7 asked about the duration that the Kenyan copyright law covers published

documents after the life of the document creator. From Table 2, a total of 85 (50.9%) of

the participants got the correct response which was 50 years after the life of the creator,

while 82 (49.1%) did not get the correct response.

Table 3: Librarian Cadre and Knowledge of Copyright Duration of Published Documents.

Cadre/Education Level	Copyright Duration		Total
	Incorrect Response	Correct Response	
Certificate	6	10	16
Diploma	43	31	74
Bachelors	17	13	30
Masters	14	28	42
Ph.D.	2	3	5
Total	82	85	167

A Kruskal-Wallis test was conducted to evaluate differences among the five librarian

cadres (Ph.D., Masters, Bachelors, Diploma, and Certificate) on tested knowledge

regarding duration the Kenyan law protects a published work after the life of the creator.

Results show that there is no statistical significant difference among the five librarian cadres when it comes to tested knowledge of the duration the Kenyan law protects a published work after the life of the creator, $\chi 2$ (4, N=167)=8.245, p=.083, η^2=.049. There is a small effect size where only 4.9% of variability in the dependent variable (knowledge of copyright duration) can be accounted for by the independent variable (librarian cadres/education level). The group with the highest mean rank thus having a relative higher level of tested knowledge on copyright were Masters holders (n=42, mean rank 97.17), followed by Certificate holders (n=16, mean rank 94.69), Ph.D. holders (n=5, mean rank 91.60), Bachelor's degree holders (n=30, mean rank 77.68), and Diploma holders (n=74, mean rank 76.48) were ranked lowest.

5.1.0.3 Administration of Copyright (Q.8).
As a whole, referring to Table 4, it is evident that 165 (98.8%) of the participants were able to correctly identify Kenya Copyright Board as the organization charged with registration and overseeing copyright protection of materials.

Table 4: Librarian Cadre and Knowledge of Organizations Charged with Copyright

Registration

Librarian Cadre/Education Level	Organizations charged with copyright registration		Total
	Incorrect	Correct	
Certificate	1	15	16
Diploma	0	74	74
Bachelors	0	30	30
Masters	1	41	42
Ph.D.	0	5	5
Total	2	165	167

A Kruskal-Wallis test was conducted to evaluate differences among the five librarian

cadres (Ph.D., Masters, Bachelors, Diploma, Certificate) on tested knowledge of the

organization charged with copyright administration in Kenya. Results show that there is

no statistical significant difference among the five librarian cadres when it comes to

knowledge of the organization charged with copyright administration in Kenya, $\chi 2$ (4,

N=165) =5.238, p=.256, η^2=.032. There is a small effect size where only 3.2% of the

variance in the dependent variable (knowledge of organization charged with copyright

Administration) can be accounted for by the independent variable (librarian cadres).

Higher mean rank being an indicator of higher relative knowledge, show that Diploma

(n=74), Bachelors (n=30), and Ph.D. (n=5) had the same mean rank of 85.00 except for

Master's degree holders (n=42, mean rank 83.01) and Certificate holders (n=16, mean

rank 79.78).

5.1.0.4 Fair Use (Q.9).

There are normally four steps that one uses to determine whether usage of a copyrighted work is fair or not. Table 5 shows that of the participants, 97 (58.1%) were not able to name any of the steps used to determine if usage of a work was fair or not; 55 (32.9%) were able to name one correct step; 8 (4.8%) named two corrects steps; 3 (1.8%) named three correct steps. Only 4 (2.4%) name all the four correct steps.

Table 5: Librarian Cadre and Knowledge of Steps Used to Determine Fair Use

| Librarian Cadre/Education Level | Steps to determine Fair Use | | |
| | | At least one correct | |
	No correct step	step	Total
Certificate	7	9	16
Diploma	48	26	74
Bachelors	21	9	30
Masters	19	23	42
Ph.D.	2	3	5
Total	97	70	167

A Kruskal-Wallis test results shows that there is no statistical significant difference among the five librarian cadres when it comes to knowledge of the four step approach used in determining whether the way a work is being used is fair or not, $\chi 2$ (4, N=167)=8.713, p=.069, η^2=.052 and the median score is 0 (No correct step). These results show a small effect size in which only 5.2% of the dependent variable (knowledge of the four-step approach in determining fair-use) can be accounted for by the independent variable (librarian cadres).

Higher mean rank indicating higher relative knowledge show Ph.D. holders (n=5, mean rank 100.90), followed by Master's degree holders (n=42, mean rank 96.77), Certificate holders (n=16 mean rank 91.75), then Diploma holders (n=74, mean rank 78.88) and the group with the least mean rank were Bachelor's degree holders (n=30, mean rank 71.80).

5.1.0.5 What Copyright Deals With (Q.10)

In response to Question 10, asking what copyright deals with, 113 (67.7%) correctly indicated literary materials. Table 5 indicates that the incorrect responses were divided as follows: 7 (4.2%) indicated copyrights deals with plant genetic materials; 11 (6.6%) said it deals with trade secrets; 27 (16.2%) said it deals with symbols to identify trade products; 5 (3%) said it deals with three-dimensional ornaments; while 4 (2.4%) never responded and the assumption was that they did not know the correct response.

Table 6: Librarian Cadre and Knowledge of What Copyright Covers

Librarian Cadre/Education Level	What copyright Covers		
	Incorrect Response	Correct Response	Total
Certificate	7	9	16
Diploma	18	56	74
Bachelors	15	15	30
Masters	11	31	42
Ph.D.	3	2	5
Total	54	113	167

A Kruskal-Wallis test was conducted to evaluate differences among the five librarian cadres (Ph.D., Masters, Bachelors, Diploma, Certificate) on tested knowledge of what copyright actually covers.

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Results show that there is a statistical significant difference among the librarian cadres when it comes to knowledge of what copyright covers, $\chi\mathbf{2}$ (4, N=167) =9.817, p=.044, η^2=.059. There is a small effect size where only 5.9% of the variance in the dependent variable (knowledge of what copyright deals with) can be accounted for by the independent variable (librarian cadres). Diploma holders (n=74, mean rank 90.69%) had the highest mean rank, followed by Master's degree holders (n=42, mean rank 89.13), Certificate holders (n=16, mean rank 74.47), Bachelors holders (n=30, mean rank 69.25), and Ph.D. holders (n=4, mean rank 60.90).

5.1.0.6 Copyright Treaties (Q.11).

Table 6 shows that only 42 (25.1%) of the librarians were able to mention a copyright treaty, as opposed to 125 (74.9%) who were not able to mention any copyright treaty. Breakdown of librarians by treaties that they mentioned is as follows: 21 (12.6%) mentioned the Berne Convention; 1 (0.6%) mentioned WTO's TRIPS; 3 (1.8%) mentioned Universal Copyright Treaty; and 17(10.2%) mentioned WIPO Copyright Treaty.

Table 7: Librarian Cadre and Knowledge about Copyright Treaties

Librarian Cadre/Education Level	Copyright Treaty		Total
	Incorrect response	Correct response	
Certificate	12	4	16
Diploma	59	15	74
Bachelors	25	5	30
Masters	27	15	42
Ph.D	2	3	5
Total	125	42	167

A Kruskal-Wallis test was conducted to evaluate differences among the five librarian cadres (Ph.D., Masters, Bachelors, Diploma, and Certificate) on tested knowledge of copyright treaties. Results indicate that there is no statistical significant difference among the librarian cadres when it comes to knowledge of copyright treaties, $\chi 2$ (4, N=167) =7.752, p=.101, η^2=.047. These results indicate a small effect size, of which only 4.7% of variability in the dependent variable (knowledge of copyright treaties) is accounted for by the independent variable (librarian cadres). Highest to lowest mean ranks indicating relative knowledge among the groups was as follows: Ph.D. holders (n=5, mean rank 113.10), Master's holders (n=42, mean rank 92.82), Certificate holders (n=16, mean rank 83.88), Diploma holders (n=74, mean rank 79.93), while the least mean ranking was Bachelor's holders (n=30, mean rank 76.92).

5.1.0.7 Type of Ideas that Copyright Protects (Q.12).

Copyright was identified correctly by 158 (94.6%) as covering ideas that have been expressed and recorded. Five (3%) said copyright protects ideas still in our mind and not yet expressed, while 1 (0.6%) said that copyright protects ideas not yet expressed, and 3

(1.8%) never provided a response. As a whole, 158 (94.6%) provided the correct response while 9 (5.4%) did not.

Table 8: Librarian Cadre and Ideas That Copyright Protects

Librarian Cadre/Education Level	Ideas that copyright protects		
	Incorrect Response	Correct Response	Total
Certificate	2	14	16
Diploma	3	71	74
Bachelors	2	27	30
Masters	0	42	42
Ph.D.	1	4	5
Total	9	158	167

A Kruskal-Wallis test results indicate that there is no statistical significant difference among the librarian cadres (Ph.D., Masters, Bachelors, Diploma, Certificate) when it comes to the type of ideas that copyright protects, $\chi2$ (4, N=167) =7.537, p=.110, η^2=.045. Results indicate a small effect size where only 4.5% of variability in the dependent variable (type of ideas protected by copyright) is accounted for by the independent variable (librarian cadres). Master's degree holders (n=42, mean rank 88.15) had the highest mean rank, followed by Diploma holders (n=74, mean rank 85.11); Bachelor's degree holders (n=30, mean rank 80.15); Certificate holders (n=15, mean rank 78.06); and finally Ph.D. holders (n=5, mean rank 71.80).

5.1.1 Self-Reported Knowledge of Copyright Issues (Q18b-35b)
This section is meant to answer the following question: Does level of copyright awareness/knowledge differ among the various cadres of academic librarians in Kenya?

5.1.1.1 Self-Reported Knowledge in Relation to Librarians' Education Level

In order to try and find out whether there are any clear factors emerging from the 18 items meant to test self-reported knowledge, Factor Analysis had to be used. After conducting a reliability test for the 18 items, results show that the Cronbach alpha α= 0.911, indicating a high internal consistency among the items. The Bartlett test of sphericity, $\chi2$ (153) =1670.078, p=.000, is significant, thus showing that the strength of the relationship among variables is strong. In addition, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is large (.838). Because the Bartlett test is significant and the (KMO) test is large, continuing to perform a Factor Analysis would be a good idea. Principal component Analysis and varimax rotation were used in extracting the factors.

Table 9: Percentage of variance explained by the test items

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.307	40.597	40.597	7.307	40.597	40.597	4.334	24.080	24.080
2	2.007	11.150	51.747	2.007	11.150	51.747	3.282	18.234	42.314
3	1.813	10.072	61.819	1.813	10.072	61.819	2.798	15.546	57.860
4	1.271	7.063	68.882	1.271	7.063	68.882	1.984	11.022	68.882
5	.960	5.333	74.216						
6	.809	4.492	78.707						
7	.626	3.479	82.187						
8	.573	3.181	85.368						
9	.442	2.457	87.825						
10	.389	2.159	89.984						
11	.338	1.877	91.860						
12	.315	1.749	93.610						
13	.285	1.582	95.191						
14	.253	1.403	96.595						
15	.200	1.109	97.704						
16	.167	.930	98.634						
17	.139	.773	99.407						
18	.107	.593	100.000						

Extraction Method: Principal Component Analysis.

After conducting the factor analysis for the 18 items, 4 factors emerged, as indicated in Table 8. The results show that 68.882% of the variance of the 18 items/variables can be accounted for by only 4 factors.

Table 10: Item Loading Into Factors

Rotated Component Matrix[a]

	Component			
	1	2	3	4
Level of Knowledge of copyright Treaties Kenya is a Signatory	.133	.220	.852	.086
Level of Knowledge of copyright provisions in International copyright treaties	.270	.215	.872	-.024
Level of Knowledge of copyright provisions in trade agreements	.216	.201	.855	-.084
Level of Knowledge of Kenya Copyright Law	.697	-.061	.324	.277
Level of Knowledge of organizations established to protect copyright in Kenya	.641	.143	.369	.277
Level of Knowledge of penalties for Violating copyright in Kenya	.719	.144	.164	.364
Level of Knowledge of Functions of the Kenya Copyright Board	.693	.237	.291	.171
Level of Knowledge of Reprographic Organizations	.682	.040	.199	.157
Level of Knowledge of duration of copyright protection of books	.787	.322	.045	-.066
Level of Knowledge of duration of copyright protection for Electronic media	.792	.349	.054	-.165
Level of Knowledge of Creative Commons	.109	.720	.287	-.033
Level of Knowledge of 4-step approach to determine Fair Use	.177	.763	.038	.242
Level of Knowledge of Economic situation In Kenya	.202	.260	-.013	.823
Level of Knowledge of what makes People photocopy whole books	.215	.110	-.024	.841
Level of Knowledge of about documents in the Public Domain	.050	.708	.222	.329
Level of Knowledge of Library copyright policy	.504	.227	-.011	.184
Level of Knowledge of Technology protective Measures	.272	.808	.181	.045

Level of Knowledge of licensing of Electronic Journals	.365	.657	.131	.089

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

From this rotated component matrix, four factors emerge that can best be classified as:

Factor 1: Knowledge about Copyright law in Kenya (8 test items)

Factor 2: Knowledge about Theoretical Principles of copyright (5 test items)

Factor 3: Knowledge about Copyright Treaties (3 test items)

Factor 4: Knowledge about Socio-economic impact of copyright (2 test items)

In order to analyze self-reported knowledge of copyright issues, each of the four factors was analyzed separately using the Kruskal-Wallis test. Scores in each of the factors were ordinal in nature and Kruskal-Wallis does not assume normal distribution. However, all factors ought to have closely identical distribution shapes because the median is most important when making comparison between the different groups. In case of a significant difference being found in the omnibus test, pairwise comparisons will be made using the Mann-Whitney test to correctly identify which of the groups are different.

5.1.1.1.1 FACTOR 1: Knowledge about Copyright law in Kenya (8 items)
Eight test items were used to gauge level of self-reported knowledge about copyright law in Kenya. They include: level of knowledge of Kenya copyright law; level of knowledge of organizations established to protect copyright in Kenya; level of knowledge of penalties for violating copyright in Kenya; level of knowledge of functions of the Kenya Copyright Board; level of knowledge of reprographic organizations; level of knowledge

of duration of copyright protection of books; level of knowledge of duration of copyright protection for electronic media; and level of knowledge of library copyright policy. After running a reliability test, Cronbach's Alpha α= 0.89 for the 8 items, a sign of high internal consistency among the test items in this Factor.

When all eight items in factor 1 were added together and analyzed using a Kruskal-Wallis test, the researcher found no statistical significant difference among the different cadres when it comes to self-reported knowledge about the Kenyan copyright law, $\chi 2$(4, N=162)=4.764, p=.312, η^2=.030. There is a small effect size where only 3% of variability in the dependent variable (Factor 1: Self-reported knowledge about copyright law in Kenya) is accounted for by the independent variable (librarian cadres), in spite of there being no statistical significant difference among the cadres. The respective relative mean ranks from higher to lower self-reported knowledge about copyright law in Kenya is as follows: Ph.D. holders (n=5, mean rank 95.20); followed by Master's degree holders (n=4, mean rank 92.00); Bachelor's degree holders (n=29, mean rank 85.79); Certificate holders (n=15, mean rank 74.47); Diploma holders (n=72, mean rank 74.32).

5.1.1.1.2 FACTOR 2: Knowledge about Theoretical Principles of Copyright
There are five items that were used to gauge knowledge of theoretical principles of copyright. The five items are level of knowledge of Creative Commons; level of knowledge of the four-step approach to determine fair use; level of knowledge about documents in the public domain; level of knowledge of technology protective measures; and level of knowledge of licensing of electronic journals.

After running a reliability test, Cronbach's Alpha α= 0.85 for the 5 items meaning the items have high internal consistency.

When all five items are combined, the Kruskal-Wallis test found no statistically significant difference among the different librarian cadres when it comes to knowledge of theoretical principles of copyright, $\chi 2$ (4, N=163)=3.603, p=.462, η^2=.022. These results show that there is a small effect size where only 2.2% percent variability in the independent variable (self-reported knowledge about theoretical principles of copyright) is accounted for by the independent variable (librarian cadres). Higher mean rank indicate higher relative knowledge: Ph.D. holders (n=5, mean rank 91.50), Master's degree holders (n=41, mean rank 89.46); Bachelor's degree holders (n=30, mean rank 88.17); Certificate holders (n=15, mean rank 82.33); while the lowest-ranked group was Diploma holders (n=72, mean rank 74.45).

5.1.1.1.3 FACTOR 3: Knowledge about Copyright Treaties
The three items that make up this factor are level of knowledge of copyright treaties Kenya is a signatory, level of knowledge of copyright provisions in international copyright treaties, and level of knowledge of copyright provisions in trade agreements. After running a reliability test, Cronbach's Alpha α= 0.909 for the 3 items.

When all three items are combined, a Kruskal-Wallis test found that there is no statistically significant difference among the different librarian cadres when it comes to self-reported knowledge of copyright treaties, $\chi 2$ (4, N=160)=7.276, p=.122 η^2=.046, Median=8 (Moderately Knowledgeable).

There is a small effect size where only 4.6% of the variance in the dependent variable (self-reported knowledge of copyright treaties) is accounted for by the independent variable (librarian cadres). The higher the mean rank, the more knowledgeable the group was. Thus, Master's degree holders are the most knowledgeable (n=40, mean rank 95.80), followed by Ph.D. holders (n=5, mean rank 88.60), Bachelor's degree holders (n=28, mean rank 81.43), Certificate holders (n=15, mean rank 77.67), and finally Diploma holders (n=72, mean rank 71.67).

5.1.1.1.4 FACTOR 4: Knowledge about Socio-economic Impact of Copyright
There are two items that make up this factor, namely level of knowledge of economic situation in Kenya and level of knowledge of what makes people photocopy whole books. When the two items are combined, the scores do not fall in a normal distribution. After running a reliability test, Cronbach's Alpha α= 0.814 for the 2 items, meaning that this variable has internal consistency.

