

**SELECTED FACTORS INFLUENCING UTILIZATION OF DIGITAL
TECHNOLOGY IN COUNSELLING: A CASE OF KENYA UNIVERSITIES
PROFESSIONAL COUNSELLORS ASSOCIATION (KUPCA) IN KENYA**

RUNNOH GORETTI WANGARI

**A THESIS SUBMITTED TO SCHOOL OF EDUCATION AND SOCIAL
SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
CONFIRMATION OF MASTERS OF ARTS DEGREE IN COUNSELLING
PSYCHOLOGY OF KENYA METHODIST UNIVERSITY**

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DECLARATION AND RECOMMENDATION

This thesis is my original work and has not been presented for the award of diploma or degree in this or any other University.

Signature.....Date.....

Runnoh Goretti Wangari

MCO-3-3758-3/2014

RECOMMENDATIONS

This thesis has been submitted for examination with our recommendations as University Supervisors.

Signature.....Date.....

Dr. Zipporah Kaaria

Lecturer – Kenya Methodist University

Department Of Theology, Religious Studies and Counselling

Signature.....Date.....

Ms Doreen Katiba

Lecturer – Kenya Methodist University

Department Of Theology, Religious Studies and Counselling

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DEDICATION

To Almighty God for His love and care, my esteemed parents Mr and Mrs Runo who are my mentors, my hubby Alex Bakari and daughter Daniella W. Bakari for their understanding during the entire study period and finally to my brother and sisters for their moral support.

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ABSTRACT

Technological knowledge is vital in every profession and counselling is not excluded. Unfortunately, many mental health service professionals especially counsellors have not yet fully embraced utilization of digital technology in counselling. Efficient utilization of digital technology in counselling enables counsellors perform various counselling tasks which include and not limited to counselling process, client appointments, report writing, record keeping, making clinical assessment and testing, consultation and client referral among other which enables them to be professionally competitive. The purpose of the study was to investigate selected factors influencing utilization of digital technology in counselling among Kenya Universities Professionals Counsellors Association (KUPCA) members in Kenya. KUPCA is composed of professional counsellors who practice counselling in Kenya Private and public universities. The researcher aimed at finding out what technological knowledge counsellors have in accomplishing various counselling tasks, the extent to which perception and ethical standards influence utilization of digital technology and strategies that can be used to help counsellors improve on utilization of digital technology in counselling practice. The study applied descriptive research design and used total population sampling a type of purposive sampling technique. The sample size was 120 KUPCA members. Data was collected by use of online questionnaire and interview. The reliability of the tools was verified through piloting which was done through selected University Counsellors in Nakuru County. Validity of the instrument was ensured through content validation through expert judgment. The data collected was processed and analyzed using both inferential and descriptive statistics, which was correlation and regression models and descriptive statistics that entailed frequency counts, percentages, means and standard deviations with the aid of Statistical Package for Social Sciences (SPSS) version 22.0. The findings revealed that the most effectively utilized digital technology was the use of computer related technology and mobile phones, followed by use of mobile phones/smart phones. It was also clear that the most frequently used digital technology was use of computer related technology. Counsellor's perception had a significant effect on utilization of digital technology. Ethical standards also had a moderate extent of influence in utilization of digital technology. Standard multiple regression model revealed that counsellors' perception and ethical standards had a high influence on utilization of digital technology. The study realized certain strategies could improve counsellors' utilization of digital technology. They included; counsellor education programmes on the importance of digital technology, a review of ethical standards and facilitation of resources to motivate counsellors to utilize digital technology. These findings may be used to advocate on counsellor professional utilization of digital technology in enhancing counselling competency and efficiency, improving counselling delivery in Kenyan Institutions of learning, and designing a curriculum that is inclusive of technological components.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACA	American Counselling Association
CRT	Computer Related Technology
ICT	Information Communication and Technology
KUPCA	Kenya Universities Professionals Counsellors Association
SCCT	Social Cognitive Career Theory
TPB	Theory of Planned Behaviour

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The section gives overview information regarding the study by reviewing the work of previous researchers and outlining current and previous statistics.

1.2 Background to the Study

As the broadening of digital technologies persists, counsellors ought to embrace their proficient communication to achieve set expectations and requirements of their clients. This is because digital technology knowledge is vital in every profession and counselling is not excluded. Unfortunately, counselling professionals are yet to fully embrace technology in accomplishing various counselling tasks which include; client appointments, report writing, record keeping, making clinical assessment and testing, consultation and client referral among others. The scope of technology utilization by counsellors and counsellor trainers in their undertaking is also almost unknown (Cabaniss, 2001). Digital technology in focus here include; use of computers related technology (CRT), social media, software's, telephones, television and any other technological equipment that create a bridge connecting the counsellor and the customer.

The use of technology in psychoanalysis and psychotherapy is changing the face and the way the profession is carried out. Practitioners are either experiencing challenges or getting excited by the new opportunities and new technologies present (Anthony, 2003). As at April 2019, in the total population of the world, 56.1% had internet access, and 81% of the developed world. This explains the reason why digital technology is central to how we live in the modern world. Across the globe for example, mobile phone use exceeds 80% of the population in many low-income countries in Central America, South Asia and Africa. The proportion of people with internet access is lower than the proportion using mobile phone ranging from 27% of the population in South Asia, 60% in South America. In United Kingdom, 38 million adults access the internet everyday, which translates to 76% of adult population (Musiat, Goldstone & TARRIER, 2014). In Africa, there has been a slow pace in application and utilization of digital technology despite the benefit it presents (Moussa & Zaki, 2002). This is attributed to the many gaps in mobile and online connectivity, especially in rural settings (Naslund, Aschbrenner, Araya, Marsch & Unutzer, 2017).

In Ghana, sizeable numbers of counsellors are technically incapable of using ICT tools and internet resources to facilitate counselling services. This was due to counsellors' reluctance and inability to adapt to new technologies (Kolog, Sutinen & Ruoho, 2014). Professional counsellors and generally mental health practitioners in Kenya are yet to fully embrace and utilize digital technology citing ethical challenges and the safety of client's data (Chepkoech, 2019). This is despite the fact that internet connectivity stands at 83% with total population of 35.5 million online, in addition to mobile phone and other digital technologies leading with 27.7 million subscriptions with connectivity (Ong'ong'a, Mukhongo & Chebii, 2017).

Despite the countless benefit of technology in counselling, counsellors still state inability to use technology hence underutilization of technology to improve counselling services. Cabaniss (2001) stated that some tasks could not be done by use of digital technology. Such tasks are undertaken during confidentiality discussions (during structuring), establishing rapport, evaluating client problems and utilizing effective intervention. However, this does not mean that the above tasks cannot be accomplished by use of digital technology. Innovation of technological tools such as software can assist in accomplishing the tasks without harming or breaching client confidentiality. But due to lack of knowledge and skills on digital technology, many counsellors struggle with paper work due to overwhelming demands of clients' services, inability to organize ones time, continuous changes of paperwork requirement (Campbell, 2005). Some counsellors also struggle with tradition counselling method of conducting counselling such as face-to-face method even when it proves impossible. For this reason, it is important for counsellors to recognize that digital technology is changing the way counselling is conducted not only in Kenya, but also worldwide. This includes the either way decisions are made, professionally or individually (Sabella, 1996).

It is important to note that technologies over the years have proved to be useful especially in situation where a client is geographically or emotionally unable to arrange face-to-face counselling. Telephone and online therapy in this case helps bridge the distance and, assists in breaking down barriers that could have prevented potential clients from visiting counselling offices. This has enabled clients to feel less threatened by face-to-face counselling, made it possible for clients not to go through face to face with a counsellor who they may consider a stranger. Further, it has allowed the clients' opportunity to express

themselves more and helped counsellors to engage more online through putting various issues and information online, which has helped in normalizing issues which clients could be struggling with hence going along way in reducing stigma(Fairburn & Patel, 2017).

With counsellors' cognizant of the fact that utilization of digital technology in counselling does not mean replacing the traditional face-to-face counselling method, counsellors are therefore using blended treatment. Blended treatments refer to combination of online and face – to – face therapy, which can be referred to as integration of online, and offline components (Wentzel, 2016). However, some counsellors still insist on using traditional face-to-face mode of counselling for fear of breaching client confidentiality and privacy.

Although digital technology is newer in the counselling profession (Johnson, 2016), counsellors are well aware that digital technology in counselling is unavoidable. However, the extent to which different types of technologies utilized is not known specifically in Kenya. Effective utilization and integration will enable counsellors and generally mental health professional to see the importance and opportunities available and enjoy the benefit of digital technology, while ensuring efficiency and competency (Shallcross, 2011). In addition, it will help bridge the distance; assist in breaking down barriers that could have prevented potential clients from visiting counselling offices. It would also help clients feel less threatened by face –to - face counselling. It will also make it possible for clients not to go through face to face counselling with a counsellor who they may consider a stranger, allows the client opportunity to express themselves and help counsellors to engage more online through putting various issues and information online and finally, normalizing issues which clients might be struggling with hence reducing stigma.

1.3 Statement of the Problem

Digital technology has become such an integral part of the 21st-century that every profession is now embracing it. The importance of digital technology in counselling cannot be overemphasized and without some level of technical savvy, effectiveness, accuracy, and relevance, the profession may become less competitive. However, despite counsellors knowledge on the importance and benefits of digital technology there is still underutilization of digital technology to improve counselling services. This includes;

ability to provide counselling services and carry out research in a more unique way, reaching more clients via social media, phone usage, emails and instant messages. In addition to connecting with other likeminded professionals enabling them to make referrals where necessary, innovation of software's that enable counsellors schedule appointment with clients is just one among other benefits.

Despite the various positive benefits and opportunities brought about by utilization of digital technology, several factors influence its utilization. Such as, lack of knowledge and skills, counsellor's perception, and ethical standards on digital technology. As a result, many Counsellors still struggle with paperwork due to great demands of client services, and inability to organize time efficiently. Some counsellors also struggle with traditional counselling method of conducting counselling even when it proves impossible. To deal with the above issues, counsellors are now using blended treatment that is a combination of digital technology and face-to-face therapy (Wentzel, 2016). The realization that counselling is beginning to undergo a shift driven by the widespread accessibility of digital technology has enabled people to stop perceiving counselling as a less competitive profession.

Effective utilization of digital technology in counselling would help counsellors' bridge the distance and assist in breaking down barriers that could have prevented potential clients from visiting counselling offices. In conclusion, digital technology would assist in normalizing issues, which clients might have been struggling with hence reducing stigma. In addition, it would help the counsellor be in a position to accomplish various counselling tasks and reduce paperwork. To address this knowledge gap, this research investigated selected factors influencing utilization of digital technology in counselling among KUPCA members in both private and public Universities in Kenya.

1.4 Purpose of the study

The purpose of the study was to investigate selected factors influencing utilization of digital technology in counselling among KUPCA members in both private and public Universities in Kenya. The study also intended to explore strategies that could be used to help counsellors' enhance utilization of digital technology in counselling.

1.5 Objectives of the Study

In order to achieve the purpose of the study, the specific objectives were:

- i. To assess digital technological knowledge and skills that counsellors have to facilitate utilization of digital technology in counselling practice among KUPCA Members
- ii. To investigate the extent to which counsellors' perception on digital technology influences its utilization in counselling practice among KUPCA Members
- iii. To establish the extent to which ethical standards influence utilization of digital technology in counselling practice among KUPCA members
- iv. To explore interventions that can be used to help counsellors improve on utilization of digital technology in counselling practice among KUPCA members

1.6 Research Questions

- i. What digital technological knowledge do counsellors have in accomplishing various counselling tasks among KUPCA Members?
- ii. What are the interventions that can be used to help counsellors improve on utilization of digital technology in counselling practice among KUPCA Members?

1.7 Research Hypothesis

For purposes of this study, the following hypotheses were applied;

(Ho1) There is no significant relationship between counsellors' perception of digital technology and its utilization in counselling practice among KUPCA members

(Ho2) There is no significant relationship between ethical standards and utilization of digital technology among KUPCA members

1.8 Significance of the Study

This research intended to examine selected factors influencing utilization of digital technology in counselling among KUPCA members. The study aimed at providing information to institutions of higher learning that offer counselling and advocate on counsellor professional utilization of digital technology in counselling. This would help improve counselling delivery in Kenyan Institutions of learning where counselling services is provided, design a curriculum that is inclusive of technological components, which

would enhance improvement on training and provision of professional counselling services in Kenya.

1.9 Justification of the Study

The outcome of the study was to enable counsellors and generally mental health professional recognize the importance and opportunities provided by digital technology.

The research was aimed at helping improve counselling delivery in Kenyan institutions of learning where counselling services are provided, and designing a curriculum that is inclusive of technological components. This is in addition to enhancing improvement on training and provision of professional counselling services in Kenya, which leads to achieving strategic development goals on innovation especially in the counselling practice.

1.10 Assumptions of the Study

This study was based on the following assumptions:

- That the Professional counsellors were sincere and genuine enough in responding to the items in the questionnaires.
- That the respondents' views represented the general view of all the practising professional counsellors.

1.11 Scope of the Study

The study was conducted among KUPCA members in selected Kenyan Universities. It focused on investigating counsellors' knowledge and skills, perception and counselling ethical standards influence on utilization of digital technology in counselling among KUPCA members in both private and public Universities in Kenya.

1.12 Limitation of the study

The study was prone to a number of limitations as illustrated below;

- i. Since the researcher used purposive sampling techniques that involve examining the entire population, the researcher was aware that the respondents of the study are a small fraction of the total number of the counsellors in the counselling practice in Kenya and may not be an ideal representation of the entire practicing counsellor.

- ii. Poor response rate from participants during interviews. This was mitigated through carrying out the interview via telephone and whatsApp.

1.13 Operation definition of Term

Computer Related Technology

Computer software and hardware, that incorporates individual computers, software utilized in processing of work, organization of data, and storage, access to offerings in internet websites, public chatrooms, and private chatrooms for direct communications, and mailing lists.

Computer software

Computer Software refers to broad expression for prearranged gathering of computer data and directives, conked out into two foremost categories: system software that provides the essential non-task-specific functions of the computer, and application software which is used by users to accomplish specific tasks.

