

**STUDENT-SUPERVISOR INTERACTION IN GRADUATE STUDIES IN
PUBLIC UNIVERSITIES IN KENYA**

BY

KOSGEI PETER KIPCHUMBA

**A THESIS SUBMITTED TO THE SCHOOL OF EDUCATION,
DEPARTMENT OF EDUCATIONAL FOUNDATIONS IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
DOCTOR OF PHILOSOPHY DEGREE IN
SOCIOLOGY OF EDUCATION**

MOI UNIVERSITY

2021

DECLARATION

Declaration by the Candidate

This research thesis is my original work and has not been presented for a degree in any other University. Wherever contributions of others were involved, every effort has been made to indicate this clearly, with due reference to the literature and acknowledgement of collaborative work. No part of this thesis may be reproduced without prior permission of the author and or Moi University.

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

Kosgei Peter Kipchumba

EDU/D.PHIL-PGF/1010/15

Declaration by Supervisors:

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

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

Dr. Felicity W. Githinji

Department of Educational Foundations
Moi University, Eldoret.

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

Dr. Kefa L.Simwa

Department of Educational Foundations
Moi University, Eldoret.

DEDICATION

To my family who always gave me support and encouragement hence the impetus to undertake and complete my PhD, My wife Grace and our children Kevin, Brian, Alphine, Alka and Adelaide.

To the department of Educational Foundations of Moi University for their mentorship and moral support throughout my academic pursuit.

ACKNOWLEDGEMENTS

I owe thanks, gratitude, and acknowledgements to many individuals whom in some way have some part in my pursuit of a doctoral degree and persistence to completion. This Ph D thesis is a testimony to the relational mentorship and guidance that I have continuously received from the many inspirational “others”, some of whom I will mention by their names.

First and foremost I thank the Almighty God for giving me the strength and good health to reach this far, on my own I could not have made it. My heartfelt appreciation also goes to my supervisors Dr. Felicity W. Githinji and Dr. Kefa L. Simwa for their insightful supervision and ceaseless devotion towards my research thesis. I appreciate your guidance and the confidence you had in me, I learnt a lot from your professional insights. I attribute the quality and depth of this research thesis experience to you as my supervisors. The synergy of the interaction between you and me, the depth of your own contemplations, the mentoring of this emergent researcher and your guidance of this thesis has been transformative. To the very end, only a deep and deepening consideration would suffice.

To the management of Moi University, especially the Dean, School of Education Professor Changach J. Koskei for his tireless effort in ensuring that the PhDs programmes in the department began and to all my lecturers for socializing, mentoring and teaching me the various courses in the graduate school. I say thank you for the big role you have played in developing me academically, spiritually, socially and morally, God bless you abundantly; to my colleagues, Joan, Richard, Margaret, Joseph, Beth, Beatrice, Robert, Sam, Johnstone, George, Arthur and Michael in the academic pursuit for the understanding, encouragements and social warmth throughout the academic journey and moments of crisis. Your socialization and friendship made the world a

beautiful experience. My appreciation also goes to the graduate students and supervisors from the faculty of education in Moi University, University of Eldoret and Kisii universities in Kenya who gave me the required information to make the study complete. Gratitude to Wilson K. Barsoi for editing this thesis. I could not list all your names here but you will always be in my heart and mind forever.

ABSTRACT

Student-supervisor interaction is an important aspect in graduate studies supervision. This is because when something goes wrong with the interaction process, many aspects of the graduate student's life affects completion time. The purpose of this study was to examine at student-supervisor interaction in graduate studies in public universities in Kenya. The study sought to: evaluate supervisory styles used in student-supervisor interaction, assess the characteristics of student-supervisor interaction, establish the experiences of student-supervisor interaction and to examine practices that would improve student-supervisor interaction in graduate studies. The study was guided by functionalist theory of education, interpersonal theory and Socialization theory. The study adopted descriptive survey research design which enabled the researcher to explore and describe student-supervisor interaction. The target population in this study were 310 participants comprising of 60 supervisors and 250 supervisees from the school of education. The study used stratified sampling to sample universities, simple random sampling to sample graduate students and heads of departments, while purposive sampling was used to sample the supervisors and Deans. The study employed the use of questionnaires and interview schedules to collect data for the study. Data were presented using frequency tables. The study used a Cronbach's Alpha coefficient of at least 0.7 as the threshold of reliability. The study findings indicated that the 'colleague in training' style was widely used as revealed by 128(53.3%) of the graduate students and 29(52.7%) of the supervisors. Further, 28(50.9%) of the supervisors and 112(46.7%) of the graduate students agreed that professionalism and respect was exercised. Also, 42(76.4%) of the supervisors and 144(60%) of the graduate students held that the universities could deal with challenges facing student-supervisor interaction at a greater extent. The findings also revealed that the universities should strictly adhere to rules and regulations governing graduate supervision process 128(53.3%) of the graduate students and 39(70.9%) of the supervisors agreed. Further, qualitative results from deans and heads of Departments on supervisory styles indicated that colleagues in training was mainly preferred style used in graduate studies. Deans and heads of departments reported that rules and regulations in graduate studies should be adhered to. The study concluded that supervisors were allocated more graduate students than the rules and regulations allowed affecting graduate students thesis completion time. Policies guiding graduate student-supervisor interaction should be revised to meet up-to-date challenges facing student-supervisor interaction. The universities should provide seminars, workshops and trainings to both supervisors and graduate students to enhance student-supervisor interaction. The findings of the study will be useful for the university managements in understanding the student-supervisor interaction in graduate studies. The findings will also provide information to interested researchers in related topics in graduate studies.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xi
LIST OF FIGURES.....	xiii
ABBREVIATIONS AND ACRONYMS.....	xiv
CHAPTER ONE: INTRODUCTION TO THE STUDY	1
1.1 Introduction	1
1.2 Background of the Study	1
1.3 Statement of the Problem	12
1.4 Purpose of the Study.....	14
1.5 Objectives of the Study	14
1.6 Research Questions	15
1.7 Justification of the Study.....	15
1.8 Significance of the Study.....	16
1.9 Assumptions of the Study.....	17
1.10 Scope of the Study.....	18
1.11 Limitations of the Study	18
1.12 Theoretical Framework	19
1.12.1 Socialization theory.....	19
1.12.2 Functionalist theory of education.....	24
1.12.3 Interpersonal theory	30
1.13 Conceptual Framework	32
1.14 Operational Definition of Terms	34
CHAPTER TWO: REVIEW OF RELATED LITERATURE	36
2.0 Introduction	36
2.1 Supervisory Styles used to Enhance Student-Supervisor Interaction.....	36
2.1.1 Concept of student-supervisor interaction	39
2.1.2 Graduate national policy on research and training in Kenya.....	41
2.1.3 The supervisor and the graduate student.....	43

2.1.4 Supervision.....	44
2.1.5 Graduate rules and regulations of Moi University.....	47
2.1.6 Function of thesis research supervisor at the University of Eldoret	49
2.2 Characteristics of Student-Supervisor Interactions	50
2.3 Experiences of Student-Supervisor Interactions	64
2.4 Practices that Would Improve Student-Supervisor Interaction	70
2.5 Research Gap.....	73
2.6 Summary of Reviewed Literature	74
CHAPTER THREE: RESEARCH METHODOLOGY	75
3.1 Introduction	75
3.2 Research Design	75
3.3 Research Philosophy	77
3.4 The Study Area.....	78
3.4.1 Justification for the study area	79
3.4.2 Moi University	80
3.4.3 University of Eldoret.....	81
3.5 Target Population	82
3.6 Sample Size and Sampling Procedure.....	83
3.6.1 Selection of the public universities: sampling procedure	83
3.6.2 Sample Size Determination.....	84
3.6.3 Sample Size for Supervisors	84
3.6.4 Sample size for graduate participants	85
3.7 Research Instruments for Data Collection.....	86
3.7.1 Questionnaires.....	86
3.7.2 Interview schedule	88
3.8 Pilot Study	88
3.8.1 Validity of research instruments	89
3.8.2 Reliability of research instruments	90
3.9 Data Collection Procedures	91
3.10 Data Analysis.....	92
3.10.1 Quantitative Analysis	92
3.10.2 Qualitative Data	92
3.11 Ethical Considerations.....	93

CHAPTER FOUR: DATA PRESENTATIONS, ANALYSIS, INTERPRETATION AND DISCUSSIONS	94
4.0 Introduction	94
4.0.1 Response rate	94
4.0.2 Demographic information	95
4.0.3 Demographic information of the graduate students	95
4.1 The Supervisory Styles used in Student-Supervisor Interaction in Public Universities in Kenya	96
4.1.1 Supervisors opinion on supervisory styles used in student-supervisor interaction in public universities in Kenya	102
4.1.2 Heads of departments opinion on supervisory styles used in public universities in Kenya.....	109
4.1.3 Deans opinion on supervisory styles used in public universities in Kenya ..	110
4.2 The Characteristics of the Student-Supervisor Interaction in Public Universities in Kenya.....	112
4.2.1 Heads of departments opinion on the characteristic of the student-supervisor interaction in public Universities in Kenya	130
4.2.2 Dean’s opinion on the characteristic of the student-supervisor interaction in public universities in Kenya.....	133
4.2.3 Supervision characteristics according to supervisors.....	136
4.2.4 Supervision characteristics according to graduate students.....	140
4.3 Experiences of Student-Supervisor Interaction in Public Universities in Kenya	144
4.3.1 What students should do to enhance interactions to complete thesis writing within the time	152
4.3.2 Extent that university enhances supervisor-interactions in graduate studies in Kenya	154
4.3.3 Heads of departments opinion on experiences and challenges facing student-supervisor interactions in public universities in Kenya	158
4.3.4 Deans opinion on experiences and challenges facing student-supervisor interactions in public universities in Kenya.....	160
4.4 Practices that would Improve Student-Supervisor Interaction in Public Universities in Kenya	163
4.4.1 Graduate students opinion on practices that would improve student-supervisor interaction in public universities in Kenya	163

4.4.2 Heads of department opinion on practices that would improve student-supervisor interaction in Public Universities in Kenya.....	173
4.4.3 Deans opinion on practices that would improve student-supervisor interaction in public universities in Kenya	174
CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	176
5.0 Introduction	176
5.1 The Supervisory Styles used in student-supervisor Interaction in Public Universities in Kenya	176
5.2 The Characteristics of the Student-Supervisor Interaction in Public Universities in Kenya.....	177
5.3 Experiences of Student-Supervisor Interactions in Public Universities in Kenya	178
5.4 Practices that would Improve Student-Supervisor Interaction in Public Universities in Kenya	178
5.5 Conclusions	179
5.6 Recommendations	181
5.7 Recommendations for Further Research	182
REFERENCES	183
Appendix I: Letter of Introduction.....	198
Appendix II: Questionnaire For Post-Graduate Participants	199
Appendix III: Questionnaire for Supervisor	204
Appendix IV: Interview Schedule for the Deans and Heads of Departments	208
Appendix V: List of Public Universities in Kenya	209
Appendix VI: Research Permit	210
Appendix VII: Research Authorization	211
Appendix VIII: Map of Uasin Gishu County, Kenya	212

LIST OF TABLES

Table 3.1 Completion Rate.....	80
Table 3.2: Target Population: Supervisors	83
Table 3.3: Sample Frame of the Participants.....	85
Table 3.4 Reliability Results	91
Table 4.1: Response Rate	95
Table 4.2: Demographic Information of Supervisors.....	95
Table 4.3: Demographic Information of the Graduate Students	96
Table 4.4: Supervisory Styles used in student-supervisor Interaction	97
Table 4.5: Supervisors Opinion on Supervisory Styles used in student-supervisor Interaction in Public Universities in Kenya.....	103
Table 4.6: Students Opinions on the Characteristic in the Student-Supervisor Interaction in Public Universities in Kenya.....	113
Table 4.7: Supervisors Opinions on the Characteristic of the Student-Supervisor Interaction in Public Universities in Kenya.....	119
Table 4.8: Supervision Characteristics according to Supervisors	136
Table 4.9: Supervision Characteristics according to Graduate Students.....	140
Table 4.10: University Ability to Deal with the Student-Supervisor Interaction Experience and Challenges in Case of Complain.....	144
Table 4.11: Supervisors' Opinions on University Ability to Deal with the Student- Supervisor Interaction Experience and Challenges in Case of Complain	146
Table 4.12: Graduate Students' Opinions on University Ability to Deal with the Student-Supervisor Interaction Experience and Challenges in Case of Complain	149
Table 4.13. What would be done by graduate students to enhance the Student- Supervisor Interaction to curb resultant delays in thesis writing	152
Table 4.14. What would be done to enhance the Student-Supervisor Interaction to complete the thesis writing within the time.....	153
Table 4.15: Extent that University Enhances Supervisor-Interaction in Graduate Studies in Kenya.....	154
Table 4.16: Supervisors' Opinions on the Extent that University Enhances Student- Supervisor-Interaction in Graduate Studies in Kenya	156

Table 4.17: Graduate Students opinion on the Practices	164
Table 4.18: Supervisors opinion on the practices.....	168

LIST OF FIGURES

Figure 1.1: Conceptual Frameworks33

ABBREVIATIONS AND ACRONYMS

- CATS** : Credit Accumulation and Transfer Scheme
- CMC** : Computer-Mediated Communication
- CUE** : Commission for University Education
- DBA** : Doctor of Business Administration
- ECTS** : European Credit Transfer and Accumulation System
- FGDs** : Focus Group Discussions
- HOD** : Head of Department
- ICT** : Information and Communication Technology
- IM** : Instant Messaging
- ISO** : International Organization of Standardization
- JKUAT**: Jomo Kenyatta University of Agriculture and Technology
- KU** : Kisii University
- LIA** : Letter of Interim Authority
- MU** : Moi University
- NACOSTI**: National Council for Science, Technology and Innovation
- NGO** : Non Governmental Organization
- PhD** : Doctor of Philosophy
- SPSS** : Scientific Package for Social Scientists
- U.S.A** : United States of America
- UoE** : University of Eldoret

CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1 Introduction

The study aimed at examining the student-supervisor interaction in graduate studies in public universities in Kenya. This chapter carried the introduction to the study and was concerned with defining the problem, the purpose of the study, objectives of the study, research questions, justification of the study, the significance of the study, the scope of the study, limitations of the study, theoretical framework, conceptual framework, operational definition of terms and assumptions of the study on which it was based to established.