Kruskal-Wallis test found that there is no statistical significant difference among the different librarian cadres when it comes to self-reported knowledge about the socio-economic impact of copyright, $\chi 2$ (4, N=157)=1.088, p=.896, η^2=.007. This means that there is a very small effect size of only 0.7% of variability in the dependent variable (self-reported knowledge about socio-economic impact of copyright) accounted for by the independent variable (librarian cadres). Mean ranks are as follows: Diploma holders (N=70, mean rank 82.59); Certificate holders (N=15, mean rank 78.43); Master's degree holders (N=38, mean rank 77.74); Ph.D. holders (N=5, mean rank 77.10); Bachelor's degree holders (N=29, mean rank 72.62).

5.1.1.1.5 Summary

When all four factors (knowledge about copyright law in Kenya; knowledge about theoretical principles of copyright; knowledge about copyright treaties; knowledge about socio-economic impact of copyright) were combined, using a Kruskal-Wallis test, it was found that there was no significant difference among the different librarian cadres when it comes to self-reported knowledge of copyright, $\chi2$ (4, N=165) =3.921, p=.417, η^2=.024. Results also show that there is a small effect size where only 2.4% of variability in the dependent variable (self-reported knowledge of copyright) is accounted for by the independent variable (librarian cadres). Mean ranking from high to low was as follows: Ph.D. holders (n=5, mean rank 96.30), Master's degree holders (n=42, mean rank 92.49), Bachelor's degree holders (n=30, mean rank 86.20), Certificate holders (n=15, mean rank 81.30), and finally Diploma holders (n=73, mean rank 75.66).

5.2 Duration That One has Worked in Libraries
In this section, we will address the following research question. Does level of copyright awareness/knowledge differ among librarians based on the duration they have worked in the library?

 5.2.1 Tested Copyright Knowledge in Relation to Duration of Service

When all six items (Q7-12) meant to test knowledge on copyright were added and a Kruskal-Wallis test conducted to evaluate whether there were any differences in the duration a librarian has worked in a library and tested knowledge of copyright, results show that there is no statistical significant difference, $\chi2$ (5, N=167) =3.981, p=.552, η^2=.024, Median is 17 (Moderately Knowledgeable).

There is a small effect size indicating that only 2.4% of variability in the dependent variable (tested copyright knowledge) is accounted for by the independent variable (duration of library service). Highest to lowest mean ranks are as follow: 16-20 years (n=24, mean rank 96.42); more than 25 years (n=22, mean rank 88.89); 11-15 years (n=30, mean rank 85.85); 0-5 years (n=46, mean rank 83.07); 6-10 years (n=33, mean rank 77.30); 21-25 years (n=12, mean rank 67.58).

5.2.2 Duration One Has Worked in Relation to Self-Reported Knowledge
Four factors that were used to assess self-rated/ Self-reported knowledge were analyzed in order to find out whether level of copyright awareness/knowledge differs among librarians based on the duration they have worked in the library.

5.2.2.1 FACTOR 1: Knowledge about Copyright law in Kenya
When all eight items were summed up and analyzed by running a Kruskal-Wallis Test, there was no statistical significant difference between the duration a librarian has worked in a libraries and knowledge about copyright law in Kenya. After running a reliability test, Cronbach's Alpha α= .89 for the 8 items, an indicator of high internal consistency among the test items in this factor. Results show, χ^2 (5, N=162) =7.347, p=.196, η^2=.046. The median was 25 (Knowledgeable). Effect size is small, meaning that only 4.6% of variability in the dependent variable (self-reported knowledge of copyright law in Kenya) is accounted for by the independent variable (duration of service). The group with the highest mean rank was the one that had worked in libraries for more than 25 years (n=22, mean rank 97.32); followed by the 0-5 years group (n=46, mean rank 86.88); 11-15 years (n=27, mean rank 82.78); 6-10 years (n=32, mean rank 79.28); 21-25 years (n=11, mean rank 68.77); 16-20 years (n=24, mean rank 64.04). We can thus conclude that duration

that one has worked as a librarian does not seem to be a critical factor in determining how knowledgeable a librarian is going to be when it comes to knowledge about the Kenyan copyright law.

5.2.2.2 FACTOR 2: Knowledge about Theoretical Principles of Copyright

Knowledge about theoretical principles of copyright was measured using five test items: knowledge of Creative Commons; knowledge of the four step approach to determine fair use; knowledge of about documents in the public domain; knowledge of technology protective measures; knowledge of licensing of electronic journals.

After running a reliability test, for the 5 items in this factor, it was found that Cronbach's Alpha α= .85 for the 5 items, a sign of high internal consistency among the 5 test items. When all five items were combined and a Kruskal-Wallis test was run to find out whether there are any difference in the duration a librarian has worked in libraries and knowledge about theoretical principles of copyright, results show that there is a significant difference in the duration a librarian has worked in a library and knowledge about theoretical principles of copyright, $\chi\mathbf{2}$ (5, N=163) =16.915, p=.005, η^2=.104. The median score is 10 (A bit knowledgeable). Effect size is medium, meaning that only 10.4% of variability in the dependent variable (self-reported knowledge of about theoretical principles of copyright) is accounted for by the independent variable (duration of service). The highest mean ranking was from those librarians who had 0-5 years working experience (n=46, mean rank 95.12); more than 25 years of working (n=22, mean rank 90.23); 11-15 year (n=27, mean rank 88.98); 6-10 year (n=32, mean

rank 82.22); 21-25 years (n=12, mean rank 56.58); and the group with the least mean rank were those with 16-20 years working experience (n=24, mean rank 53.88).

Pairwise comparison using Mann-Whitney test was carried out to find which of the different duration categories were significantly different. Results are reported below.

U (n=70) =269.5, p=.000, Z=-3.508, r^2=.176. Librarians who have worked in libraries for between 0-5 Years (n=46, mean rank 41.64) were more knowledgeable of theoretical principles of copyright than librarians with 16-20 years experience (n=24, mean rank 23.73).

U (n=58) =139.5, p=.008, Z=-2.633, r^2=.12. Librarians who have worked in libraries for between 0-5 Years (n=46, mean rank 32.47) were more knowledgeable about theoretical principles of copyright than librarians with 21-25 years experience (n=12, mean rank 18.13).

U (n=56) =247.5, p=.023, Z=-2.268, r^2=.092. Librarians who have worked in libraries for between 6-10 Years (n=32, mean rank 32.77) were more knowledgeable about theoretical principles of copyright than librarians with 16-20 years experience (n=24, mean rank 22.81).

U (n=51) =189, p=.011, Z=-2.558, r^2=.128. Librarians who have worked in libraries for between 11-15 Years (n=27, mean rank 31.00) were more knowledgeable about

theoretical principles of copyright than librarians with 16-20 years experience (n=24,

mean rank 20.38).

U (n=39) =94.5, p=.039, Z=-2.062, r^2=.109. Librarians who have worked in libraries for

between 11-15 Years (n=27, mean rank 22.50) were more knowledgeable about

theoretical principles of copyright than librarians with 21-25 years experience (n=12,

mean rank 14.38).

U(n=46)=153.5, p=.015, Z=-2.442, r^2=.13. Librarians who have worked in libraries for

between 16-20 Years (n=24, mean rank 18.90) were less knowledgeable about

theoretical principles of copyright than librarians with more than 25 years experience

(n=22, mean rank 28.52).

5.2.2.3 FACTOR 3: Knowledge about Copyright Treaties (3 items)

When the three items (self-reported knowledge of treaties Kenya is a signatory; self-

reported knowledge of copyright provisions in international copyright treaties; self-

reported knowledge of copyright provisions in trade agreements) were combined, the

Kruskal-Wallis test found no statistically significant difference between the duration a

librarian has worked in libraries and self-reported knowledge of copyright treaties χ**2** (5,

N=160)=5.349, p=.375, η^2=.034, median score being 8 (Moderately knowledgeable).

Effect size is small, meaning that only 3.4% of variability in the dependent variable (self-

reported knowledge of copyright provisions in trade agreements) is accounted for by the

independent variable (duration of service). Mean ranks are as follows: those with more

than 25 years experience (n=22, mean rank of 100); 6-10 year (n=32, mean rank 82.75);

0-5 year (n=45, mean rank 77.28); 11-15 years (n=27, mean rank 76.56); 21-25 years (n=11, mean rank 75.82); 16-20 year (n=23, mean rank 71.89). After running a reliability test, Cronbach's Alpha α= .909, a sign of high internal consistency among the 3 test items.

5.2.2.4   FACTOR 4: Knowledge about Socioeconomic Impact of Copyright

The two items (knowledge of economic situation in Kenya and knowledge of what makes people photocopy whole books) form the factor "knowledge about socio-economic impact of copyright." After running a reliability test, Cronbach's Alpha α= .814 for the 2 items, a sign of high internal consistency among the test items. When this factor was analyzed using a Kruskal-Wallis Test, results show that there is no statistically significant difference in the duration a librarian has worked in a libraries and knowledge about socio-economic impact of copyright, $\chi2$ (5, N=157)=4.628, p=.463, η^2=.0297, Median score was ranked 8 (knowledgeable), with a small effect size. The group with the highest mean rank is librarians with more than 25 years experience (n=21, mean rank 91.55), followed by 0-5 years (n=46, mean rank 84.52); 6-10 years (n=31, mean rank 77.61); 21-25 years (n=11, mean rank 77.00); 16-20 years (n=22, mean rank 71.34); 11-15 years (n=26, mean rank 68.08).

5.3 Tested Copyright Knowledge Based On Library Department One Works In.
In this section, we will address the following research question. Does level of awareness/ knowledge of copyright issues differ among academic librarians based on the department of the library that a librarian mostly works in?

Scores for all six items (Q7-12) meant to test knowledge on copyright were added and analyzed using a Kruskal-Wallis test to evaluate whether there are any differences in tested knowledge of copyright among librarians based on the various departments they work in. Results indicate that there is no statistical significant difference between the department a librarian works in and tested knowledge of copyright, Chi-Square $\chi2$ (5, N=166) =4.907, p=.671, η^2=.03 and Median is 17 (Moderately Knowledgeable). There is a small effect size indicating that only 3% of variability in the dependent variable (tested knowledge) is accounted for by the independent variable (department a librarian works in). Department ranks are as follows: Administration Section (n=13, mean rank is 99.81); Reference Service (n=23, mean rank is 91.57); Other sections not listed (n=15, mean rank 88.47); ICT section (n=9, mean rank 88.44); Cataloging section (n=38, mean rank 83.32); Acquisition section (n=7, mean rank 88.00); Circulation Section (n=59, mean rank 75.19); Archive Section (n=2, mean rank 58.00).

5.4 Self Reported Copyright Knowledge Based Library Department One Works In.

In this section, we will address the following research question. Does level of awareness/ knowledge of copyright issues differ among academic librarians based on the department of the library that a librarian mostly works in?

5.4.1 FACTOR 1: Knowledge about Copyright Law in Kenya
When all eight items were summed up and analyzed by running a Kruskal-Wallis Test, there was no statistical significant difference between the duration a librarian has worked in a libraries and knowledge about copyright law in Kenya.

Reliability test indicates that Cronbach's Alpha α= .89 for the 8 items, an indicator of high internal consistency among the test items in this factor. Results show, χ^2 (7, N=147) =16.082, p=.024, η^2=.11. The effect size is small, meaning that only 11% of variability in the dependent variable (self-reported knowledge of copyright law in Kenya) is accounted for by the independent variable (Department that a Librarian works in). The department with the highest to the lowest mean ranks were: ICT section (n=9, mean rank 88.12); Reference Services (n=23, mean rank 86.75); Other Sections not listed (n=15, mean rank 83.57); Cataloging Section (n=38, mean rank 78.19); Circulation Section (n=59, mean rank 74.08); Archives Section (n=2, mean rank 46.56, Acquisition Section (n=7, mean rank 43.14; Administration Section (n=13, mean rank 36.25).

Pairwise comparison using Mann-Whitney test was carried out to find which of the Sections that librarians work in were significantly different. Results are reported below. U (n=36) =50.5, p=.002, Z=3.062, r^2=.26. Librarians who work in Reference Section (n=23, mean rank 86.75) rated themselves as having higher knowledge about copyright law in Kenya than librarians who worked in the Administration section (n=13, mean rank 36.25). The differences in self rating of knowledge among this two groups is big because of the large effect size.

U (n=51) =41.941, p=.006, Z=2.738, r^2=.178. Librarians who work in Cataloging Section (n=38, mean rank 78.19) rated themselves as having higher knowledge about copyright law in Kenya than those who worked in the Administration section (n=13,

mean rank 36.25). Differences in self rated knowledge among these groups is big and it is evident because of the large effect size.

U (n=22) =-51.875, p=.01, Z=-2.568, r^2=.3. Librarians who have worked in ICT Section (n=9, mean rank 88.12) rated themselves as having higher knowledge about copyright law in Kenya than librarians who worked in the Administration section (n=13, mean rank 36.25). The effect size is large.

U (n=30) =43.607, p=.02, Z=2.332, r^2=.18. Librarians who have worked in Reference Services (n=23, mean rank 86.75) rated themselves as having higher knowledge about copyright law in Kenya than librarians who worked in the Acquisitions section (n=7, mean rank 43.14). The effect size is large, indicating a big difference.

U (n=16) =44.982, p=.041, Z=2.041, r^2=.26. Librarians who work in ICT Section (n=9, mean rank 88.12) rated themselves as having higher knowledge about copyright law in Kenya than librarians who work in the Acquisitions section (n=7, mean rank 43.14). The effect size is large, meaning that there is a real big difference.

U (n=45) =35.048, p=.047, Z=1.983, r^2=.087. Librarians who work in Cataloging Section (n=38, mean rank 78.19) rated themselves as having higher knowledge about copyright law in Kenya than librarians who work in the Acquisitions section (n=7, mean rank 43.14). Eta squared indicates a medium effect size, meaning that there are moderate differences among these two departments.

5.4.2 FACTOR 2: Knowledge about Theoretical Principles of Copyright

After running a reliability test, for the 5 items in this factor, it was found that Cronbach's
Alpha α= .85, a sign of high internal consistency among these items. When all five items
were combined and a Kruskal-Wallis test was run to find out whether there are any
differences in the Department that a librarian normally works in the library and self
rated/reported knowledge about theoretical principles of copyright, results show that
there is a significant difference. $\chi 2$ (7, N=147) =14.82, p=.043, η^2=.102. Effect size is
medium. This means that only 10.2% of variability in the dependent variable (self-
reported knowledge of about theoretical principles of copyright) is accounted for by the
independent variable (Department of the Library that Librarians work in).

The group with the highest mean rank was   Acquisition Section (n=7, mean rank 93.86;
Cataloging Section (n=38, mean rank 90.16); Reference Services(n=23, mean rank
83.20); Other Sections not Indicated in the tool (n=15, mean rank 70.64); ICT section
(n=9, mean rank 67.75); Circulation Section (n=59, mean rank 63.33); Administration
Section (n=13, mean rank 62.05); Archives Section (n=2, mean rank 23.5)

Pairwise comparison using Mann-Whitney test was carried out to find which of the
Sections that librarians work in were significantly different from the other. Results are
reported below.

U (n=97) =-26.835, p=.004, Z=-2.858, r^2=.08. Librarians who have worked in Cataloging
section (n=38, mean rank 90.16) rated themselves as having higher knowledge about

Knowledge about Theoretical Principles of Copyright than librarians who worked in the

Circulation section (n=59, mean rank 63.33).

U (n=40) =66.662, p=.031, Z=2.152, r^2=.116. Librarians who have worked in Cataloging

section (n=38, mean rank 90.16) were rated themselves as having higher knowledge

about Knowledge about Theoretical Principles of Copyright than librarians who worked

in the Archives (n=2, mean rank 23.50).

U (n=9) =70.357, p=.039, Z=2.061, r^2=.47. Librarians who have worked in Acquisition

Section (n=7, mean rank 93.86) rated themselves as having higher knowledge about

Knowledge about Theoretical Principles of Copyright than librarians who worked in the

Archives section (n=2, mean rank 23.50).

5.4.3 FACTOR 3: Knowledge about Copyright Treaties
After running a reliability test, Cronbach's Alpha α= .909, a sign of high internal

consistency among the 3 test items. Kruskal-Wallis test found no statistically significant

difference between the Department a Librarian works in and self-reported knowledge of

copyright treaties $\chi2$ (7, N=147) =7.635, p=.366, η^2=.052. Effect size is small, meaning

that only 5.2% of variability in the dependent variable (self-reported knowledge of

copyright Treaties) is accounted for by the independent variable (Department a Librarian

works in). Mean ranks are as follows: ICT section (n=9, mean rank 91.25); Other

Sections not listed (n=15, mean rank 90.21); Acquisition Section (n=7, mean rank 81.29;

Administration Section (n=13, mean rank 79.75); Reference Services(n=23, mean rank

74.85); Cataloging Section (n=38, mean rank 71.13); Circulation Section (n=59, mean

rank 66.79); Archives Section (n=2, mean rank 65),

5.4.4 FACTOR 4: Knowledge about Socioeconomic Impact of Copyright

The two items (knowledge of economic situation in Kenya and knowledge of what makes

people photocopy whole books) comprise the factor "knowledge about socio-economic

impact of copyright." After running a reliability test, Cronbach's Alpha α= .814 for the 2

items, a sign of high internal consistency among the test items. When this factor was

analyzed using a Kruskal-Wallis Test, results show that there is no statistically significant

difference in the Department a Librarian works in and knowledge about socio-economic

impact of copyright, $\chi 2$ (7, N=147)=5.474, p=.602, η^2=.037. This shows that there is a

small effect size. The group with the highest mean rank is Cataloging Section (n=38,

mean rank 80.16); Circulation Section (n=59, mean rank 79.15); Acquisition Section

(n=7, mean rank 78.57; Reference Services(n=23, mean rank 72.55); Other Sections not

Indicated in the tool (n=15, mean rank 67.07); ICT section (n=9, mean rank 64);

Administration Section (n=13, mean rank 49.75); Archives Section (n=2, mean rank

29.50).