Counselling tasks

Work related activities that any counsellor does in day to day running of the office such as client appointment, administrative work among others

Counsellor Perception

Mental impression; a way of regarding, understanding, or interpreting something in case, counsellors perception on utilization of digital technology.

Ethical issues

Ethical code of ethics refers to guidelines for mental health practitioners. It also refers to professional set of standards or principles that regulate the counselling practice.

Digital Technology

A segment of engineering or scientific skills that entails conception and practical application of digital or computerized devices, methods, systems such as computers, mobile devices such as smart phones, the internet and mobile software applications (apps

Counselling Ethical codes

Moral principles or rules that govern a group or individuals. Ethical codes/standards and principles are aimed at balancing the power and ensure that the counsellor operate for the good of the client and not for self.

Counsellors and psychologists Act

An act of parliament to provide for the training, registration, licensing, and practice and ensure counselling ethical codes are adhered to.

Counsellor Education programme

Programme that focuses/prepares the beginner counsellors to work as professional counsellors.

Counsellors Knowledge and skills

This refers to facts, information, and skills acquired through experience or education; the theoretical or practical understanding of counselling and psychology course while counsellors skills refers to practical techniques that enables a counsellor be able to take the client through the counselling process.

Counsellor Utilization

Counsellor's action of making practical and effective use of digital technology

Counselling

A process and a therapeutic relationship between the counsellor and the client where the counsellors helps the client deal or cope with various issues they are experiencing.

Intervention

This refers to strategies designed to produce behaviour change (s) and to improve on something. Intervention may include things like change/ new policies, improvement on the ways of doing things among others

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter gives a synopsis of the narrative on counsellors' knowledge and skills, perception and ethical standards influence on employment of digital technology in counselling. The chapter concludes with theoretical framework and conceptual framework adopted for the study.

2.2 Empirical Review on digital technology and counselling

Digital technology has become a key element in development of many countries. As a result, it's changing the way many professions are conducted not only in Kenya, but also, worldwide. This includes the way decisions are made either professionally or individually (Sabella, 1996). Many countries have adopted delivering of their services to citizens through the utilization of digital technology.

In America, ACA has designed guidelines that address the development of technology in provision of counselling services. This is due to expanding role technology plays in provision of counselling services and in continuous development of new technology. The guidelines covers on major areas which include competency of the counsellor, informed consent, confidentiality, security and transmission of information, standards of care in service deliver among others. This has lead to revision of 2005 American Counselling Association (ACA) Code of Ethics to 2014 American Counselling Association Code of Ethics. It's worth noting that when 2005 ACA Code of Ethics was in use, digital technology was not a major concern as it wasn't a fashionable and dominant communal force that is prevalent today (Shallcross, 2011).

In United Kingdom, 38 million mature people use the internet everyday which translates to 76% of grown ups' population. Generally, the internet users of 16 years and above consume above 20 hours online every week and over and above 70% posses a shared networking profile. With the growth of digital technology and other related innovations in provision of services, there is improved access to services and reduction of barriers such as stigma (Musiat et al., 2014).

However, there has been a slow pace in application of digital technology in African countries despite the knowledge of the benefit it presents (Moussa& Zaki, 2002). In Ghana, a country in western part of sub-saharan Africa, the education sector's medium-term development plan for 2010-2013 identified the use of ICT skills and knowledge as a key challenge facing counsellors. It discovered that a sizeable number of counsellors are technically incapable of using ICT tools and the internet resources to enhance psychoanalysis services. This was also attributed to counsellors' reluctance to adapt owing to their powerlessness in utilization technology (Kolog et al., 2014).

In Kenya, the Government has been in the forefront in embracing digital technology service delivery. Digital technology for instance basic mobile phone has been demonstrated to help aid people in communicating with each other, obtain information regarding the market, market and sell merchandise crosswise in geographic areas, reach new customers, enter mobile payment systems, reduce fraud and crime and empower women and the disadvantaged among others (Yator & Shale, 2014).

It can be concluded that digital technology has invaded every area of our personal and professional lives (Kincaid, 2004) and has become central to how we live in the modern world in addition to providing the potential for reaching more clients. Unfortunately, professional counsellors and mental health practitioners in Kenya are yet to fully embrace digital technology such as use of computer related technology (CRT), counselling software, radio and television, social medial, among others and the extent to which is being utilized by counsellors and counsellors educators it's not known. This is despite the tremendous growth in the counselling profession after adoption of Kamunge report in which recommended the establishment of guidance and counselling services to schools (Kamunge, 1988).As a result, counsellors still struggle with paperwork and struggle with traditional counselling method of conducting counselling such as face to face method even when it proves impossible. This has resulted to some scholars perceiving counselling and mental health profession to be less competitive hence lack of its recognition as a profession by many people. Integration and utilization of digital technology in counselling would enable counsellors and generally mental health professional to see the importance and opportunity available and enjoy the benefit of digital technology, while ensuring efficiency and competency.

2.2.1 Digital technological knowledge in accomplishing various counselling tasks

Many counselling professionals are yet to fully embrace digital technology in accomplishing various counselling tasks such as; client appointments (scheduling and rescheduling), report writing, record keeping, making clinical assessment and testing, consultation and client referral among others. Similarly, counsellors are also raising concerns on privacy and confidentiality of client information when using digital technology (Shallcross, 2011). Digital technology in focus here refers to use of computers related technology (CRT), social media e.g. WhatsApp, Facebook, LinkedIn, software's, telephones, television and any other technological equipment that creates a bridge between the counsellor and the client. This could be contributed by lack of knowledge and skills on digital technology.

Many counsellors also struggle with paper work due to overwhelming demands of clients' services, inability to organize ones time, continuous changes of paperwork requirement and lack of computer skills and knowledge (Campbell, 2015). Some counsellors struggle with tradition counselling method of conducting counselling such as face to face method even when it proves impossible. Over the years technologies have proved to be useful especially in situation where a client is geographically or emotionally unable to arrange face to face meeting or is uncomfortable in face to face counselling.

Telephone and online therapy has gone a long way to help bridge the distance and, assists in breaking down barriers that could have prevented potential clients from visiting counselling offices. This includes enabling clients feel less threatened by face to face counselling, making it possible for clients not to go through face to face counselling with a counsellor who they may consider a stranger, allows the client opportunity to express themselves more and helps counsellors to engage more online through putting various issues and information online. This helps in normalizing issues, which clients might be struggling with hence going along way in reducing stigma. Digital technology has also helped/can help counsellors working with at-risk clients in areas of relationship by building need assessment and interventions especially to clients' conversant with digital technology, for example, by playing videos the counsellor helps to build rapport with clients especially children (Jencius & Wade2011).

Efficient integration of digital technology in counselling enables counsellors perform various counselling tasks such as counselling practical work and administrative work (Abney & Maddix, 2004). This is in addition to using management software's for tasks such as appointment schedule and rescheduling clients which makes analysis almost instant, documentation and record keeping which enables the counsellor in tracking client's information. Further, it can also help the counsellor to easily generate case conceptualization, treatment plan, counselling interventions, information retrieval and dissemination where necessary, psychological assessment and testing, online counselling and training and supervision.

Sampson, Kondinsky, & Greeno, (1997) suggested various possible uses of digital technology for internet-based CRT tools by counsellor that would enable them to accomplish their work effectively. For instance, use of electronic mails which can be used for psychoanalysis, advertising, client psychoanalysis, communication for setting up appointments and rescheduling clients, inter-session evaluation and monitoring and post therapeutic updates and follow ups, client record transmission, referral, ingestion, assignments, investigation and professional inter-relations (Bownan & Bowman, 1998). Websites can be used for promotion, marketing, information propagation and publication; computer video conferencing – psychoanalysis, assignments, referrals and discussion, press release systems. News group can be used for consultation sessions, referrals, resource for sources of information and professional inter-relations, computerized inspiration (regulation and skill instruction); database for investigation, information sources for psychoanalysts, self-help libraries, transmission of client records and evaluation and examination; chatrooms/online conversations for group therapy, self help and support; software's for skill training, client scheduling, record keeping among other use.

So as to understand adoption of digital technology in counselling, an example was given by Cabannis, (2001). By use of Delphi method, the panels comprised of experts including one group of counsellor educators, counsellor practitioners, and computer technologists. According to the research which had several questions from different experts, the findings and recommendations of CRT was as follows; Question one was on the extent to which therapists educators depend on CRT to accomplish work associated tasks; the findings suggested that counsellors and counsellors tutors are making use of CRT to aid them over and above half (59%) of work associated assignments. The professionals demonstrated

that therapists then have established that CRT is supportive in ensuring that 40% of standard job-related assignments are easier to get done. The tasks include proficient inscription, grounding and delivery of promotion and trial management and ranking. They also believed that CRT can be of paramount importance in considerably lessening exertion, escalating efficiently and enhancing the eminence of services of an extra 19% of the job associated assignments.

In research question two, on counsellors' associated assignments psychotherapists are achieving aided by CRT, Cabaniss (2001) indicated that each and every one of the categories of job-associated assignments are incorporated in existing use of computer associated technology with exception of tasks concerning professional recruitment. The experts' rated CRT use is helpful in numerous ways including promotion, customer search, information and account maintenance, medical evaluation/appraisal, consultation and recommendation. On question two findings, 53% of the counsellors expressed belief that CRT isn't used by counsellors in a majority of their curative interventions assignments for instance establishing relationship (connection) with customer, discretionary discussion, assessment of client demonstrating problems and making use of effective interventions. This was for the reason that CRT is unsuitable in therapeutic assignments.

The Delphi panel also stated that therapeutic tasks that involve determining treatment length and interventions using cognitive, behavioural or combination of therapeutic techniques were not being accomplished using CRT due to lack of software's. The panel concluded that counsellors' would like to use CRT if they acquire the technology knowledge and skills. In research question three on ways in which counsellors and counsellors' educators were using CRT in performing various counselling tasks, the panel indicated that various CRT tools have been explored as potentially useful to mental health professionals in their work (Sampson et al., 1997). The results of the study indicated that counsellors are in fact utilizing CRT tools in their work.

In research question four, on the ways in which and to what extent was CRT being utilized by counsellors and counsellor tutors to carry on their roles, the panellists' expressed significant increase in the use of CRT with 90% utilization in all counselling tasks, including professional accountability (Cabaniss, 2001). The panel members believed that counsellors would in the future find the use of CRT to be of paramount importance, which will considerably decrease attempt, increase effectiveness or improve the eminence of

provided services. This was because CRT had made their job easier to perform by 21%. Counsellors and technological panellist all agreed that 92% of work counsellors perform tasks which include advertising, customer establishment, information and accounts maintenance, intervention/psychoanalysis, medical evaluation/testing, discussion and recommendation, control, preparation, professional empowerment accountability and all tasks performed by counsellors would be well accomplished by the use of CRT. However, there are tasks the panellist believed CRT was not being used including therapeutic activities and professionals accountability.

The panellists gave their views, on how they believed counsellors would be able to use CRT (Cabaniss, 2001). These included the augmented software improvement and the utilization of World Wide Web (www) for advertising of counselling services, personal information database for the purposes of statistics and scientific research, electronic trials implementation ranking and analysis, improvement of additional self-evaluation software's, discussion and recommendation roles, oversight, coaching, specialized growth and psychoanalysis. They also believed that acoustic ocular equipment would arise to be more common place in website dialogues. In addition, they articulated more hopefulness alongside safety concerns associated with the utilization of CRT.

A lacuna indentified by Cabaniss (2001) relates to the extent to which different types of technology are being used and what influences they have. Therefore, adequate research would greatly provide foundation that would assist in directing research in diverse ideas realized through an augmented number of people using technology in providing leadership and therapy services and thus the reason the researcher is carrying out this research.

2.2.2 Counsellors' Perception and Utilization of Digital Technology in Counselling

In each day throughout life, individuals notice other personality's deeds and conducts and come up with conclusions regarding other people's perceptions building on their own observations. Whenever individuals observe the behaviour of a person in a given circumstance, they normally relate the conduct to the attitudes and traits of the person. Looking at today's world, digital technology is changing the nature of people's problems as well as how the issues are addressed (Ahmad, Nasir& Yusooff, 2010). Digital technology and the use of internet have taken counselling service beyond the traditional face to face to e-counselling. It's evident that over the years digital technology has grown in terms of popularity among clients and mental health providers (Tannous, 2017).

As digital technologies and social media continue to develop, counsellors must adapt their professional communication to meet the expectations and the needs of the clients. This adaptation may include communication on social media sites using computer, phones, ipads among others. However, counsellors still have concerns that social media use, particularly its interaction with clients during counselling session, as this can lead to possible ethical issues such as confidentiality and privacy hence their reluctance to utilize digital technology in counselling practice (Gagnon & Sabus, 2015)

Counsellors' perceptions which can either be positive or negative influence utilization of digital technology in counselling. This is due to what Gagnon and Sabus (2015) referred to as sphere of digital technology and social media use in professional health care communication. This involves acknowledging standards and individuals consideration and implications. Underutilization of digital technology in counselling can be attributed to counsellors' attitude, resistance and fear due to negative perception and fears on digital technology interference on therapeutic relationship, violation of ethical standards and dehumanization of therapeutic process (Shallcross, 2011).

In reference to Theory of Planned Behaviour, a person's behaviour is determined by behaviour intentions. A strong intention shows likelihood the behaviour would be performed. It explains attitude and the extent to which an individual has negative or positive feelings. A behaviour increases when a person perceive they have more resources and self-confidence to complete a particular task. Counsellor's Negative attitude towards utilization of digital technology and counsellors perceiving themselves as persons with no resources will result to underutilization of digital technology. Counsellors who perceive themselves as competent and with resources in digital technology have positive perception and confidence to utilize it. Positive intention shows the likelihood that the behaviour/action will be performed (Ajzen, 1991)

2.2.3 Ethical issues and use of Digital Technology in Counseling

Bond (2009) stated that, the use of any technological tool raises ethical concerns in any profession. With every profession being governed by professional ethical standards, counsellor understanding of professional legal and ethical requirements helps avoid situations and instances where counsellors can manipulate clients' weaknesses for their

own benefits. When an individual or organization has a strong sense of ethics, it boosts self-confidence and encourages further interaction (Makela, 2009).