1.2 Background of the Study

There is no single definition of the term ‘graduate’ although it is often used to describe further study undertaken by those who already have a first degree (House, 2010). It is frequently used to refer to master or doctoral studies, but it also includes certificates and diplomas which are taught to a more academically demanding standard than undergraduate certificates and diplomas (Schofield & Dismore, 2010). A distinction is sometimes made between courses which are graduate in level which is to say that they are more advanced than undergraduate courses with similar subject matter and courses which are graduate only in the sense that they are studied by people who already hold degrees (‘graduate in time’).

Therefore, graduate education or graduate education involves learning and studying for academic or professional degrees, academic or professional certificates, academic or professional diplomas, or other qualifications for which a first or bachelor's degree generally is required, and it is normally considered to be part of higher education (Ryan, & Zuber-Skerritt, 2017). The organization and structure of graduate education

vary in different countries, as well as in different institutions within countries (Grix, 2010).

Masters courses vary enormously in terms of their function and intended outcomes. Many courses aim to extend graduate students' depth of knowledge in a particular field, building on an area in which they already have the expertise, usually gained at undergraduate level (Altonji, Arcidiacono, & Maurel, 2016). Others are essentially conversion courses, open to those with little or no prior knowledge of the subject, offering an education similar in knowledge to that of a final year undergraduate course but broadening students' academic abilities and engagement with research.

Doctorates are often further divided into academic and professional doctorates. An academic doctorate can be awarded as a Doctor of Philosophy degree (from Latin Doctor Philosophiæ; PhD or D.Phil.) or as a Doctor of Science degree (from Latin Doctor Scientiæ; D.Sc.). The Doctor of Science degree can also be awarded in specific fields, such as a Doctor of Science in Mathematics degree (from Latin Doctor Scientiarum mathematic arum; D.Sc.Math.), a Doctor of Agricultural Science degree (from Latin Doctor Scientiarumagrariarum; D.Sc.Agr.), a Doctor of Business Administration degree (D.B.A.), etc. (Craft, Augustine-Shaw, Fairbanks, & Adams-Wright, 2016).

In some parts of Europe, doctorates are divided into the Doctor of Philosophy degree or "junior doctorate", and the "higher doctorates" such as the Doctor of Science degree, which is generally awarded to highly distinguished professors. A doctorate is a terminal degree in most fields. In the United States, there is little distinction between a Doctor of Philosophy degree and a Doctor of Science degree. In the UK, Doctor of Philosophy degrees are often equivalent to 540 CATS credits or 270 ECTS European

credits, but this is not always the case as the credit structure of doctoral degrees is not officially defined (Christianson, Elliot, & Massey, 2015).

Student-supervisor interaction in graduate studies in public universities in Kenya has drawn a lot of interest in recent research in higher education institutions globally (Mukhwana, Oure, Too, & Some, 2016). When something goes wrong with this key interaction, many aspects of a student's life, including livelihood, work status, study status, career prospects, and in turn, mental health gets affected (Li and Seale, 2007). The graduate student experience revolves to a large extent around the interaction between a graduate student and his/her supervisor (Mainhard, van der Rijst, van Tartwijk, and Wubbels, 2009).

While student interaction with professors at the undergraduate level is often limited, postgraduate students of whatever level have an ongoing relationship with their supervisors (Ombudsperson for Students, 2013, 2014). A positive student supervisory interaction and experience is often key to success in graduate studies, it is complex, subtle, pivotal and responsible (Zhao, 2003). In some ways, supervisors are like masters over apprentices, rather than teachers over the students (Amundsen and McAlpine, 2009). Heath (2002) pointed out that the success of any graduate system strongly relies on the supervisors who should provide expertise, mentorship, time, counselling and moral support to enhance the students' research skills and attitudes to ensure good production of the quality thesis.

Socialization of post-graduate students happens all the while at different dimensions (Golde, 1998), as graduate students were associated to both current (understudy) and future (proficient) jobs (Austin, 2002). As indicated by Lovitts (2001), socialization happens as students connect with educators, supervisors and different students in an

assortment of scholarly and expert assignments. These collaborations were critical in that they assemble compatibility among students and teachers and give chances to incorporation and advancement.

Socialization is the way toward internalizing the norms, values, aptitudes, convictions, frames of mind and belief systems of society. Socialization includes both learning and instructing and is in this manner "the methods by which social and social congruity were accomplished (Macionis, 2013). Socialization speaks to the entire procedure of learning for the duration of the course and is a focal impact on the standards, values, conduct, convictions, and activities of grown-ups and also of kids (Boden, Borrego & Newswander, 2011). Explicit to post-graduate education, socialization is the procedure through which people gain the learning, abilities, and qualities fundamental for fruitful passage into an expert profession requiring a propelled dimension of particular information and aptitudes (Weidman, Twale and Stein, 2001).

Weidman, Twale, and Stein(2001) recognized four phases of graduate student socialization. Amid the anticipatory stage (recruitment), the individual structures summed up and stereotypical role expectations, primarily through broad communications and perception of good examples. In the formal stage, graduate students get increasingly organized guidance concerning standards and desires, however, these remain idealized. Communication ends by enlightening through adapting course material, regulative through grasping regularizing desires, and integrative through staff and student collaboration" (Weidman et al. 2001).

In the informal stage, graduate students take in more subtle and casual desires through drenching in the way of life, taking signs from educators and individual students. Amid the last close to the home stage, graduate students shape an expert personality

that lines up with the picked calling and accommodate past job clashes. This stage is likewise described by more profound commitment with research and expert exercises, for example, association in distributing, temporary positions and nearby and global gathering participation. All through the stages, association with graduate students, educators, and experts were key to taking in the way of life.

Globally, graduate studies have been adversely affected by a majority of graduate students who enrol to pursue these studies taking too long to complete or discontinuing the course. For example, in the United States, an issue existed in doctoral projects with half of the graduate students who had registered dropping out before finishing their doctoral studies (Burkard, 2014; Cakmak, Isci, Uslu, Oztekin, Danisman, and Karadag, 2015; King and Williams, 2014). In an investigation by King and Williams, (2014) on graduate studies, they were under strain to settle their studies, the examination discoveries demonstrated that graduate students were aware of different checks to completing their degrees. A study also by Rugut, (2017) on doctoral students showed that attrition rate was high in the United States and Australia estimated at 40% to 50% never finished their studies, in the United Kingdom, 72.9% of the graduate students in 2013 took seven years to complete their studies. Canada by 2013 had the lowest attrition rate of 20% compared to other countries. They found out that a portion of these hindrances was fringe to the program such as exhorting issues, learning deficiencies, and individual duties.

In most countries, the hierarchy of graduate degrees is that it starts with master's degrees. A master's degree typically requires a minimum of one-year full-time equivalent study. Students are expected to have shown originality in the application of knowledge and in problem-solving and demonstrated understanding of how the

boundaries of knowledge are advanced through research (Hart, 2018). Masters are usually distinguished from other graduate qualifications, such as diplomas or certificates, by increased complexity and depth of study. They may involve the completion of taught courses, research modules or a mixture of both. Typically, they involve a planned course which progresses from taught elements to research for a dissertation. These elements are generally set as a series of 'units' with a dissertation representing the equivalent of several taught units.

Most African Universities have taken good practice from universities in the western world and have minimum qualifications for graduate student supervision. For instance, a student at Masters' level can only be supervised by a PhD scholar and a PhD graduate can only be supervised by a team of senior faculty with not less than five years working experience after PhD completion. Nonetheless, with the increasing enrolments of graduate students in institutions of higher learning, few faculty members can meet these requirements in some colleges and universities. This is increasingly becoming more challenging in fields such as climate change, information and communication technologies, and nanotechnology for which Africa has fewer and/or less experienced expertise. This in part contributes to the delays in student completion with faculty carrying heavy loads regarding student supervision and mentoring. Some supervisors who hold PhD's end up being overloaded by student supervision and do not give their students sufficient direction in their area of expertise

In South Africa, an increasing number of graduates is returning to universities for graduate study, affecting the supervisor-student ratio, thus impacting on student support and supervision. This is a world-wide phenomenon and Taylor (2002) has argued that this represents a transformation in higher education access, from the few

elite to a mass system. The students are diverse in terms of age, language, cultural socioeconomic status and educational background. This diversity poses challenges for the traditional supervisor-student process of supervision. New options are being explored to provide support and engaged communication (Mouton, Boshoff & James, 2015) and the use of technology is replacing much of the traditional, personal one-to-one supervision (Preece, 2014).

Graduate students must behave interests during the journey, dedicate enough time, proper planning, academic integrity remains a major requisite for the acquisition of the doctoral thesis and smooth completion (Kuo, 2009). Doctoral hopefuls should have been ready to portray their thesis in a sentence. Absence of arrangements, board chair and graduate associations, student-supervisor desires, cooperation, and up to date emotionally supportive networks were hindrances for finishing the thesis notwithstanding funds, singular attributes, and campus and office strategies (Burkard, 2014). In this way, guaranteeing open doors for research assistantships and chances for working with supervisors on research ventures positively and graduate student collaborations, graduate desires and communications, and backing from companions and friends were significant for fulfilment and completion of graduate studies.

In Africa, students undertaking graduate studies at the universities were under expanding strain to finish their candidature inside a specific period and timelines (Smyth, Houghton, Cooney & Casey, 2012). However, graduate students, have a lot of difficulties to defeat, for example, family duty, work responsibility and budgetary difficulties, which might frequently influence their accomplishments (Mouton, 2001). These difficulties were a lot more prominent if the graduate students were doing low maintenance which truly expends time, cash, exertion, persistence and excitement.

They need to deal with their time and exertion for other responsibility, for example, employment and family.

Since the greater part of the students were either subsidizing their examination without anyone else or got a grant, it was essential for them to finish their study at the earliest opportunity, and positively inside the time frame given by the universities concerned (Ismail, Abiddin & Hassan, 2011). Graduate students frequently encounter issues which contribute to some of them abandoning studies in the way or taking longer to complete. As indicated by Priest, Roberts and Woods (2002) three challenges were highlighted contributing to graduate students abandoning studies, inadequate planning, data collection procedures and process up to the report writing and submitting. Challenges through these processes can be attributed to the student level of preparedness and in some cases absent of proper guidance from the supervisors within the University, (Mouton, 2001). Lessing and Schulze (2012) found that the effective culmination of a paper was the same amount of an element of the capacities of the student as of the supervisor.

In the recent past, research supervision has turned out to be exceptionally basic for alumni students to achieve higher degree confirmation (Crisp and Cruz, 2009). It was out of this affirmation that supervision has transformed into a central method for the fruitful finishing of graduate programs in public universities in Kenya and the rest of Africa. Supervision furthermore could be translated as a two-way interactional procedure that requires both the graduate student and the supervisor to purposefully interface each other inside the spirit of self-evident aptitude, respect, collegiality and generosity (Carifio and Hess, 1987).

Supervision is a continuous engagement with the students which includes two parties with both converging and diverging interests. In this manner, adjusting these interests was extremely significant to the productive supervision of graduate research ventures (Grant & Graham, 1999). Departments have also been recognized as being so profitable in this issue and as imperative places of learning and change that exist inside bigger associations: resources/schools inside universities (Boehe, 2016). Foundations consolidate degrees of assorted variety similarly as to graduate populaces and divisions. Curiously, various graduate schools check shorter events to and larger amounts of fruition to completion than other colleges (Elgar, 2003).

Seagram, Gould and Pike (1998) exhibited that a good student-supervisor affiliation was the key factor in the accomplishment of graduate studies exploration work. As a ground-breaking supervisor, certain fundamental practices should be set up in the supervisory system to enhance research and supervision needs. In some instances, the system might not be so accurate that students are allocated supervisors on time or the other way round where a supervisor is allocated more students. This creates some delay in thesis progression for the graduate students.

Graduate students experienced lots of inconveniences amid their assessment technique. Some of them were not familiar with the research process and nonappearance of data about research system. Of course, supervision was one of the essential parts that should be considered while discussing graduate studies. A graduate student was as often as possible his/her supervisor's nearest partner (McAlpine and Weis, 2000). Subsequently, graduate encounters of the graduate studies can be emphatically impacted by the nature and degree of arrangement with the supervisor, just as by qualities, for example, sex and ethnicity (Acker, Hill and Black, 1994; Ellis,

2014). The perception from this subject must be genuinely looked into to guide graduate students to finish their research on time. University education in Kenya began in 1963 with just 571 students enrolled in Nairobi University College (Weidman, 1995). Since then, the system has undergone considerable expansion as of 2016 there were 22 public universities, 14 chartered private universities and 13 universities with Letter of Interim Authority (LIA).