5.5 Departments a Librarian Works In, Education Level, and Duration of Service

Table: 11 Department a librarian works, Duration of Service, and Education Level

Department that one normally works in			Qualifications					
			Certificate	Diploma	Bachelors Degree	Masters Degree	PhD	Total
Circulation Section								
	Duration one has worked in a Library	0-5 Years	1	13	5	0	0	19
		6-10 Years	3	12	2	1	0	18
		11-15 Years	2	3	2	2	0	9
		16-20 Years	0	1	1	5	0	7
		21-25 Years	1	0	0	1	0	2
		More than 25 years	1	2	0	1	0	4
Total			**8**	**31**	**10**	**10**	**0**	**59**
Reference Service								
	Duration one has worked in a Library	0-5 Years	0	4	0	1	0	5
		6-10 Years	1	1	1	0	0	3
		11-15 Years	1	1	0	2	1	5
		16-20 Years	0	0	2	2	0	4
		21-25 Years	0	3	0	1	0	4
		More than 25 years	1	1	0	0	0	2
Total			**3**	**10**	**3**	**6**	**1**	**23**
Cataloging Section								
	Duration one has worked in a Library	0-5 Years	0	8	4	0	0	12
		6-10 Years	0	1	0	2	0	3
		11-15 Years	1	2	3	0	0	6
		16-20 Years	0	4	1	1	1	7
		21-25 Years	0	1	0	1	0	2
		More than 25 years	1	4	1	2	0	8
Total			**2**	**20**	**9**	**6**	**1**	**38**

	Duration one has worked in a Library						Total
Administration Section							
	0-5 Years	0	0	0	0	0	0
	6-10 Years	0	0	0	1	0	1
	11-15 Years	0	0	0	2	0	2
	16-20 Years	0	0	0	2	1	3
	21-25 Years	0	0	0	1	0	1
	More than 25 years	0	0	1	4	1	6
	Total	**0**	**0**	**1**	**10**	**2**	**13**
ICT Section							
	0-5 Years	0	1	2	1	0	4
	6-10 Years	0	0	1	0	1	2
	11-15 Years	0	0	0	1	0	1
	16-20 Years	0	0	0	1	0	1
	21-25 Years	0	1	0	0	0	1
	Total	**0**	**2**	**3**	**3**	**1**	**9**
Acquisition Section							
	0-5 Years	0	0	1	1	0	2
	6-10 Years	0	0	0	1	0	1
	11-15 Years	0	0	0	1	0	1
	21-25 Years	1	0	1	0	0	2
	More than 25 years	0	1	0	0	0	1
	Total	**1**	**1**	**2**	**3**	**0**	**7**

Section	Duration							Total
Archive Section	Duration one has worked in a Library	0-5 Years	0	0	0	1	0	1
		6-10 Years	0	0	1	0	0	1
	Total		0	0	1	1	0	2
Other Sections	Duration one has worked in a Library	0-5 Years	0	2	1	0	0	3
		6-10 Years	0	3	0	1	0	4
		11-15 Years	1	2	0	2	0	5
		16-20 Years	0	2	0	0	0	2
		More than 25 years	0	1	0	0	0	1
	Total		1	10	1	3	0	15

5.6 Tested Copyright Knowledge by Chronological Age

Scores of all six items (Q7-12) meant to test knowledge on copyright were computed and

a Kruskal-Wallis test conducted to evaluate whether there are any differences in

librarians' chronological age and tested knowledge of copyright. Results indicate that

there is no statistically significant difference between a librarian's chronological age and

tested knowledge of copyright, Chi-Square $\chi2$ (5, N=166) =2.618, p=.624, η^2=.016. There

is a small effect size which indicates that only 1.6% of variability in the dependent

variable (tested copyright knowledge) is accounted for by the independent variable

(chronological age). The mean ranks from the highest to the lowest in terms of

chronological age are as follows: 60 and more years (n=7, mean rank 99.36); 40-49 years

(n=47, mean rank 89.69); 18-28 years (n=23, mean rank 85.28); 50-59 years (n=21, mean

rank 80); and finally 29-39 years (n=68, mean rank 78.07).

5.7 Perceptions Regarding the Importance of Copyright Issues (Q18-35)

Scores in each of the items do not form a normal distribution. The Cronbach alpha

α=0.881 for the 18 items, showing internal consistency among the test items.

5.7.1 Perception of the Importance of Copyright Issues in Relation to Librarians'
Education Level

Using the Kruskal-Wallis test after summing up all 18 items used to test Librarians'

perception of the importance of copyright issues, results show that there is no statistically

significant difference in perception of copyright issues among the different librarian

cadres, $\chi2$ (4, N=164) =3.516, p=.475, η^2=.022, with the median being 78 (Very

important) and effect size is small. The group with the highest mean rank thus a higher

level of perceived importance was Certificate holders (n=15, Mean rank 90.53); followed

by Master's degree holders (n=42, mean rank 91.70);

Ph.D. holders (n=5, mean rank 85.20); Bachelor's degree holders (n=29, mean rank 81.48); Diploma holders (n=73, mean rank 75.77).

When each of the 18 individual items were analyzed using a Kruskal-Wallis test, results show that there is no significance difference in perception of the importance of copyright issues among the different librarian cadres except for two items.

Table 12: Kruskal Wallis Test Output of Perceived importance of Copyright based on a librarians' Cadre/Education level

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Chi-Square	6.796	17.976	5.044	3.769	5.943	2.816	5.021	5.855	1.375	.772	8.714	7.782	1.235	5.924	4.661	5.032	3.782	6.854
df	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	.147	.001	.283	.438	.203	.589	.285	.210	.848	.942	.069	.100	.872	.05	.324	.284	.436	.144

a. Kruskal-Wallis Test

b. Grouping Variable: Qualifications

KEY:
1= Importance of knowing copyright treaties Kenya is a signatory; 2= Importance of knowing copyright provisions in international copyright treaties; 3= Importance of knowing copyright provisions in trade agreements; 4= Importance of knowing Kenya copyright law; 5= Importance of knowing organizations established to protect copyright in Kenya; 6= Importance of knowing penalties for violating copyright in Kenya; 7= Importance of knowing functions of the Kenya Copyright Board; 8= Level of knowledge of reprographic organizations; 9= Importance of knowing duration of copyright protection of books; 10= Importance of knowing duration of copyright protection for electronic media; 11= Importance of knowing Creative Commons; 12= Importance of knowing 4-step approach to determine fair use; 13= Importance of knowing economic situation In Kenya; 14= Importance of knowing what makes people photocopy whole books; 15= Importance of knowing about documents in the public domain; 16= Importance of knowing library copyright policy; 17= Importance of knowing technology protective measures; 18=Importance of knowing about licensing of electronic journals.

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5.7.2 Perception of the importance of copyright issues based on duration that a librarian has worked in the library

Table 13: Kruskal Wallis Test Output of Perceived importance of Copyright based on a librarians' Duration of service

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Chi-Square	5.386	20.095	4.320	6.950	9.961	5.243	6.766	8.241	6.187	8.699	2.285	6.185	1.220	6.264	1.700	2.318	6.833	1.996
df	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Asymp. Sig.	.371	.001	.504	.224	.076	.387	.239	.143	.288	.122	.808	.289	.943	.281	.889	.804	.233	.850

a. Kruskal-Wallis Test

b. Grouping Variable: Duration one has worked in a Library

KEY:
1= Importance of knowing copyright treaties Kenya is a signatory; 2= Importance of knowing copyright provisions in international copyright treaties; 3= Importance of knowing copyright provisions in trade agreements; 4= Importance of knowing Kenya copyright law; 5= Importance of knowing organizations established to protect copyright in Kenya; 6= Importance of knowing penalties for violating copyright in Kenya; 7= Importance of knowing functions of the Kenya Copyright Board; 8= Level of knowledge of reprographic organizations; 9= Importance of knowing duration of copyright protection of books; 10= Importance of knowing duration of copyright protection for electronic media; 11= Importance of knowing Creative Commons; 12= Importance of knowing 4-step approach to determine fair use; 13= Importance of knowing economic situation In Kenya; 14= Importance of knowing what makes people photocopy whole books; 15= Importance of knowing about documents in the public domain; 16= Importance of knowing library copyright policy; 17= Importance of knowing technology protective measures; 18=Importance of knowing about licensing of electronic journals.

When a Kruskal-Wallis test was conducted to find out perception of the importance of copyright issues in relation to the duration a librarian has served in the library, out of the 18 test items, only one (importance of knowing copyright provisions in international copyright treaties) is statistically significant, $\chi 2$ (5, N=161) =20.095, p=.001, η^2=.126, and there is a medium effect size. Mean ranks are as follows, with higher ranks equaling higher perceived importance: librarians with 6-10 Years (n=30, mean rank 91.70); more than 25 years (n=22, mean rank 85.14); 21-25 Years (n=12, mean rank 82.13); 11-15 Years (n=28, mean rank 81.95); 16-20 Years (n=23, mean rank 77.43); 0-5 Years (n=46, mean rank 72.96).

After the Kruskal-Wallis test was conducted, no significant difference was found between the duration librarians have worked in libraries and perceived importance of copyright issues, $\chi 2$ (5, N=164)=8.798, p=.117, η^2=.054. Mean ranks are as follows: more than 25 years (n=22, mean rank 93.68); 21-25 Years (n=12, mean rank 91.83); 11-15 Years (n=28, mean rank 91.75); 6-10 Years (n=32, mean rank 90.83); 0-5 Years (n=46, mean rank 71.07); 16-20 Years (n=24, mean rank 67.60).

5.8 Library Copyright Policy (Q13)

When asked to state whether their library has a copyright policy, two out of four librarians at Katherine University; seven out of 48 librarians at Rais Hayati; seven out of 16 at Elisha University; three out of 13 at Obukosia University; two out of seven at Account Hasibu; four out of 15 at James University; five out of seven at Veve University; and six out of 16 librarians at Nyota University indicated that their library does not have a copyright policy or they are not sure if it has one.

This demonstrates that 43 out of 167 (25.7%) librarians in this study indicated that their library did not have a copyright policy or they were not sure that their library had one.

5.9 Perceived Infringement of Information Resources in the Library

Books: 111 (69.4%) of the librarians who responded indicated that copyright is infringed among books in the library as opposed to 49 (30.6%) who said it was not.

Journals: 84 (53.8%) of the librarians who responded indicated that copyright is infringed among journals in the library as opposed to 72 (46.2%) who said it was not.

Magazines and Newspapers: 61 (38.9%) of the librarians who responded indicated that copyright is infringed among Magazines and Newspapers in the library as opposed to 96 (61.1%) who said that it was not.

Movies and Video Recordings: 42 (27.8%) of the librarians who responded indicated that copyright is infringed among movies and video recordings in the library as opposed to 109 (72.2%) who said that it was not.

Music and Audio Recordings: 43 (27.7%) of the librarians who responded indicated that copyright is infringed among music and audio recording as opposed to 112 (72.3%) who said that it was not.

Software: 58 (38.4%) of the librarians who responded indicated that copyright is infringed upon among software in the library as opposed to 93 (61.6%) who said that it was not.

5.10 Perceived Frequency of Copyright Infringement (Q14)
Testing the reliability for the 6 items testing perceived frequency of copyright infringement for specific information resources in the library, Cronbach's α=.858 thus indicating a high internal consistency in the test items.

5.10.1 Perceived infringement of books

Twenty-nine (18.5%) reported that books are always infringed in the library, an equal percentage to those who say that they are infringed upon often times; 43(27.4%) reported that they are sometimes infringed upon; 27(17.2%) rarely; another 29 (18.5%) reported that they are never infringed upon.

5.10.2 Perceived frequency in the infringement of books in the library.

(a)   A Kruskal-Wallis test was conducted to evaluate differences in librarians' education level and perceived copyright infringement of books in the library. Results show that there is no significant difference between education level and perceived copyright infringement of books in a library, Chi-Square $\chi 2$ (4, N=157) =5.365, p=.252, η^2=.034 and Median is 3 (Sometimes there is copyright infringement). There is a small effect size where 3.4% of variability in the dependent variable (perceived infringement of books) is accounted for by the independent variable (librarian cadres/education level).

Highest to lowest mean ranks are as follows: Master's degree holders (n=39, mean rank 89.36); Ph.D. holders (n=3, mean rank 89.00); Bachelor's degree holders (n=29, mean rank 85.14); Certificate holders (n=15, rank 77.93); Diploma holders (n=71, mean rank 70.61).

(b) A Kruskal-Wallis test was conducted to evaluate differences between the department in which one works in and perceived copyright infringement of books in the library. Results show that there is a statistical significant difference between the department that one works in and perceived copyright infringement of books in a library. Chi-Square $\chi 2$ (7, N=157) =18.015, p=.012, η^2=.115 and Median is 3 (Sometimes there is copyright infringement). There is a medium effect size where 11.5% of variability in the dependent variable (perceived copyright infringement of books) is accounted for by the independent variable (departments in the library).

The highest to lowest mean rank by library sections thus indicating higher to lower perception of the frequency with which books are infringed in the library is as follows: Administration section (n=1, mean rank 111.73); Archives section (n=2, mean rank 111.50); Other library sections (n=15, mean rank 60); ICT section (n=8, mean rank 95.50); Circulation section (n=57, mean rank 76.63); Acquisition section (n=7, mean rank 70.14); Cataloging section (n=36, mean rank 67.78); and the section with the least mean rank was Reference section (n=21, mean rank 63.52)

(i) When a Mann-Whitney test was run to find out which of the sections have a statistical significant difference, results show a statistically significant difference between

Circulation section and Administration section when it comes to perceived copyright infringement on books in the library, $U(1,N=68)=168.5$, $p=.013$, $z=-2.478$, $r=.301$, $r^2=.091$, mean ranks Administration section (n=11, mean rank 47.68) compared to Circulation section (n=57, mean rank 31.96). There is a medium effect size where only 9.1% of variability in the dependent variable is accounted for by the independent variable. Librarians in Administration thus rate that there is a higher frequency of copyright infringement of books than those who work in the Circulation section.

(ii) Mann-Whitney test also found that there is a significant difference between librarians who work in circulation section (n=57, mean rank 33.8) and those who work in other sections of the library not named in the questionnaire (n=15, mean rank 46.77) when it comes to their perception regarding infringement of books in the library, $U(1,N=72)=273.5$, $p=.028$, $z=-2.191$, $r=.258$, $r2=.067$. There is a medium effect size where only 6.7% of variability in the dependent variable is accounted for by the independent variable. Librarians who work in other sections not mentioned in the questionnaire perceive that there is a higher infringement of books in the library compared to those who work in the circulation section.

(iii) In addition, the Mann-Whitney test found that there is a statistical significant difference between librarians working in Reference service (n=21, mean rank 13.17) and those working in the Administration section (n=11, mean rank 22.86) when it comes to perceived frequency of infringement of books, $U (1, N=32) =45.5$, $p=.005$, $Z= -2.839$, $r =.50$, $r^2= .25$. This shows that there is a large effect size where 25% of variability in the

dependent variable (perceived infringement of books) is accounted for by the independent variable (sections of the library). Librarians working in Administration section perceive that there is a higher frequency of infringement of books in the library compared to librarians who work in the Reference section.

(iv) A Mann-Whitney test showed that there is a statistical significant difference between librarians working in Reference service (n=21, mean rank 14.71) and those working in Other sections of the library not mentioned in the questionnaire (n=15, mean rank 23.8) when it comes to perceived frequency of copyright infringement of books in the library, U (1, N=36) =78, p=.009, Z= -2.604, r=.434, r^2=.188. This shows that there is a large effect size where 18.8% of variability in the dependent (frequency of copyright infringement of books) variable is accounted for by the independent variable (section of the library). Librarians working in other sections perceive that there is a higher frequency of copyright infringement of books than those librarians who work in the Reference Service.

(v) Mann-Whitney test showed that there is a statistical significant difference between librarians in Cataloging section (n=36, mean rank 21) and those working in the Administration Section (n=11, mean rank 33.82), when it comes to perceived frequency of copyright infringement of books in the library, U (1, N=47) =90, p=.006, Z= -2.774, r=.405, r^2=.164. There is a large effect size which shows that 16.4% of variability in the dependent variable (perceived frequency of copyright infringement) is accounted for by the independent variable (section of the library).

5.10.3 Perceived frequency of infringement on journals

Eight (5.3%) librarians said that journals are always infringed upon, 21(13.9%) said they are often infringed upon; 37(24.5) reported that sometimes they are infringed upon; 46(30.5%) said that they are rarely infringed upon; 39(25.8%) reported that Journal are never infringed in the library.

A Kruskal-Wallis test was conducted to evaluate differences in education level and perceived copyright infringement of journals in the library. Results show that there is no statistical significant difference between education level and perceived copyright infringement of journals in a library, Chi-Square $\chi2$ (4, N=151) =4.800, p=.308, η^2=.032. Median is 4 (Rarely is there copyright infringement). There is a small effect size in which 3.08% of variability in the dependent variable (perceived frequency of infringement on journals) is accounted for by the independent variable (librarian's education level/cadre). Highest to lowest mean ranks are as follows: Certificate holders (n=14, mean rank 84.75); Bachelor's degree holders (n=27, mean rank 83.46); Master's degree holders (n=36, mean rank 82.38); Ph.D. holders (n=3, mean rank 80.17); Diploma holders (n=71, mean rank 68.03).

5.10.4 Perceived frequency of infringement on magazines and newspapers

Nine librarians (5.9%) reported that magazines and newspapers are always infringed upon; 18 (11.8%) reported that they are often infringed upon; 33 (21.7%) reported that they are sometimes infringed upon; 38 (25%) reported that they are rarely infringed upon; 54 (35.5%) reported that they are never infringed upon.