In the early years before emergence of technology, little was stated on technology. This was due to the fact that little or no research was done to document its effectiveness. As a result, many ethical codes in the counselling practice were written almost out of fear and ignorance of the unknown and emphasis was put on what not to do when it came to use of technology in counselling (ACA, 2005). However, according to Fairburn and Patel (2017) in the recent years, counselling application by counselling professionals has steadily increased with availability of digital technology.

In reply to increasing consciousness of the likely moral problems correlated with the use of digital technology in counselling profession, the ethical standards has created an increased awareness of potential issues and recommends guidelines for appropriate practice. Ethical codes are therefore developed to educate professionals regarding conduct and standards of practice, as well as to protect and promote the wellbeing of those served by career professionals (Makela, 2009). Regrettably many counselling ethical standards have not incorporated elements of use of digital technology in counselling even though some organization like American Counselling Association (2005) has briefly indicated that on the use of technology in counselling, many organizations focused on what not to do when it came to technology which was later reviewed.

With digital technology increasingly being used in various professions, there is need for professional bodies to modify their ethical codes and include use of digital technology in the counselling discipline. Major focus should be on ethics such as counselling principles; autonomy which is respect for individual; beneficence, non-maleficence which is avoiding doing harm to a client; justice (being fair); and fidelity (honouring the promises upon which the trust between the client and counsellor is founded).

In Kenya, there is no national licensure or certification body in existence hence no single entity to regulate the standards of counselling practice and training in Kenya. Currently there are six main counselling professional associations. They include Kenya Counselling and psychological association (KCPA); the Kenya Psychological Association (KPsyA); Kenya Association of Professional Counsellors (KAPC); Kenya University Professional Counsellors Association (KUPCA); and the Kenya Guidance, Counselling and

Psychological Association, (KGCPA) and the Kenya Association of Clinical Psychologist (KACP) (Kimiru, 2014).

For example, below is ACA code of ethics that captures technology use in counselling and it has clearly outlined the need of ethical practice while using digital technology. It has also covered various subtopics, which include benefits and limitations of using technology. It states that counsellors ought to notify their clients on the advantages and disadvantages of using digital technology application such as telephones, World Wide Web (www) the internet, online assessment instruments, hardware's and software's in the counselling practice/process and other services in counselling tasks such as payment.

In technology –assisted services the counsellors should first find out whether the client is intellectually, emotionally and physically capable of using various applications and whether they are appropriate to counsellors need. When the technology application is deemed inappropriate, the counsellor should opt for face to face counselling. Counsellors are advised to ensure technology does not violate the laws of any local, state, national or international entity and should at all times observe all relevant statues stipulated.

In conclusion, the utmost challenge for mental health professionals today is how to take advantage of the new abilities digital innovations affords to both the clients and the counselling profession, while maintaining the integrity and professionalism that is meaningful and personal interrelationship. This means that there is need to essentially develop an appropriate integration of technology in counselling and considering that many ethical codes lean on cautionary direction, there is also the need for professional bodies to continue adapting and changing through periodic revision in order to remain relevant (Bowman & Bowman, 1998). In addition there is need to address issues such as accessibility, anonymity, online security, informed consent and regulation in e-counselling for effective utilization of digital technology (Harris& Birnbaum, 2014).

2.2.4 Interventions to Help Counsellors Utilize Digital Technology in Counselling

Kenya has been in the forefront in implementation and utilization of digital technology in service delivery. This is with the aim of enabling effective inter-organizational linkages and consolidation of government systems (Yator & Shale, 2014). Digital technology in counselling is unavoidable since the world is ever evolving and technology is in constant growth. Therefore counsellors need to deal with misunderstanding relating with its use and come up with intervention that will lead to utilization of modern technology in counselling (Johnson, 2016).

The benefits of digital technology in counselling discipline cannot be underestimated. Therefore, to enable its effective utilization, there is a need for counsellors to review and deal with potential barriers that could hinder its utilization. These include addressing issues accessibility, anonymity, online security, informed consent and regulation in e counselling. This will help deal with fears that the use of digital technology in counselling would lead to abuse such as overuse of digital technology and losing physical touch with the clients, which would lead to inability to read client's non-verbal cues and overdependence on technology that would easily result to depersonalization of counselling process (Harris & Birnbaum, 2014).

While the use of digital technology has potential to enable accessibility of counselling services, there is a need to review the ethical standards because the previous ethical standards were written out of fear and ignorance of the unknown and so emphasized what not to do rather than what to do when it comes to digital technology (Kaplan, 2006). Review of ethical standards would address issues to do with accessibility, anonymity, record keeping of online records, counselling communication via digital technology, online security, online informed consent, and regulations regarding online counselling practice, which lead to counsellor confidence assured they are not violating any ethical standards.

Counsellor's competency on the use of various digital technologies would enable counsellors meet the expectations and needs of their clients (Gagnon & Sabus, 2015). For this reasons, technological knowledge and skills in various digital technologies such as social media sites will enable counsellor interpret and check agreements often hidden in setting ,the terms of service and security pages (privacy settings) which makes it impossible for counsellors to establish what is kept private and what information is available to the

public (Demile, 2014). To deal with the above concern, there would be a need to design a curriculum that is inclusive of technological components which would in turn enhance improvement on training and provision of professional counselling services. Kimiru (2014) identified that counselling education programme is quite varied in terms of curriculum, nature of institutions that offer and the duration of the training programme. This in return brings lack of uniformity in training of counsellor professionals in Kenya.

2.3 Theoretical Framework

The theory was guided by the following theories;

2.3.1 Theory of Planned Behaviour (TPB)

This theory was postulated by Icek Ajzen (1991). The theory predicts a person's desire to engage in a given conduct at a specific time and place. It explains that a person's conduct is predicted by behaviour objectives. The behaviour intentions are a function of three determinants which include a person's attitude towards behaviour, subjective norms and perceived behaviour control. Behaviour intention represents an individual motivation in the sense of a person conscious plan or decision to act upon certain behaviour (Conner & Arnitage, 1998). A strong intention shows likelihood the behaviour would be performed.

Theory of planned behaviour explains that, attitude towards behaviour is the extent to which an individual has negative or positive perception of the conduct of concern. It involves consideration of the outcomes of performing the behaviour. Subjective norm refers to whether the belief about significant others thinks a person would perform the behaviour. This aspect relate to an individual perception of the social environmental factors surrounding the behaviour. Perceived behavioural control refers to a persons' perception of the extent to which performance of the behaviour is simple or complex. A behaviour increases when a person perceive they have more resources and self-confidence to complete a particular task (Aljzen, 1985).

It should be noted that individual intention to engage in behaviour depends on what drives them. This has led to some counsellors adopting a wait and see attitude towards utilization of digital technology in counselling. As a result, counsellors still struggle with paperwork, despite the negative attitude and perception about paper work and supervisee's fears of writing to perfectionism.

Negative attitude towards utilization of digital technology in counselling, and lack of incorporating elements of use on digital technology in counselling training programme has resulted to counsellors perceiving themselves as persons with no resources and confidence to utilize digital technology. This has resulted to counsellors lacking strong intention on utilization of digital technology hence having negative attitude, feelings and lack of confidence. Here in Kenya, its worth noting that not much has been done to enable counsellors to proactively guide them on utilization of digital technology in counselling.

Ethical standards by various counselling bodies have been focused on what not to do when it came to technology which has led to reluctance and under utilization of digital technology and vice versa. Institutions of learning have not included digital utilization components in their curriculum, making it difficult for counsellors to find it important to utilize digital technology since they lack behaviour intention and conscious plan.

2.3.2 Social Cognitive Career Theory (SCCT)

As Postulated by Lent, Brown & Gail (1994) this theory was anchored on Albert Bandura general social cognitive theory that explains how individuals study through others by scrutiny, replication and modelling; individuals learn through scrutinizing other's conducts, perceptions and results of individual behaviours (Bandura, 1997). It's important to recognize that theories are always changing especially with innovation of digital technology.

Social Cognitive Career theory explains how career and academic interests develop, how career choices are developed, and how these choices are turned into action. The theory intends to explain three interrelated features of career development. This includes how academic and career interests grow, how educational and career choices are made and finally, how academic and career achievements are obtained. The theory incorporates range of concepts which include and not limited to interests, abilities, values and environmental factors which influence career development. This is attained through a focus of three beliefs that include self-efficacy, outcome expectations, and goals (Lent et al., 1994).

Self-efficacy refers to beliefs people have about their ability to successfully complete a specific task. An individual develops their sense of self-efficacy from personal performance, learning by example, social interactions, and how they feel in a situation. Outcome expectations refer to the beliefs interconnected to the consequences of performing a specific behaviour. Normally, outcome expectations are formed through past experiences, either direct or vicarious, and the perceived results of these experiences. In conclusion, goals are seen as playing a crucial role in behaviour. A goal is defined as the decisions to begin a particular action/activity or future plan. Behaviour is controlled or sustained based on these previously set goals (Lent et al., 2000). In SCCT, career interests are kept in harmony by self-efficacy and an outcome expectation, which means people, will figure out lasting interests in activities when they have the experience, personal capability and

positive outcomes. Similarly, a belief of low personal competency will lead people to shun away from activities.

Over the years, there have been countless factors which determine the type of work one does. Cultural perceptions about working have also changed dramatically (Gary & Belkin, 1994). With rapidly changing occupational realities of our contemporary society, it's important for counsellors to examine counsellor career direction, self assessment and cognitive adaptability to understand his or her work in relation to the working world. With the social change and expanding technology, questions have arisen about the future of counsellors in regard to what skills, qualities and interests needed by a counsellor in order to be relevant to the changing world of work and what kind of opportunities are available now and in the future.

According to SCCT, for interests to flourish, the surroundings a person lives in has a lot of effect on them since it exposes them to the types of direct vicarious and influential experiences that give rise to vigorous efficacy belief and positive outcome expectation. Interest can be impeded from developing when a person does not have the opportunity to form strong self efficacy and positive results and beliefs regardless of their intensity of objectivity.

With major changes in social and economic life ushered in by digital technology (Matzen & Edmunds, 2007), it's important for counsellors to acknowledge that there are many opportunities for people to improve their learning hence continual advancement of their knowledge in technological world. Efficacy belief influences academic motivation and aspiration, level of interest in achievement and goals. Therefore, future involvement in digital technology, exposure to information technology is necessary to career achievement and development. This is because career accomplishment in almost every occupation depends on interaction with digital technology.

2.4 Summary of Literature and Theoretical Framework

The researcher used two theories to explain selected factors influencing utilization of digital technology in counselling. Theory of planned behaviour (TPB) is a theory that predicts a person desire to engage in a given activity at specific place and time. The theory explains that, attitude towards behaviour is the extent to which an individual has negative or positive perception. The other theory is Social Cognitive Career theory which explains how career and academic interests develop, how career choices are developed, and how these choices are turned into action. According to the theory career interests are kept in harmony by self-efficacy and an outcome expectation, which means people, will figure out lasting interests in activities when they have the experience, personal capability and positive outcomes. This means that, a belief of low personal competency will lead people to shun away from activities and vice versa.

The reviewed literature showed that digital technology has become a key factor not only in Kenya but also in many countries. This has influenced how professions are conducted across the board. In counselling, although counsellors appreciate the positive effect of digital technology in counselling, there are several factors that have influenced its effective utilization. These factors are; ethical concerns which have been raised (Gagnon & Sabus, 2015). This is because many counselling ethical standards had not incorporated elements of use of digital technology in counselling. Counsellors' perception is another factor which can either be positive or negative. Therefore it can be concluded that for effective utilization of digital technology in counselling, there is a need for counsellors to change their perception and attitude on utilization of digital technology. The reviewed literature has also discussed the need for counsellors to deal with misunderstanding relating to the use of digital technology in counselling since its benefit cannot be underestimated

2.5 Conceptual Framework

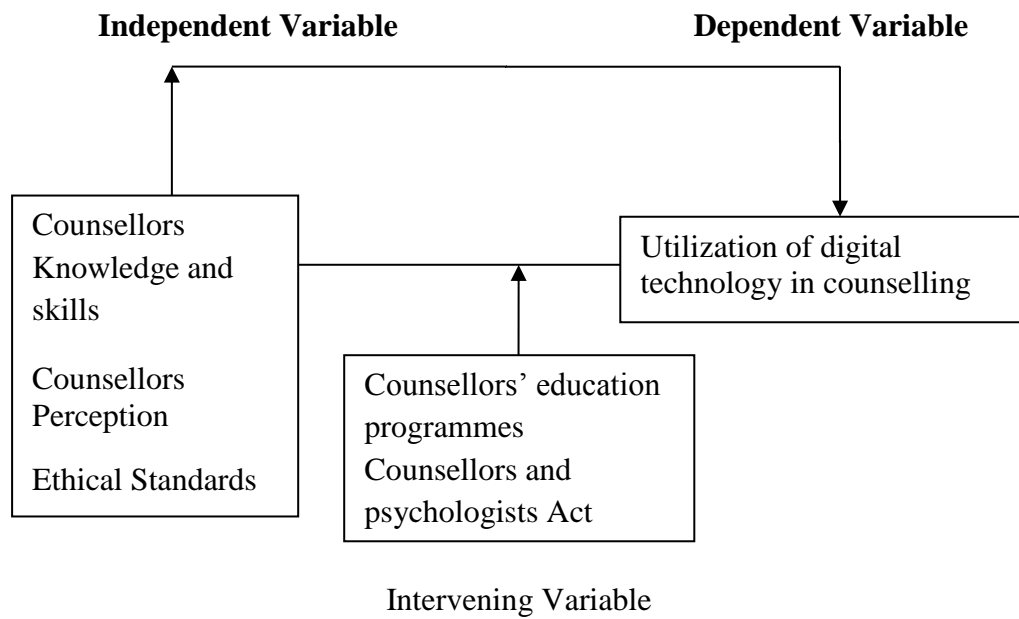


Figure 2. 1: Conceptual Framework

The conceptual framework shows the interrelatedness and relationship between selected factors influencing utilization of digital technology in counselling. The selected factors include counsellor knowledge and skills, perception and ethical standards. Counsellor utilization of digital technology depends on whether all factors influencing utilization of digital technology are dealt with.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents an explanation of the research design, population of the study, sample and sampling method, research instruments used, the data collection procedures used and data organization and analysis procedures

3.2 Research Design

The researcher used descriptive research design. Descriptive research is a systematic collection and analysis of data in order to answer questions or test hypothesis (Orodho, 2009). The researcher used descriptive research method since it enables a wide variety of qualitative and quantitative methods to investigate one or more variables. This is because the study aimed at finding out what technological knowledge counsellors have in accomplishing various counselling tasks, the extent to which perception and ethical standards influence utilization of digital technology.