The number of students being enrolled for higher education has also swelled driven by the demand for higher education in the country (Jancey & Burns 2013). The intake of students to public universities has also increased by 23.4% from 17,100 in 2008-2009 to 21,100 in 2009-2010 (Jancey & Burns 2013). This was attributed to the establishment of more constituent colleges which boosted access to university education.

Many universities have been established and continue to be established in Kenya to improve the level of higher education, learning and absorption of swelling number of students from high schools. The rapid expansion of university education was a spontaneous response to the high demand. As the demand for undergraduate degrees has risen, the demands for graduate studies have also risen. However, concerns have arisen due to the prolonged period graduate students are taking to complete their education and the low completion rates (Omanga, 2017).

There were high drop-out rates in most graduate studies and the pattern does not look good to build up a satisfactory pool of future academicians in Kenya. The argument was supported by Rugut (2017), Ayiro & Sang, (2011) when they agreed that most of the graduate students were part-time students with other duties and responsibilities related to education. They further agreed that they were professionals who held formal

employment and most of them work in universities as lecturers, or in high schools and others hold administrative positions in government or private institutions making it difficult for them to complete their graduate studies on time (Nganga, 2014). The graduation pace of post-graduate students in state-funded universities in Kenya was low. For example, at the University of Nairobi, only 26 PhDs were awarded out of 4,473 students who were awarded degrees and diplomas in 2015. Similarly, in 2014, only 13 PhDs were awarded out of a cohort of 3,947 graduates. The situation was replicated at Kenyatta University where only 22 students were awarded Ph Ds in 2014 (Wachira, 2016). The University of Eldoret graduated only 14 masters out of 981 in 2015, only 1 PhD in 2016 out of 726, and in 2017, the university graduated only 9 PhDs and 9 masters students out of 1858. Moi Univesity graduated 182 graduate students out of 1007 in 2013, 96 out of 1617 in 2014, 160 out of 1767 in 2015, 80 out of 2144 in 2016 and 54 out 1396 in 2017.

Considering that Nairobi and Kenyatta universities were among the most seasoned universities in the nation and conceivably with probably the most progressive offices, it was apparent that the circumstance might be at standard or more awful in whatever was left of the neighbourhood universities in Kenya.

Ayiro and Sang (2011) in their study attempted to bring to the fore the need for enhanced quality assurance processes in the award of PhDs by Kenyan universities. The study findings revealed that quality challenges exist in the institutional processes established for the award of this advanced degree across the universities in the country. Therefore, there was the need for more studies urging the universities to re-evaluate and revamp their quality-control systems for the award of not only the Ph Ds but all their other degrees and diplomas. There was, therefore, need to carry out an in-

depth study in graduate studies to determine what role the student-supervisor interaction plays in determining the completion of the graduate program and development of scholars in the field of sociology of education.

1.3 Statement of the Problem

Currently, postgraduate education is largely self-paid and students make significant sacrifices to obtain graduate degrees with the expectation that they would finish on time and secure good careers. With this expectation, supervisors have an enormous task of ensuring quality mentoring within timelines. In post-graduate studies, students should be accepted as members of an academic class, as knowledge producers as well as knowledge accumulators (Jones 2013). Andrews et al. argued that students should be encouraged to make decisions and provided with opportunities to analyze and synthesize information in a respectful environment. In other words, supervision is a space for the student to explore his or her practice, to build or test theory and to attend to feelings and values. The supervisor should not act as the all-powerful who renders the student powerless, rather he or she should cultivate a spirit of adventurism in the student so that the student can venture into unexplored and virgin areas of academic interest. This way the supervisor would have averted potential sources of conflict.

It is a privilege to hold a faculty position and supervise students; nonetheless, this comes with a great responsibility associated with great expectations from the students. The expectations are targeted to supervisors and the institutions of learning. Although there is still an imbalance on power relationships between supervisors and students, especially in developing countries, supervisors still need to understand and know the student expectations. This way, they can build professionally and healthy long-lasting relationships that can spread beyond the supervision period.

However, the rapid expansion in the number of universities and student enrolments has led to what many terms as a crisis of quality in higher education and poor completion rates (Oanda and Jowi, 2013). Declining quality of educational outcomes was primarily driven by the rising student to staff ratio which in practical terms implied poor mentorship and supervision of graduate students. In Kenya there are 5,186 lecturers for the 160,000 students in public universities, indicating 1 lecturer for 70 students compared to the international standard of 1 to 25. The low percentage of PhDs among the academic staff has several implications for the overall quality of degree programs. The ability to mount effective post-graduate degree programs was compromised, both in terms of teaching quality and also the ability to design and undertake quality research.

Further, the graduate student experience revolves to a large extent around the interaction between a student and his/her supervisor (Mainhard et al, 2009). Therefore, because graduate students have different faculty advisors, lab supervisors, and dissertation chairs, some students will have better mentors than other students (Gopaul, 2011). Negative outcomes can be linked to a poorly matched wish to draw from the interaction (Dysthe, Samara & Westrheim, 2006). These have led to an increased number of graduate students' issues brought to various university bodies each year. This suggests that there are ongoing issues concerning student-supervisor interaction (Ombudsperson for Students, 2012, 2013, 2014)

In Kenya, as per the present trend in higher education, there has been a high rate of graduate studies taking longer than they were expected to. In an audit of universities carried out at the beginning of 2017 by Education Cabinet Secretary Fred Matiang'i, several "irregularities" concerning certification, examination, duration of courses and

admissions were exposed. The report revealed that graduate students take a period of three to four years to finish a two-year graduate degree course in most African nations, contingent upon the explicit field; it takes a period of nine years to finish a three-year doctoral certificate in sub-Saharan Africa. While in Kenya, as in numerous different parts of the world, just a small amount of all who join any graduate program finish it, (Omanga, 2017). Numerous Kenyans fundraise to support, take advances or were greatly sacrificing to put resources into graduate studies while the Commission for University Education (CUE) report did not give explanations behind the poor graduation rates, prominent talk regularly accuses scholastics and institutional structures. These studies have tried to show the importance of these interactions. However, only a few studies have been conducted in Kenya with regards to this issue. This study, therefore, aims to analyze student-supervisor interaction in graduate studies in public universities in Kenya.

1.4 Purpose of the Study

The purpose of this study was to establish student-supervisor interaction in graduate studies in public universities in Kenya.

1.5 Objectives of the Study

The study was guided by the following research objectives;

1. To investigate the supervisory styles used in student-supervisor interaction in public Universities in Kenya.
2. To determine the characteristics of student-supervisor interaction in public universities in Kenya.
3. To assess the experiences of student-supervisor interactions in public universities in Kenya.

4. To examine practices that would improve student-supervisor interaction in public universities in Kenya.

1.6 Research Questions

The study sought to answer the following research questions;

1. What are the supervisory styles used in student-supervisor interaction in public universities in Kenya?
2. What are the characteristics of student-supervisor interactions in public universities in Kenya?
3. What are the experiences of student-supervisor interactions in public universities in Kenya?
4. What are the practices that would improve student-supervisor interaction in public universities in Kenya?

1.7 Justification of the Study

Past studies on the graduate experience propose that graduate students confront an assortment of challenges amid their investigations (Appel and Dahlgren, 2003; Wright, 2003). Wearing down rates among graduate competitors have been accounted for to go from 30% to 50%, contingent upon the order and nation (Bair & Haworth, 1999; Gardner, 2008, Golde, 2000; Golde, 2005). Moreover, reports have suggested that distress experienced by graduate students might be high (Kurtz-Costes, Helmke, & Ulkusteiner, 2006; Oost & Sonneveld, 2004).

However, there was a need to acquire a more profound comprehension of the idea of the graduate procedure and the issues students look and how these issues identify with their prosperity amid the graduate procedure. National policy on graduate research and training in Kenya (Too, Kande, Kiptoo, Mukhwana and Some, 2016) affirms that

there was a tremendous rise in student numbers in Kenyan universities which has put into question the integrity of students' research output and this, therefore, required a closer student-supervisor interaction through socialization within departments of the public universities. This has put into question the integrity of students' research output and therefore need for more research on student-supervisor interaction in Kenya.

While the expansion of undergraduate access to university education was receiving increasing attention, public universities were not allocating adequate resources to the development of graduate programmes. In 2015, graduate enrolment stood at approximately 11.9% of the student population up from 10% in 2014, a situation that was deemed to be unacceptable because of the country's current and future needs. In addition to enrolments in graduate programs remaining generally low, the handling of students from the season of starting registration to graduation was excessively long, with the nature of arrangement and supervision of graduate projects overall very weak, (Too et al, 2016).

Thus, the rate and the quantities of graduate students being created were deficient to address national issues that incorporate staffing the expanded number of universities, replacing maturing personnel, and the expert frameworks required in government, the private part, worldwide organizations and the Non-Governmental Organization (NGO) community,(Too et al, 2016). This study, therefore, aimed to shed light on student-supervisor interaction and socialization in graduate studies in public universities in Kenya.

1.8 Significance of the Study

The present investigation of the study was important for future practice, research and strategy for the administration of institutions of higher learning since it would shed

light on student-supervisor interaction and socialization in graduate studies and how these interactions had affected the completion, quality and pursuit of graduate studies. The findings of the study will inform the management of areas that challenge the students-supervisor interaction making recommendations on what could be done to improve the process and reap success from the process. The discoveries of the study were of noteworthiness to strategy producers and policymakers who were responsible for formulating the policies that govern institutions of higher learning. It would enable them to formulate policies that would ensure that higher learning institutions in the country were able to improve the quality of graduate students produced and also the rate at which graduate complete their studies. This was made possible by identifying the challenges that existed currently and made recommendations that were aimed at improving higher education in the country. The findings of the study would also be of significance to future scholars who were interested in looking at the same area or a similar area since it created a body of literature that these scholars could refer to. The study also contributed to the body of knowledge in graduate studies.

1.9 Assumptions of the Study

According to Leedy and Ormrod, (2010) assumptions are things that are beyond the researcher's control, but if they disappear the study would become irrelevant. This study assumed that the respondents gave the data as mentioned. Additionally, the study accepted that participants comprehended the encounters and difficulties confronting student-supervisor interaction and socialization. The study likewise expected that respondents submitted legitimate, significant and trustworthy reactions to the inquiries posed.

1.10 Scope of the Study

The study aimed to determine student-supervisor interaction in graduate studies in public universities in Kenya. It specifically aimed to establish the supervisory styles used in student-supervisor interaction in public Universities in Kenya, to identify the characteristics of student-supervisor interaction in public universities in Kenya, to establish the experiences of student-supervisor interactions in public universities in Kenya and to examine practices that would improve student-supervisor interaction in public universities in Kenya. The study was conducted through a descriptive survey research design. It targeted graduate students from public universities within Kenya who had graduated between 2013 and 2017. The participants targeted were 60 supervisors including heads of departments, Deans and 250 graduate students drawn from the graduate studies in the faculty of Education in the sampled public universities in Kenya.

1.11 Limitations of the Study

The study faced several limitations which affected the study. These included lack of reception in the study areas by some participants, lack of cooperation from the targeted participants and unwillingness to provide the information required by the participants. To overcome these limitations, the researcher sought consent from all the public institutions and from other regulating bodies which gave the researcher an introduction and opened the doors in these public universities for the researcher to research with ease. The researcher was also limited to self-reporting data which can be biased. The researcher faced reluctance by the respondents to give information on the topic of study especially supervisors because it was a sensitive topic touching them. This was handled by explaining the purpose of the study and informing that the information was used for academic reasons only and was treated with the greatest

privacy. The researcher also adhered to confidentiality and anonymity using pseudonyms to encourage the participants who took part in the study and provided the information required.

1.12 Theoretical Framework

Various theories have been formulated especially concerning the field of sociology of education. This study was guided by socialization theory by Weidman, Twale and Stein (2001), functionalist theory of education and interpersonal theory by Harry Stack Sullivan (1953).

1.12.1 Socialization theory

This study adopted the Socialization Theory by Weidman, Twale & Stein (2001). This theory was derived from Van Maanen and Schein (1979) studies on the socialization of people in associations and Stein and Weidman's (1989) graduate socialization outline. Socialization is the procedure through which people procure the qualities, frames of mind, standards, learning, and abilities expected to exist inside the society (Merton, 1968). The individual is socialized into a group in a community of network, or association (Austin, 2002). In institutions of the higher learning socialization process is the same.

As indicated by Weidman et al. (2001) to comprehend socialization procedure of graduate students and professionals in graduate studies that set them up for future expert jobs there are three components to consider. These components are information obtaining, venture, and inclusion. These components lead to recognizable proof and responsibility to an expert job. Personality and responsibility change after some time, contingent upon the stage (of socialization) in which an individual is working.

Notwithstanding the centre components distinguished by Weidman et al. (2001), the socialization procedure happens in stages: expectant (anticipatory), formal, casual (informal), and individual (personal) stages (Tierney and Rhoads, 1994; Tierney and Bensimon, 2002). Expectant socialization happens before an employee starts their work on campus. Others say that the socialization procedure starts at the undergraduate level when understudies start to see themselves in a workforce job because of connections and discussions with lecturers (Bieber & Worley, 2006). These encounters in undergraduate and graduate instruction impact view of and genuine encounters with graduate life.

Van Maanen and Schein (1979) suggest that six dimensions of socialization occur within organizations: (a) collective versus individual, (b) formal versus informal, (c) random versus sequential, (d) fixed versus variable, (e) serial versus disjunctive, and (g) investiture versus divestiture.

Individuals can experience any one of the dimensions at varying points of their experience in an organization. Collective versus individual socialization involves the extent to which newcomers have common experiences (Van Maanen & Schein, 1979).