A Kruskal-Wallis test was conducted to evaluate differences in education level and perceived copyright infringement of magazines and newspapers in the library. Results show that there is no significant difference between education level and perceived copyright violations of magazines and newspapers the library, $\chi 2$ (4, N=152) =4.153, p=.386, η^2=.028 and Median is 4 (Rarely is there copyright infringement). Highest to lowest mean ranks are as follows: Ph.D. (n=3, mean rank 110.17); Bachelors holders (n=27, mean rank 82.87); Master's degree holders (n=37, mean rank 79.35); Diploma holders (n=70, mean rank 73.62); Certificate holders (n=15, mean rank 64.70).

5.10.5 Perceived frequency of infringement on movies and video recordings

Twelve (8.5%) of the participants reported that Video recordings and movies are always infringed upon; 8 (5.6%) reported that they are often infringed upon; 25 (17.6%) reported that they are sometimes infringed upon; 30 (21.1%) reported that they are rarely infringed upon; while 67 (47.2%) reported that they are never infringed upon.

A Kruskal-Wallis test was conducted to evaluate differences in education level and perceived copyright infringement of movies and video recordings in the library. Results show that there is no statistical significant difference between education level and perceived copyright of movies and video recordings in a library, $\chi 2$ (4, N=142) =4.03, p=.319, η^2=.029 and Median is 4 (Rarely is there copyright infringement). Highest to lowest mean ranks are as follows: Ph.D. holders (n=3, mean rank 92.83); Master's degree holders (n=33, mean rank 81.62); Certificate holders (n=14, mean rank 74.21); Bachelor's degree holders (n=28, mean rank 68.20); Diploma holders (n=64, mean rank 66.13).

5.10.6 Perceived frequency of infringement on music and audio recordings

Nine librarians (6.3%) report that music and audio recording is always infringed upon; 15 (10.5%) said that it is often infringed upon; 17 (11.9%) reported that it is sometimes infringed upon; 35 (24.5%) said that it is rarely infringed upon; 67 (46.9%) reported that music and audio recordings are never infringed in their library.

A Kruskal-Wallis test was conducted to evaluate differences in education level and perceived copyright infringement of music and audio recording in the library. Results show that there is no significant difference between education level and perceived copyright infringement of music and audio recordings in a library, χ^2 (4, N=143) =6.596, p=.159, η^2=.046 and Median is 4 (Rarely is there copyright infringement). Results show that there is a small effect size. Highest to lowest mean rank: Ph.D. holders (n=3, mean rank 93.00); Master's degree holders (n=34, mean rank 83.38); Certificate holders (n=13, mean rank 80.00); Bachelor's degree holders (n=28, mean rank 67.57); and finally Diploma holders (n=65, mean rank 65.38).

5.10.7 Perceived frequency of infringement on software

Eighteen (12.8%) reported that software is always infringed upon in the library; 6 (4.3%) said that it is often infringed upon; 22 (15.6%) reported that it is sometimes infringed upon; 23 (16.3%) said that it is rarely infringed upon; 72 (51.1%) reported that it is never infringed upon.

A Kruskal-Wallis test was conducted to evaluate differences in education level and perceived copyright infringement of computer software in the library. Results show that there is no statistical significant difference between education level and perceived copyright infringement of computer software in a library, $\chi 2_{(4, N=141)} = 2.502$, p=.644, $\eta^2=.0179$ and Median is 5 (There is Never copyright infringement). Highest to lowest mean rank: Ph.D. holders   (n=3, mean rank 89.67); Certificate holders (n=14, mean rank 74.93); Master's degree holders (n=35, mean rank 74.80); Diploma holders (n=62, mean rank 70.62); Bachelor's degree holders (n=27, mean rank 62.83).

5.11 Perceived Likelihood of Getting into Trouble after Copyright Infringement (Q15)
Twenty-one librarians (12.9%) reported that it was extremely likely for people violating copyright in the library to get into trouble; 26 (16%) reported that it was very likely; 53 (32.5%) said it was likely; 47 (28.8%) said that it was not likely; and 16 (9.8%) said that it was extremely unlikely.

A Kruskal-Wallis test was conducted to evaluate differences in education level in terms of perceived likelihood of getting into trouble after infringing on copyright in the library. Results show that there is no statistical significant difference between education level and perceived likelihood of getting into trouble after infringing on copyright in the library, Chi-Square $\chi 2_{(4, N=163)} = 3.461$, p=.484, $\eta^2=.021$ and Median is 3 (Likely to get into trouble).

5.12 What Strategies do Academic Librarians in Kenya Use to Solve Copyright Queries that Have Been presented to Them? (Q36-38)

This section will be used to address the hypothesis that there are differences in the strategies employed by different librarian cadres in relation to solving copyright problems. The question to be answered is: "What strategies do academic librarians in Kenya use to solve copyright queries that have been presented to them?"

Strategies librarians employ when they see someone infringing copyright include trying to educate library users about copyright; punishing the user; ignoring to take any action when someone is infringing on copyright; refer users to senior members of the library, to the law or to the library copyright policy; and finally, some of the librarians always try to find out why the person is infringing on copyright before they take any decision.

5.13 What Librarians Normally Do When They See People Infringing Copyright in Their Library (Q36)

Table 13: Steps librarians Take When They see a User Infringe on Copyright in the Library

Qualification	Librarian's Action					
	Educating Users	Punishment	Accepting Copyright Infringement	Understanding users' reasons	Referring users	Total
Pre-Undergraduate	41 (52.6%)	6 (7.7%)	10 (12.8%)	6 (7.7%)	15 (19.2%)	78 (100%)
Undergraduate	16 (64.0%)	5 (20.0%)	2 (8.0%)	0 (0.0%)	2 (8.0%)	25 (100%)
Graduate	27 (61.4%)	9 (20.5%)	2 (4.5%)	1 (2.3%)	5 (11.4%)	44 (100%)
Total	84 (57.1%)	20 (13.6%)	14 (9.5%)	7 (4.8%)	22 (15.0%)	147 (100%)

In Table 13, Pre-Undergraduate are Diploma and Certificate holders, Undergraduate are Bachelor's degree holders, while Graduate are Masters and Ph.D. holders. The five cadres have been narrowed into three categories because this is how they tend to be categorized in libraries. Those with graduate education tend to be considered as administrators and section heads, Undergraduate holders as technical staff. Graduate and undergraduate are considered as professionals. On the other hand, pre-undergraduate are considered paraprofessional and tend to be given the least technical work to do in the library. Table 13 shows that when librarians see someone infringing on copyright in the library, 84 (57.1%) of the librarians said they try educating the user; 22 (15%) said that they refer them to their superiors in the library, to Kenyan copyright law or library copyright policy; 20 (13.6%) said that they have them punished; 14(9.5%) of the librarians indicated that they allow copyright infringement to take place; while 7(4.8%) said that they try to find out reasons that are making library users infringe on copyright.

The top two reasons given based on Library cadre/level of education is as follows: Most librarians with Pre-Undergraduate (Diploma and Certificate holders) rated that when they see someone infringing copyright, they educate the user (41, or 52.6%), refer users to others 15, (19.2%). On the other hand, 16 (64%) of librarians who hold an Undergraduate degree reported that they educate users, while 5 (20%) reported that they administer some form of punishment. None of the librarians with an undergraduate degree said that they try to find out reasons why library users are infringing on copyright. For librarians with a graduate degree, 27 (61.4%) said that they try educating users about copyright

issues when they see them infringing on copyright in the library, compared to 9 (20.5%) who said that they always tend to have the user punished.

5.13.1 Educating users

Librarians holding Certificate and Diploma were merged to form Pre-Undergraduate Group, Bachelor's degree holders formed the Undergraduate group and finally, Masters and Ph.D. degree holders formed the Graduate degree holders. Table 14 shows that most librarians, 41 (52.6%) Pre-Undergraduate, 16 (64%) Undergraduate, and 27 (61.4%) of Graduate degree holders, indicated that they educate users when they see them infringing on copyright in the library. Educating users came in the form of educating them about copyright principles, about the consequences of violating copyright, providing warning signs to users, and educating them about the copyright law.

A Bachelor's degree holder said: *"Educate them on the importance of copyright violation then take disciplinary measures as appropriate. [However], some patrons may not be knowledgeable about copyright. Others may violate copyright and require disciplinary action"*

A certificate holder said: *[I normally] explain and warn them of the need to respect copyright laws and the risks of violating the law. It is the responsibility of every citizen to respect and obey the law. Infringement of copyright kills innovation and robs people the fruits of their hard work.*

A Certificate holder said: *"Find out why they are violating, let them know our policy and the copyright position. [The reason for this action is due to the fact that] most of violations are done outside of the library/university."*

A Diploma holder reported that: *"I do nothing but let person violating be aware of consequences of violating. [However] it is difficult to police or stop someone if you do not have authority to do so. Preventing them may lead to mutilation, stealing of the materials so you leave them"*

A Diploma holder said that: *"[I] explain to her/him the reason they should not do. [Reason being] Some people do so because they don't want to spend*

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money to buy the material, not considering the author spent finances to
publish and put into circulation the said information material"

5.13.2 Punishment

Punishments included withholding library services from person infringing on copyright.

Twenty (13.6%) of the Librarians indicated that they punish library users, most of them

(9 out of 147) being Graduate degree holders.

A Diploma holder indicated that: *"...Explanation of the importance of copyright*
law to the students/user's then after if found, suspension from the library
or library use will be put in place. [This is done] to protect the
information materials of the library and also to protect work of different
authors and scholars."

A Bachelor's degree holder said that: *"I would confiscate the document the user*
has photocopied or reproduced. [I would also] not issue the original to
the user in future. [This is] Because it would be punitive for the user in
terms of expenses incurred. [I would also] Destroy the reproduced copy or
keep it in safe custody."

A Master's degree holder said that: *"Students tend to mutilate chapters and at*
times whole books leaving the cover on the shelves. Such are taken to the
security and are further disciplined thro' the university disciplinary
system. Full document copying is not allowed. [Reason for this action
being that] this is unfair to the author and also other readers for whom
the book is stocked in the library."

5.13.3 Accepting Copyright Infringement

There were more Pre-Undergraduate librarians (10 out of 147) who indicated that they do

nothing and will always allow copyright to be infringed, as opposed to two out of 147

Undergraduate librarians and an equal number of Graduate librarians.

A Certificate holder said: *"I feel bad but sometimes it is only one copy and [in] a*
class of 50 students and [this] mostly happens with evening students"

A Diploma holder said: *"...Nothing because the library doesn't have a copyright policy or if it has, then I'm not aware."*

Another Diploma holder said: *"Since library patrons are allowed to do all their photocopies, and have access to all kinds of resources, there is very little one can do to protect copyrighted materials."*

A Master's degree holder said: *"Nothing, you might be reprimanded. [Reasons for not doing anything when violation goes on include] Fear of intimidation and management not trusting subordinates"*

5.13.4 Empathy by trying to understand a users' reason for copyright infringement

Six out of 147 Pre-Undergraduate librarians indicated that they try to understand users'

reasons for infringing copyright, as opposed to none of the Undergraduate librarians and

only one librarian with Graduate education.

A Master's degree holder said: *"...Find out why they are violating, let them know our policy and the copyright position. [The reason for this action is due to the fact that] most of violations are done outside of the library/university."*

A Certificate holder reported that: *"I find out whether the person is aware he/she is violating the copyrighted material, explain to him, and then stop him/her to do it. [Reason being] Because most people are not aware of the copyright laws."*

5.13.5 Referring users

This category includes referring users to library superiors, to the Kenyan copyright law,

and to the library's copyright policies. More Librarians with Pre-Undergraduate

education (15 out of 147) referred users infringing on copyright than Undergraduate and

Graduate librarians.

The highest number of librarians (27 out of 147) said the decision they take when they see someone infringing copyright in the library was because they wanted to protect the rights of creators. Twenty-four out of 147 librarians said that they take the decision they do because copyright infringement is against the law. Twenty out of 147 said that it is because users have little or no knowledge of copyright.

5.14 Librarians' Justifications for their Actions When They See Library Users Infringing Upon Copyright

The researcher categorized the responses that these librarians gave as follows:

Table 14: Reasons Given to Justify Action Taken When a Librarian Sees a Person Infringing on Copyright

Justification	Number of librarians providing response
Lack of knowledge/Awareness regarding copyright by library user	20
Librarian's duty to educate users about copyright issues	6
It is morally wrong to violate copyright	17
It is against the law	24
Protect Library's Image/interest	4
Punish the offender	4
It is not easy to monitor people all the time	4
I have never seen the library copyright policy	1
Fear of being reprimanded by library management	1
I will violate the law if the user has no other alternative to access the information he needs	1
For management to act	3
Deficiency of information resources in the library	5
Inference/reflection by putting oneself in the place of the author	2
It is library policy to report to superiors	1
Plagiarism is bad	3
I am aware of copyright issues	3
Create awareness of copyright	6
Protect rights of creators/authors	28
Adhere to the library copyright policy	2

Table 15: Number of Librarians, Action They Take When Someone is Infringing on Copyright, and Justification for Action Taken

		Justification for the decision librarians take when seeing someone infringe copyright																			
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Total
What Librarians do when they see someone infringing on copyright in the library	Educating Users	14	6	10	13	2	2	3	0	0	0	0	2	1	0	2	1	4	17	2	84
	Punishment	2	0	4	3	2	1	0	0	0	0	1	0	0	1	0	0	0	5	0	20
	Accepting Copyright Infringement	0	0	0	1	0	0	1	1	1	1	0	3	0	0	0	0	1	2	0	14
	Understanding users' reasons	2	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	Refusing users	2	0	2	5	1	0	0	0	2	0	0	2	0	1	2	1	3	0	0	22
Total		20	6	17	24	4	4	5	1	3	1	3	5	2	1	3	6	27	2	147	

KEY:
A: Lack of knowledge/Awareness regarding copyright by library users
B: Librarian's duty to educate users about copyright issues

C: It is morally wrong to violate copyright

D: It is against the law

E: Protect Library's Image/interest

F: Punish the offender

G: It is not easy to monitor people all the time

H: I have never seen the library copyright policy

I: Fear of being reprimanded by library management

J: I will violate the law if the user has no other alternative to access the information he

needs

K: For management to act

L: Deficiency of information resources in the library

M: Inference/reflection by putting oneself in the place of the author

N: It is library policy to report to superiors

O: Plagiarism is bad

P: I am aware of copyright issues

Q: Create awareness of copyright

R: Protect rights of creators/authors

S: Adhere to the library copyright policy

5.15 Results of the Critical Incident Interviews

Critical incident technique interviews were administered to 32 librarians. Three of the interviewees were Certificate holders, 10 Diploma holders, 8 Bachelors degree holders, 8 Masters Degree holders, and 3 PhD holders in Library and Information Science. Four transcribed interview scripts were randomly picked and individually rated for themes based on the coding scheme provided by the researcher. Before coding started to be done, the researcher briefed the other coder about the purpose of the study and issues to look for based on the pre-established coding scheme. Each coder then individually coded the typed interview transcript and finally the coder and the researcher compared the codes they each assigned in order to harmonize with the pre-established coding scheme. After comparing each coder's codes, it was found that the coders achieved 80% commonality in the themes, thus achieving an inter-rater reliability of .8.

The researcher had interviewed each of the librarians individually in the absence of any other person in order to reduce chances of the interviewee being influenced by other peoples' opinions. All the interviewees were asked 4 questions although only one question is going to be reported in this study. The remaining questions will be reported in other studies. When asked what they thought to have been the toughest question that they ever encountered from library users in the duration they have worked as librarians in relation to photocopying, printing, and usage of copyrighted materials, the following questions/issues emerged from the critical incident technique interviews with the 32 librarians.

The top four toughest questions/issues that were ranked by librarians starting from the one mentioned by most library staff include: Preventing users from photocopying; Downloading entire electronic documents from websites or CD or DVD; Users saying it is their right to use the library resources as they please; Telling a user that no part of a Masters of PhD Thesis can be photocopied. More Diploma holders reported the toughest question was denying a user from photocopying part of a whole document.

Table 16: Toughest questions/issues regarding copyright encountered by librarians

Toughest questions/issue encountered by Librarians in each Cadre regarding photocopying, printing, and usage of copyrighted materials.

PhD Holders	Masters Degree holders	Bachelors Degree Holders	Diploma Holders	Certificate Holders
Why prevent people from photocopying yet you keep insufficient information resources in the library?	Denying a user to photocopy a whole book and user later coming and telling me he has actually done it.	A faculty member requesting whether she could put the full content of a document available from another website into the university's e-learning site.	Why are you denying me to photocopy the whole of this book?	User wanting to photocopy entire book because the book does not have a copyright mark in it.
It is our right to use the library resources as we please because we have paid library fee.	Torn in between denying a student access to a document yet understands their situation.	Why are you refusing that I should not photocopy the whole of this document as much as I want?	Being challenged by a user to produce tangible evidence of the specific section of the copyright law that restricts the amount to be photocopied.	Why should I be denied to Photocopy the book?
Printing whole books from the internet by library staff and users.	User insisting to be helped to download a document from the internet yet the document is embedded with a Technology Protective Measure.	Why do you have the damn machine there if you don't want me to make photocopies?		
	User comes and says that has got consent from the work's creator allowing him to photocopy the work in its entirety			
	Faculty member bringing photocopied copyrighted materials and putting them on reserve			

5.15.1 Strategies Librarians Employed to Address the Questions/Issues Presented
The strategies below are listed from the one that librarians used the most to the one that

was least reported they use when toughest question/issue was presented.