3.3 Location of the Study

The study was carried out in forty five (45) Universities in Kenya both private and public that are directly involved in counselling practice on daily basis and are members of Kenyan Universities both public and private in Kenya (KUPCA).The researcher used KUPCA because it is the only registered body for University counsellors in Kenyan which was also the researcher area of interest.

3.4 Target Population of the Study

The target population of this study was 120 (one hundred and twenty) registered KUPCA members in all the Kenyan Universities both public and private in Kenya. There are 31 Public Chartered Universities, Public Constituent Colleges 6, Chartered Private Universities 18, Private Constituent Colleges 5 and Universities with letter of Interim Authority 14 (Commission for University Education, 2017).

3.5 Sampling procedure and sample size

The researcher used the entire 120 (one hundred and twenty) KUPCA population as the sample size. This made it possible for the researcher to get deep insight and information of the topic under investigation. However, only 97 (ninety-seven) members responded to the online questionnaire. Total population sampling is kind of purposive sampling technique that involves examining the entire population that has a particular set of characteristics such as experience, knowledge and skills.

3.6 Instrumentation

Data pertaining to this research was collected using online questionnaire. The questionnaire consisted of open, closed, contingency and matrix questions which had various items seeking information relevant to the study objectives. A questionnaire was to allow several participants to respond. The use of questionnaires helped reduce interviewer bias and gave respondents enough time to give a well thought out answer.

The researcher also used interview schedule with semi structured questions (open questions). The participants selected were university counsellors who were available for the interview. The purpose of the interview was to obtain detailed information regarding personal feelings, perceptions and opinions on research topic. This was done by use of purposive sampling which is a non probability technique. A total number of 5 (five) KUPCA members who came from the central region participated in the interview. This is because some participants who had initially agreed to show up refused to participate due to various reasons. The interview provided the necessary qualitative data. Questions were asked on face to face and one on one basis, and also through telephone call and WhatsApp which helped stimulate discussions as well allowing participants to give their own and more independent views and suggestions.

3.7 Piloting

Piloting refers to a study that is carried out in advance of a planned research to test various aspects of the research and more so to allow necessary adjustments on the research instruments before the actual research is undertaken (Mugenda & Mugenda, 2003). In this research, pilot study was able to identify flaws in the questionnaire that was adjusted and it helped the researcher identify some of the ambiguities and misunderstanding of some of the responses given from the instrument. This enabled the researcher to be able to get feedback on the validity of the instruments.

3.8 Validity of Research Instruments

Validity is defined as the extent to which an assessment measures what is supposed to measure (Privitera, 2014). Validity of the instrument was based on content validity that is defined as the extent to which a measure represents all facets of a given construct. The instruments in this study were validated and reviewed by the supervisors and other experts in the department of Theology, Religious Studies and Counselling.

Reliability is the consistency or precision of a measurement when repeated under similar circumstances (Privitera, 2014). A piloting was conducted before the actual field study to establish the reliability of the instruments. The pilot study was conducted from selected University Counsellors in Nakuru County. The pilot study findings were helpful in determining the reliability and improving validity of the instruments and in the adjustment of the questionnaires where necessary. For instance, the pilot helped to reveal ambiguities, poorly worded questions, questions that were not understood and unclear choices. It was also aimed at indicating whether the instructions were clear or needed an alteration. Cronbach's coefficient alpha method was used to establish internal consistency of the items. A reliability coefficient of 0.7 was achieved which reflected the internal reliability of the instruments.

3.9 Data Collection Procedures

The researcher sought research permit from National Council for Science, Technology and Innovation (NACOSTI) through Kenya Methodist University Scientific and Ethical Review Board. Since this permission was not enough to enable the researcher carry out the research, the researcher also sought permission from KUPCA chairperson who notified the members about the research. The researcher took the initiative of communicating to the respondents explaining to them the purpose of the research. The data was collected through online questionnaire and interview.

3.10 Data Analysis Procedures and Presentation

Data collected was processed, and presented in both quantitative and quantitative methods. Objective two was to investigate the extent to which counsellors' perception on digital technology influence its utilization in counselling. Objective three was to establish the extent to which ethical standards influence utilization of digital technology in counselling practice among KUPCA members. Data was analyzed by use of computer programme - Statistical Package for Social Sciences (SPSS) version 22.0 and was presented by use of percentages and by use of inferential statistics such as correlation analysis, linear regression analysis and T-test.

3.11 Ethical Considerations

Research ethics refers to the ethical standards that researchers must adhere to conducting research on human subjects (Meece, 2002). The study was ethical in data collection, analysis and reporting. Information obtained, remained confidential. The respondents who participated in the interview used pseudo names to conceal their identity. This was highlighted and explanation given where possible. Participation in the study was voluntary. All respondents were treated with utmost dignity and respect and information shared was only to be used for research purpose. The researcher sought research permit from National Council for Science, Technology and Innovation (NACOSTI) through Kenya Methodist University Scientific and Ethical Review Board

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

In this section findings of the study were discussed. The results of the study were presented according to the objectives of the study, which were:

- i. To find out what digital technological knowledge counsellors have in accomplishing various counselling tasks among KUPCA Members
- ii. To investigate the extent to which counsellors' perception influences utilization of digital technology in counselling practice among KUPCA Members
- iii. To establish the extent to which ethical standards influence utilization of digital technology in counselling practice among KUPCA members
- iv. To explore strategies that can be used to help counsellors improve on utilization of digital technology in counselling practice among KUPCA members

4.2 Response Rate

The rate of return of this research was 81%, which represents 97 respondents who returned their questionnaires out of target population of one hundred and twenty (120) members. According to Baruch and Holtom (2008) a high rate of return is of benefit because it gives a larger possibility that the sample is a representative of a population.

4.3 Demographic Characteristics

The first step in the analysis was the review of the respondent's demographic characteristics. The main areas of interest in the background of the target population were years in service, gender, age, and academic qualification of the respondents.

4.3.1 Participants' Gender

From the result, 60 (61.9 %) of the participants were women counsellors whereas male counsellors were 37 (38.1 %). Unlike in most of the other professions in Kenya, women counsellors seem to dominate this profession. This demonstrates the need for Universities to employ an equal number of counsellors of both genders. Despite the fact that analyzed data had established that most of the respondents had the awareness plus skills on digital technology and had embraced its usage, there is still the need for female counsellors to familiarize themselves with technological components even though it's perceived as a male dominated profession such as software development.

4.3.2 Participants' Age

Findings revealed that, 47(48.5%) of the respondents ages lied in the range of 40-50 years while the lowest was, 3(3.1%) aged 20-30 years. This showed majority of counsellors are in middle adulthood stage and past youthful stage of generativity v/s stagnation (Corey, 2005). Although the respondents understand and appreciates the benefits of utilizing digital technology in counselling, the profession still lacks youthful people to spearhead and come up with new ideas on utilization of digital technology. As a result, counsellors feel a bit secure with traditional eye-to-eye way of offering counselling citing lack of laws to regulate how personal data can be safeguarded against misuse as shown in Figure 4.2.

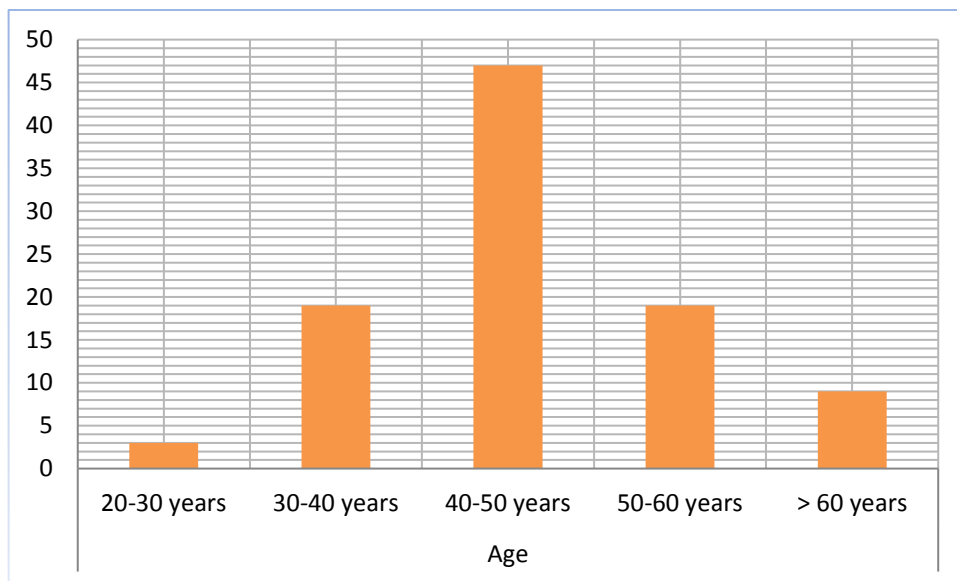


Figure 4. 2: Participants' Age

4.3.3 Participants' Academic Qualification

Figure 4.3 revealed that 69(71%) of the participants were masters degree holders' followed by 16(16.3%) who were degree holders, 12(12.4%) who were PhD holders, and finally 1(1.0%) who was a diploma holder. The high number of master's holders is due to the fact that most university counsellors are required to be master's holders and advancement of their profession has resulted to a large number of PhD holders within profession. Although from the questionnaire, many counsellors had gone through counselling and psychology course only and even to advanced levels, very few had undertaken any additional course related to technology. Counsellors' advancement in education means that counsellors are more competent and have the experience, knowledge and skills needed in their area of specialization. It also means that they are more open minded to different ways of solving issues hence perceiving digital technology critically and positively as a new way of doing things.

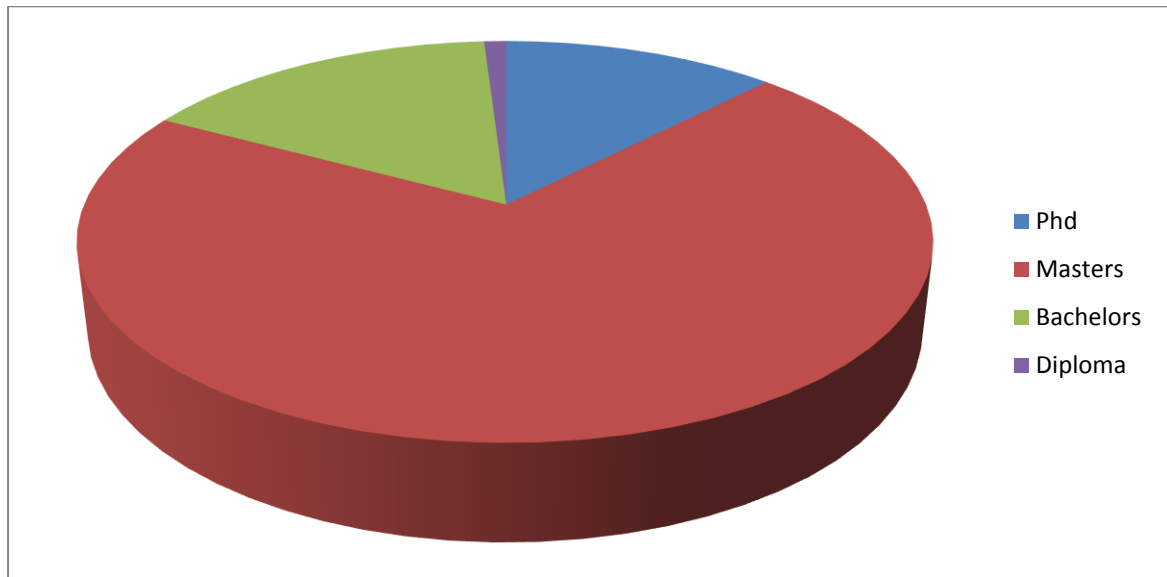


Figure 4. 3: Participants' Academic Qualification

4.3.4 Participants' Duration of Experience in Counselling Practice

On counsellors years of service, it emerged that majority, 53(54.6%) of the counsellors had 6-10 years of service. Those who had 1-5 years were only 19(19.6%) while those who had a slightly more experience of 11-15 years and above 16 years were 15(15.4%) and 10(10.3%) respectively. Longer duration showed that respondents were competent enough and specialized in the profession since they had enough experience, knowledge and skills to share sufficient information. As a result, counsellors had seen the need to adapt to new technologies so as to meet the expectation and needs of the clients' who they attended to on daily basis. And also because the vast majority of internet users (clients) have digital gadgets and are techno savvy (Johnson, 2016) as shown in Figure 4.4.