Graduate students experience collective socialization when they participate in orientations or core courses with their peers. Graduate students experience individual socialization when they participate in activities individually such as writing their dissertations and working individually with their major professors (Weidman et al., 2001). The next dimension of socialization is formal versus informal socialization. Formal socialization involves specific activities designed to “shape” (Austin & McDaniels, 2006) the junior person in certain ways (Van Maanen & Schein, 1979).

Graduate students experience formal socialization, for example, when they participate in preliminary, qualifying, or comprehensive exams or dissertation defences (Austin & McDaniels; Weidman et al., 2002). Informal socialization involves unstructured activities, some of which occur by trial and error. Graduate students experience informal socialization when they internalize experiences in different ways. Observations of the faculty and peer culture help the student navigate during the formal socialization process (Weidman et al.). Random socialization occurs through activities performed that lead to an end goal, but are not clearly defined. Such activities for graduate students that may be considered occurring randomly might be research, teaching, or mentoring experiences (Austin & McDaniels, 2006).

Random socialization could also occur as the student develops opinions about courses or faculty members (Weidman et al., 2001). Sequential socialization includes clearly defined activities and is a more ordered process.

Sequential socialization occurs when graduate students follow specific steps in their programs, such as following examination or dissertation procedures (Austin & McDaniels; Weidman et al.). Fixed and variable pace describe the fourth dimension of socialization. These two terms denote the specialized and unclear timeline for activities to occur within an organization (Tierney & Rhoads, 1994). Graduate students for the most part experience variable socialization because activities and stages of completion in a graduate program vary from student to student; making the process more individualized (Austin & McDaniels, 2006).

Serial versus disjunctive socialization characterize the fifth dimension. This type of socialization occurs when graduate students are given specific advice by faculty members or are engaged in planned experiences. Graduate students working under the

guidance and tutelage of a faculty mentor experience serial socialization. For example, graduate students serving as teaching assistants, research assistants, or otherwise collaborating with faculty mentors are considered serial socialization. Disjunctive socialization, on the other hand, occurs when individuals do not have the specific guidance of faculty members or veteran students. Graduate students who do not have role models such as faculty mentors experience disjunctive socialization (Weidman et al., 2001).

The sixth dimension of socialization involves the experiences of an individual that help shape her or his perceptions, attitudes, and beliefs about the organization or an experience (Tierney & Rhoads, 1994). Investiture socialization occurs when beliefs about an experience or an organization are confirmed. The individual characteristics are also accepted by the organization. For example, if doctoral students trained in research universities assume faculty positions at an institution they will believe that faculty life will include research. Divestiture socialization, on the other hand, occurs when an individual has to change their beliefs to conform to the culture of the organization. Using the same example, if a graduate student trained at a research institution assumed a faculty position at a different institutional type, the student may still have the expectation to produce research, finding it challenging to conform to the values and traditions of the institutions of the liberal arts (Tierney & Rhoads, 1994).

Key to the socialization process is the acquisition of knowledge, investment, and involvement of the student; core elements of the graduate and professional student socialization model. These core elements are achieved through involvement with peers, the program, and becoming invested in the knowledge, skills and abilities necessary for effective professional practice. In addition to the stages and core

elements of the socialization process, four factors influence the student's socialization process: prospective students, professional communities, personal communities, and novice practitioners (Weidman et al., 2001). The core elements of the model: knowledge acquisition, investment, and involvement, are the most useful in this study. Knowledge acquisition involves acquiring cognitive knowledge and affective knowledge. Affective knowledge includes awareness of professional role expectations and an assessment of one's ability to perform successfully in a professional role like supervision (Stein, 1992).

Investment means committing something of personal value (e.g., time, alternative career choices, self-esteem, and social status) to prepare for a professional role (Weidman et al.). Involvement also involves participating in any activity that prepares one for a professional role. Such activities could include involvement with student peers or faculty members in research activities, taking exams, or being involved in professional organizations. These activities help develop the identity of the individual being socialized. Involvement varies by activities and level of intensity (Weidman et al.).

Adapting to the norms and values of graduate school for graduate students typically is an experience of discovery. Many students entering higher education at the graduate level may not be fully aware of the academy's value systems. Developing an understanding of the academic norms and culture is but one aspect of a graduate student's socialization into the process (Lindholm, 2004; Nyquist et al., 1999). Sometimes the values and expectations of the academic culture mesh well, complementing the student's values and expectations, allowing the student to be successful in their graduate programs. In other instances, values and expectations are

not internalized and accepted, causing the graduate student to experience disillusionment and further causing the student to struggle in their program. The complications of accepting the academy's values may cause the struggling student to not finish the program on time or to adapt bitterness and disappointment (Nyquist et al., 1999).

1.12.2 Functionalist theory of education

Functionalists see education as one of the more essential social establishments in the general public. The battle that education contributes two sorts of capacities: show (or essential) capacities, which were the proposed and obvious elements of education; and idle (or optional) capacities, which were the covered up and unintended capacities. There were a few noteworthy show capacities related to education. The first is socialization. Starting in preschool and kindergarten, students were educated to rehearse different societal jobs. The French humanist Émile Durkheim (1858– 1917), who built up the scholarly control of humanism, described schools as "socialization organizations that show kids how to coexist with others and set them up for grown-up financial jobs (Durkheim 1898). Surely, it appears that schools have assumed on this liability in full.

Functionalism translates each piece of society as far as how it adds to the strength of the entire society. Society is more than the aggregate of its parts; rather, each piece of society is practical for the solidness of the entirety. Durkheim really imagined society as a life form, and simply like inside a living being, every segment has a fundamental impact, yet none could work alone, and one encounters an emergency or comes up short, different parts must adjust to fill the void here and there.

Inside functionalist hypothesis, the diverse parts of society were made out of social establishments, every one of which is intended to fill distinctive necessities, and every one of which has specific ramifications for the frame and state of society. The parts all rely upon one another. The centre establishments characterized by human science and which were vital to comprehension for this hypothesis incorporate family, government, economy, media, education, and religion. As indicated by functionalism, an organization exists since it serves a crucial job in the working of society.

On the off chance that it never again serves a job, an establishment will fade away. At the point when new needs develop or rise, new organizations will be made to meet them. We should consider the connections between and elements of some centre foundations. In many social orders, the administration, or state, gives education to the offspring of the family, which thus makes good on government expenses on which the state depends to keep itself running. The family is needy upon the school to enable kids to grow up to have steady employment with the goal that they could raise and bolster their own families. All the while, the kids progress toward becoming honest, taxpaying natives, who thusly bolster the state. From the functionalist viewpoint, if all goes well, the parts of society create request, solidness, and profitability. On the off chance that all does not go well, the parts of society must adjust to deliver new types of request, security, and profitability. Functionalism underscores the accord and request that exist in the public eye, concentrating on social security and shared open qualities. From this point of view, the complication in the framework, for example, degenerate conduct, prompts change because societal segments must conform to accomplish strength.

When one system in the framework is not working or is broken, it influences every other part and makes social issues, which prompts social change. Another job of

schools, as per functionalist hypothesis, is that of arranging or characterizing students dependent on scholarly legitimacy or potential. The most proficient students were distinguished from the get-go in schools through testing and classroom accomplishments. Such students were set in quickened programs fully expecting fruitful school participation. Functionalists additionally battle that school, especially as of late, is assuming control over a portion of the capacities that were customarily attempted by family.

Society depends on schools to educate about human sexuality and besides essential aptitudes, for example, planning and employment applications point that at one time were tended to by the family. Functionalism has been studied by numerous sociologists for its disregard of the regularly negative ramifications of social request. A few pundits, similar to Italian scholar Antonio Gramsci, guarantee that the point of view legitimizes business as usual and the procedure of social authority which looks after it. Functionalism does not urge individuals to play a functioning job in changing their social condition, notwithstanding while doing as such might profit them. Rather, functionalism sees fomenting for social change as bothersome because the different parts of society will remunerate in a normal manner for any issues that might emerge. The theory is deemed relevant to the study since it explains the importance of school and education in society. School system is important in transmitting the fundamental beliefs of the country through show capacities like social control. One of the jobs of schools is to show students adjustment to law and regard for power. Such regard, given to educators and executives, will enable a student to explore the school condition.

This capacity likewise gets ready students to enter the work environment and the world everywhere, where they will keep on being liable to individuals who have a

specialist over them. The satisfaction of this capacity rests fundamentally with classroom educators and teachers who were with students throughout the day. Education additionally gives one of the significant techniques utilized by individuals for upward social portability. This capacity is alluded to as social position. University enables the students to move towards their careers to give them financial freedom. The theory motivates students that the belief on the educational benefit on social ladders and therefore to attain those ladders they have to put effort on their education. The theory also explains how education experience has traditionally given a place for students to find out about different social issues. The study was guided by the functionalist point of view. The functionalist point of view depends to a great extent on crafted by Herbert Spencer, Emile Durkheim, Talcott Parsons, and Robert Merton. As per functionalism, society is an arrangement of interconnected parts that cooperate in concordance to keep up a condition of parity and social harmony for the entirety. For instance, every one of the social organizations contributes essential capacities for society: Family gives a setting to duplicating, supporting, and mingling youngsters; education offers an approach to transmit a general public's aptitudes, information, and culture to its childhood; legislative issues gives a method for administering individuals from society; financial aspects accommodates the generation, circulation, and utilization of merchandise and ventures; and religion gives moral direction and an outlet for love of a higher power.

The functionalist viewpoint underscores the interconnectedness of society by concentrating on how each part impacts and is affected by different parts. Functionalists utilize the terms useful and broken to depict the impacts of social components on society. Components of society were utilitarian if they add to social soundness and broken on the off chance that they disturb social steadiness. A few

parts of society could be both practical and broken. Sociologists have distinguished two sorts of capacities: show and inactive (Merton, 1968). Show capacities were results that were planned and regularly perceived. Inert capacities were results that were unintended and regularly covered up. For instance, the show capacity of education is to transmit information and abilities to society's childhood. Yet, open grade schools likewise fill in as sitters for utilized guardians, and universities offer a place for youthful grown-ups to meet potential mates. The looking after children mate-choice capacities were not the proposed or ordinarily perceived elements of education; henceforth they were dormant capacities.

Emile Durkheim considers education to be a social actuality "outside to individual and obliging his/her conduct" (King, 1983). While looking at their value to society instead of people, social realities likewise need to locate a suitable method to serve the general needs of social life form. The real elements of education, hence, were to give fundamental social paste to look after solidarity; to supply essential specialized information and aptitudes as per the requirements of work-put and changing innovative conditions; to mingle and adapt individuals by giving the regularizing and psychological systems they need (Blackedge & Hunt, 1985).

Functionalist approaches have been depicted by applying the well-known similarity between the human body and society, a relationship assuming that society like a human body has specific organs with explicit capacities. In the body, lungs take oxygen, heart siphons blood, veins convey blood and so on reliant. Any sort of breakdown in one of these will influence the entire framework's amicability. Essentially, education as a social foundation and part of a social creature, for instance, is associated in different approaches to the economy, the family, and the political and religious frameworks. It has its very own capacities to perform inside a composed

entirety. At the end of the day, working in an amicability and for explicit capacities to perform in "immaculate entire" were key to this methodology (Karabel and Halsey, 1977; King, 1983; Meighan, 1981, Blackedge and Hunt, 1985; Majoribank, 1985). In such manner, information that will be incorporated into educational modules is reasonable and real just on the off chance that it is a piece of a typical culture, that is, it must work towards solidarity and coordination as opposed to pluralism and separation. Necessities of the general public were constantly foremost to those of people. Subsequently, teachers as specialists of this real information transmission, and good models and good creatures for next ages, ought to compel themselves with showing just for societal products. In Durkheim's own words: "The educator should subsequently, be focused on introducing (the standard), not as claim individual doing, but rather as an ethical power better than him, and of which he is an instrument, not the creator" (Durkheim, 1961 :). Here, students were viewed as clear sheets, a clean slate, latent creatures prepared to be loaded up with regular social products by the specialists (supervisors) of the general public.

Parson contends that school, as a noteworthy office of socialization, is a genuine impression of society as a result of its uniqueness of being the main institutional place that shows aptitudes and jobs (Selakovich, 1984). Parsons sees the schools as unbiased spots sorted out to furnish students with essential aptitudes and information they should work in the more extensive society. He additionally takes a gander at schools as settings that make ready to measure up to circumstance that encourages the advancement of students' remaining in the social pecking order (Giroux, 1983). This equivalent chance, in any case, acquires a few contrasts fulfilment. These distinctions were hypothesized to start from capacity, family introductions, and individual inspirations or dimension of enthusiasm for education. Contrasts in educational

fulfilment were worthy because, even though students were naturally introduced to unequal social or material conditions, education could delete these separations, because of the suggestion that the individuals who do well in school were exceedingly remunerated (Parsons, 1961). These "normal" results don't change the way that schools were sorted out to spread the chance to all individuals from society similarly and that each general public has such basic culture (Blackedge and Hunt, 1985).

In present-day social orders, the real connection between social structure and education is the economy. In this way, schools need to react to financial changes via doing the elements of determination and preparing of labour, (Meighan, 1981) and besides invigorating monetary change through research. This theory relates to the study since it shows the importance of education and the role that lectures and supervisors play. The mechanism and techniques they use in the educational process achieve latent or manifest results as the study posits. This study, therefore, aimed to shed more light on the issue by indicating the effects that the interaction between student-supervisor plays in student socialization process in public universities in Kenya. The socialization process and interaction between the graduate students and supervisors were very significant in achieving success. Failure or disconnect was reflected in the failure of graduate studies to produce scholars and professionals and ultimately affected the whole society. This theory therefore guided in understanding the drive of the study.