1. Educating the library users. This is a strategy that tends to be used by many of the

librarians that were interviewed. Educating the user entailed telling them about the

consequences, library rules and about copyright law among other issues. This strategy

was used by all cadres across the board with the hope that library users would understand

and heed the librarian's advice. However, not all users accepted what the librarian told

them. A few users openly told the librarian that in spite of what the librarian had said,

they were still going to photocopy the document. A Diploma holder reported how he

starts educating the user.

> *. …So you try to cool down first [reduce chances where tempers flare] then try to explain to this person in a way that he or she can understand… as I have told you cool down, be sober and talk to this person, you don't have to get annoyed… explain to him that the copyright law does not allow this*

A Masters Degree holder said: *I just had to explain to them just some few issues about copyright.   …There is someone who will come up with programs where …you cannot download, you cannot copy, you cannot do anything on that material. Some of them are just read-only. You can only read from the screen and well, it was hard to convince the person because they really felt they wanted to go away with that material and print it somewhere … I could see the person was not happy even as he left my desk, he was not happy*

2. Refusal to serve a user and providing rationale for refusing. In this strategy,

librarians tended to deny users from photocopying although they tended to justify

reasons for their actions with the hope that users would understand and cease from

photocopying. Some of the primary justification librarians gave for refusal ranged

from them saying that photocopying the whole document went against the library

policy and the copyright law; it was the moral duty of librarians to safeguard

against copyright infringement, among others. PhD and Masters Degree holders

had a higher tendency of refusing users to photocopy documents compared to

librarians in the other cadres. The most likely reasons is that most of them tend to

be heads of sections in the library or are in upper management of the library and if

they were to wholly approve unlimited photocopying, then they are likely to lose

the moral authority to fight infringement.

A Bachelors Degree holder indicated that: *... I am not sure I know what fair use means, what is the percentage [of a document that is acceptable to be photocopied]? ... let's say someone wants to photocopy almost half of it [a book], in my own understanding, I would say no. Yes I would say no... if the person asks me why, I say it is against the copyright law. Then they argue and say but [I] am a student. To me, that is always a very difficult situation, trying to convince the person that they don't photocopy ... I discourage it. I think I take my role here as the information custodian. ...I will say no, I will tell them you shouldn't [photocopy]... Previously, we would get the requests [to photocopy] directly [from users] and you are the one to make sure it is done [the work is photocopied]. ...We would say no if someone's request is outrageous like someone wants you to photocopy a journal. I got one [request], "photocopy for me this whole issue". [Response by librarian] oh I say sorry, "we can't do that".*

A Diploma holder reported: *The hardest question I think was, "why should I not copy?"... A user comes and asks you, [and] you say no... [User then says] "I am just copying; I am not stealing the book, just copying. ...am just copying, what is so wrong with that?" [We end up now looking like] we are quarrelling, "no copying, no" "why should I not?" [I normally say that], it is rules. Ah, these rule you know...... makes you sad and then you are not able to relate [well] with that user... It is like you create a small 'kagrudge.'(Grudge with the user). ...anyway, to be sincere [I] do not find anything wrong with copying something because [I] always copy if [I] want my extra copy. But now rules 'inasema' (rules demand that), do not keep on copying you will spoil the book. Some crap crap kind of things [library rules], so you find you create some grudges.*

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3. Emotions. This entailed librarians explaining the feeling they go through when

they have been presented with a copyright query and it is this type of emotion that

contributes to the decision taken by the librarian.

A Bachelors Degree holder said: *…. it demoralizes at one point because you have tried to explain why copyright is important …but the other party seems not to get it and even if they get it, they choose not to apply it. … they choose to ignore … because we do have, information deficiency. … you will find that we are not able to provide, enough copies of a title [nor] alternative copies of a title. … secondly, the structure of some of courses like the ACCA [professional accountancy certification] is so rigid that in itself it abets infringement of copyright because you either use their Kaplan text or the APP text - nothing else, there is no alternative*

A Masters Degree holder reported: *… I have not had that many cases coming to my office because I said I don't deal with users direct so it is only the ones that are desperate. Others have already been solved in different ways by the people at the circulation so it is only the person who insist, really insist I must see the librarian and that is a person who is really in great need and … on a personal level… sympathized with them. [When] I put myself in their shoes as a student, this book you have never seen, you have about two weeks here and it is not a book that you can go and buy. Money also is a problem for most of the students and you know it is not a book that you can tell a person that you can go and buy. …in some cases you may even have the money but the book is not even available in the country so there are those problems and I think I really sympathize with individuals who come to my office.*

4. Situational Awareness. This refers to being aware of the environment and

community in which the user lives in including the state of the library. This strategy

cuts across all the cadres.

A Bachelors Degree holder reported: *Being in the information world …I feel bad that people are misusing somebody else's work like that but again I almost understand. Yes I am the custodian of this information but I also understand some of the limitations in [developing countries]… you find some of these students struggling [paying] school fees …I am looking at our situation where so many of these health books are very expensive and some of them are not available locally. That is why copyright becomes an issue. …on one hand yes, I think it is wrong but on the other hand, I think I understand.*

Another Bachelors degree holder said: …. *it demoralizes … because you have tried to explain why copyright is important … but the other party seems not to get it and even if they get it, they choose not to apply it. … They choose to ignore … because we do have, information deficiency. … we are not able to provide, enough copies of a title [nor] alternative … titles. Secondly, the structure of courses like ACCA is so rigid that in itself, abets infringement of copyright because you either use their Kaplan text or the APP text - nothing else, … we do not have copies sufficient to cater for them … academic libraries should be storing alternatives. …and that is not happening … copyright issues will always be with us until we change the system whereby we stop stocking reference copies [Core textbook for a course].*

A Diploma Holder reported: *…experience I have seen is … the number of students increasing. …resources we have diminishing. … We … introduced a service of researching…for students. We began to look for information and pin point where they can get the information. In those days there was no problem with copyright. The copyright was brought by lack of enough resources. If there are no enough books definitely photocopying has to be has to be done. Even if you are going to limit to a chapter or say a few pages. Because the resources are getting fewer and fewer. … [There] are so many reasons they may not [obey] this copyright law… a class of one thousand … coming to the library to rush for one or three copies available in the library.*

A Master's degree holders said: *…On a personal level… I felt with them and sympathized with them … [when] I put myself in their shoes as a student, this book you have never seen, you have about two weeks here and it is not a book that you can go and buy. Money also is a problem for most of the students and you know it is not a book that you can tell a person that you can go and buy. …in some cases you may even have the money but the book is not even available in the country*

5. Reflection. This entails looking back and making a critical assessment of the issue

that occurred or is at hand

A Bachelors degree holder reported: *You tell him [library user] it is necessary that you one day look at …yourself as an author later on in life. … I told him his view right then was narrow because he was after exams and passing his exams but I told him to look at the broader picture. That at one time, later on in life you could be a publisher. You could publish, you*

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could be an author and then what happens when (a) you have gone through all the [r]igor of writing a paper or writing a book and …financial satisfaction is not there and people are actually plagiarizing your work … and saying it is their original work. …It may not have had the impact then, but having told him that, I think, that is a step forward.

6. Accepting infringement though with some reservation. This is a strategy that tended to be used more often by Diploma and Certificate holders. It is evident that a friend to a librarian would be given a go ahead to get copies although in a way that other users may not notice.

A Diploma Holder said: *We just explain to them, quietly because really you don't yell at them. …you tell them it is not allowed. You can only do this, this and this [explaining steps to be taken] … if it is a friend, quietly you tell them, … next time you can come and do the second chapter… If it is not a friend, you just photocopy and go.*

7. Reflection by using analogies. In order to convince users, some librarians have taken to referring to other issues that may be relevant to the user's life and that the user can easily relate to than an abstract concept such as copyright.

A Bachelors degree holder reported: …T*o answer that effectively … you …pull the answer out of … general matters of life. … water is good … to drink, but you jump into a pool … and you don't know how to swim you die. Okay Alcohol itself is good. You drink three of them and drive a car, the consequences are there. So it is not the things in themselves or the gadgets that exist are faulty or wrong. They are there … [to] serve a purpose. If I have documents and I duplicate, well I need a duplicating machine … so they are pretty useful. …the existence of something that can do a function that could potentially be abused does not necessarily legitimize the abuse … that is just a fact you put across. … essentially, it does get home.*

8. Reference to the law/ The Kenya Copyright Act. In order to convince the library users that they are going against the law, librarians have started producing the

Kenya Copyright Act to back their argument. However, looking at the Act can

only best be used when one is trying to explain the punishment one can be given

if found guilty in a court of law for infringing on copyright.

A Diploma holder said: *…I remember the student who came and wanted to actually [photocopy] because she had seen many books photocopied. They were all over so … she wanted to take a book and get a copy of the same and when I said it is not acceptable, [you are] not doing right . You are going to violate the copyright. I found I was cornered because I did not have tangible information to give to this user about this copyright and that's the time you feel like you know the ground can open and swallow you … because you get in a very awkward situation as the information you know you are so vocal about something but you don't have. That is … the toughest assignment I got. I had to go to the government printer [to] purchase the copyright act. Brought it and … If they come…we have something we can share with them.*

9. Reference to the library policy. This is a situation where the Librarian makes a

decision and says that it because they are simply following library rules.

A Diploma Holder indicated that: *…Now we tell them to read, write down what they want and bring them [the books] back after three hours. … to make sure that this work is not photocopied…. we follow it [library rule] to the letter ah because, well, that's part of efficiency, efficiency I mean if we are custodians of the material, university material.*

10. Checking existence of a disclaimer. This is particularly when dealing with

documents in electronic format. This strategy was raised by Bachelors degree

holders mostly working with electronic documents.

A Bachelor's degree holder reported that: *… it just made me realize that copyright issues in the digital age are a little bit complex. Because if that document is available freely for download, then why would there be alternative restrictions for a user to put them maybe on the e-learning site.*

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5.15.2 Issues Emerging from Critical Incidents that Librarians Encountered

After taking an in-depth scrutiny of the critical incidents, the following copyright-related

issues emerge as being of concern to librarians and library users. They include

- Libraries having insufficient information resources

- Librarians trying to deny users from reproducing entire book volumes

- Users wanting to download and print entire documents that are in an electronic
  format

- Technology protective measures acting as a hindrance to accessing information

- Users feeling that they are entitled to use library resources as they please without
  any restrictions

- Librarians being challenged to produce tangible evidence from the copyright law

- The concept of fair use seeming not to be used by librarians

- Librarians torn between providing access to information and enforcing copyright
  law

- Lack of a watertight mechanism to curb rampant photocopying of entire
  document

- Evidence of ignorance of copyright by both users and librarians

- Photocopies placed in the reserve collection of the library by faculty members

- Librarians fearing for their jobs

- Librarians being insulted by aggressive users

It seems that most of these issues stem from the fact that libraries do not have sufficient

information resources that can effectively support users needs thus leading to the

scramble of the few relevant information resources that are available. It seems to be the

reason why most users seem not to understand why librarians are denying them to photocopy the resources yet these users say that they are basically trying to get a copy of the document because they are going to read it and not for any other reason. It is the feeling that the librarian is an obstacle to facilitating access to information that is making users aggressive towards librarians and at times end up using insults to vent out their frustration. The frustration also seems to be brought about by the fact that users pay library fees as part of their tuition fees and therefore expect the library to buy sufficient information resources. In addition, whenever they want to photocopy, they still have to pay for the copies.

Several libraries such as those at Rais Hayati, Elisha, Ukulima and Zadock Universities faced a lot of challenge from serving library users who were enrolled in the distance education program. These in-service students physically come to campus only 3 times each year and when they are on campus, they take classes all day long for each of the 3-week session they are on campus. By virtue that most of them come from rural areas with no library facilities, they take that opportunity to photocopy as many relevant books related to their study as they can so that when they get back to where they work, they can use the photocopies of books they made to help them do assignments that they have been given. Users in such a situation will not want to understand the reasons librarians are giving for not photocopying books because their education would be at stake and in turn the likelihood of getting an education that would transform their lives for the better.

5.15.3 Librarians' Perception of Library Users

1. Ignorance. From the strategies that librarians employ, it is evident that there are

some librarians who think that Library users are ignorant of the copyright Law as

evidenced by what one PhD holder said about Library users.

> *...having paid [library fees, users think] photocopying now will be their right too. Borrow books and go and photocopy the whole [document] not knowing the implications. They are in the dark. And also printing, some say ... we pay library fees so it is also our right to print. ... There are those who think that copyrighted materials do not include books. ... [For example] students doing law ...also have their own challenges of law trying to meander around and telling you [that you] don't understand [the copyright law and] it is them who understand the law....outside there, we really have some people who don't know these issues and we say that our work is to ensure that people understand them [copyright issues] but really there is quite a lot that we have not done.*

A Bachelors Degree holder reported*: …It makes it difficult because … [library users] will be able to get that book outside there. …even if you say no here you are really doing nothing. So, first and foremost, for a librarian, professionally that tells me [they] look at me as a hindrance to them gaining some information. When [library users] tell you "unanikataza (you are denying me) but I [photocopy the book outside campus]". It becomes that, the library and by extension you as a professional, are hindering them from acquiring information. And then the issue is "why can't I?" The understanding of copyright laws or issues in Kenya ...is negative, very few people understand.*

2. Entitlement. There is a feeling among librarians that users think that they

are entitled to use the library the way they so wish because they have paid for

library services.

A PhD holder said: *...having paid [library fees, users think] photocopying now will be their right too. Borrow books and go and photocopy the whole [document] not knowing the implications. They are in the dark. And also printing some say for example we pay library fees so it is also our right to print. ...there are those who think that copyrighted materials do not include books*

A Diploma holder was asked: *...why can't I photocopy the whole of this book and yet, I pay yearly five thousand for library materials…At times you try to talk to them; at times we just keep quiet.*

3. Resentment. Trying to enforce copyright law more often than not ends up making library users holding grudges against librarians because they see librarians as their obstacles when it comes to accessing the much needed information. One Diploma Holder captures this scenario pretty well.

> *...this rule ... makes you sad and then you are not able to relate [well] with that user... It is like you create a small 'kagrudge.'(grudge with the user)... But now rules 'inasema' (rules demand that), do not keep on copying you will spoil the book. Some crap crap kind of things, so you find you create some grudges. [when users have a grudge], you talk but they do not talk to you. As a librarian, it is not cool at all because you are not even able to serve them properly. [How common the grudges are]... it is just the same way...you suspend them from using the library materials. They [normally say], this is a bad librarian... [This situation] really helped me to think a lot about users and how we should handle them... sometimes rules can be bad....[users] love having their own stuff so they like copying books. There are those things they want to have their own copies and... [materials] that they copy [most] are [those] on short loan (Library Reserve Collection) 'ama'[or] are frequently used so they are ever reserved... so they[users] need their extra copy to read.*

4. Abuse. There are moments that Library users end up being aggressive or even insulting librarians because these users feel that librarians have unfairly denied them to photocopy an entire document.

A Diploma holder reported: *… the moment you keep on pressing them, you may be told something that you will regret the rest of your life. ... in trying to address the issue, we are usually, pulled back...anyone within this library will tell you that at one given time or another has been insulted so we don't, actually...feel good.*

A Bachelors Degree holder in one of the Libraries reported: *...the user could not understand why I couldn't allow him to photocopy the whole book... ...that he was going to use the book to study because he did not have a copy of the same book so he wanted the whole copy so that he can be able to use for ... He was aggressive! ... In aggressiveness I mean ... he caused a lot of commotion, shouting. ... I really felt bad because it is like he did*

not want to listen to me. And he felt as if I did not want to help him get what he wanted but I was only trying to prevent him from copying from photocopying somebody's work… I wasn't happy. … I would not want it to occur again.

5. *Intimidation.* Some Librarians are of the opinion that persistence of library users wanting to infringe on copyright ends up making these librarians be intimidated and fear losing their jobs. Some Librarians end up not allowing any photocopying to be done while others look aside and abet infringement. A Diploma holder reported:

> *…. I feel bad being pestered for nothing… the big problem is we try to re[f]rain [from] (assisting people photocopy) "kabisa kabisa kabisa" [completely]. …Because they are already infringing the copyright law by photocopying a whole book. A friend [of the person the librarian allowed to photocopy a whole book] then goes out …to your job [and reports] you are favoring somebody. You are not supposed to favor … you are supposed to give Equal treatment. [Library users] will accuse you of not giving them service… and you are refusing to serve them. You are creating for yourself a problem… the impact is that you have created enmity between the [library] staff and the students. … The outcome is disciplinary… [the university] will write to me a letter and tell me don't do this. … It is that bad because they have already put something [warning letter] in your file. You see… [they have] Smeared your file. … We can only avoid [receiving a disciplinary letter from the university]… by refusing to photocopy completely*

Another Librarian who was a Diploma holder reported:
> *…even if I would wish to assist her, in one way or another I will be risking my job at the same time. Because if it happens …the owner may come across … asks this student where did you get this material? She will point the finger at me and I will not be able to assist because I am the one who gave her and that is why I would always want to be on the safer side.*

6. *Indifference.* Librarians at times feel that even after educating users, they actually never heed the advice.

A Bachelors Degree holder reported: *…The student's reaction was …, I hear you, but am sorry, this will still happen and sincerely, he left the library, went and got a book from outside there, and him and his friend photocopied [it]. …. it demoralizes … because you have tried to explain why copyright*

is important, and you know it is important but the other party seems not to get it and even if they get it, they choose not to apply it. ... I say they choose to ignore ... because we do have information deficiency.

5.15.4 How librarians perceive themselves and the strategies they employ

Some Librarians attest that they have not done much in educating Library users: a PhD holder said: *...outside there we really have some people who don't know these issues and we say that our work is to ensure that people understand them [copyright issues] but really there is quite a lot that we have not done.*

There is evidence of learned helplessness. In spite of the efforts they put in, some librarians feel inadequate. A master's degree holder reported:

...my [jurisdiction] is only in the library and I could not have, prosecuted anybody, and could not have reported this person to anybody so I felt inadequate as it were.