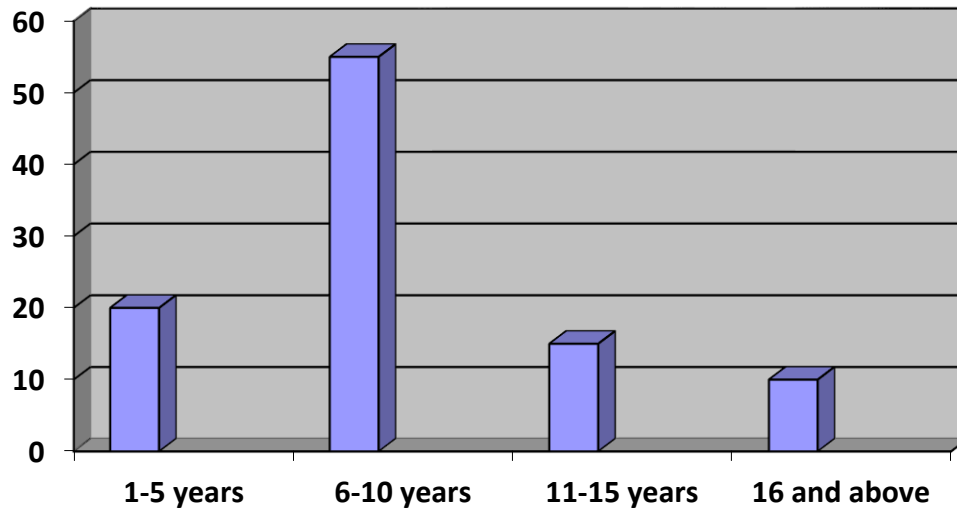


Figure 4. 4: Participants Duration of Know-How in Counselling Practice

4.4 Counsellors' Technological Knowledge and Skills and utilization of digital technology

The study sought to find out what digital technological knowledge and skills counsellors had in accomplishing various counselling tasks among KUPCA Members.

4.4.1 Counsellors' Understanding of Technology

An open ended question was posed so as to collect wide variety of views regarding respondents understanding of digital technology. Some of the commonly given answers were summarized as presented in Table 4.1

Table 4. 1: Counsellor Understanding of Digital Technology

Counsellor's Understanding of Digital Technology	F (%)
New ways of handling issues by use of innovation to make work easy and efficient	41(41.84)
Non traditional ways of doing things, solving problems inquest to provide solutions.	52(53.06)
Internet, mobile phones	39(39.97)
Application soft-wares enabling service to humanity	38(38.77)
Present day or improved way of doing things by use of devices	49(50.00)
It's the way that information and communication is passed in the digital platforms	62(63.26)
Improved technological gadgets and ways of doing things	53(54.08)
Use of social media such as face-book,	45(45.91)
Current/improved/advance scientific knowledge application to doing things in technology	36(36.73)
New ways	49(50.00)
Assistive technology which helps compute and summarize information for decision making	44(44.89)
Technology applications in our times	46(46.93)
Digital technology is being to work and communicate to the world electronically.	29(29.59)

As shown from the table above most of the participants referred digital technology as the way information and communication is passed in the digital platforms indicated by 62(63.26). This shows clearly; respondents understanding of digital technology and how it's used as a tool in communication and to pass information or for communication purposes. 53(54.08) of the respondents stated that digital technology is an improved technological gadgets that improves ways of doing things. This enables innovations and new ways of handling things can be invented which will make work easier and efficient hence reducing the amount of work done. Other respondents indicated that it was "Non-traditional ways of doing things, solving problems inquest to provide solutions" as indicated by 52(53.06%). This clearly implies that the aim of digital technology is to solve problems and provide solutions using the new ways that have been discovered, an answer

that relates to the first definition that it is new way of handling issues. Finally, the other definition of digital technology as highlighted by other respondents was the use of technology applications in our times as indicated by 46(46.935%) of the respondents. These could include the use of internet, advanced use of smart phones, iphones, tablets, among others in our day-to-day activities that generally have improved the manner in which issues in the new era are perceived. This is commendable since the counsellors when responding to the questionnaire indicated that a few of them had undertaken additional courses related to technology. This also revealed counsellor positive perception and appreciation of evolving nature of the counselling profession as pertains to digital technology, and the realization of continuous expansion of digital technology. It can be concluded that counsellors have an understanding on what digital technology is, which is in agreement with what Gagnon and Sabus (2015) said that it is necessary to get used to proficient communication to meet the anticipations and desires of the clients.

4.4.2 Frequently used Digital Technology

The finding showed that Computer Related Technology took the highest frequency of 44 respondents having 44.9% of all the respondents. The finding further shows that the second mode mostly used is the use of tablets was 30.6%, while the use of the television by counsellors as a digital technological device was rated at 10 (10.2 %). Also, it emerged that participants preferred use of Computer Related technology which entails; spread sheets, word processors, electronic message, chat rooms, listservs, catalogues, software programmes inclusive of many web-related tools. Furthermore, it was identified that the make use of cell phone or smart phones for chats both on whatsapp and facebook was minimal as highlighted in the above table whereby only 14.3% of the counsellors embraced this as shown in Figure 4.4.

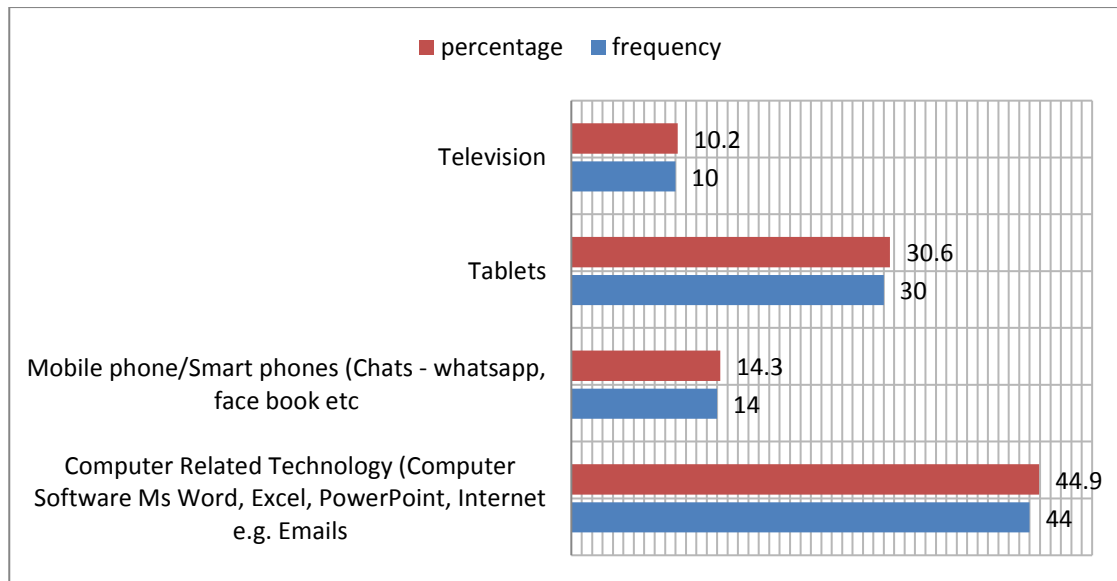


Figure 4. 1: Frequently used Digital Technology among Counsellors

When responding on frequently used digital technology in counselling, ethical concerns were also raised with counsellors wondering how one can ensure systems are not interfered with by hacking of the database or tapping of phone hence leaking of client information as shown in the verbatim:

Researcher: what is your view on use of digital technology in counselling practice?

Respondent 1: *The use of digital technology is very important in our day-to-day work and especially because the clients we attend to are tech savvy. The use of text messages help reach many clients through the phone and Smartphone especially those who are not be able to come for counselling.*

Respondent 2: *Technology helps a client deal with fear and makes them feel comfortable e.g. using phone since no readily available eye-to-eye communication.*

Respondent 3: *As much as digital technology is good, confidentiality can easily be compromised especially with counsellor who don't follow counselling ethics especially on use of whatsapp or messenger (facebook)*

Respondent 4: *With our clients who are digital generation and who identify more with technology anything can happen.*

***Respondent 5:** Yes this can raise ethical concerns on confidentiality as to how we as counsellors can ensure client's information is protected and that they won't be hacking of client database to get client information.*

Despite the fact that most counsellors felt that using mobile phones and smart phones during therapy session can compromise confidentiality, which can results to breach of ethical standards. Apparently, from the results above the utilization of computer interrelated technology had been embraced by most counsellors. This is in agreement with what Shallcross (2011) stated that growing number of professionals are now embracing social media and other emerging technologies in offering counselling services and in their counselling training which ensures that counsellors are not left out in the digital technological world. This also showed that counsellors are now embracing the change on how people access and share information and the fact that digital technology has continued to expand. This also showed that counsellors are now adapting to the new technologies to meet the expectation of their clients who they serve in addition to enjoying flexibility that comes with digital.

This can be attributed to the fact that most counsellors felt that using mobile phones and smart phones during therapy session could compromise confidentiality, which results to breach of ethical standards. This could be due to the fact that although most of the clients the counsellors attend to are in the digital generation they still want to be anonymous

4.4.3 Most effectively Utilized Digital Technology

The other question in an attempt to achieving the research aim was to access the digital technologies which can effectively be utilized in counselling. This question was close towards the core of the research objective which intended to detect what digital technological knowledge counsellors have in accomplishing various counselling tasks among KUPCA Members. To establish this, the respondents shared their views on open-ended question as stated. The results were summarized and shown in Table 4.2.

Table 4. 2: Most effectively Utilized Digital Technology

Most effectively utilized digital technology	Frequency	Percent
Mobile Phones/Smart Phones	24	24.5
Computer Related Technology & Mobile phones	30	30.6
Computer Related Technology	15	15.3
Mobile Phones	14	14.3
All	15	15.3
Total	98	100.0

According to the responses in Table 4.2, it emerged that the most effectively utilized digital technology as per the majority, 30(30.6%) of the counsellors who participated in the study is the use of computer related technology and mobile phones. The second in order is the use of mobile phones/smart phones, 24(24.5%), a technology that is widely used especially with the emergence of open data kits (a free and open-source set of tools which help organizations, field, and manage data collection solutions)in collecting information from the internet across the world. Even though some respondents, 15(15.3%) found mere use of computer technology helpful, its combination with the use of mobile phones is more powerful tool.

Other, 15(15.3%) respondents also found all of these technologies useful. Cumulatively, the percentage, 55.1%, of respondents that found mobile phones/smart phones and computer related technology/mobile phones was higher, as compared to those that found mere computer and mobile phone useful (29.6%).With digital technology continuously growing and with social media, smart phones and iPads rapidly fitting everyday life, counsellors are now incorporating innovative technologies into their work this is in agreement with Cabannis (2001) who concluded that, (15.3%) found mere use of computer technology useful, but its combination with the use of mobile phones was more powerful tool.

From the findings, it was evident that counsellors were ready to embrace digital technology. As such this could go ahead in getting better the way of doing things such as reaching more clientele incapable of getting the services face to face, besides enabling counselling being done at client's convenient time. In addition, it would enable the counsellors be able to book appointment, offer online guidance and counselling, put clients

in touch with others confronting related matter, and provide a base of distance learning programmes in profession management expertise and connected regions. This is in agreement with Shallcross (2011) who stated that counsellors are trying to embrace the emerging technologies in offering various counselling services.

However, some counsellors during the interview expressed fears that the use of digital technology in counselling can lead to abuse such as overuse of digital technology and losing physical touch with the clients hence not able to read clients emotions which can easily lead to harming the client. These sentiments were also expressed by Shallcross (2011) who stated that digital technology is still not liberated from possible shortcoming or else moral concerns, and if the counsellor is not careful it can lead to overdependence on technology and allowing therapeutic process to become depersonalized.

4.4.4 Role of Digital Technology

The final question on digital technological knowledge counsellors had in accomplishing various counselling tasks among KUPCA members was on the role of digital technology. In regard to these, counsellors were requested to mention their consideration on the role of digital technology in counselling. The Table 4.3 below indicated the conclusion made.

Table 4. 3: Role of Digital Technology utilization in Counselling

Role of Digital Technology
Digital technology has in recent times made counselling easier because you can easily get feed backs without necessarily travelling to meet the client. Although having negative contribution too especially when abused
Research purpose, publications, to improve ways of doing things in terms communication, counselling administration work record keeping, sharing and learning and teaching/training
aid in fast-tracking information required by the client, counselling can be done at your convenient time
Store data confidentially and efficiently
It can be used to increase knowledge to counsellors.
Deliver on-line guidance within the site itself
Putting clients in touch with others facing similar issues to their own
Provide a source of distance learning programmes in career management skills and related areas
takes care of distance by helping to give services even to those who may not physically come for counselling

It's evident from Table 4.3 that counselling done by use of digital technology has made counselling easier due to the fact that feedback from the respondents could easily be traced/collected without personal involvement with the participant.

According to this research finding, digital technology is used for research purposes, publications sharing, learning and aids in the competency and efficiency of counselling services. From the use of digital technology, counsellors could have the confident storage and communication of data. It also increased deliverance of on-line psycho-education, put clients of similar issues in contact and also aid in the provision of distant learning. This is in agreement with what Shallcross (2011) stated that utilization of up-coming technologies is an attempt to additional efficiently give out and interact with more clients because new technologies are continuously expanding and with the social media, smart phones and ipads are fitting to everyday life hence there is need for counsellors to include new technologies in their work

One respondent stated that *“Digital technology has in recent times made counselling easier because you can easily get feedbacks without necessarily travelling to meet the client. Although having negative contribution too especially when abused”* This shows counsellors are aware of fact that digital technology has positive effects but it can also act as a barrier to counselling delivery (Harris& Birnbaum, 2014).

4.5 Counsellors Perception and Utilization of Digital Technology

The research paper determined the degree to which counsellors' perception manipulates utilization of digital technology in counselling practice. So as to achieve this, the study sought views on the perception of counsellors. A five point likert scale was adopted to determine the feedback, with 1 indicating weak or negative perception and 5 indicating positive perception towards digital technology. These views on a mean scale were then correlated with the utilization of digital technology.

4.5.1 Counsellors Perception of Digital Technology

The finding showed that counsellors had a positive perception on the adoption of digital technology. For instance, the leading aspects perceived positively by counsellors included: Inclusion of technological skills and knowledge in counselling curriculum, (mean=4.81, std=.397); whether counsellor perception/attitude/resistance on digital technology in counselling influences its utilization in counselling practice (mean=4.61, std=.490); whether integration and utilization of digital technology in counselling will make the counselling practice a competitive profession (mean=4.46, std=.661) and finally the fact that Kenyan Counselling Act has provision on the use of Digital technology in counselling (mean=4.26, std=.631). However, counsellors had a different perception on the statement the hypothesis that use of digital technology in counselling increase client confidence as established by a mean and standard deviation (mean=2.77, std=1.32). It can therefore be generalized that counsellors had a positive perception on the use of digital technology as presented in Table 4.4.