1.12.3 Interpersonal theory

The circumplex custom in relational psychology was inspired by the relational hypothesis of Harry Stack Sullivan (1953) and made progressively express and available to inquire about by Timothy Leary (1957), who presented the roundabout requesting of factors known as the relational circumplex. Relational hypothesis

includes three strands of driving thoughts: the rule of complementarity, the standard of vector length, and the guideline of circumplex structure. The first strand of the relational hypothesis is the rule of complementarity which battles that individuals in dyadic collaborations arrange the meaning of their relationship through verbal and nonverbal prompts. This arrangement happens along the accompanying lines: prevailing agreeableness welcomes accommodating kind disposition, and the other way around, though overwhelming antagonistic vibe welcomes compliant threatening vibe, and the other way around. The second strand of the relational hypothesis is the standard of vector length, which fights that inside judgments of identity type on the relational circle, vector length (a proportion of measurable aberrance) is a record of psychopathology (mental abnormality; Wiggins, Phillips, and Trapnell, 1989). When all is said and done, individuals with unbending, resolute identities have more issues - regardless of whether such individuals were unyielding in a cordial heading while individuals with adaptable, versatile identities have fewer issues regardless of whether such individuals were commonly more unfriendly than friendly.

The third strand of the relational hypothesis is the standard of circumplex structure, which fights that factors that measure relational relations were masterminded around a hover in two-dimensional space (Leary, 1957). A circumplex could be seen in three progressively increasingly prohibitive and testable ways. Initial, a circumplex could be seen as just a valuable pictorial portrayal of a specific space. Second, a circumplex could be seen as inferring round request, to such an extent that factors that fall near one another were more related than factors that fall further separated on the hover, with inverse factors being adversely related and factors at right points being inconsequential (symmetrical). Third, a circumplex could be seen as suggesting definite circumplex structure, with the end goal that all factors were similarly divided

around the circle (Wiggins and Trobst, 1997). Advanced psychometric and geometric tests could be connected to decide if a circumplex meets the criteria for correct circumplex structure (Acton and Revelle, 1998).

The theory was deemed relevant to the study because it explains the factors that affect the interaction between two individuals. It explains also the types of interactions including dyadic interactions where those involved arrange the meaning of their relationship through verbal and nonverbal signs. For this situation transaction happens along the accompanying lines: dominant friendliness invites submissive friendliness, and the other way around, while dominant hostility invites submissive hostility, and the other way around. Dyadic interaction depends on how individuals treat each other in this study when the graduate student acts friendly to the supervisor also the supervisor will be friendly and when the student becomes hostile the supervisor will also treat them hostilely. The theory also describes personality types which affect the level of interaction. Individuals with rigid, resolute identities have more issues regardless of whether such individuals were rigid an inviting way while individuals with adaptable, versatile identities have fewer issues regardless of whether such individuals were commonly more unfriendly than well disposed of. The theory was good in guidingthe understanding of the drive of the study.

1.13 Conceptual Framework

The study employed the following conceptual framework to illustrate how the independent and dependent variables interact in the study on student-supervisor socialization interaction in graduate studies in Kenya.

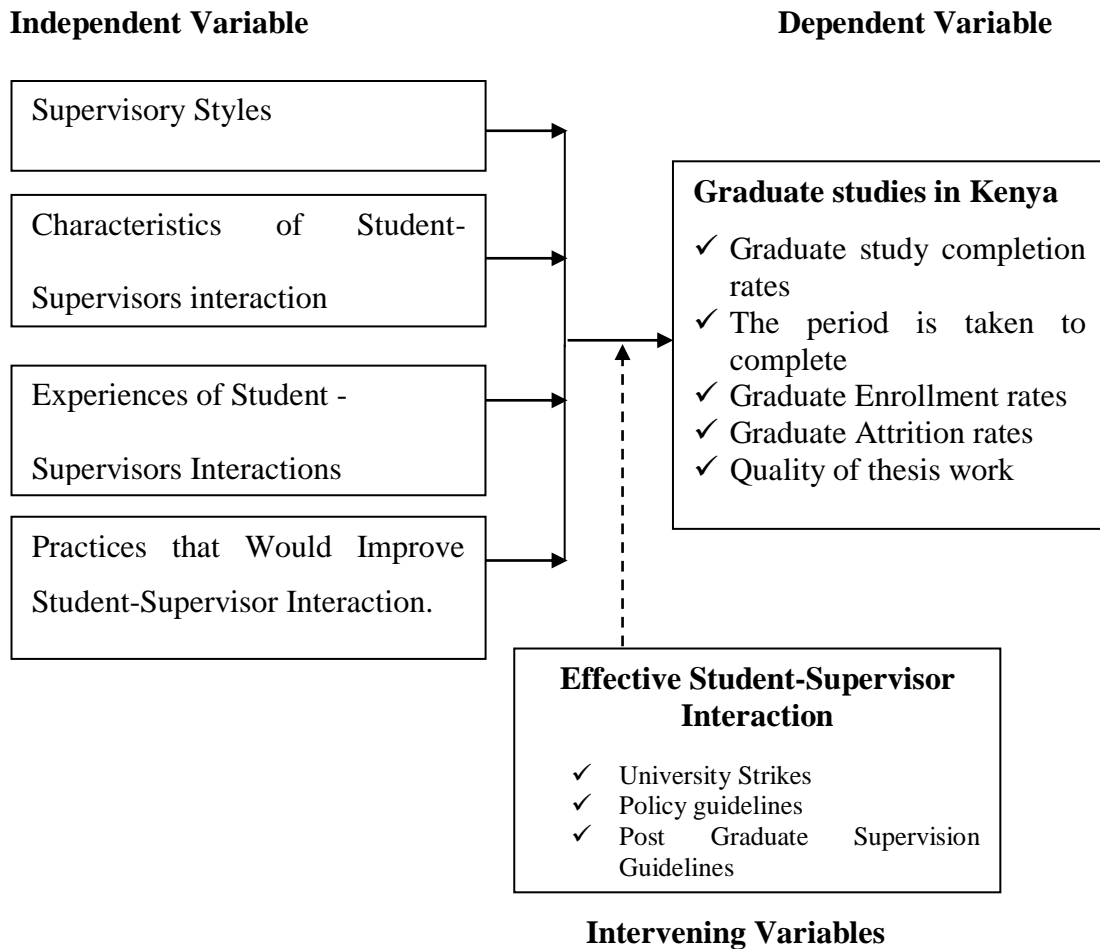


Figure 1.1: Conceptual Frameworks

This study aimed to look at student-supervisor interaction in graduate studies in public universities in Kenya. The independent variables of the study were supervisory style methods which employed different modes of student-supervisor socialization, characteristics of student-supervisor interaction found in the process, experiences of student-supervisor interactions and practices that would improve student-supervisor interaction. The dependent variable was graduate studies in Kenya which were indicated by graduate study completion rates, the period taken to complete and graduate enrollment rate whereas the intervening variables like the university strikes, policy guidelines and postgraduate supervision guidelines were held constant. This study aimed to illustrate how student-supervisor interaction affects graduate studies in Kenya.

1.14 Operational Definition of Terms

Graduate Studies: Were used to in this study to refer to studies for people who have earned a bachelor's degree and were pursuing additional education in a specific field in masters and PhDs. Study and learning are more self-directed at the graduate level than at the undergraduate level.

Interaction: How two or more people or groups regard and behave towards each other (student-supervisor) during graduate studies.

Is used in this study to refer to reciprocal action or influence between the supervisor and the graduate student in the learning context.

Skills: Traits and aptitudes acquired or learned, the capacity to do something well during thesis writing.

Socialization: Socialization encompasses both learning and teaching and is thus "how social and cultural continuity was attained (Clausen, 1968; Macionis, 2013). It is used in this study to refer to the processes through which graduates gain the knowledge, skills, and values necessary for successful entry into a professional career requiring an advanced level of specialized knowledge and skills.

Student-supervisor Interaction This is the day to day relationship between the student and the supervisor in the process of learning

Supervisor: Is a person approved by the senate to oversee, advice and approve research activities and thesis writing by a graduate student;

Supervisory Skills These are skills and attributes like communication skills, observation and problem skills that every supervisor must have to be proficient and show expertise over the graduate students

Supervisory Styles This is an approach to how supervisors provide leadership to their students in the field of academics. It entails how you communicate, motivate, direct and manage your students.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter presents a review of literature related to the study. The review aims to provide an analysis of what available literature in the area of post-graduate studies related to the study of student-supervisor interaction in graduate studies in public universities; which were the supervisory styles used to enhance student-supervisor interaction, characteristics of student-supervisor interactions, experiences of student-supervisor interaction in public universities and practices that would improve student-supervisor interaction in public universities in Kenya.

Student-Supervisor Interaction develops a relationship between supervisor and supervisee based on clear expectations and mutual respect first meeting onward. As trust develops and interpersonal or cultural differences can be discussed openly and pragmatically. A supervisory style is an approach to directing, managing, motivating and communicating with students. There are many supervisory styles, each with their strengths and weaknesses. While certain supervisory styles are commonly considered superior methods, the reality is that no leadership style is one-size-fits-all. Among other factors considered in assessing student-supervisor interaction include characteristics, experience and practice of student-supervisor interaction.

2.1 Supervisory Styles used to Enhance Student-Supervisor Interaction

It is no secret that getting a Masters or a PhD is a stressful process. One of the factors that could help or hinder this period of study is the socialization between supervisor and student. Research shows that effective supervision could significantly influence the quality of the Masters or PhD and success or failure. Graduate supervisors tend to fulfil several functions: the teacher; the mentor who could support and facilitate the emotional processes; and the patron who manages the springboard from which the

student could leap into a career (Burkard, 2014). There were styles of supervision that were adopted and these could vary depending on the type of research being conducted and subject area. Although research suggests that providing extra mentoring support and striking the right balance between affiliation and control could help improve graduate studies success and supervisor socialization, there is little research on the types of student-supervisor interaction that occur. From decades of experience of conducting and observing graduate supervision, I have noticed ten types of common supervisor interactions that occur (Cakmak, 2015).

"The clone" or to (make a replica) is where the graduate is expected to replicate the field, approach and worldview of the supervisor, producing a sliver of research that supports the supervisor's reputation and prestige. Often this is accompanied by strictures about not attempting to be too creative. "Cheap labour" is where the student becomes a research assistant to the supervisor's projects and becomes caught forever in that power imbalance. The patron-client roles often continue long after graduation, with the student forever cast in the secondary role. Their own work is often disregarded as being unimportant. 'The ghost supervisor' is where the supervisor is seen rarely, responds to emails only occasionally and has rarely any understanding of either the needs of the student or of their project (Wadesango, & Machingambi, 2011).

For determined students, who will work autonomously, the ghost supervisor is often acceptable until the crunch comes usually towards the end of the writing process. For those who need some support and engagement, this is a nightmare. 'The chum', the relationship is overly familiar, with the assurance that we were all good friends, and the student is drawn into family and friendship networks. Situations occur where the graduate students were engaged as babysitters or in other domestic roles (usually

unpaid because they do not want to upset the supervisor by asking for money). The chums, however, often do not support the student in professional networks (Cakmak, 2015).

There is 'Collateral damage' where the supervisor is a high-powered researcher; the relationship could be based on minimal contact, because of frequent significant appearances around the world. The students might find themselves taking on teaching, marking and administrative functions for the supervisor at the cost of their own learning and research. 'Combatant' is the practice of supervision that becomes a method of intellectual torment, denigrating everything presented by the student. Each piece of research is interrogated rigorously, every meeting is an inquisition and every piece of writing is edited into oblivion. The student is given to believe that they were worthless and stupid.

'Creepy crawlers' is where some supervisors prefer to stalk their students; sometimes students stalk their supervisors, each with an unhealthy and unrequited sexual obsession with the other. Most Australian universities have moved actively to address this relationship, making it less common than in previous decades. 'Captive and con', occasionally, supervisor and student enter into a sexual relationship. This could be for several reasons, ranging from a desire to please to a need for power over youth. These affairs could sometimes lead to permanent relationships (Cakmak, 2015).

However, what remains from the supervisor-student relationship is the asymmetric set of power balances. 'The counsellor' is almost all supervision relationships contain some aspect of the counsellor or mentor, but there is often little training or desire to develop the role and it is often dismissed as pastoral work. Although the life experiences of students become obvious, few supervisors were skilled in dealing with

the emotional or affective issues and. 'Colleague in training' when a graduate student is treated like a colleague in training, the relationship is always on a professional basis, where the individual and their work is held in respect.

The supervisor recognizes that their role was to guide through the morass of regulation and requirements, offer suggestions and do some teaching around issues such as methodology, research practice and process, and be sensitive to the life-cycle of the graduate process. The experience for both the supervisor and student should be one of acknowledgement of each other, recognizing the power differential but emphasizing the support at this time. This is the best of supervision (Cakmak, 2015). Many university policies move to address a lot of the issues in supervisor relationships, such as supervisor panels and dedicated training in supervising and mentoring practices. However, these policies need to be accommodated into already overloaded workloads and should include regular review of supervisors (Cakmak, 2015).

2.1.1 Concept of student-supervisor interaction

For graduate students to complete their Masters' and Ph D. theses on time, they need feedback, cues, guidance and supervision. Common problems perceived by graduate students were too little instructions as well as infrequent and insufficient supervisor feedback. Interactions were at the heart of educational encounters. When a supervisor stands in front of graduate students, they relate. When a graduate student meets with a supervisor, they relate. Remembering supervisor-student experiences brings back memories of being inspired, bored or perhaps over-looked.