Some librarians think that they actually need to acquire more knowledge about copyright so that they can feel empowered. A Certificate holder said:

...in regard to understanding ... the copyright law, ... there are things that we people need to know more about the copyright law, especially whom does it protect and even the culture of duplicating things... or even plagiarism, you know that we also need to understand more about this. As ... librarians, we are in a position where we need to impart this information to our users so our understanding of the subject is very important. ...I felt that there is need to empower most of us on issues in that regard.

5.15.5 Conclusion
Librarians are faced with many challenging issues regarding copyright. Some of these issues seem to be brought about by insufficient information resources in the library that seem to have been brought about by high student enrolment. In addition, users seem to engage in insults and aggressive behavior towards librarians as a result of being

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frustrated to access the information they need. Unfortunately, none of the librarians seem to want to justify allowing users to photocopy on the basis of fair use and using the 4-step approach in determining whether usage is fair or not. This might just be an indicator that these librarians may not be fully conversant with the concept of fair use. It no wonder that 97 (58.1%) of the academic librarians could not name even a single step in the 4-step approach used to determine whether usage of a work is fair or not.

Some of the librarians justify refusing students to photocopy by basing their argument on either the library policy or the Kenya Copyright Act. However, on close scrutiny of the Kenya Copyright Act, some of the issues they say are contained in the Act are actually not in the Act. In order to assist librarians with these myriad of challenges regarding copyright, there seems to be need for sustained education about copyright, not only educating librarians but also library users. Such education might lead to stemming down the hostilities that library users are projecting to Librarians and can lead to enhancing a more cordial working relationship.

The Kenya Copyright Board has been given the mandate to educate Kenyans about copyright issues but it seems that it has very limited resources in order to carry out their mandate and thus have not been very aggressive in creating awareness and educating the general population about copyright issues.

5.16 Results from the Think Aloud Protocol

Librarians were provided with two scenarios requiring them to decipher different aspects of copyright. The first scenario depicted the dilemma that most users are faced with when deciding what to photocopy, how much of a work they could photocopy and when to photocopy. The second scenario depicted conflict that users are faced with regarding making a decision between scanning for education purposes versus for commercial purposes. These two scenarios have an underlying theme regarding fair use of copyrighted materials. Due to the bulk of materials and also because the other scenarios will be used in the publication of other smaller studies, only the second scenario is being reported. This second scenario depicts the challenge in deciding whether scanning of a given work was fair or not and strategies that librarians adopted when faced with such a scenario.

5.16.1 Strategies Used by Librarians Based on Cadre

Strategies librarians employ when faced with a scenario that require them to determine whether scanning journal articles fell under the category of fair use or not based on the purpose of usage of the given information object.

From the think aloud protocol interviews, PhD and Masters Degree holders tended to have an inclination against the Professor from scanning the 2 journal articles irrespective of whether the usage was for educational or commercial purpose. On the other hand, Bachelors degree, Diploma, and Certificate holders were more inclined towards accepting to scan the journal articles irrespective of whether usage of the article was for academic or for commercial purpose. Among the strategies employed included scenario:

1. *Referring query to senior librarians for fear of intimidation by the library users.* It is evident that low cadre staff (Diploma and Certificate holders) have learnt not to make decisions and instead refer users to their senior particularly in circumstances that they think users will intimidate them. Such action has thus tended to breed learned helplessness among these low cadre staff. When presented with the scenario, a Diploma holder responded:

> *….I'd just tell him to go to the university Librarian or the person who works in periodicals/journals to help him. …Because I know what he's doing is illegal but now that he is a Professor, he may want to use his prowess or intelligence to intimidate me so to avoid that, I would rather he gets through a senior person than me. … We refer them [professors] to the Senior [librarians]. They are now even used to going straight to the office. … [and] are always allowed. There is nothing I can do. … there are situations whereby these so called Professors come totally confused but they don't want to show their confusion instead they harass you with questions so that you can feel lower and serve their ulterior motives. I cannot allow, I'd rather he deals with people of his level or caliber. … There is a time, a lecturer here, Professor, wanted a book on "Facing Mt. Kenya". It is a reserve book; it should not leave the library… So when I told him, [he said] "my friend, I teach people who are senior than you. This book I want it and I want it out fast!"… I felt fear and I referred him to my boss and I told him the only person who can authorize it out is so and so and not me.*

2. *Refusal.* Most PhD and Masters Degree holders refused to scan the article because they saw that there was a high chance of the document being plagiarized. The notion of using the user's purpose for the article to determine whether the usage was fair seems to have been relegated. Examples from past experience with plagiarism might have masked purpose a user is going to put a given work when determining fair use. A PhD holder said:

... the fact ... he is scanning is [a scary] problem. ... Scanning it means you are taking it back to life. It can be misused. ...at the end of the day...I would just refuse. ....We've had situations where ... a thesis [or] projects have been copied and students have presented them for academic purposes. ... I've had a case where ...I wrote a report. ...somehow, when I was processing the information because I was a cataloger, [the] material... looked familiar. When I checked through, it's the same report which I had authored. ...it was word for word ...The student had ...made a few alterations, [and] took it before his supervisors. I don't know but he or she approved it. ... and the material came back to the library and I was supposed to process and put in the project's collection. ... the student it appeared had graduated ... and the university doesn't have a policy on such. And the library also doesn't have a policy, but I felt this was a good working case in situations where we are trying to enforce copyright. ... what I did was to detain that material. ... we use it more as case..., this could happen, and it's happening... It has been plagiarized and brought forward and marked. .. it made me feel the urgency of that matter and the need [for] every librarian [to] take it personally and more keenness in the issue of plagiarism and issue of photocopying... there is no keenness among ... professors or the lecturers ... on whether materials have been plagiarized or whether it's a copyright being flouted. I think lack of university policy itself, is bad enough because the students are not aware or they know they can get away with it.

Another PhD holder refuses to scan for the professor although he will not mind if the professor goes to scan elsewhere as long as the scanning is not done in the library. It seems that what is most objectionable is the conversion of a document from hard to softcopy through scanning.

This librarian said:

Scan? I would not allow Professor James to scan journal articles from my institution. I would say no. Just use it here and go. but not scanning for them. If they have to scan let them do it out there but for me knowing ...What copyright means, I would not want them to do it from my department. ... Because I know I am doing something wrong. I would not do it for them, but I would tell them the article is here...

A Masters degree holder could also not scan the Journal articles for Professor James because this librarian does not trust library users with an electronic copy of a print document and the situation is even made worse by the fact that the library has no copyright policy regarding electronic scanning of printed documents. This librarian argued that:

> … I would not allow him. If we receive [the journal] in soft format it is fine but I still would not allow him to scan from a hard copy. … as a manager,… we don't have a policy on that but on my part as a manager I would not trust the user of that information because to me, [Professor James] works with a publishing firm. … information is very easy [to manipulate] when …scanned [and can] be used in other ways which may not really be what we have intended. … It may be used for … commercial purposes. … Knowing he works somewhere else as a publisher, I would not scan. I would ask him to ask the students who are members of the library to come and use the [articles in the] library.

3. *Acceptance.* Most Bachelor degree, Diploma and Certificate holders accepted that they would scan the journal articles for Professor James. However, a number accepted to scan because it is the library rule to assist users to access information and not necessarily because their acceptance to scan was based the rationale of copyright's fair use doctrine. A Certificate holder reported that:

> … we only cater for the students not for his colleagues outside our [university], …So the decision is we can only photocopy for the clients who are in this case the undergraduate or postgraduates we are handling, not any other person outside our desk… that's …the rule here. … [Just as] We can photocopy, we can do a Xerox and … and keep it somewhere where students can come and borrow for a given period of time so that … as many [students] as possible [can use], which we always call the short loan. The duration [for these materials on high demand] is normally three hours.

One of the Diploma holders sees no reason why the professor should not be allowed to scan the articles because he thinks he has no control over the professor if that professor decided to make extra copies of the articles outside the library. Unfortunately, this

librarian does not justifying the decision taken based on copyright principles such as fair

use. This librarian said:

> *…for scanning an article from a journal, I will not stop him. I will let him do it because he has a single article from a journal, that one he can do it. Because, [for] one, he may not have access to that journal he wants to go and give to the students. We may have no [means] to stop him from photocopying. Second thing, the journal may not be available locally. Again …would he not make so many copies outside there? I will have no control over that….It is not easy for me. Even if he does not disclose to me that he is going to distribute some to the commercial whatever [and] whatever that he is using, … for teaching, what reason would I have to stop him from photocopying?... I will allow him to do the [Scanning] …*

One Bachelors degree holder acknowledges the use of the articles for teaching was fair

use although does not rule out the possibility of requiring the Professor to contact authors

of the journal articles: This librarian said

> *…that private company to subscribe to that journal [and] not to scan and use it …although [if] it is used, for the fair use of teaching students it is allowed. That is one thing he can do. The other thing is just to write to the author of that article and then from the authority from the author, that is only the time I can allow him.*

5.16.2 Summary

There is evidence that Librarians who are PhD and Master's degree holders have a

tendency to deny a user from scanning a journal article as opposed to librarians who are

holders of a Bachelors Degree, Diploma, or Certificate. Irrespective of the decision taken,

many librarians do not fully apply the four-step approach in determination of whether

usage of a work is fair or not. These four steps are: Considering the character of the usage

of the material. In this first step, issues such as whether the usage is for educational,

commercial, commentary, parody can be considered. The second step is to consider the

nature of the work to be used. Is the work published or not? The third step to consider is

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how much of the work is going to be used and the final step is to consider what the effect

of usage will have on that particular work. In the decisions they took, none of the

librarians tried to provide alternative scenarios using the 4 step approach. The only step

that a couple of librarians considered is the first step which deals with the character of

usage, meaning whether the usage was for educational or commercial use.

It is also evident that when academic librarians make decisions most of them seem to

only look at one option and that is the option they use to make the decision. None of the

librarians irrespective of cadre seem to try to use multiple scenarios before making the

decision they took.

CHAPTER SIX: DISCUSSION

6.0 Introduction

The purpose of this study was to find out whether different cadres of academic librarians in Kenya, based on their level of education in Library and Information Science, and duration they have worked in libraries make them differ in level of knowledge about copyright and copyright law in Kenya. The researcher also wanted to find out strategies that academic librarians in Kenya employ when presented with queries on copyright and whether the different librarian cadres differ in the strategies that they employ.

6.1 Research Questions

1. Does level of copyright awareness/knowledge differ among the various cadres of academic librarians in Kenya?

2. Does level of copyright awareness/knowledge differ among librarian cadres based on the duration they have worked in the library?

3. Does level of copyright awareness/knowledge differ among librarians based on the department of the library where they work?

4. What strategies do academic librarians in Kenya use to solve copyright queries that have been presented to them?

5. Do strategies that academic librarians use to solve copyright queries vary by cadre?

6.2 Librarians' Education Level in Relation to Tested Knowledge of Copyright Issues.

Results from Tested Knowledge about copyright supported the first hypothesis which stated that there are differences in knowledge/awareness about copyright issues among the different librarian cadres based on their education level. Questions that this study tried

to answer included whether level of copyright awareness differed among the different librarian cadres based on their education level, and also whether there was any difference in knowledge of copyright issues based on the duration that these academic librarians had worked in libraries.

Worldwide, there is a general belief that the more someone attains academic qualifications, the more that person becomes knowledgeable in that given domain. This assumption also tends to be supported by a couple of studies on expertise that have looked at knowledge levels among practitioners in different categories of a given domain. In order to understand how these different categories function to maximize performance, education level has been used to categorize novices and experts. Educating learners has thus been seen as key to enhancing their knowledge in order to better perform tasks at hand as a result of attaining certification (Alungbe, Stepp, Li, & Zargari, 2008). In addition, Aiken, Clarke, Sloane, Lake, & Cheney (2008) found that the more education and qualifications that a nurse attained, the higher the chance of that nurse being able to offer better quality care. Patients who were taken care of by nurses who had an undergraduate degree in nursing had lower chances of mortality compared to nurses who had lower levels of education.

Results from this study show that there are statistical significant differences among the different librarian cadres based on their education level in relation to tested knowledge/awareness of copyright issues. These differences are real because there is a medium effect size where 8.1% of variance in the dependent variable (tested copyright

knowledge) is accounted for by the independent variable (Librarian cadre based on education level). However, these findings go against the generally held notion that the more academic qualification one attains, the more knowledgeable they become. Certificate holders, who under the generally held belief would have performed the worst, ended up performing better than both the Diploma and Bachelors degree holders. Bachelor's degree holders did not perform as well as Certificate and Diploma holders when it came to tested knowledge of copyright. These results support what Bobay, Gentile, & Hagle (2009) found in the nursing profession, in which they reported that education level had no significant difference with initial level of expertise and additional education never made any difference.

Results show that academic librarians in Kenya are only moderately knowledgeable about copyright issues. This low level of knowledge among most librarians can also be pointed to the fact that as many as 25.7% (43 out of 167) academic librarians are either not aware or have little knowledge of the existence of a copyright policy in the library they work in. As a whole, academic librarians in Kenya who were moderately, a bit knowledgeable or had absolutely no knowledge of copyright issues accounted for 90(53.9%) of all academic librarians. Lack of or limited knowledge of copyright does not seem to only be confined to librarians in Kenyan Universities but similar situations are reported about librarians and other groups of employees of universities outside Kenya. Closely similar observations of library users, librarians or faculty with low levels of knowledge on copyright issues has been reported in Zimbabwe where it seems that little knowledge about copyright is the most plausible reason that has made many librarians

not focus on copyright issues (Matsika, 2007). In Uganda, Kawooya (2006) shows that librarians are just starting to think about copyright and how they can incorporate it in institutional policy because a number of libraries stock photocopied books as attested by students. In the United States, Smith et al. (2006) found that 62% (292 out of 466) of Health Sciences Faculty in 2 universities in the United States had Limited or no Knowledge of copyright law. Little or total lack of copyright is also evident among non librarians. In Nigeria, Okiy (2005) shows that ignorance about copyright is mainly among persons operating small scale photocopy shops and they do not see anything wrong with rampant copying of copyrighted materials because to them it is business and a means to eke out a livelihood.

It is thus critical that all library staff undertake short term training programs regarding copyright issues on a regular basis in order to retool librarians with the knowledge and skills on copyright issues. This retooling exercise will thus elevate librarians' level of knowledge on copyright issues and is likely to make librarians serve users better when presented with copyright queries and also help avoid libraries in protracted copyright litigations that can arise due to acts of commission and omission on the part of librarians. On the other hand, the greatest impact in enhancing librarians' knowledge of copyright issues lie in Library schools that ought to establish courses that are specifically geared to teaching of copyright issues because this component is lacking in the Kenyan Library schools.

6.3 Librarians' Education Level in Relation to Self-Reported Knowledge

Does level of copyright awareness/knowledge differ among the various cadres of academic librarians in Kenya? Four factors were used to try and answer this question and included a self evaluation regarding knowledge about copyright issues. These respective factors included: Knowledge about Copyright law in Kenya; Knowledge about Theoretical Principles of copyright; Knowledge about Copyright Treaties; and finally Knowledge about Socio-economic impact of copyright. None of these four factors were found to be statistically significant. In 3 factors (Knowledge about Copyright law in Kenya; Knowledge about Theoretical Principles of copyright; Knowledge about Copyright Treaties), librarians with graduate level education (PhD and masters degree holders) reported to have higher knowledge of copyright issues, followed by those with a Bachelors degree and finally librarians with Pre-undergraduate qualification (Diploma and Certificate holders) reported to have the least knowledge on copyright issues. However, the differences were not statistically significant and there was a small effect size.

On the other hand, results of tested knowledge on copyright showed that librarians with graduate level education (Masters and PhD holders) performed better than those with pre-undergraduate education level (Certificate and Diploma holders), although librarians with an Undergraduate degree were least knowledgeable about copyright issues.

When self-reported and tested knowledge of copyright are compared, it is evident that Librarians with a PhD and those with a Bachelors degree seem to have overrated themselves when given the opportunity to evaluate their knowledge of copyright issues.

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However, Librarians with a pre-undergraduate degree qualifications (Diploma and Certificate), actually underrated themselves in comparison to the other groups when given the opportunity to self evaluate themselves about knowledge of copyright issues.

These findings show that it will be prudent that all librarians irrespective of cadre be given equal opportunity to attend short term training/ refresher courses on copyright issues. These findings also have library policy implications especially when it comes to knowing which library cadres ought to be in the forefront of giving guidance on copyright issues. At the moment such a policy is lacking in libraries and that is why there seem to be no unity of purpose and direction when handling copyright issues.

6.4 Duration of Service and Tested Copyright Knowledge
Results from Tested Knowledge in relation to the duration a librarian has worked in libraries did not support the second hypothesis which stated that there are differences in knowledge/ awareness about copyright issues among academic librarians in Kenya based on the duration that they have worked in libraries. Questions that this study tried to answer included: whether level of copyright knowledge awareness differed among the academic librarians based on the duration that these academic librarians had worked in libraries.

Results indicate that there is no statistical significant difference between duration a librarian has worked in a library and tested knowledge of copyright and the librarians were found to only be moderately knowledgeable about tested copyright knowledge. It might be possible that as academic librarians work in libraries over the years, they rarely

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or never engage in deliberate practice of learning about copyright issues. When one takes a closer look at each duration category, it is shocking to know that slightly over 50% of the librarians in each duration category could not correctly mention any of the 4 steps used to determine whether the usage of a copyrighted work was fair or not. Unfortunately, majority (29 out of 97) of those who could not mention even one correct step had worked in libraries for less than 5 years, meaning that they are most likely to have recently come out of library school. However, looking at expertise among nurses, Bobay, Gentile, & Hagle (2009) found that expertise is a function of the experience/duration that one has worked in a given domain.