Table 4. 4: Counsellors Perceptions on Digital Technology

<i>Counsellors perception on digital technology</i>	Mean	Std. Dev
Digital technology has relevance in counselling	3.35	1.066
Use of digital Technology in counselling increase client confidence	2.77	1.322
Use of digital technology in counselling leads to breaching any counselling ethical code	4.19	1.128
Counsellor perception/attitude/resistance on digital technology in counselling influences its utilization in counselling practice	4.61	.490
Digital technological skills are important to professional counsellor's	4.43	.703
Technological skills and knowledge should be included in counselling curriculum	4.81	.397
Learning counsellor's education programmes should include training on use of digital technology in counselling	4.28	.757
Use of digital technology in counselling will increase efficiency and competency in the counselling profession	4.32	.683
Integration and utilization of digital technology in counselling will make the Counselling practice a competitive profession	4.46	.661
Technological skills/knowledge are important in accomplishing various counselling tasks	4.08	1.032
A lack of incorporating digital technology in counselling services in our institutions of learning makes it difficult for counselling innovation	3.17	.985
Kenyan Counselling Act has provision on the use of Digital technology in counselling	4.26	.631

The results are in agreement with earlier researchers, which stated an improved technology in counselling application by counselling professionals steadily increased due to a positive perception. As theory of planned behaviour forecast a person's aim to be involved in behaviour at an exact point in time as well as place is determined by an individual with social environmental factors surrounding the behaviour (Zamani, Nasira, & Yusooff, 2010). With improved technology and provision of resources, it enables counsellor change their perception towards utilization of digital technology

4.5.2 Relationship between counsellor perception and utilization of digital technology Hypothesis testing

Pearson product moment correlation which determines the strength and magnitude (direction) of linear correlation among two variables, was established to access whether there is a correlation linking counsellor's perception and utilization of digital technology. The research assumption stated "There is no significant relationship between counsellors' perception of digital technology and it's utilization in counselling practice among KUPCA members". Established results was as shown in table 4.5

Table 4. 5: Correlation between Counsellors Perception and Utilization of Digital Technology

	Utilization of Digital Technology	Counsellors Perception
Utilization of digital technology	Pearson Correlation	1 .522**
	Sig. (2-tailed)	.000
	N	98 98
counsellors perception	Pearson Correlation	.522** 1
	Sig. (2-tailed)	.000
	N	98 98

** . Correlation is significant at the 0.05 level.

The results indicate there is a positive significant correlation among counsellor's perception as well as utilization of digital technology ($r=.522, p<.05$). This mean that there is a positive relationship between the two variables such that Counsellors perception influences utilization of digital technology in the practice of counselling. However because of optimistic awareness and the view that technology is imperative in counselling, counsellors opt to use it.

The influence of counsellor's perception on utilization of digital technology was sought through regression model using standardized coefficients. Simple linear regression model was established to measure the causal effect of counsellor's perception on utilization of digital technology in counselling. In regard to this, utilization of digital technology was regressed against counsellor's perception and the model coefficient results presented as shown hereafter.

Table 4. 6: Model Coefficient Outcomes on effect of counsellor's perception on Utilization of Digital Technology

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	-.009	.743		-.013	.990
1 counsellors perception	.923	.154	.522	5.990	.000

a. Dependent Variable: utilization of digital technology

The findings indicates that without digital technology counselling practice cannot be effective as revealed by a constant non-significant value ($B=-.009, p=.990$). Nevertheless, by use of standardized coefficients, the results showed counsellor's perception have an effect on utilization of digital technology ($\beta=.522, p<.05$).Using standard multiple regression as indicated in Table 4.12, findings showed that as compared to ethical standards, counsellors perception had a distinctive important contribution ($\beta=.593, p=.000$), a change that arose due to the comparison of the model for the two variables thus overlapping effect. This implies that a positive orientation of the counsellor's perception results in an improvement in the utilization of digital technology.

Related to this result, a summary model result for the input of counsellor’s perception on utilization of digital technology as well was presented using the R square value. Analysis of findings was as shown in the table below

Table 4. 7: Summary model on Effect of Counsellors perception on Utilization of Digital technology

Model	R	R ²	Adjusted R ²	Std error	Change Statistics				
					R ² Δ	F Δ	df1	df2	Sig. F Δ
1	.522 ^a	.272	.264	.603	.272	35.881	1	96	.000

a. Predictors: (Constant), counsellors perception

Results showed that there was a significant relationship in between counsellors perception and utilization of digital technology (R=.522). When the value was squared, the proportion of variation in the utilization of digital technology was found (R square=.272) which is also the coefficient of determination. This value when multiplied by 100% resulted to 27.2% meaning that counsellor’s perception on digital technology accounts for 27.2% change in utilization of digital technology. This implies that counsellor’s perception positively influences utilization of digital technology to a moderate extent.

The findings contradict those of a study by Cabannis (2001) which revealed Counsellors’ resistance, negative attitude, and perception on digital technology has effect on digital technology in therapeutic relationship and on privacy of customer information as well as dehumanization of beneficial process which makes it difficult for counsellors to fully embrace digital technology.

In Social Cognitive Career Theory (Lent, Brown & Gail, 1994) stated career interests are regulated by self-efficacy and an outcome expectation, which implies that individual structures long-lasting welfare in actions when an individual experiences individual competency and optimistic results. Conversely, believe of low individual ability results to individuals avoiding activities. This is evident from the findings that counsellor’s perception positively influences utilization of digital technology to a moderate extent by 27.2%.

Counsellors’ positive perception are accredited to that digital technology is here to stay. The various positive outcomes of digital technology in counselling have enabled the

counsellor (s) to drop the ‘wait and see’ attitude towards utilization of digital technology in counselling. In the theory of planned behaviour control, belief is defined as occurrence of aspects which assist and hinder performance of the behaviour and attitude as the degree to which an individual has a encouraging or discouraging evaluation of the behaviour of interest. It also entails a deliberation of the outcomes of performing the behaviour (Ajzen, 1985). Although the previous studies had believed counsellors have negative attitude towards utilization of digital technology, the research findings indicate the opposite. The findings revealed that counsellor had a strong intention of utilizing digital technology in counselling hence the positive perception. With positive attitude and perception and the view that technology is important in counselling, counsellors have made a logic decision to utilize digital technology. This finding showed that the TPB on attitude, subjective norm and behavioural control explains counsellors’ significant perception on utilization of digital technology. Therefore it’s acceptable to state that TPB predicts counsellors’ utilization of digital technology in counselling (Cheon, Lee, Crooks Song, 2012).

4.6 Influence Of Ethical Standards On Counsellor Utilization of Digital Technology

The third objective of the study was to determine the extent to which the counsellor’s ethical standards influence utilization of digital technology in counselling.

4.6.1 Ethical standards and utilization of digital technology

In order to achieve this, the study sought views on counsellors’ ethical standards. Their views on a mean scale were then correlated with the deployment of digital technology. Likert scale was used to measure the findings. Whereby, 1 (one) represented weak response while 5 (five) represented strong response. The analyzed results were as shown in Table 4.8

Table 4. 8: Extent of practice of ethical standards on Digital Technology in Counselling

Ethical standards	Mean	Std. Dev
Client Autonomy (respect for individual)	2.70	.903
Beneficence (responsibility for promoting what is good for the client)	3.07	.881
Non-maleficance (Avoiding doing harm to a client)	3.20	1.105
Justice (being fair)	3.02	.968
Fidelity (honouring the promises upon which the trust between the client and the counsellor is founded)	3.14	.901
Informed consent (mutual understanding about therapy with a client)	3.00	1.070
Confidentiality	3.29	1.108
Client Privacy	3.26	1.210

From the findings, it is evident that the counsellors' ethical standards significantly influenced digital technology. Among these ethical standards; confidentiality was the most paramount ethical standard by the counsellors (mean=3.29, STD=1.108). This was closely followed by client privacy as an ethical standard (mean=3.26, STD=1.210) and non-maleficance which entailed avoiding doing harm to a client (mean=3.20, STD=1.105). However, the results from this case study indicated that client autonomy have small significant influence on utilization of digital technology in counselling practices, (Mean=2.70, STD=.903). This implies that confidentiality and client privacy positively influenced utilization of digital technology in counselling practice among KUPCA members. These findings agreed with the previous findings by Bond (2009) which revealed that strong sense of ethics boosts self-belief/self-efficacy and encourages further interaction, which would motivate counsellors to be technological savvy.

During the interview, counsellors expressed fears that use of digital technology in counselling could lead to unethical procedures where unaccredited/unlicensed counsellors could take advantage and end up harming clients. They also feared that digital technology would disadvantage the counsellor since the skills learned to assist the counsellor in reading clients emotions would be greatly reduced. One of the counsellors said:

“use of digital technology in counselling (e-counselling) will make it difficult for a counsellor to see clients non-verbal cues and not able to clearly know or pick what the client is saying since there will be no one on one touch. “

This is because traditional personal counselling rely on both oral and non-oral signs such as emotions, feelings, moods and social attitudes, tone of voice among others. Lack of it creates communication challenge when offering e-counselling and can lead to incorrect assumption and wrong interpretation of the client message hence dehumanization of the counselling process (Harris& Birnbaum, 2014)

The respondents also raised the issue of interference of counselling relationship, which would make the process more informal than formal. This is because the client would find it easy to call, chat or sms the counsellor when they feel like. These results were with agreement with those of (Fenichelet al., 2002) which stated that adoption of digital technology such as internet is perceived as a method with higher potential for ethical and legal violation.

Confidentiality of client information was the main worry since the use of digital technology could lead to breach of client information through hacking of the database or tapping of counsellors or clients phone. This would in return make it difficult for a counsellor to keep online clients documents since its not possible for a customer to approve form or even signing of contract with a suicidal client. As a result, keeping clients documents would be become difficult and a big dilemma. As stated in the verbatim;

Researcher: how does the use of digital technology affect ethical standards in counselling practice?

Respondent 1: *There will be a big challenge when it comes to record keeping especially of online records, e.g. informed consent forms which need to be documented.*

Respondent 2: *Digital technology can result to lack or possibility of no documentation, which makes proper recording or follow-ups difficult.*

Respondent 3: *use of one office laptop or desktop computer can/may compromise issues of confidentiality since several counsellors could be using one desktop computer.*

Respondent 4: *It won't be possible to sign a contract and informed consent form with a suicidal client which is a big dilemma to a counsellor.*

From above verbatim on the adoption of digital expertise affects ethical standards in counselling practice, it's evident that counsellors had fears that the use of digital technology could lead to ethical and legal violation. However, the above counsellors' fears on the use of digital technology could be interpreted as adherence to ethics, which means there was a need for revision of Kenyan ethical standards. This was because the counsellors who participated in the interview were in a dilemma on whether the current existing ethical standards applied on one on one clients or are the same to be applied for e-counselling.

In short, counsellors felt there was a need for ethical standards to be revisited to accommodate issues of digital technology in counselling, as many counsellors also felt the existing codes are more of code of conduct rather than ethical standards with little or no information on counselling and digital technology.

4.6.2 Relationship between ethical standards and utilization of digital technology in Counselling

Table 4. 9: Correlation between Ethical standards and Utilization of digital Technology in Counselling Practices

Pearson product moment correlation was established to ascertain whether there was an association between ethical standards and utilization of digital technology in counselling practice among KUPCA members. The findings were presented as shown in Table 4.9

		utilization of digital technology	ethical standards
Utilization of digital technology	Pearson Correlation	1	.398**
	Sig. (2-tailed)		.000
	N	98	98
Ethical standards	Pearson Correlation	.398**	1
	Sig. (2-tailed)	.000	
	N	98	98

** . Correlation is significant at the 0.01 level (2-tailed).

From the findings, it was clear that there was a weak positive but significant correlation between ethical standards and utilization of digital technology($r=.398, p<.05$). This implied that ethical standard in counselling influenced counsellor utilization of digital technology. Therefore an improvement/revision in ethical standards would lead to an improvement in

the utilization of digital technology in counselling. In addition to the findings, a simple linear regression model was carried out to establish the effect of ethical standards on utilization of digital technology in counselling practices. The findings were as presented in table 4.10

Table 4. 10: Model Coefficient Results on the Effect of Ethical standards in Utilization of Digital Technology

Model	Unstandardized		Standardized	t	Sig.	
	Coefficients		Coefficients			
	B	Std. Error	Beta			
1	(Constant)	1.795	.624		2.877	.005
	ethical standards	.571	.135	.398	4.245	.000

a. Dependent Variable: utilization of digital technology

From the findings, it was clear that ethical standards had an effect on utilization of digital technology in counselling practices ($\beta=.398$, $p<.05$). This was done through regression model using standardized beta coefficients. This meant that a unit change in the practice of ethical standards would lead to a unit increase in the utilization of digital technology in counselling. An examination of the standard multiple regression model indicated that ethical standards had a slightly weak contribution to the utilization of the digital technology due to the overall aping effect of counsellors perception ($\beta=.237$, $p=.001$). However, the findings were still significant leading to the same conclusion. Therefore ethical standards had an effect on utilization of digital technology.

Additional to this results, a summary model result was presented as in Table 4.11 to indicate the percentage in utilization of digital technology due to ethical standards.

Table 4. 11: Summary Model Results on the Effect of ethical standards on utilization of digital technology

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.398 ^a	.158	.149	.649	.158	18.022	1	96	.000

a. Predictors: (Constant), ethical standards

From the findings, it emerged that ethical standards accounted for 15.8% change in the utilization of digital technology in counselling practices (R square=.158, $p < .05$). An F value that was significant implied that the model was significant and not by chance. These findings laid a firm conclusion that ethical standards had an effect on utilization of digital technology in counselling practices. However, as illustrated from the verbatim below; it was evident that counsellors were in a dilemma on which ethical codes to refer to.

Researcher: How does use of digital technology affect ethical standards in counselling practice?