Curricular, lesson plans and learning outcomes were long forgotten, but the impact of interactions lives on for many years in one's life. How the supervisor-student interaction is conceptualized varies considerably. For some, the essential aspect of this

interaction is what happens between the supervisor and graduate student, as if the interaction comprises an interpersonal space across which the supervisor and student traverse (Hartrick & Doane, 2002; Metcalfe & Game, 2006).

What lies between those relating is variously described as space, a gap, or an opening, which allows room for relational happenings. Inter-actions occur as trans-actions exchanged from one person to the other. Buber (1996, 2002) describes interactions that accentuate differences between those relating as “I-it” interactions. These interactions tend to objectify the participants, the interaction, and the transactional nature of the interaction.

Palmer's (1999) concern is that interactions that were reduced to such objectified forms of relating privilege technique and efficiency over interaction. For others, interaction speaks about a connectedness that exists, a connectivity that is basic to our humanity (Bennett 1997). Relational connectedness emphasizes holistic interaction rather than space between those relating. This view of interaction shifts the attention from the functionality of the space between people to an inherent connectedness that is integral to interaction (Hooks 2003; Gibbs 2006). Educational processes that value relational connectedness seek to nurture the wholeness of students through a genuine concern for the supervisor-student interaction (Miller & Nakagawa 2002). Re-framing interactions within the context of a community draws attention to the interconnectedness of the many shared interactions that co-exist in everyday experiences (Palmer 1997).

The many interactions within a particular context resemble a 'web of communal interactions' (Palmer 1998: 95). While there is value in theorizing from empirical data about interaction, it is equally important that educational research consider students

and lecturers' interaction as a means to increase student learning in public universities especially in this era where there is a high demand for university education, increase in satellite campus and the resources were experiencing a strain. This draws us towards essential understandings of the interaction especially in our graduate studies in Kenya.

2.1.2 Graduate national policy on research and training in Kenya

The Commission for University Education considers study as a vital part of higher education in Kenya as the country aims to impeccably journey to an industrialized knowledge-based economy. The Commission desires to take lead in providing policy guidelines in research activities in Kenya. The policy has identified key thematic areas on which universities were expected to address. The Commission has set standards for the quality of training and supervision of graduate students in all public and private universities in Kenya.

Kenyan Universities have graduate school policies and regulations to direct the preparation of graduate students. Most policies were nonetheless not readily available to students and supervisors. Too, Kande, Kiptoo, Mukhwana and Some (2016). The Commission for University Education was established by an Act of Parliament, Universities Act No. 42 of 2012 as the heir to the Commission for Higher Education which was established under Universities Act Cap 210B of 1985. This was to tackle the need to regulate, coordinate and reassure quality in university education as a result of the growth and development of the university in Kenya. The purpose of the policy was expected to direct universities in aligning their specific policies on graduate research and training.

In 2015, graduate enrolment stood at just about 11.9% of the student population up from 10% in 2014, a position that was deemed to be deplorable because of the country's present and future requirements. Additionally to enrolments in Masters and Ph D programmes remaining fairly low, the dispensation of students from the time of initial registration to graduation is excessively long, with the quality of preparation and supervision of graduate students on the entire quite feeble. Consequently, the rate and the numbers of graduate students being produced were insufficient to meet national needs that include staffing the increased number of universities, replacing an ageing faculty, and the professional cadres required in government, the private sector, international agencies and the NGO community.

Kenya's national development agenda is articulated in the nation's development blueprint, Vision 2030. Vision 2030 has the objective of transforming Kenya into a newly industrializing, middle-income country, providing a high-quality life for all its citizens, by the year 2030. This will be realized through the transformation of the Kenyan economy to an innovative one driven by technological innovation, a shift from knowledge-reproduction to knowledge-production, and ensuring the availability of a critical mass of well-qualified human resource to stimulate development. The heart of this transformation will be the university education system that must be "focused, efficient and able to create knowledge, and deliver accessible, equitable, relevant and quality training to sustain a knowledge-based economy that is globally competitive."

Research is a hub activity of universities, and central to post-graduate training. Research output forms the foundation for the realization of national development goals. Kenyan Universities have graduate school policies and regulations to steer the

training of graduate students. These policies and regulations serve as the main documents guiding graduate education, providing direction to both faculty and students on institutional expectations and requirements for successful completion of the students' programmes. Most policies were however not readily accessible by students and supervisors (Too, Kande, Kiptoo, Mukhwana &Some, 2016). This background on the graduate policy governing public and private universities has prompted the researcher to closely look at the influence of student-supervisor interaction in graduate studies in public universities in Kenya.

2.1.3 The supervisor and the graduate student

Will establish approved roles and clear processes to be maintained by both parties. In the case of joint supervision, the role of each party must be defined. The supervisor and the student will meet frequently and as often as is reasonable to ensure stable progress towards the completion of the proposal and thesis. This time varies but the normal minimum requirement for face-to-face contact spread across each year of registration is 24 contact hours for a Masters and a PhD by thesis. These two will keep appointments, be punctual and respond on time to messages, keep one another informed of any planned vacations or absences as well as changes in his or her personal circumstances that might impact on the work schedule (Kirk, & Lipscombe, 2019). Unplanned absences or delays should be discussed as soon as possible, and arrangements should be made, to catch up lost time. The supervisor and student will ensure that research on human subjects is conducted according to the procedures and the requirements of the relevant University Ethics committee and lastly the duo will together complete progress reports on the research project, as requested by the Departmental and School Graduate Studies Committee (Roets, Botha, & van Vuuren, 2017).

2.1.4 Supervision

Supervision is vital to graduate research and training. Several challenges exist concerning supervision. For example, in the process of harmonizing supervisors and graduate students, some academic units select supervisors with little input from the students. In these cases, there seem to be no standard criteria adopted other than the willingness of the supervisors to work with the students. Besides, there is often a mismatch between the students' research areas and the supervisors' areas of expertise. This is especially true in programmes where there were a large number of students as compared to supervisors.

Further, universities do not adhere to student-supervision load limits. With the growing number of graduate students, there has not been a commensurate growth in staff numbers, especially in the social sciences. Supervisors were forced to handle large undergraduate numbers, coupled with a sizeable number of graduate students. Admissions into graduate programmes hardly ever take into account supervision capacity, resulting in many programmes, especially in the Humanities, Arts and Social Sciences having faculty supervising students' numbers far above the recommended (Silinda & Brubacher 2016).

This policy therefore advocates that universities institute policies and regulations which ensure that: Students were actively involved in the process of identification of and were properly matched with their supervisors; faculty members do not supervise students in areas for which the faculty have no expertise; faculty members do not supervise more graduate students than contained in the regulations and standards by the Commission for University Education; junior graduate faculty undergoes mentorship from senior faculty and formal training in supervision; junior graduate

faculty is restricted from serving as the main supervisor of a Ph D candidate until successful completion of a graduate supervision training, and supervision of at least one Ph D student as a secondary supervisor; processes were put in place to measure supervisor performance by tracking the ratio of discontinuing and transferring students to completing students for each post-graduate faculty member, among other measures. In cases of poor supervision performance, appropriate remedial measures should be taken; and lastly, through the relevant academic unit, supervisors who could no longer continue in that role were suitably replaced (Ali, Watson & Dhingra, 2016).

Supervisor accepts to provide direction for the student's research project concerning the design and scope of the project, the relevant literature and information sources, research methods and techniques and methods of data analysis. Has an obligation to be reachable to the students. Will be ready for the meeting with the student. This includes being up-to-date on the latest work in his/her area of expertise. Will expect written work as jointly agreed and will return that work with constructive criticism within a timeframe (a suggestion of 2-4 weeks) jointly agreed at the outset of the research (Ekpoh 2016).

Supervisors will provide guidance that could help the student to improve his/her writing. This might include referrals for language training and academic writing. The supervisor will offer direction on technical aspects of writing such as referencing as well as on discipline-specific requirements. Detailed correction of drafts and instruction in aspects of language and style were not the responsibility of the supervisor. They will support the student in the production of a research report, dissertation or thesis. Provision should be allowed for adequate, mutually respectful, the discussion around recommendations made. Also, will assist with the construction

of a written schedule which outlines the expected completion dates of successive stages of the work. Again, they will ensure the student could present work at graduate/staff seminars/national/international conferences as appropriate, will support the publication of research articles as appropriate. Supervisors will discuss the ownership of research conducted by the student following the University guidelines and rules on intellectual property, co-authorship and copyright (Mukhwana, Oure, Too, & Some, 2016).

University and college supervisors for graduate students will guarantee that the research is conducted under the University's policy on plagiarism Lamula, (2017). They will confirm that the student is made aware in writing of the inadequacy of progress and/or of any work where the standard is below par. Acceptability will be according to criteria previously supplied to the student. They have an obligation to refuse to allow the submission of sub-standard work for examination, regardless of the circumstances. If the student chooses to submit without the consent of the supervisor, then this should be clearly recorded, and the appropriate procedures followed.

Virtually all university graduate schools have put in place policies that require regular update reports by supervisors on students' progress. This is basically to assist students to make good progress through their academic programme and complete their studies on time. It also allows the university to take appropriate measures where problems were identified. This reporting process, however, is rarely adhered to. On completion of coursework, or for programmes based solely on research, monitoring research progress has been difficult except for those students who were part of research project teams where inherent reporting guidelines help in tracking the student research output. Further, it is not unusual for students to spend several years between the completion of

coursework and graduation, with some falling completely off the radar (Too, Kande, Kiptoo, Mukhwana & Some, 2016)

2.1.5 Graduate rules and regulations of Moi University

Rules and regulations governing graduate studies of Moi university as revised in 2015 points out that the university intends to ensure that; The student-supervisor ratio should remain as approved by the senate to ensure effective interaction during all the stages. Maximum load for a supervisor will be three PhD and five Masters Students at any one time during the study. Supervisor must have a PhD and shall be at the level of a senior lecturer and above to qualify as a supervisor for a PhD student. Each candidate shall have two supervisors of which one of them must be a member of the teaching department. The supervisor shall be responsible for guiding the student in the conduct of the research work (Too, 2014).

The departmental graduate committee shall immediately appoint a replacement supervisor if the supervisor ceases to supervise a student for a period exceeding three months. The supervisor is the research advisor of the student in graduate studies. Graduate student gets the expert guidance, direction and constructive advice throughout the study. The supervisor should guide the student in maintaining progress of the work following the approved programme. The supervisor ensures the student complies with the Moi University ethical requirements as it is contained in the rules and regulations governing graduate studies. Supervisor prepares reports on the student's progress and submits to the Dean of the school and a copy to the directorate of Graduate Studies after every three months (Mwonge, 2015).

On the other hand, the Student shall; Upon passing the proposal stage enter into an agreement with the supervision plan for the research and thesis. Be his or her

responsibility to contact the supervisor about the supervisory plan of the thesis work. Report regularly and submit the progress report of the research work to the supervisor and the departmental seminars as required from time to time. Come up with original work and avoid plagiarism under the anti-plagiarism policy of Moi University on regulation 17. Undertakes to work independently under the guidance of the supervisor. This includes reading widely to ensure that the literature pertinent to his/her chosen topic has been identified and consulted. Is obliged to make appointments to see the supervisor and will arrange meeting times well in advance. Will think carefully about how to get the maximum benefit from these contact sessions by planning what he/she wants in these sessions. Should submit written work for discussion with the supervisor well in advance of a scheduled meeting. The kind and frequency of written work should be agreed with the supervisor at the outset of the research (Muriungi, 2015).

Written work that is submitted should be relatively free from basic spelling mistakes, incorrect punctuation and grammatical errors. Responsibility for the accuracy of language, the overall structure and coherence of the final research report, dissertation or thesis rests with the student. Undertakes to heed the advice given by the supervisor and to engage in discussion around suggestions made. Ultimately the student must take responsibility for the quality and presentation of the work. Should strive, within reasonable bounds, to maintain a focus on his/her research area and to work within the agreed schedule. The student will prepare material for presentations at seminars and conferences also undertakes to submit papers for publication. Agrees to honour agreements about ownership of the research and following the University's guidelines and rules concerning co-authorship, copyright and intellectual property.

Graduate students will ensure that the work contains no instances of plagiarism and that all citations were properly referenced and that the list of references is accurate, complete and consistent. Agrees to work following the criteria of acceptability as supplied by the supervisor. Undertakes not to place the supervisor under undue pressure to submit work for examination until the supervisor is satisfied that it has reached an acceptable level of quality.

2.1.6 Function of thesis research supervisor at the University of Eldoret

A student's thesis/dissertation shall be supervised by at least two academic staff members who shall have appropriate qualifications in the subject area in focus and its methodology. At least one supervisor shall normally be a member of the teaching department in which the student is registered who shall normally be designated as the main supervisor. The ranking of first/second to or more supervisors for a candidate is not necessarily determined by seniority in the university hierarchy. If the thesis research is pursued at another approved organization, then a second supervisor associated with the other organization may be appointed or may be appointed as a third supervisor if the two university supervisors have already been appointed.

In cases where a student has multiple supervisors, the supervisory committee should hold a formal meeting with the student to discuss comments made on the thesis by the examiners. The supervisors shall be responsible for guiding the student in the conduct of the thesis research. In the absence (for at least 2 months) of the lead supervisor, the second supervisor and/or relevant HOD shall be responsible for ensuring the student complies with University regulations and procedures, including supervision. If a supervisor ceases to meet these requirements or fails to supervise a candidate for a

period exceeding three months, the HOD shall advise the DGC to nominate a replacement supervisor for approval following these rules,

A supervisor shall peruse, amend and return proposal or thesis drafts or parts of such drafts within one month after receiving such drafts from the student, The maximum supervision load for a lead supervisor shall be in the band of **six** to eight candidates, and the supervisory load shall constitute part of their official workload. In an ideal situation, the maximum number of students and academic staff can supervise in any given academic year shall be a) masters-5; b) Doctorate-3 but there are exceptional circumstances. In exceptional circumstances, the Senate may approve a higher load for a lead supervisor, but in no circumstances shall the load exceed fourteen students at a time.