In spite the fact that there was no significant difference in tested knowledge among librarians based on duration of service grouped by 5-year span of service, the groups that had worked for less than 10 years were found to be less knowledgeable about tested copyright issues compared to groups with over ten years experience. This means that as the academic librarians start working in the library up to the first 10 years, their knowledge of copyright seem to actually diminish although not in any significant way and tends to pick up after 10 years of service. However, there is no readily available plausible reason why librarians with 21-25 years working experience in libraries were the least knowledgeable on tested copyright issues. There was no significant correlation between Duration that one had worked in Libraries and education qualification. Pearson Product moment correlation coefficient of .016 was not significant at .05 level and we can conclude that there is an almost negligible relationship. Ericsson & Lehmann (1996) argues that duration that one has worked in a given domain is in itself not an indicator of

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one's knowledge. What is however critical is the deliberate practice that one is engaged in while working in a given domain. However, Ericsson & Lehmann (1996) found that for someone to reach peak performance in a given domain, it takes at least 10 years of deliberate practice. King & Bartlett (2008) found that for one to be an expert therapist, it takes 18 years of deliberate practice, while for counseling psychotherapists, it takes them 15 years of deliberate practice in order to attain the highest level of expertise (Skovholt, Ronnestad, & Jennings, 1997). As long as librarians do not deliberately learn or are not deliberately taught about copyright issues, their level of copyright issues is likely to remain low.

By virtue that there is no statistical significant difference in copyright knowledge based on duration of service, is an indicator that libraries are not doing a good job of educating their staff member about copyright issues and so are library schools. The Kenya Copyright Board which is mandated to educate people about copyright issues now has some information that can guide them in educating librarians about copyright issues.

6.5 Duration Librarians Have Worked in Relation to Self-Reported Knowledge
In this study, the researcher also wanted to find out whether level of copyright awareness/knowledge differed among librarians based on the duration they have worked in the library? The researcher used librarians' self assessed knowledge of varied copyright issues which included: Knowledge about Copyright law in Kenya; Knowledge about theoretical principles of copyright; Knowledge about Copyright Treaties; Knowledge about socioeconomic impact of copyright. Results indicate that there was no statistical significant difference in self reported knowledge and in tested knowledge

among the different duration categories. We can thus conclude that the number of years one has worked in the library does not necessarily make one more knowledgeable about copyright issues. These findings seem not to support findings by Bobay, Gentile, & Hagle (2009) who found that nurses irrespective of education level were not really distinguishable in terms of knowledge about nursing when they initially started work. However they gained more experience/knowledge as they continued to work in the hospital.

Results in this study also indicate that librarians who had worked for between 16-25 years were not only least knowledgeable about functions of the Kenya Copyright Board, they also happen to be least knowledgeable about organizations established to protect copyright in Kenya. The most plausible reason may be due to the fact that many Kenyans tend not to read widely after completing school. This is because the Kenya Copyright Board was established after the year 2000 and if they do not read about transformation in the copyright industry, then they are least likely to be aware of these developments. What is amazing is that the group that had worked for 21-25 years also happened to be the least knowledgeable about tested knowledge of copyright among the groups.

In order to enhance the level of copyright knowledge/awareness among academic librarians, there is need for constant in-service training. Unfortunately, it seems that lack of in-service training among academic librarians can be as a result of the fact that there is no one charged with coordinating this type of training in academic libraries of public universities in Kenya (Ondari-Okemwa, 2000).

In addition, attending conferences and workshops seem to have become a preserve for the University Librarian and the Deputy, who keep on nominating themselves and not any other library staff. Such actions seem to have demotivated most library staff. After looking at the skills that Ondari-Okemwa (2000) listed as being sought after by employers, knowledge about copyright issues happen not to be one of them. Maybe this might be one of the reason that has contributed to most librarians having low levels of both tested and self reported knowledge about copyright issues. Looking at the curriculum in library schools in Southern and Eastern Africa, where Kenya is located, Ocholla & Bothma (2007) show that curriculum in these schools has remained very narrow and library schools have stuck to the traditional core content. This is why none of the library schools in Kenya has a course that is solely on copyright issues and it is no wonder academic librarians in Kenya are not very knowledgeable about copyright issues irrespective of education level and duration of service.

6.6 Copyright Knowledge and Department that Librarians work.

Research finding from this study support the third hypothesis which states copyright awareness/ knowledge differs among librarians based on the department of the library where they work. Librarians who work in the Administration Section and Reference Section were most knowledgeable on tested Knowledge. Similar findings are reported by (Gould, Lipinski, & Buchanan, 2005). They compared library administrator and general librarians regarding their level of copyright knowledge. They found that 73.6% of Library Administrators were rated as very knowledgeable regarding copyright issues as opposed to the 54.3% of the general library staff.

Despite there being a statistical significant difference between self-rated knowledge and department that one works in, the differences are actually very minimal because there is a small effect size. It also happens that the bulk of people who work in Administration are PhD holders and Masters Degree holders. They also happened to be the two cadres that were most knowledgeable when it came to tested knowledge. Surprisingly, they are just moderately knowledgeable about copyright issues. What is interesting is that expertise is multifaceted and apart from only concentrating on knowledge (tested knowledge, self reported knowledge), problem solving and decision making processes among librarians, also ought to be considered for a holistic perspective expertise to be realized.

Apart from only being aware about copyright issues, Library administrators ought to couple their knowledge of copyright issues with   policies that work toward curbing infringement. Lower cadre staff have accused library administrators of abetting infringement because it is not uncommon for librarians in Administration to override what the junior staff have told users and such a situation ends up going against the very policies that the administrators have put in place. The implication is that there is need for unity of purpose among librarians and need for continuing education.

Librarians who work in the circulation department were among the least knowledgeable about tested knowledge on copyright. Circulation Section tends to staffed be Diploma and Certificate degree holders who also happen to have worked for less than 10 years in the library. Because most users tend to ask for assistance at the Circulation Desk which also couples as the Reference desk, there is need to staff the Circulation section with

more staff who are more knowledgeable about copyright. However, there has however been great debate on whether paraprofessionals, out to be allowed to work at the Reference desk. Some think that they are not qualified enough to guide users. However, Dinkins&Rayan (2010) advocates for the Reference desk to be staffed by paraprofessionals because they found that most of the queries that users present can be handled by paraprofessionals.

6.7 Strategies Academic Librarians in Kenya Use to Solve Copyright Queries Presented to them

Research findings from this study support the hypothesis that there are differences in the strategies employed by different librarian cadres in relation to solving copyright problems. Among the strategies that academic librarians employ when they see someone infringing on copyright in the library include: Educating users; Punishing users; Accepting users to infringe on copyright; Referring users to other librarians, to the copyright law or the library's copyright policy; and finally trying to understand why users are infringing on copyright.

Whenever these academic librarians see library users infringing on copyright, 20 (13.6%) of these librarians reported that they Punish the users in order to deter them from infringing on copyright. Unfortunately, Tyler (1996-1997); Li & Nergadze (2009) found that punishment had no consequence of trying to deter people from copyright infringement. What has however been found to have a significant impact in deterence of copyright infringement is social influence and societal norms (Hsu & Shiue, 2008; Gerlach, Kuo, & Lin, 2009).

Majority of the librarians 84 (57.1%) reported that they educate the library user about copyright issues whenever these users infringe on copyright. The assumption that these librarians make is that these user are ignorant of copyright issues and it is no wonder that 20 out of 147 librarians reported that the justification for the reason they take when they see library users infringing on copyright is due to the fact that most library users are ignorant of copyright issues. Ronkainen & Guerrero-Cusumano (2001) found that in communitarian societies, of which Kenya can be categorized, sharing is viewed as a virtue. The way forward is to try and educate users about copyright without resorting to punishment. Unfortunately, awareness of the law has been found to have very little impact on deterring people from copyright infringement (Li & Nergadze, 2009).

7 (4.8%) of the librarians try finding out the root cause of why the user is infringing on copyright before they take any decision; 22 (15.0%) refer the user to senior members of the library, to the law or to the library copyright policy; and yet others totally ignore to take any action 14 (9.5%).

Legal instruments that have been established to safeguard copyright infringement seem to be developed without taking into consideration how they are going to affect purveyors of information in addition to access to information by library users. This research shows the need for developing copyright laws and policies taking into consideration the socio-economic and cultural situation in which users find themselves in. If copyright laws and policies took into consideration local situations, then the likelihood of rampant

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infringement might be stemmed. It is also evident that in spite the fact that many librarians are striving to curb copyright infringement, they are not being sufficiently backed by comprehensive library and institutional copyright policies. If such policies were to be developed, then there is a likelihood of librarians having unity of direction in their fight against infringement.

This study has also been able to show that library users infringe on copyright not because they want to, but because academic libraries in Kenya have insufficient information resources. Institutions thus ought to encourage the use of open source information resources in addition to injecting a significant amount of their budget in the acquisition of information resources.

6.7 Strategies by Education Level

It is also surprising that the last thing that librarians with an undergraduate degree (0 out of 25) and those with a graduate degree (1 out of 44) want to do is to try and understand the reasons that are making library users infringe on copyright. Thus there are more librarians with Pre-undergraduate qualification (6 out of 78) that seem to be eager to find out what is actually making library users infringe on copyright.

The top two reasons given based on Library cadre/level of education are as follows: Most librarians with Pre-Undergraduate (Diploma and Certificate holders) rated that when they see someone infringing copyright, they educate the user 41, (52.6%), or refer users to others or to documents 15, (19.2%). On the other hand, 16 (64%) of librarians who hold an Undergraduate degree   reported that they educate users, while 5 (20%) reported that

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they administer some form of punishment. None of the librarians with an undergraduate degree said that they try to find out reasons why library users are infringing on copyright. For librarians with a graduate degree, 27 (61.4%) said that they try educating users about copyright issues when they see then infringing on copyright in the library, compared to 9 (13.6%) who said that always tend have the user punished.

From the Think-Aloud Protocol, it is evident that PhD and Masters Degree holders had the tendency to deny someone from scanning as opposed to those librarians who are holders of a Bachelor's Degree, a Diploma, or a Certificate. The likelihood of them denying is that most of them tend to be administrators or heads of sections in the library and if they allow infringement, then they will have no moral obligation to stop other staff from allowing infringement. On the other hand, Bachelor's degree, Diploma and Certificate holders tended to allow scanning to be done. There is evidence that they have been boxed into a situation of learned helpless because of insults, users holding grudges against them, and faculty not listening to them.

What is however very surprising is that librarians from all the cadres tended to only use one option before they made decisions. None looked at multiple options and scenarios. Kitchener (1983) shows that people tend to stick to their positions rather than consider alternative answers as a result of uncertainty that they may have when solving an ill structured problem. The use of only one option before making decision is characteristics of novices (Kobus, Proctor, & Holste, 2001; Klein G. , 2008).

It is no wonder that this study found that 90 (53.9%) of the academic librarians in Kenya were only moderately or less knowledgeable about copyright issues.

Looking at results from the Critical incident technique, the toughest questions librarians faced was why they were denying users to photocopy yet these users were only going to use the material for schoolwork. In addition, users felt that they have the right to use the library resources as they pleased. This situation has led to users insulting and even being aggressive to librarians. All this situation seem to be caused by lack of sufficient information resources in libraries.

6.8 Learned Helplessness

From the critical incident technique and the think aloud protocol, there was evidence that there is learned helplessness among librarians who are Diploma and Certificate holders. One Diploma holder reported one of the many instances he is faced with issues on copyright.

> *...there was a situation whereby ...a library user ... came to me, and had already photocopied the whole book. So I told him that in the laws of Kenya ...he was contravening the copyright act and he was liable to imprisonment if found. So I ...kindly requested him to leave the copy and the book [Original]. He gradually obliged... I presented [this case] to my immediate supervisor, but as usual there was no action. ...The policy is such that for any material to be photocopied ... from the reserve section, no student should carry the material himself. And no book should be photocopied from verso page to the last page, but when I saw that this book had been photocopied everything, then I realized that here there was a breach in policy and my conscience could not allow me to leave that particular student go ahead. ... Now that I informed the supervisor and there was no action, I thought of moving to the head librarian but I thought it could bring issues between me and my supervisor.*

And when asked what subsequent steps he would take when he sees a user

infringing on copyrighted materials in the library, he responded by saying:

…I'll not go the extra mile of confiscating the material because after having reported and there was no action taken, you know at the end of the day, I looked foolish. I wouldn't want to look foolish for the second time.

Another Diploma holder said:

There is this student [Undertaking a Masters degree] who wanted to photocopy a whole project. [Masters' thesis]. …I said that here, we don't photocopy any unpublished work. And the guy moved out, talked to the superior, of course, then he came with the superior, took the project, he went photocopied, came and showed me. He said that now, this is the game. … I cannot eh control. … my morale was low, I felt reduced and, I just felt resigned.

When asked what he would do if a similar situation happened. He responded:

Unless I have … other powers, other than what I have now. I'll just let them do, their stuff. … even if … I try to address it, we work in shifts. Whoever comes next, will still give them, then they'll come, tell you. … some of them are young, they'll want to hit back to show you off that …here you are trying to block us and yet… you can't. … It's just like fighting corruption in Kenya. You cannot win [as a] one man army… anyone within this library will tell you that at one given time or another has been insulted so we don't, actually feel good. … the only problem is that [students] usually gang up when they mention you [at] that whatever general assembly of theirs like twice, you are on the verge of going [being sacked]. Most of the time, you want to safeguard your job now you look at between loosing [your] job, even your integrity is questioned between losing your job and [re]taining [it] just because of copyright, which is more superior? Because if they [students] mention you once over that incident [trying to stop user from photocopying entire library documents], some will even go ahead and lobby. When somebody [stands] up and says Mr. Olaka mishandled me, another one shoots up, another one shoots up and the administrators will take note, the second time, you get a warning [warning letter]. … Initially it [getting a warning letter] was very rampant. … Even here, others have also been warned, and she was just doing her job. … You know now here your job is at stake… Even if you were the one, and now it's very tough to get one [a job] outside there. You compromise some principles. Ya, or look aside [abet copyright infringement].

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It is evident that there is no unity of direction among library staff members and this allows users to exploit the situation. In the process, many librarians who would have wished to fight infringement of copyright end abetting it because they feel they are powerless and there is nothing they can do to rectify the situation. It is no wonder that 63(38.6%) of the academic librarians indicated that library users were not likely to get into trouble when infringing on copyright in the library. What is also amazing is that 10 out of 14 librarians who reported that they never take any action when copyrighted materials are being infringed upon were pre-undergraduate (Diploma and Certificate holders). This might be due to the fact that they are the ones who expressed the existence of learned helplessness when it came to trying to curb copyright infringement. In contrast, only 2(8%) of the librarians with an Undergraduate degree and 2(4.5%) of those with a Graduate degree reported that they accept copyright infringement to take place in the library.

Due to the fact that there is existence of some form of learned helplessness among lower cadre librarians, there is need for library and University management to also take their views into consideration. University and library management can start recognizing and inculcating a feeling among lower cadre library staff that their contribution in actively participating in stopping copyright infringement is appreciated. The library and university management should also assure them that their jobs will not be jeopardized even if they disagree with library users and especially students and faculty. Library schools thus have a role to play in the eradication of copyright infringement by establishing courses that solely teach about copyright.

6.9 Limitations of the Study

In spite of having a large number of librarians, it could have been ideal to have more academic librarians who hold a PhD degree participate in the study. The low number of 5 is not ideal for analysis because it becomes very easy to commit type I and type II errors where results might suggest a significant difference among the groups when in reality there are actually no differences, or that there are no significant differences among the groups when in reality there are actual differences that exist among the groups.

The study had 6 test items that were used to gauge tested knowledge. There is need for more items to be included as they seem to be likely to facilitate getting differences that may exist among the groups.

This study never focused on library users. It could have been interesting to know how users rate librarians and why they act the way they do.

Expertise of copyright among librarians is multifaceted. However, not all the different layers of the qualitative data were explored, including how librarians understand problem representation, complexity of the copyright task, cultural awareness among other issues.

6.10 Recommendation for Further Research

It is evident from this research that one of the main strategies employed by librarians is to educate library users and most librarians justified that the reason for the strategy they employed was due to the fact that library users are ignorant of copyright issues. There is need to find out how knowledgeable these library users are regarding copyright issues.

Due to the fact that there exists learned helplessness among the lower cadre librarians, there is need to study how internal power dynamics among librarians in a given library influences copyright infringement or protection and the differences that may exist between these power dynamics of libraries in public universities versus private universities.

It would also be ideal for more research to be done regarding how the organizational dynamics and environment of academic libraries in Kenya impact on knowledge of copyright issues among academic librarians. This is an issue that not been given much attention yet a library's culture and internal dynamics and environment might have a bearing on librarians knowledge of copyright issues and access to information among users.

During interviews with librarians, the name KOPIKEN, a reprographic services organization, was mentioned a lot. It thus becomes interesting to find out how such organizations are contributing to copyright compliance and knowledge in libraries and how affective factors among librarians and users contribute to copyright infringement or protection.

6.11 Implication of This Study
Research finding from this study have a bearing on the education of librarians in Kenya. The assumption has been that the more academic qualifications that one attains, the more knowledgeable one becomes.

However, findings in this study did not support such an assumption. It thus becomes clear that there is need for emphasis to be put in the teaching of intellectual property rights and copyright in particular in library schools. It would thus be ideal if courses that solely deal with intellectual property are incorporated in Library school curricula in Kenya.

Due to dynamism in society and in knowledge, librarians at all levels need to keep abreast with developments taking place in the intellectual property rights domain. This can only be done through continuing education programs which can be achieved through holding of regular seminars, workshops, and conferences regarding copyright issues.

This study is also likely to help guide librarians in deciding the type of librarian who ought to handle copyright queries from user. This is because some librarians have a tendency to be very strict while others never intervene when they see someone infringing on copyright. In addition, more dialogue is likely to take place among librarians in each of the academic libraries. This action is necessary in order to empower lower cadre librarians so that they do not continue feeling alienated by senior librarians and by the University management. Thus, this study will help guide some of the internal library and university policies regarding the treatment of lower cadre librarians.