Respondent1: *Digital technology does impact on counselling ethical standards. Good to mention that current Kenyan ethical code does not have a clause on incorporate digital technology and counselling.*

Respondent2: *Do we have code of conduct or ethical standards?*

Respondent3: *Digital technology can lead to unstructured counselling and if the counsellor is not careful it may interfere with client privacy and generally the counselling process.*

Respondent4: *Most Counselling professions follow American Counselling Association (ACA) codes which is more all-inclusive than Kenyan one.*

Respondent5: *There is need revision of Kenyan ethical standards to include use of digital technology and counselling e.g. e-counselling if at all the ethical standards do exist.*

It's evident from above verbatim on the use of digital technology and its effect on ethical standards in counselling practice that some counsellors felt the existing Kenyan ethical code are more of code of conduct than ethical standards. This is because there is no/limited mention on the use of digital technology and counselling. This leaves the counsellors to refer to other countries codes such as American Counselling Association (ACA) codes

which they perceived as universally accepted. There was a need to have ethical standards that is no longer limited to face – face counselling but also one that appreciated the evolving nature of the counselling profession in regard to digital technology.

There is need to adhere to ethical standard in regard to the changing technological world. When 2005 ACA Code of Ethics was in use, digital technology was not a major concern as it is. The existence of now 2014 American Counselling Association Code of Ethics ensures counsellors adherence to ethical standards when it comes to counselling and digital technology (ACA, 2005).

4.7 Summary Standard Multiple Model Results

The final analysis on the influence of counsellor’s perception, and ethical standards on utilization of digital technology was sought through standard multiple regression model using standardized coefficients. The model coefficient results were presented as shown in Table 4.12 that follows.

Table 4. 12: Influence of selected factors on utilization of digital technology

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.912	.223		4.093	.000
	Counsellors perception	.526	.060	.593	8.843	.000
	Ethical standards	.196	.056	.237	3.532	.001

a. Dependent Variable: utilization of digital technology

The findings in Table 4.12 indicated that counsellors perception had the strongest unique contribution to utilization of digital technology ($\beta=.593$, $p=.000$). Ethical standards also had a unique significant contribution ($\beta=.237$, $p=.001$) though not as strong as counsellors’ perception. These findings implied that a unit or any improvement in the selected factors would lead to an improvement in the utilization of digital technology. The findings were also significant and not by chance established by the t values and their respective significant values. The summary model results in terms of the percentage change in digital utilization due to counsellors’ perception and ethical standards are presented as presented in Table 4.13

Table 4. 13: Model Summary Results on Effect of Counsellor’s Perception and Ethical Standards on Digital Technology

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F	df1	df2	
1	.674 ^a	.454	.445	.71640	.454	51.894	2	95	.000

a. Predictors: (Constant), counsellor perception, ethical standards

The findings in Table 4.13 indicated that both counsellors perception and ethical standards significantly accounted for 45.4% change in utilization of digital technology $F(2, 95)=51.89$, $p=.000$. This implied that out of 100%, the two variables accounted for the approximately 45%. It can therefore be deduced that the two variables have a strong significant contribution to the utilization of digital technology. Thus selected factors have an influence on the utilization of digital technology.

4.8 Interventions to Assist Counsellors Improve on Utilization of Digital Technology in Counselling Practice

The final research objective sought to explore the plans that can be used to help counsellors improve on utilization of digital technology in counselling practices. To achieve this objective, the respondents were engaged on a face to face interview.

This was aimed at coming up with strategies that could be used to help counsellors improve on utilization of digital technology in counselling. Counsellors’ dilemma as seen in below verbatim

Researcher: What interventions can be used to help counsellors improve on utilization of digital technology?

Respondent1: *since there are questions on Kenyan counselling ethical standards, there is a need for its revision especially on the issue of inclusion of digital technology and counselling. This is because, Kenyan counselling code of conduct does not specify if the existing ethical codes applies on one on one client or are the same is applied for e-counselling.*

Respondent2: *Revision of ethics should be specific on issues such as accessibility, anonymity, record keeping of online records, and counselling communication via digital technology, online security, online informed consent, and regulations regarding online counselling among others. This will help deal with dilemma counsellors encounter every day.*

Respondent3: *There is need for counsellors to change their attitude towards digital technology.*

Respondent4: *Counsellors ought to be endowed with funds to allow them embrace digital technology e.g. ensure there is network, phones, and computers.*

Respondent5: *Not all counsellors have technological literacy therefore counsellors should be on the forefront to acquire skills and knowledge required.*

From above verbatim on interventions that can be used to help counsellors improve on utilization of digital technology, counsellors felt that for effective utilization of digital technology in counselling, Kenyan curriculum on counselling should be inclusive of technological components which could enhance and improve training and provision of professional counselling services in Kenya. It would also make it possible for counsellors to be proactive and be able to come up with counselling innovation such as computer software's/programmes for diagnosis, assessment, recordkeeping among others.

Counsellors also felt there was a need for revision of ethical standards to accommodate utilization of digital technology in counselling. This would include issues such as accessibility, anonymity, record keeping of online records, counselling communication via digital technology, online security, online informed consent and suicidal contract forms, and regulations regarding online counselling among others. The counsellors were in a dilemma on whether the current existing ethical standards applied on one on one client or are the same to be applied for e-counselling. As a result they felt there was a need for ethical standards to be revisited to accommodate issues of digital technology in counselling. This would enable counsellors' deal with dilemma (s) and issues that would arise when utilizing digital technology. Previous ethical standards and codes had little or no mention on digital technology since they were formulated with fear and lack of knowledge of the unknown and so emphasized was put on what not to do rather than what to do (Kaplan, 2006).

For this reason, some counselling bodies have seen the need for revision of their ethical standards in response to growing awareness of the potential ethical problems associated with the use of digital technology in counselling profession (Makela, 2009). In addition, counsellors felt the existing Kenyan codes if it exists in KUPCA or any professional body, it's more of code of conduct rather than ethical standards. This is especially because there is no/limited mention on the use of digital technology and counselling which forces the counsellors to refer to other countries codes such as American Counselling Association (ACA) codes which they perceive as universally accepted.

In conclusion, Provision of resources by various universities to university counsellors would result to utilization of digital technology which would motivate the counsellors to acquire the relevant skills and knowledge. As Ajzen (1985) stated in the theory of TPB, behaviour increase when individual perceive that they have more resources and confidence to do a specific task. During the interview, Counsellors confessed lack of enough resources to enable them utilize digital technology in counselling while some institution indicated meagre resources. This implied that provision of enough facilities and resource to universities will enable counsellors utilize digital technology in counselling. Resource in mention here refers to computers, mobile devices such as smart phones, the internet and mobile software applications (apps) and network among others resources. As mentioned earlier, combination of various digital technologies in offering counselling services was more powerful tool unlike in the past where the commonly and effectively used digital technology was CRT which counsellors relied on to complete their counselling task (Sabella, 1996).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The section presented a synopsis of the main results from the research in regard to study objectives, conclusion from the results, recommendations as well as suggestions for further study.

5.2 Summary of the Findings

In regard to the study objectives, the following was the summary of research findings:

5.2.1 Counsellors technological knowledge and skills

Descriptive established that most of the participants preferred use of computer related technology represented with 44.9% and the use of tablet at 30.6%. However, despite the dynamic shift of technology from the old information communication, most counsellors had embraced only computer related technology and to some extent use of tablets and mobile phones. Findings also showed that the most effectively utilized digital technology as indicated by, 30(30.6%) of the counsellors was the use of computer related technology and mobile phones while the second was the use of mobile phones/smart phones, 24(24.5%). This had the implication that counsellors had knowledge and skills in digital technology.

5.2.2 Influence of Counsellors' Perception on Utilization of Digital Technology

It emerged that counsellor's perception towards digital technology in counselling influenced its utilization in counselling practice as indicated by a mean of 4.61. Pearson Results from the correlations showed a significant relationship among counsellor's perception and utilization of digital technology ($r=.522$, $p<05$). Simple linear regression also indicated that counsellor's perception had an influence on utilization of digital technology ($\beta=.522$, $p=.000$) and accounted for a 27.2% variation in utilization of digital technology in counselling practices. The final analysis on the influence of counsellor's perception, and ethical standards on utilization of digital technology was sought through standard multiple regression model using standardized coefficients. The findings indicated that counsellors perception had the strongest unique contribution to the utilization of digital technology ($\beta=.593$, $p=.000$).

5.2.3 Influence of Ethical Standards on Utilization of Digital Technology in Counselling Practice

The findings revealed some highly practiced ethical standards by the counsellors. These included beneficence (M=3.07), non-maleficence (M=3.20), justice (M=3.02), fidelity (M=3.14), confidentiality (M=3.29) and client privacy (M=3.26). These were the practices that increased the mean on ethical standards. In line with these, correlation analysis a positive significant, though low correlation between these standards and utilization of digital technology in counselling practices ($r=.398$, $p=.000$). Furthermore, simple linear regression model revealed that ethical standards had an effect on utilization of digital technology ($\beta=.398$, $p=.000$) and accounted for 15.8% significant variation in the utilization of digital technology in counselling practices. Therefore, the conclusion is that ethical standards had an effect on utilization of digital technology in counselling practices. Analysis on the influence of counsellor's perception, and ethical standards on utilization of digital technology was sought through standard multiple regression model using standardized coefficients. The findings indicated that ethical standards had a unique significant contribution ($\beta=.237$, $p=.000$) though not as strong as counsellors' perception..

5.2.4 Model Summary Results on Effect of Counsellors Perception and ethical standards on Digital Technology

The findings indicated that both counsellors perception and ethical standards significantly accounted for 45.4% change in utilization of digital technology $F(2, 95)=51.89$, $p=.000$. This implied that out of 100%, the two variables accounted for the approximately 45%. It would therefore be deduced the two variables have a strong important effect on utilization of digital technology. Thus selected factors have an influence on the utilization of digital technology.

5.2.5 Strategies used to help Counsellors Improve on Utilization of Digital Technology

For effective utilization of digital technology in counselling, counsellors who participated in the interview stated that there was a need for Kenyan counselling curriculum to be inclusive of technological components. This would ensure counselling training institutions are providing learners with resources that would enable utilization of digital technology in counselling. Secondly; revision of ethical standards to accommodate e-counselling, record keeping of e-counselling clients, and other counselling tasks since counsellors felt the existing Kenyan ethical code are more of code of conduct than ethical standards and finally,

counsellors need to change on their attitude towards digital technology utilization in counselling and seek to get enough skills and knowledge.

5.3 Conclusions

1. Counsellors have some understanding on employment of digital technology in counselling, researcher also found out counsellors have knowledge and skills in utilization of digital technology such as computers, tablet, mobile phone and social media sites. However, there is still much required to enable them be competent and enhance how to interpret and check agreements often hidden in settings of digital technologies.
2. Counsellors' perception has influence on utilization of digital technology in counselling. This therefore concludes that counsellor's perception has a positive effect on utilization of digital technology in counselling among KUPCA Members.
3. From the findings, it appeared most of the counsellors were in a dilemma whether there were Kenyan ethical standards or code of conduct. Due to this dilemma the counsellors were able to point out possible moral problems connected with utilization of digital technology in counselling. Therefore, revision of ethical standards will go a long way to facilitate utilization of digital technology
4. University should empower counsellors with enough resource to enable them utilize digital technology in counselling since from the research findings counsellors already have knowledge and skills on utilization of digital technology.

5.4 Recommendations

1. There is need for the Universities to recognize the importance of digital technology in provision of counselling services and include digital technology components in the counselling curriculum training that will increase counsellors competency.
2. There is a need for counsellors who not techno savvy to change their attitude and perception towards utilization of digital technology in counselling
3. There is a need for the Kenyan Counselling bodies such as KUPCA to revise the existing ethical code to include issues such as accessibility, anonymity, record keeping of online records, and counselling communication via digital technology, online security, online informed consent, and regulations regarding online counselling practice.
4. Universities should consider empowering counsellors with resources to enable utilization of digital technology since they have knowledge and skills. This would result to increased efficiency and competency of counselling services offered.

5.5 Suggestions for Further Research

This research paper suggested subsequent area for extra study which included;

- i. Impact of e-counselling in comparison to customary eye to eye counselling among practicing counsellors in Kenyan.
- ii. The role of digital technology in the counselling relationship among practicing counsellors in Kenya
- iii. Factors influencing lack of counselling innovations among practicing counsellors in Kenya in comparison to other professions.

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APPENDICES

Appendix 1: Introduction Letter

RUNNOH GORETTI

P.O BOX 75

MURANGA

Date: 20TH March 2017

Dear Madam/Sir,

RE: REQUEST FOR INFORMATION FOR ACADEMIC RESEARCH

I am a student in Kenya Methodist University undertaking Masters of Arts in Counselling. I am required to undertake a research in my area of study. My research topic is on **“FACTORS INFLUENCING UTILIZATION OF DIGITAL TECHNOLOGY IN COUNSELLING: A CASE OF KENYA UNIVERSITIES PROFESSIONALS COUNSELLORS ASSOCIATION”**

I kindly request you to honestly provide information as required in the questionnaire.

The information gathered will be treated with utmost confidentiality.

Thank you.