2.2 Characteristics of Student-Supervisor Interactions

Studies have tried to understand graduate students' expectations and their perceptions of thesis supervisors considering students are the active participants in the educational process (Phillips & Pugh, 2010). It has been found out that graduate students prefer professors who throw an intellectual challenge to them, have the experience, and clearly explain not only the subject, but also how to achieve success in learning (Senko, Belmonte, & Yakhkind, 2012).

Some researchers found out that graduate student with a high level of satisfaction with training programs consider the ideal supervisor to be able to adapt the learning content and arouse the interest of students (Junquera, Mitre, & Perez, 2012). There are revealed differences in the behaviour of teachers-facilitators perceived by nursing students: they appreciate preceptors as more supportive while clinical lecturers are perceived as more important for the development of critical thinking, reflection and

exchange of experience between students (Kristofferzon, Martensson, Mamhidir, & Lofmark, 2013). It is essential that graduate students were satisfied with all facilitators' supervision and their contribution to all learning outcomes.

It means that graduate students need different kinds of support from supervisors. At the same time, the problem of supervisors' perception and evaluation of learning outcomes and capabilities of students is topical. Currently, psychologists agree that students' achievements are the result of systematic interactions between various cognitive and motivational variables (Sedaghat, Abedin, Hejazi & Hassanabadi, 2011). The learning outcomes of students depend not only on their cognitive abilities and applied learning strategies, but also many motivational and personal factors, such as goals (motives) of students' learning activity (Elliott, 2002), students' perceived abilities (Green & Miller, 1996), individual difference in ego orientation (desire for superiority) and task orientation (desire for understanding) (Nicholls, Cheung, Lauer, & Patashnick, 1989), psychological sense of school membership (Ferreira, Cardoso, & Abrantes, 2011), and other various characteristics.

Sequentially, the development of graduate students' skills in the creative and research projects improves their learning motivation and quality of work (Darinskaya, 2012). The analysis of the scientific literature showed that students' expectations and issues of evaluating students' achievements in traditional learning activity are mainly described. But an important role in modern education belongs to research activity and involvement of students in the joint research projects with supervisors. The research activity differs from traditional learning activity. It aims to get new scientific knowledge through finding and analysis of scientific information, formulation of

research questions and hypotheses, data collection and processing, reflection and representation, etc. (Poddyakov, 2000).

At every stage of the research project, the graduate student expects from supervisors' certain types of support and incentives: motivation to begin the study, positive, but critical feedback, algorithms and explanation of research operations, and assistance in analysis and interpretation of the data. The complexity of tasks and requirements for students increases on each subsequent stage of education. Therefore, supervisors' evaluation of students' research capacities, including a whole range of motivational, cognitive, behavioural and self-organizational characteristics becomes very important. As all these characteristics may appear ambiguous or be the only potential, a supervisor has to solve a very difficult problem.

Misjudgment or overestimation of research capacities of graduate students by a supervisor could reduce the effectiveness of their interaction. For example, it was shown that character of motivation which encourages students to interact with supervisors could be ambiguous. Mottet, Martin, & Myers (1999) identified functional, social motives, motives of participation, "extenuating" and "slavish subservience" motives of students' communicative behaviour, among which only a functional motive is directly related to the learning course. It was found out that research activity of students, along with intrinsic motives, leading to a high quality of work, can also be encouraged by students' values (Iskra & Moskvicheva, 2014), the motives of social achievements, personal development, and obligation, which stimulate them to look for easier ways of completing tasks (Moskvicheva, 2012).

Personality features of graduate students could also be predictors of success of their researches. High level of the research potential of students is positively correlated with

extraversion, self-control, emotional stability, expressiveness, as well as the personality orientation to the future (Bordovskaia & Kostromina, 2013). Maturity of goal-setting processes, forecasting, self-reflection largely determines the promptness of completion of thesis work (Kostromina, 2013), and its incorrect assessment by supervisors could lead to unexpected students' procrastination.

Important to the successful solving of research tasks are cognitive intellectual and creative abilities, defining the level of analytic-synthetic activity of graduate students: the ability to distinguish common features and properties of objects or concepts, to compare, to think abstractly, to operate the knowledge; preference for an analytical thinking style, flexibility of thinking, (Darinskaya & Rozum, 2014). Successful communication in a research project leads not only to decision of a particular scientific problem but has an important influence on the personal and professional development of graduate students. According to Ulug, Ozden, & Eryilmaz, (2011), the influence of attitudes and style of teaching is usually studied in terms of the impact on students' academic achievement, whereas outside the research long-term consequences of the influence on the formation of personality remain.

Blended learning, integrating a variety of media to deliver teaching material to graduate students is increasingly prevalent in university education. Blended learning is often associated with the use of web tools such as email, lecture recordings, blogs, discussion boards, and a dedicated university learning management system (for example *Blackboard*). Institutional based learning management systems were being used by universities all over the world. These systems were often designed to provide a web presence for course instruction and assist with the organization and management of course material (Coates, James & Baldwin, 2005). Typically, they

propose to offer an environment that helps to engage students and enrich the quality of the graduate student experience through interactive learning activities. In general, they were designed to support the development, management, and delivery of blended learning.

Social networking sites engage graduate students in online learning communities using technologies familiar to and accepted by their generation (Oradini & Saunders, 2008). Incorporation of this pedagogical strategy could offer new opportunities to enhance academic instruction and student-supervisor socialization (Ouf, Nasr, & Helmy, 2010). For example, *Facebook* has the capacity to support course management activities, enhance the provision of information and resources to graduate students, as well as engage and motivate students through interactivity and collaboration (Naidu, 2005). Using *Facebook* as a host site to incorporate assessment, McCarthy (2010) reported positive student feedback for its integration into the learning environment. Students in this study noted many advantages of the online learning environment and *Facebook* tasks. Reports of improved academic interactions being developed between both domestic and international student groups, the generation of rewarding academic discussions that were beneficial for study, and increased interaction with the peer group were among the main findings.

Makokha and Mutisya (2016) carried out a study on the status of E-Learning in Public Universities in Kenya. Data were collected using questionnaires administered to both students and lecturers randomly sampled from seven public universities. Questionnaire responses were triangulated with interviews from key informants and Focus Group Discussions (FGDs). Data were analyzed qualitatively and through the

use of descriptive statistics. Findings revealed that e-learning is at its infant stage in Kenyan universities.

Majority of universities lacked senate approved e-learning policies to guide structured implementation. A few lecturers (32%) and students (35%) used e-learning and few courses (10%) were offered online. Majority of online uploaded modules (87%) were simply lecture notes and not interactive. Again, universities in Kenya lacked requisite Information and Communication Technology (ICT) infrastructure and skills. The study recommends that universities partner with the private sector to improve ICT infrastructure, build capacity, and standardize e-learning programs in the country.

Lei, Finley, Pitts and Guo, (2010) sought to determine which is a better choice for student-faculty interaction: synchronous or asynchronous communication? According to the study, the use of Computer-Mediated Communication (CMC) technology has dramatically changed the ways for students to interact with their professors, especially for communications occurring outside of the classroom. A recent study investigated the impact of offering virtual office hours by using Instant Messaging (IM) software for student-faculty interaction.

The study found that participants in classes that offered virtual office hours reported higher levels of satisfaction with office hours than students in classes that offered only traditional face-to-face office hours. Also revealed, however, was that students' use of virtual office hours is not significantly different from their use of traditional office hours. The study further reported that students prefer asynchronous tools such as email to communicate with the professor. This study extends this line of research by studying the use of email to enhance student-faculty interaction. Participants in the study were drawn from undergraduate students enrolled in on-campus MIS courses at

a public university in the U.S. Southeast. The findings suggested that students who were offered an email turn around time guarantee reported a significantly higher level of satisfaction on getting help outside of the classroom than the participants who were not offered such a guarantee. The study also found that, when participants were offered both virtual office hours and an email turn around time guarantee, they prefer the latter for communication.

Recently, the internet and web-based course management systems have created a convenient alternative to traditional office hours for many students who have substituted email and discussion board postings for face-to-face meetings as a means to ask questions or obtain course-related information or additional help. These new, and arguably preferable, means of interacting with professors through web-based technologies have some researchers predicting the demise of traditional face-to-face office hours (Myers et al. 2004). Such management systems also offer an advantage of choice in terms of synchronous or asynchronous communication.

One main challenge for institutions of higher education is to discover how to better engage graduate students in the communication processes that stimulate more substantial and frequent interaction with faculty. CMCs could be and were used to enhance traditional office hours. In a recent CDW study assessing technology usage in higher education, students indicated they wanted more regular and immediate communication with faculty, and rated online chat with professors as the capability they desired the most (CDW Government, 2008). In their study of e-learning environments, Jafari, McGee & Carmean (2006) found that students preferred free and popular communication technologies such as IM and podcasts, and wanted these tools included into the course for communication and collaboration.

CMCs at the university level tend to be considered a principal means of delivery of information and communication. This additionally entails the potential for extending the communication channels most commonly found in traditional learning environments. The most common forms of communication used by faculty to facilitate interaction with graduate students include the use of asynchronous (for example, email and online discussion boards) and synchronous communication (for example, chat or instant messaging). The majority of research related to the use of asynchronous communication in higher education has focused on distance learning courses that utilize web-based communication technologies to deliver course content virtually, and thus, involves extensive student-instructor communications (Dezhi, Bieber, and Hiltz, 2008; Oomen-Early et al., 2008).

Synchronous online communications have been used with success in several studies of distance learning environments (Cox, Carr & Hall, 2004; Myers et al., 2004). The most common forms of such communication were via "chat" or instant messaging. In a comparative study of synchronous and asynchronous learning technologies, Schwier and Balbar (2002) found that synchronous chat created a feeling of community among students enrolled in a graduate course.

Spencer and Hiltz (2003) conducted a field study of synchronous chat in an online course and found graduate student satisfaction highest in courses where synchronous chat sessions were offered in addition to face-to-face methods. This finding was consistent with Cox, Carr, and Hall's (2004) study which found the "chat" function of commercial course management systems less effective for more in-depth topics. The use of chat or IM to facilitate student-interaction and virtual office hours in online courses and traditional courses has also been explored in recent studies (Myers, et al.,

2004; Jeong, 2007). Hooper, Pollanen, & Teismann (2006) found that virtual office hours increased effectiveness and participation of students enrolled in an online introductory mathematics course.

In a study of the impact of offering virtual office hours within a traditional course, Myers (2003) found that students who had participated in virtual class discussions had higher levels of comfort and confidence during traditional classroom discussions. In a recent experiment at Harvard Business School, virtual office hours were offered to students in an introductory computer science class with the intent of addressing the need for flexibility and convenience. Feedback from students was generally positive about the availability of help outside the classroom although professors indicated they did not foresee virtual office hours completely replacing traditional hours anytime soon (Riley, 2007).

Integration of web-based technologies in both online and traditional learning environments, while often successful, does entail possible usage issues. One potential drawback was increased workload and time commitment for faculty as a result of student expectations of “ubiquitous instructor access” (Farmer, 2003). Jeong (2007) noted issues related to miscommunication due to the lack of verbal cues and drawbacks associated with the lack of interoperability between IM clients.

This also addresses the lower level of media richness that might be found in any non-face-to-face communication media (Daft, 1987; Dennis, 1999). A recent study (Li & Pitts, 2009) found that, while offering virtual office hours improved students' satisfaction of outside-of-classroom student-faculty interaction, students' usage of virtual office hours was very limited. The study also reported that students prefer asynchronous tools such as email to communicate with professors. This study,

therefore, aims to look at how these different types of student-faculty interactions influence the student-supervisor socialization process.

Kim and Sax (2009) carried out a study to examine the effects of student-faculty interaction on a range of student outcomes i.e., college GPA, degree aspiration, integration, critical thinking and communication, cultural appreciation and social awareness, and satisfaction with college experience vary by student gender, race, social class, and first-generation status. The study utilized data on 58,281 students who participated in the 2006 University of California Undergraduate Experience Survey (UCUES). The findings revealed differences in the frequency of student-faculty interaction across student gender, race, social class and first-generation status, and differences in the effects of student-faculty interaction (i.e., conditional effects) that depended on each of these factors except the first-generation status.

The findings provided implications for educational practice on how to maximize the educational efficacy of student-faculty interaction by minimizing the gender, race, social class, and first-generation differences associated with it. Tenacity, support by the supervisor, personal and collegial support and previous experience contribute to psychological survival (Smith and West-Burnham, 1993). Students also need determination and perseverance to complete their research (Phillips and Pugh, 2000; Smith and West-Burnham, 1993). Besides, they need adequate supervision and clear communication with supervisors. They should also be familiar with evaluation criteria (Shannon, 1995).

Research is an interactive process and requires the development of social as well as academic skills (Phillips & Pugh, 2000). A school's administrative function is commonly interpreted as referring to managing, operating or directing an organization

(Burton and Bruekner, 1995) to support graduate students towards the completion of a PhD or masters degree. Some suggestions regarding the supervisory framework for supporting and defining the students' graduate programme include producing a definite plan in writing, probably different for each department, that describes the department's view on good supervisory practice; establishing regular meetings between graduate student and supervisor, setting up adequate methods of assessing coursework, thesis or dissertation supervision record keeping and project advancement (Brown and Atkins, 1988; Council of Graduate Schools, 1990) and submitting a comprehensive annual progress report to the supervisor.