By 2013, the extension of the transition period that developing nations had been given to fully implement WTO's TRIPS agreement will come to an end. All developing countries will be required to take stock of how their national laws have conformed to TRIPS agreement.

This is in addition to scrutinizing how intellectual property practices and especially copyright practices in each developing country such as Kenya are being realized. This study is likely to be among those that can be used to better understand the impact of copyright at the micro level or at the individual library level. Scrutinizing copyright issues at this level is rarely done, especially what library users and librarians go through as a result of the implementation of national, regional and international copyright treaties and trade treaties with copyright provisions in them. Understanding the dynamics of copyright issues at such a micro level is never well captured and this study has tried to highlight what takes place at this micro level.. This study captures these moments and is likely to be part of the blueprint that WTO can use in evaluating what is taking place in academic libraries in Kenya as it relates to copyright. Results from this study are thus likely to make WTO and Kenyan policy makers come up with copyright instruments that are favorable to users' access to information and to purveyors of information.

6.12 Conclusion
As librarians acquire more academic qualifications, the assumption and expectation is that they acquire more domain knowledge in the process. Copyright, a core component in the production, dissemination and consumption of information, has a bearing on the mission and duties of librarians and it becomes critical that they are knowledgeable about intellectual property and copyright issues in particular. This study has been able to show that the widely held assumption that the more academic credentials a person acquires, the more knowledgeable the person becomes is not really the case. Academic librarians have been found to only be moderately knowledgeable about copyright issues.

However, there was a significant difference in tested knowledge among the different librarians cadres based on their education level although the difference was not huge and as evident as what the general population would have expected. On the other hand, duration that one has worked in libraries was not an indicator of how knowledgeable a librarian was about copyright issues. This means that there was no statistical significant difference in knowledge about copyright among the librarians with varying working durations in libraries when these durations were based on a 5 year span.

Interview results show that there is evidence that there is a mix-up and also confusion regarding copyright issues. This confusion seems to be what is leading to misrepresentation of what copyright entails. It was common for many academic librarians to speak with confidence about issues that exist in the Kenyan Copyright law, yet such issues actually do not exist. If academic librarians in Kenya have to become more knowledgeable about copyright issues, there has to be a deliberate effort to teach these librarians about copyright issues. Alternatively, librarians have themselves to become proactive in learning more about copyright issues.

There exists learned helplessness among lower cadre librarians. These are librarians who hold a Diploma or a Certificate in Library and Information Science. Learned helpless among these librarians seem to emanate from the fact that these lower cadre staff feel that their jobs are being threatened because library users seem to be given more say by university management than these staff members. There is also likelihood that when they are accused by library users, they are never really given much of a chance to defend

themselves. Similarly, learned helplessness is brought about because senior library member disregard the decisions that they make when they try to stop copyright infringement. Because they cannot fight or oppose their seniors, they resort to condoning infringement to continue because there is no consistency and hence unity of direction in the decisions staff members make when they address copyright issues.

University management thus needs to also give an ear to the views of these lower cadre librarians. When they start feeling that they are recognized and their views are also considered, it then becomes easy for them to actively participate in making copyright infringement come to an end. The library and university management should also assure them that their jobs will not be jeopardized even if they disagree with library users and especially students and faculty.

The strategy that most librarians said they employ when presented with copyright queries is educating library users about copyright issues. However, it has been found that majority of the librarians are less knowledgeable about copyright issues. The need to have librarians more conversant about copyright issues is thus critical. On the other hand, most of the tension between librarians regarding copyright issues is brought about due to insufficient information resources. The way forward for academic libraries in Kenya is to stock sufficient information resources if copyright infringement is to be stemmed.

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Appendix A: Questionnaire

Note: This is **NOT** a test and there are no marks assigned to your responses.

Instruction: Please answer all the following questions as accurately as possible and to the best of your knowledge.

1. What is the highest qualification that you hold in Library and Information Science?
    (a) PhD   (b)Masters degree (c) Bachelors Degree (d) Diploma (e) Certificate

2. Gender
        (a) Male   (b) Female   (c) Other

3. Age
        (a) 18-28   (b)29-39   (c)40-49   (d)50-59   (e) 60 and more

4. How many years have you worked as a librarian?
        (a)0-5   (b)6-10   (c)11-15   (d)16-20   (e) 21-25   (f) More
than 25

5. What do you consider to be your role in your library? ……………………….

6. Choose one section of the library that you normally work in most of the time?
        (a) Circulation (b) Reference service (c) Cataloguing (d) Administration (e) ICT
           (f) Acquisition (g) Archive (h) other……………….

7. Copyright protection is normally for a limited duration after the life of a creator. What
    is this duration of protection for a published document under the current Kenyan
    copyright law?
    (a) 20 years (b) 30 years (c) 40 years (d) 50 years (e) 60 years

8. Which of these organizations/institutions is charged with copyright registration and
    overseeing protection of copyrighted materials?
(a) Eveready Copycat Kenya (b) Kenya Copyright Board (c) Kenya Human Rights
    Commission (d)Kenya Church (e) Kenya Tourist Board

9. There are normally four steps that are used to determine fair use of a copyrighted work.
    If you were to determine whether a work was used in a fair manner or not, what might
    you consider? ……………………………………………………………………

10. When we talk of things that are protected by copyright, which of the following would
    you consider to be covered under copyright?
        (a) Plant genetic materials (b) Literary materials (c) Trade secrets (d) Symbols to
            identify a trade product (e) Three dimensional ornament.

11. Name one copyright treaty that first comes into your mind.

…………………… ……………………..

12 . What does copyright law protect?
(a) Ideas still in our minds and not yet expressed (b) Ideas that have been expressed and recorded. (c) ideas not expressed (d) ideas in subconscious mind (e) unexpressed dreams

13. Has your library got a copyright policy?
(a) Yes   (b) No (c) Not sure

14. From your own opinion, tell us about copyright infringement for the following materials in your library.

	For each of the material listed below, is copyright infringed upon in your library?		For the listed materials, how frequent is copyright infringed upon in your library? **Scale:** 1. Always 2. Often 3. Sometimes 4. Rarely 5. Never				
	YES	**NO**	**1**	**2**	**3**	**4**	**5**
Books							
Journals							
Magazines and newspaper							
Movies and video recording							
Music and audio recording							
Software							

15. How likely is it for an individual violating copyright in your library to get into trouble?
(a)Extremely likely (b) Very Likely   (b) likely (c)   (d) not likely (e) extremely unlikely

16. For the time you have worked in the library, what have your deep feelings/beliefs been regarding the importance of copyright in facilitating users to access information?

....
.

17. In what ways does the responsibility that you have in your library affect the way you look at copyright?

....

By checking (√) the appropriate box, rate your knowledge of the issues listed in the left column and also indicate the importance of knowing those issues.

SCALE:
1. Very Important
2. Important
3. Moderately important
4. Of little importance
5. Not important

SCALE:
1. Very Knowledgeable
2. Knowledgeable
3. Moderately knowledgeable
4. A bit knowledgeable
5. Not knowledgeable

#	Issue	How important is it for a librarian to know the issue mentioned below?					How knowledgeable are you regarding the issue that has been mentioned?					
		1	2	3	4	5		1	2	3	4	5
18	International copyright treaties that Kenya is a signatory						18b					
19	Any copyright provisions in international copyright treaties						19b					
20	Any copyright provisions in trade agreements						20b					
21	Kenya copyright law						21b					
22	Organizations established to protect copyright in Kenya						22b					
23	Penalties for violating copyright law in Kenya						23b					
24	The function of Kenya copyright Board						24b					
25	The function of organizations such as Music Copyright Society of Kenya; KOPIKEN						25b					
26	Duration of copyright protection for books in Kenya						26b					
27	Duration of copyright protection for electronic media and music						27b					
28	Creative Commons						28b					
29	Determining if copyright of a work is being violated or not by using the 4-step approach used to determine fair use						29b					
30	The economic situation in Kenya						30b					
31	Why people photocopy whole books and copy original music on blank CDs and DVDs						31b					
32	Documents in public domain						32b					
33	Your library's copyright policy						33b					
34	Technology protective measure in CD, DVD, or databases						34b					
35	Licensing of electronic journals and databases						35b					

36. Explain what you normally do when you see someone violating copyrighted material in your library?

....…………………………………………………………………

………

………………

37. Give reasons for the action that you took in question 36 above ?

....

………

………………

38. Peter is a student at your university and also owns a commercial marketing company. He regularly comes to use the internet in your library to edit and upload information to his company's website. One day he comes and scans an entire chapter of a recently published Business Studies book and uploads it to his website and does not give any commentary to this book chapter. He later comes and shows you his website and requests you to advise him regarding whether he was violating copyright or not.

(a) How would you normally go about helping users who present such a query to you?

………………………………………………………………………………………….

…………………………………………………………………………………………

(b) What advice will you give to Peter?

....

………………………………………………………………………………………………..

(c) Explain the reasons that you would give to justify the kind of advice that you gave to Peter.

……………………………………………………………………………………………………

……………………………………………………………………………………………………

…….

……………………………………………………………………………………………………

……..

(d) What factors did you consider in deciding whether Peter is violating copyright or not?

....

..

……………………………………………………………………………………………………

..

Appendix B: Think aloud Protocol

Scenarios to be used for the think-aloud protocol
(The scenarios below will be recorded on video.)
Researcher overseeing the protocol:…………………….
Time:………………   Date:……………. Place:…………………….

Participant:
Gender:…………. Age:…………….
Academic Qualification: ………………… Years of service as a librarian…………..

Instructions: I am interested in how librarians solve problems related to copyright whenever these problems are presented by library users. I am therefore going to ask you to solve the problems/queries presented by library users and I am going to listen to how you solve the problem/query. While you are solving the problem, say aloud everything that is going on in your mind regarding the problem. I am most interested in how you think about the problem/query and the process/strategies you use to solve the problem/query. I will require that you justify the decision and steps that you undertake in solving the query.

Scenarios:

1. Four of your library users are engaged in a discussion regarding a book they want to photocopy in the library. User A says that one is not allowed to photocopy a substantial amount from a copyrighted work. User B says that one can only photocopy 10% of a copyrighted work. User C says that one can photocopy an entire work. User D says that one is not allowed to photocopy a copyrighted work. The book that these users are talking about is also normally available in the bookshop and the library only has one copy that other library users also want to use. How would you go about solving these users' dilemma?

2. Professor James works at your University and at the same time works for a private for profit publishing company. He comes and asks you to help him scan two articles from a journal the library has subscribed to so that he can distribute these scanned articles to students in the class he is teaching at the University and to his colleagues in the company. How would you go about helping Professor Peter?

Potential probing questions after the think-aloud is completed.

Does this problem remind you of another?

What is the similarity or difference in the way you have solved this problem and the way you used to solve previous problems?

In what ways is the environment that your users are in contribute to the decision you took?

Appendix C: Interview/ Critical Incident Technique
Interviewer :…………………….
Time:………………. Date:……………. Time:…….. Place:…………………….
Condition of place interview is taking place…………………………………………

Participant:
Gender:…………. Age:…………….
Academic Qualification: ………………… Years of service as a librarian…………..

Instructions: I am carrying out a research project to find out strategies that librarians employ when presented with queries related to copyright. I believe that you are especially qualified to enlighten us about strategies that you normally use when library users present you with queries related to copyright. We will present you with 4 queries and in each of them, we request you to think back to particular incidents that you encountered and how you went about solving the queries at hand.

(Questions in this tool will help answer Research question 2 and address hypotheses 2 and 3, which deal with finding out strategies that librarians use when faced with copyright queries.)

1. Recall a time when a user approached you and was confused whether the way he was using a given library work was contravening copyright or not.

    How did you go about solving this user's dilemma?

    Explain what made you to take the steps you took.

    What option(s) did you consider before taking the decision that you took?

    What issues would you consider when determining whether the usage of a work is fair or not?

    If you were to be presented with the same query today, how would you solve it?

2. Look back to that particular moment when your library users knowingly or unknowingly made you to be encouraged or discouraged   to comply with copyright.

    Briefly describe the incident.

    How did that moment affect the way you solve queries related to copyright?

    If you were to be in a similar situation now, how differently would you have handled this situation?

How has your perception of your users influenced the way you approach copyright issues in your library?

3. Share with me an incident or a moment that surprised you most regarding how you or other librarians tried to curb copyright infringement.

    How did other librarians react?

    How did you handle the situation?

    How differently would you handle a situation like this if it were to happen again?

    How have you used this situation to solve other copyright issues presented to you?

4. In your life as a librarian, what is the toughest question that you ever encountered from a library user regarding photocopying, printing, and usage of copyrighted materials?

    How did you go about to resolve the question?

    Explain how this question affected your feelings?

    How did this question help you in solving subsequent questions on copyright that you encountered?

    How did your past experience as a librarian help you in solving this question?

Appendix D: Coding scheme
This is a list of the concepts that were used to code the data we got from the Think aloud protocol, the Interview/Critical Incident technique, and from a couple of questions in the questionnaire that required qualitative data. This coding scheme shows strategies that participants used when presented with queries on copyright. These categories are based on what we inferred from reading Literature and what librarians actually said.

Code	Category/Strategy	Reference

1	**Situational Awareness /Assessing context.**
	    1a Home environment.
	    1b Library environment
	    1c socio-economic situation
	    1d Situation at the university
		This category refers to the description of the environment in which the user finds himself/herself in. In case a participant mentions some of the following issues, we will consider them to fall under this category.
		... The level of poverty or richness among library users.
		… Population/ number of people using information resources.
		… Inadequate information resources.
		… Outdated and old information resources.
		… Almost all people in society engage in this activity, meaning that it is commonplace.

2	**Displaying Emotions**
	    2a Loving
	    2b Indifference
	    2c Empathizing
	    2d Hating/ Disliking
		These are feelings expressed about the user's ability to access information. Participants may mention statements such as:
		… I do not care… I care less
		… I hate, detest, dislike, it makes me crazy
		… I love
		… I am touched by …

3	**Using Inference/Reflection**
	    3a Reflecting
	    3b Using Analogies
	    3c Using Examples
		This category is used in referring to other similar issues that might have already taken place or have been experienced. Participants might say things such as:
		… When I think back, the situation…
		... Because we solved that case using method ABC, then we can refer to it because it is slightly similar to what we can use to solve the problem one at hand.

4	**Reference** 4a Referring user to Superiors in the library 4b Referring user to fellow Library workmates 4c Referring user to fellow library users.	This category is used when the librarian refers to other people for assistance and guidance on an issue at hand. In this case, the participants talk of letting other people come in to help them solve the query at hand.eg … I told my head of department to solve the problem. …. I called my colleagues to handle the issue

Code	Category/Strategy	Reference
5	**Single option**	This category refers to the Librarian only providing a single option to the solution instead of weighing several options before arriving at a decision. E.g. Participant may use statements such as: … When faced with the problem. I told the user I can help. … I never thought about it. I gave the answer straight away.
6	**Multiple options**	In this category, the librarian thinks of alternative/multiple options to the solution before making a decision. E.g. the Participant may use statements such as: … I thought of refusing or sending him to the Chief librarian, however, I opted for the latter.

7	**Educating**
	       7a About copyright principles
	       7b About consequences
	       7c About the Law
		This category refers to the librarian trying to teach the user about copyright as a way of enlightening the user about copyright issues. E.g. Participant may use statements such as:
		 … I gave the user for information on copyright.
		 … I explained to the user about our copyright policy.

8	**Using Morality to support copyright** 8a Based on religious beliefs 8b Based on Cultural beliefs 8c Based on group norms 8d Based on law	In this category, librarians make arguments to library users regarding morality when it relates to infringement or adherence to copyright. E.g. Users may use statements such as: … It is against our Christian or Muslim beliefs to steal. … The Luhya community does not support your actions
9	**Fear** 9a Being Incarcerated in police custody. 9b Being fined. 9c Being banned from using a particular library service. 9d Being banned from the library.	In this category, the librarian tries to instill fear in users by threatening that they will be punished as a way to justify adherence to copyright. E.g. Participants may use statements such as: … I told him that I will call the police to come and arrest him. … We told him that we can ban him from using the Library
10	**Culture** 10a Tradition of the	The librarian refers to the traditions and way of life of the community the user finds himself in.

Code	Category/Strategy	Reference
	community. 10b Traditions of the university.	E.g. participants might use statements such as: … It is this university's tradition to adhere to the law. … Our culture does not support literacy.
11	**Rule based approach** 11a Law of the Land 11b Library policy	In this category, the librarian Strictly adheres to the law or library policy that has been put in place. E.g. Participants might use statements such as: … He must follow the law and no argument. …. We will be breaking library policy if we serve the user.
12	**Refusal** 12a Refuse and provide reasons for refusing. 12b Refuse and not provide rationale for refusing.	In this category, the librarian outright refuses to serve immediately the user presents his query. E.g. Participants might use statements such as: … I just told him to go away. …. I refused to serve him …. His request got turned down
13	**Acceptance** 13a Accepting without any question. 13b Accepting with reservations.	In this category, the librarian accepts the user's request without any question or without providing rationale for accepting the copy query. E.g. Participant might use some of the following statements. … Okay, I photocopied all the materials and after finishing, I handed them back to him. …. This is our work. It is not our duty to deny serving users. I therefore photocopied the materials for him. … I told him that I would accept to photocopy for him but not any other time.
14	**Cues** 14a Cues derived from Behavior. 14b Cues derived from Bodily language. 14c Cues derived from appearance. 14d Cues derived from the system.	In this category, the librarian talks of being able to see critical cues the user portrays so as to recognize early signs of infringement or compliance. E.g. Participants might use statements such as: … When I saw them sitting in a group, they were likely to be up to something. … When I saw the user approach me and grin sheepishly, I knew he wanted me to help him do something illegal.

Vitae

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