RUNNOH GORETTI WANGARI

Appendix 2: Questionnaire for Counsellors

INSTRUCTIONS

Please read each statement/question carefully and tick where appropriate

Information gathered was be treated with utmost confidentiality

SECTION A: BACKGROUND INFORMATION

1. Preferred code for your Institution

2. Years of service as a professional counsellor

3. Gender

Male Female

4. Please select the age bracket you belong

- 20-30
 30-40
 40-50
 50-60
 60 and above

5. What is your highest academic qualification

- PHD
 Masters
 Bachelors
 Diploma

Any other Specify

SECTION B: COUNSELLORS KNOWLEDGE AND SKILLS ON DIGITAL TECHNOLOGY IN COUNSELLING

PART 1

1. According to you what do you understand by the term digital technology

2. (a) Which of the following digital technology do you frequently use

- i. Computer Related Technology (Computer Software Ms Word, Excel, PowerPoint, Internet e.g. Email(s)
- ii. Mobile phone/Smart phones (Chats - whatsapp, face book etc)
- iii. Tablets
- iv. Television
- v. Radio
- vi. Any other (specify) _____

(b) State the which of the above digital technology can effectively be utilized in counselling

3. According to you what do you think is the role of digital technology in counselling _____

SECTION C: COUNSELLOR'S PERCEPTION ON UTILIZATION OF DIGITAL TECHNOLOGY IN COUNSELLING

Please indicate in each section of these statements by the use of a tick whether you:

Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D), OR Strongly Disagree (SD)

		SA	A	UD	D	SD
1	Digital technology has relevance in counselling					
2	Use of digital Technology in counselling increase client confidence					
3	Use of digital technology in counselling leads to breaching any counselling ethical code					
4	Counsellor perception/attitude/resistance on digital technology in counselling influences its utilization in counselling practice					
5	Digital technological skills are important to professional counsellors					
6	Technological skills and knowledge should be included in counselling curriculum					
7	Learning counsellors education programmes should include training on use of digital technology in counselling					
8	Use of digital technology in counselling was increase efficiency and competency in the counselling profession					
9	Integration and utilization of digital technology in counselling was make the Counselling practice a competitive profession					
10	Technological skills/knowledge are important in accomplishing various counselling tasks					
11	A lack of incorporating digital technology in counselling services in our institutions of learning makes it difficult for counselling innovation					

12	Kenyan Counselling Act has provision on the use of Digital technology in counselling					
13	Counsellors prefer traditional face to face method of counselling					

SECTION D: ETHICAL ISSUES RELATING TO USE OF DIGITAL TECHNOLOGY IN COUNSELLING

To what extent do the following ethical issues influence utilization of digital technology in counselling practice? **Never, Almost never, Sometimes, Almost every time and Every time**

		Never	Almost never	Sometimes	Almost every time	Every time
1	Client Autonomy (respect for individual)					
2	Beneficence (responsibility for promoting what is good for the client)					
3	Non-maleficence (Avoiding doing harm to a client)					
4	Justice (being fair)					
5	Fidelity (honoring the promises upon which the trust between the client and counsellor is founded)					
6	Informed consent (mutual understanding about therapy with a client)					
7	Confidentiality					
	Client Privacy					

SECTION E: UTILIZATION OF DIGITAL TECHNOLOGY IN COUNSELLING

Please indicate in each section of this question by the use of a tick whether you:

Always (A), Often (O), Sometimes (S), Rarely (R), Never (N)

(a) I always accomplish the following counselling tasks by use of digital technology.

		A	O	S	R	N
1	Client Appointment (Scheduling and rescheduling)					
2	Marketing Counselling Services					
3	Counselling Supervision					
4	Evaluating Screening/Assessment clients Issues					
5	Monitoring and post therapeutic follow-up					
6	Utilizing Counselling Intervention					
7	Record Keeping					
8	Counselling Administrative work					
9	Client Referral					
10	Client Intake					
11	Counselling Structuring					
12	Establishing Rapport					
13	Counselling Consultation,					
14	Individual and Group therapy					
15	Counselling Training					

Appendix 3: Interview Schedule for Counsellors

Gender_____

Counsellors Code_____

UTILIZATION OF DIGITAL TECHNOLOGY IN COUNSELLING

1. What is your view on use of digital technology in counselling practice
2. To what extent do you use digital technology in counselling?
3. How does use of digital technology in counselling influence effectiveness of counselling services
4. Explain how use of digital technology can affect ethical standards in counselling practice
5. What are some of the challenges you are experiencing in using digital technology in counselling
6. What strategies can be used to help counsellors improve on utilization of digital technology

Appendix 4: Research Permit



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: 020 400 7000,
0713 788787,0735404245
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/18/78901/20825**

Date: **18th January, 2018**

Goretti Wangari Runnoh
Kenya Methodist University
P.O. Box 267- 60200
MERU.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Selected factors influencing utilization of modern technology in counselling: A case of Kenya Universities Professional Counsellors Association(KUPCA) in Kenya,”* I am pleased to inform you that you have been authorized to undertake research in **all Counties** for the period ending **17th January, 2019.**

You are advised to report to **the Vice Chancellors of selected Universities, the County Commissioners and the County Directors of Education, all Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.


BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The Vice Chancellors
Selected Universities.

**THIS IS TO CERTIFY THAT:
MISS. GORETTI WANGARI RUNNOH
of KENYA METHODIST UNIVERSITY
(KEMU), 75-10200 MURANGA, has been
permitted to conduct research in All
Counties**

**Permit No : NACOSTI/P/18/78901/20825
Date Of Issue : 18th January,2018
Fee Received :Ksh 1000**

**on the topic: *SELECTED FACTORS
INFLUENCING UTILIZATION OF MODERN
TECHNOLOGY IN COUNSELLING: A CASE
OF KENYA UNIVERSITIES PROFESSIONAL
COUNSELLORS ASSOCIATION(KUPCA) IN
KENYA***

**for the period ending:
17th January,2019**

.....
**Applicant's
Signature**



.....
**Director General
National Commission for Science,
Technology & Innovation**

Appendix 5: Introductory Letter From Kenya Methodist University



KENYA METHODIST UNIVERSITY

P. O. BOX 267 MERU - 60200, KENYA
TEL: 254-064-30301/31229/30367/31171

FAX: 254-64-30162
EMAIL: INFO@KEMU.AC.KE

4TH DECEMBER, 2017

Runnoh Goretti Wangari
MCO-3-3758-3/2014

Dear Runnoh,

SUBJECT: ETHICAL CLEARANCE OF A MASTERS' RESEARCH THESIS

Your request for ethical clearance for your Masters' Research Thesis titled "Selected Factors Influencing Utilization of Modern Technology in Counselling: A Case of Kenya Universities Professional Counsellors Association (KUPCA) in Kenya" has been granted to you in accordance with the content of your Thesis proposal.

As Principal Investigator, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the Thesis.
2. Changes, amendments, and addenda to the protocol or the consent form must be submitted to the SERC for re-review and approval **prior** to the activation of the changes. The Proposal number assigned to the Thesis should be cited in any correspondence.
3. Adverse events should be reported to the SERC. New information that becomes available which could change the risk: benefit ratio must be submitted promptly for SERC review. The SERC and outside agencies must review the information to determine if the protocol should be modified, discontinued, or continued as originally approved.
4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by subjects and/or witnesses should be retained on file. The SERC may conduct audits of all study records, and consent documentation may be part of such audits.

5. SERC regulations require review of an approved study not less than once per 12-month period. **Therefore, a continuing review application must be submitted to the SERC in order to continue the study beyond the approved period.** Failure to submit a continuing review application in a timely fashion will result in termination of the study, at which point new participants may not be enrolled and currently enrolled participants must be taken off the study.

Please note that any substantial changes on the scope of your research will require an approval.

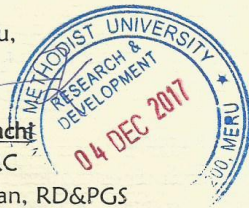
Thank You,



Dr. Wamacht

Chair, SERC

Cc: Dean, RD&PGS



Appendix 6: Acknowledgement Letter - Kisii University



Telephone: 020 2610479

Email: adregistrar@kisiiversity.ac.ke

KISII UNIVERSITY

OFFICE OF THE REGISTRAR (ADMINISTRATION)

P. O. Box 408-40200

KISII, KENYA.

www.kisiiversity.ac.ke

KSU/ADMIN/1/12/vol. 2 (12)

15th February, 2018

Ms. Runnoh Goretti Wangari
Student –Kenya Methodist university
ADMISSION NO. MCO-3-3758-3/2014

Dear Ms. Wangari,

RE: RESEARCH AUTHORIZATION

Reference is made to your letter dated 22nd January, 2018 on the above subject matter.

This is to inform you that your request for research authorization to carry out your research work has been approved by the Vice Chancellor.

Yours sincerely,


Dr. Nyenze C. M, PhD
REGISTRAR (ADMINISTRATION)

Ct: Vice-Chancellor – to note in file

NCM/go

Appendix 7: Acknowledgement Letter - Egerton University

EGERTON

P.O. Box 536 -20115
Egerton, Kenya



UNIVERSITY

Tel: +254-51-2217801/808
+254-51-2217891/2
Cell: 0708489256
0775015388
Fax: +254-51-2217942
E-mail: dvcre@egerton.ac.ke

**OFFICE OF THE DEPUTY VICE - CHANCELLOR
RESEARCH AND EXTENSION**

EU/DVCRE/089

23rd February, 2018

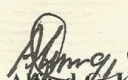
Runnoh Gorette Wangari
Kenya Methodist University
P. O. Box 267-00200
Nairobi

RE: AUTHORITY TO COLLECT DATA AT EGERTON UNIVERSITY

Reference is made to your letter dated 22nd January, 2018 requesting for authority to collect data at Egerton University for as partial fulfilment of a Master of Arts Degree in the study titled: *'Factors Influencing Utilization of Modern Technology in Counseling: A Case of Kenya Universities Professional Counselors Association (KUPCA).'*

Authority is hereby granted for you to collect data from Student Counselors at Egerton University.

It is noted that this research is purely for academic purposes and will not be used otherwise. Upon completion of the study please ensure that you provide a copy of the report for our retention.


Prof. Alfred C. Kibor, PhD
Ag. Deputy Vice-Chancellor [Research & Extension]

cc. DVC/AA
Dean of Students

ACK/po

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Appendix 8: Acknowledgement Letter - Murang'a University of Technology



MURANG'A UNIVERSITY OF TECHNOLOGY

Office of the Vice Chancellor

Cell : +254-711 843 967

E-mail : vc@mut.ac.ke

: info@mut.ac.ke

Website : www.mut.ac.ke

P.O. Box 75 - 10200

Murang'a, Kenya

Ref: MUT/EXT-Com/VC/22/2017/Vol.2 (33)

Date: 2nd March, 2018

Runnoh Goretti Wangari
Kenya Methodist University
P.O. Box 267-600200
Nairobi.

Dear Madam,

AUTHORITY TO CARRY OUT RESEARCH

Reference is made to your letter dated 22nd January, 2018 on the above subject matter.

This is to inform you that your request has been approved for you to carry out research at Murang'a University of Technology. You are however required to make appointments with the University Counsellors.

Thank you.

Prof. Dickson M. Nyariki, Ph.D.

VICE-CHANCELLOR

All correspondence should be addressed to the Vice Chancellor

Appendix 9: Acknowledgement Letter - University of Nairobi



UNIVERSITY OF NAIROBI
OFFICE OF THE DEPUTY VICE - CHANCELLOR
(Research, Production & Extension)
Prof. Lucy W. Irungu B.Sc., M.Sc., Ph.D.

P.O. Box 30197-GPO.
00100, Nairobi-Kenya
Telephone: +254-20-2315416 (DI), 318262

Fax: 0202317251
Email: dvrpe@uonbi.ac.ke

UON/RPE/3/5

February 21, 2018

Runoh Goretti Wangari
Kenya Methodist University
P.O. Box 267-600200
NAIROBI

Dear Wangari,

AUTHORITY TO COLLECT DATA AT THE UNIVERSITY OF NAIROBI

Reference is made to your request dated January 22, 2018 to collect data at the University of Nairobi on a research entitled: "*Factors Influencing Utilization of Modern Technology in Counselling: A Case of Kenya Universities Professionals Counsellors Association (KUPCA)*".

I write to inform you that your request has been approved.

You are however required to share the findings of your study with the University of Nairobi by depositing a copy of your research findings with the Director, Library and Information Services on completion of your study.

LUCY W. IRUNGU
DEPUTY VICE-CHANCELLOR
(RESEARCH, PRODUCTION AND EXTENSION)
&
PROFESSOR OF ENTOMOLOGY

Copy to: Vice-Chancellor
DVC, A&F
DVC, AA
DVC, SA
Registrar Administration
Director, Library & Information Services



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Appendix 10: Acknowledgement Letter - Dedan Kimathi University of Technology



DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY

NYERI – MWEIGA ROAD, P.O. BOX 657, 10100 – NYERI, KENYA
Mobile: 0719311223, Email: dvcrtmcl@dkut.ac.ke

Office of the Deputy Vice Chancellor, RTMCL

Ref: DEKUT/DVC-RTMCL/RE/03/117

Date: 19th March, 2018

Ms. Runnoh Goretti Wangari
Kenya Methodist University
P.O Box 267-00200
NAIROBI

Dear Ms. Runnoh,

RE: AUTHORIZATION TO COLLECT RESEARCH DATA AT DeKUT

Your letter dated 22nd January, 2018 refers.

Approval has been granted to you to collect data at Dedan Kimathi University of Technology for your research titled *'Factors Influencing Utilization of Modern Technology in Counselling: A case of Kenya Universities Professionals Counsellors Association (KUPCA)*. Your respondents will be the University student counsellors.

You are expected to submit a hard copy and a soft copy of your research report to the Office of the Registrar, RTMCL once your research is completed.


Prof. (Eng.) P.M Wambua, FIEK

Deputy Vice Chancellor – Research, Technology Management and Community Linkages

Appendix 11: Acknowledgement Letter - The Technical University of Kenya



THE TECHNICAL UNIVERSITY OF KENYA

Haile Selassie Avenue, P. O. Box 52428, Nairobi, 00200, Tel: +254 (020) 3343672, 2219929, 0732388765,
E-mail: vc@tukenya.ac.ke, Website: www.tukenya.ac.ke

Office of the Vice-Chancellor

Prof. Dr.-Ing. Francis W. O. Aduol

5th March, 2018

Runnoh Goretti Wangari,
Admission Number MCO-3-3758-3/2014
Kenya Methodist University,
P. O. Box 267-600200,
NAIROBI.

"BY HAND DELIVERY"


Cell phone: 0724742281

RE: RESEARCH AUTHORIZATION

We are in receipt of your letter dated 22nd January, 2018 on the above-captioned matter and note the contents thereof.

Consequently, we are pleased to inform you that your request to conduct research in our University in the area of **"Factors influencing utilization of Modern Technology in Counseling. A Case Kenya Universities Professionals Counsellors Association (KUPCA)"** has been granted, accordingly.

We look forward to according you any assistance that you may need to make the said research a success.


Ruth Kirwa (Mrs.)
University Secretary
FOR: VICE-CHANCELLOR

Copy to: Vice-Chancellor
Deputy Vice-Chancellor, Academic, Research and Students (ARS)

RKK/vnm

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