Given the length and complexity of graduate student supervision, it is understandable that various difficulties arise (Brown and Atkins, 1988; Moses, 1992) due to organizational or professional factors. Some of the professional factors influencing the interactions of the student-supervisor were misinformed or inadequately prepared supervisor or a supervisor whose research interests were different from those of the graduate student. Humphrey and McCarthy (1999) explained that many graduate students were mature and/or distance learners with needs different from those of residential and undergraduate students.

Salmon (1994) pick up the theme of changing research stages and the need for a supervisor to be flexible in an attempt to meet the needs of individual students. Supervisors who have this flexibility could be more helpful to their research students, Haksever and Manisali, (2000). Supervisors believed that they were contributing by organizing help with skills, developing English, writing, by collecting relevant literature and through networking or putting students in contact with others in the area (Brown and Atkins, 1988). However, support from the institution and supervisor still

needed as reported by Malfroy (2005) that graduate students often experience frustration as a result of a perceived lack of support or what is referred to as “a disjunction in expectations” between the graduate student and the supervisor.

Spears (2000) states that supervisors should read the student's written work thoroughly and provide constructive criticism as this is an essential element in the student's intellectual development. It is supported by Lessing and Schulze (2002) who describe the supervisory role as a balancing act between various factors: expertise in the area of research, support for the student, critique, and creativity. Also, advice on the desired amount of reading, experimentation and analysis will normally be expected (Holdaway et al., 1995). According to Spear (2000), feedback is normally given concerning topic selection, methods of inquiry, writing style and layout, the clarity of the student's work and ideas, the completeness and direction of the work, and the student's general progress.

According to Hodza (2007), supervisors must be willing to make adjustments in the interaction process to meet the supervisee's learning needs. This includes consultation and appointment with the students. Holloway (1995) referred to this as the artistry of supervision. Therefore, faculty and even the university must assist these graduate students by providing enough information for a potential supervisor and supervisors should make themselves accessible for the students. The supervisors should make equal information, time and energy available to all graduate students (Brown and Krager, 1985). According to them, the supervisor needs to be sensitive to students' time and competence limitations and to assist them to become aware of their own limitations and any constraints on them. Russell (1996) and Moses (1992) found that both supervisors and students agreed that one role of the supervisor was to assist

students in general. The amount of assistance that supervisors give to graduate students varies, depending upon the stage that the latter have reached (Moses, 1992). Thus, supervisors should help students more in research input.

The supervision literature indicates that ethical, technical and methodological problems could be minimized or prevented if all the participants in the interaction strive to enter it with clear expectations for their respective roles and about the rules for their interactions (Goodyear et al., 1992). Therefore, both on a departmental and individual basis, the supervisor must be diligent about explicitly working with students to establish mutual expectations, responsibilities and benefits for working together and with other interested parties (Phillips & Pugh, 2000).

Moses (1992) argues that at each stage of the research progress, students were likely to need different forms of guidance. They need particular guidance on when to stop data collection and analysis, when to start drafting the thesis and how to structure it (Moses 1992). Thus, the supervisors were expected and assumed to be guides (Cryer, 2000) and critical friends (Hockey, 1996; Sheehan, 1994). On the other hand, they should also be able to adopt flexible supervision strategies depending on the individual requirements, which were influenced by the attributes of the particular student (Hockey, 1996; Hill et al., 1994; McQueeney, 1996). This is because graduate students were not homogenous, but highly diverse in terms of academic ability, personality attributes, motivation and attitude.

Hence, how supervisors respond to students will, in part, be conditioned by these different factors and applying the same rigid strategy for each student might not always work effectively (McQueeney, 1996). Burgess et al. (1994) also pick up the theme of changing research stages and the need for a supervisor to be flexible in an

attempt to meet the needs of individual students. Supervisors who have this flexibility could be more helpful to their research students (Haksever & Manisali, 2000). Norhasni & West (2007) explained that research student supervision as a blend of academic expertise and the skilful management of personal and professional relations. Accessibility of the supervisor should be improved so that the students could seek advice from them. Students need guideline from the institution to select a potential supervisor.

Haksever and Manisali (2000) define the supervisory requirements of the student as follows: (1) personal help: support, motivation, socializing, help in organizing accommodation and other things that might be required, but were unrelated to the research; (2) indirect research related help: providing contacts, both industrial and academic, providing equipment and initial help in locating references; and (3) direct research-related help: a critical analysis of work, help with methodological problems, precise direction and help with the management of the project. The interaction between the student and supervisor involves selecting a research topic, planning the research, identifying and acquiring the necessary resources, managing the project, actively conducting the research, carrying out the literature review, analysis and interpretation of the data, writing the thesis, defending it and possibly publication (Piccinin, 2000).

Consequently, the supervisory process requires constant adjustment, great sensitivity and interpersonal skill on the part of both the supervisor and student (Hockey, 1995, 1996; Piccinin, 2000). Good communication between graduate students and their supervisor was the most important element of supervision (Barger & Mighto-Chamberlain, 1983; Donald et al., 1995; Haksever & Manisali, 2000; Hockey, 1996;

McQueeney, 1996; Phillips & Pugh, 2000; Spear, 2000; Waitie, 1994). Without open and honest communication it is very difficult to identify the nature of and reasons for the shortfalls perceived by the graduate student. Both parties should be open to criticism, willing to listen to each other and to talk openly (Haksever and Manisali, 2000) and trustworthy (Armitage & Rees, 1988; Hockey, 1996; Salmon, 1992).

2.3 Experiences of Student-Supervisor Interactions

Experiences of student-supervisor interactions include the problems and challenges encountered by graduate students during graduate studies. Some of the problems and challenges encountered during their studies are just but experiences of graduate school.

Zuber-Skerritt et al. (1994) summarized the main problems/challenges in graduate supervision as inadequate supervision: supervisors' lack of experience, commitment, and/or time; emotional and psychological problems: students' intellectual and social isolation; their insecurity to fulfil the standards and lack of confidence in their ability to complete their theses within the specified time or not at all; lack of understanding and communication between supervisor and graduate student; and graduate students' lack of knowledge, skills, training or experience in research methods.

Another problem/challenge is that the role of supervision and the motive for supervision also seems to be unclear. In the first instance, the role of supervision is being described as the most advanced level of teaching (Connell, 1985), critical conversation (Knowles, 1999) and mentorship (Taylor, 1995), and in the second case, supervisor motives might incorporate knowledge attainment, joint publications and recognition (self-esteem) each motive carrying different expectations of students (Hockey, 1996). Spear (2000) concludes that one of the most common complaints

from research graduate students concerns infrequent or erratic contact with supervisors, who might be too busy with administrative or teaching responsibilities, have too many students or be away from the university too often. Therefore, the supervisor should make equal information, time and energy available to all students (Brown & Krager, 1985) and should also meet regularly with students (Hockey, 1996; Russell, 1996). Research has shown that constant, thoughtful supervision and availability is the key to successful graduate program completion (Donald et. al., 1995; Holdaway, 1991).

McAlpine and Norton (2006) found that a student's voice is seldom heard in research on graduate studies. Lin and Cranton (2005) described the process of graduate study as growing from a scholarship student to becoming a responsible scholar, which Lovitts (2005) refers to as a critical transition. The graduate growth process is not always a fluent and untroubled transition. The growth that takes place by working through what Malfroy (1998) refers to as a necessary creative tension and the development of independence, critical thinking (Lin and Cranton, 2005) and creativity (Lovitts, 2005), were essential elements of graduate development. Lin and Cranton (2005) add that students need to be supported in their growth to establish an individual scholarly identity. Lovitts (2005) found that graduate students were often ill-prepared to deal with the challenges graduate studies pose to them.

Lovitts (2005) include elements in the macro and microenvironments, as well as individual resources as influences in graduate completion and creative performance. Spear (2000) concludes that one of the most common complaints from research students concerns infrequent or erratic contact with supervisors, who might be too

busy with administrative or teaching responsibilities, have too many students or be away from the university too often.

Research into chair-candidate interactions suggested that gender, ethnicity, education, and other differences impact any research interaction. Particularly, research revealed that the chair-candidate interaction is a veiled and controlled interaction similar to the "master-slave interaction" (Wisker & Robinson, 2014) and possible cultural imperialism. Wisker and Robinson alleged that some foreign students were even suppressed or sought remedial education from host universities and that this practice has gone so far as to lead to mistreatment of candidates.

Teaching in higher education is currently being carried out either by face to face mode or distance teaching mode. Face to face teaching mode is the one in which the lecturer delivers the lecture, demonstration or explanations in front of students in a lecture hall or theatre. In distance teaching, the lecturer is separated from students in terms of place, space and time and uses electronic broadcast, electronic mail, audio-visual methods and so forth (Macharia, 2009),

It is becoming more common for instructors to explore various mediums, methods, and settings in which to conduct the class. Alternative structures to the traditional classroom configurations were being considered for example the increased use of hybrid or online class settings, also known as high-tech classrooms, (Gutierrez-Folz, 2010). The rise of online courses and access to social media such as Facebook and YouTube presents a new menu of options for lecturers; but with it, speculation that students will not get required and/or expected social interaction to succeed (Steinfeld, Ellison, & Lampe, 2008; Valenzuela, 2009).

It will come as no surprise that students in a classroom tend to form interactions that might affect their experiences, including their learning and understanding of classroom material. However, less is understood about factors affecting these interactions. Some research points to the importance of teaching methodology in connection to outcomes. For example, using technology in a classroom could create new literacy environments (Moayeri, 2010), and teaching methodology could affect the levels of student participation in the coursework and, in turn, their learning outcomes (Nunn, 1996).

While it is often assumed that a face-to-face environment is the best way to create synergy and in turn intellectual creativity and increased knowledge exchange, there were many methodologies for teaching face-to-face, and some were better than others. Choices such as group activity and online discussion groups have opened the door to new kinds of social interaction. Teaching techniques and the class structure was chosen by instructors could influence student learning (Rotenberg, 2005). An important factor in teaching effectiveness relates to the experience of the instructor with the course material. Experience of an instructor could affect how well a course is organized and activities were facilitated. Such factors could account for up to 40% of the variation in student achievement (Strong, 2007). The importance of using group discussion and cooperative learning methods in classes (as opposed to lecture only) is well known (Orlich, Harder, Callahan, & Brown, 2010; Rotenberg, 2005) and the benefits of online instruction were evident, but ways to maximize them were still being discovered (De Laat, Lally, Lipponen, & Simmons, 2007; Kelly, Ponto, & Rovai, 2007).

Online learning enables the development of competencies in collaboration, critical thinking, personal knowledge, and identity development (Ala-Mutkam, 2009). However, the potential implications these techniques have on graduate student interactions are less well known. This is an important factor because social networks of students in academic settings have been shown to influence such outcomes as academic performance, development, and persistence (Rizzuto, LeDoux, & Hatala, 2009; Sparrowe, Liden, Wayne, & Kraimer, 2001), as well as health outcomes (Valente et al., 2007, 2009).

Varda, Retrum and Kuenzi (2011) carried out a study on the influence of teaching methodology on student social interaction. The study explored the effects of various teaching methodologies on the social interactions reported by university students in the School of Public Affairs at the University of Colorado Denver. The study found that online classes tend to have fewer, but more frequent interactions among students, more diversity among interactions, and greater likelihood that students perceive other students as influential to their learning. In primarily lecture classes, students reported fewer connections, but similar to online students' interactions, the interactions were frequent and influential. The study concluded that teaching in an online environment has its own strengths in terms of student interactions; that working in groups offers fewer positive relational outcomes than expected; that the experience of the lecturer has a surprising influence on interactions among students; and that student types affect interactions in fairly predictable ways.

Majeed and Navaz (2013) carried out a study on perception of lecturer-student interaction in English medium science lectures, in Sri Lanka where English is a second language. The study argued that dialogic lecturer-student interaction, which

enables students to take a more active role in discussions compared to the use of recitation scripts (questions-answers-evaluations) developed in non-dialogic interactions, is likely to be beneficial for students' content (lecture comprehension) and language development. The study revealed the complexity of the perception-practice dynamic, and the multi-faceted sub-set of factors which influenced students' and lecturers' behaviour in class, and their perception of that behaviour. Students' lecture comprehension and classroom interaction were influenced by their language proficiency, though the students considered the lecturers' lecture delivery style to be more important than their own language proficiency. This study also revealed that a culturally-embedded behaviour perpetuated by senior students, known as ragging (a kind of bullying), restricted the classroom interaction of the students.

Wenglinsky (2001) carried out a study on teacher classroom practices and student performance: how schools could make a difference. According to the study, quantitative studies of school effects have generally supported the notion that the problems of the United States of America (U.S.A). Education lies outside the school. Yet such studies neglect the primary venue through which students learn, the classroom. Another study explored the link between classroom practices and student academic performance by applying multilevel modelling to the 1996 National Assessment of Educational Progress in mathematics. The study found that the effects of classroom practices, when added to those of other teacher characteristics, were comparable in size to those of student background, suggesting that supervisors could contribute as much to student learning as the graduates themselves.

2.4 Practices that Would Improve Student-Supervisor Interaction

Effective supervision requires supervisors to be knowledgeable and skilled in the research field (McQueeney, 1996). Brown and Atkins (1988) suggest that to supervise effectively, one has to be a competent researcher and to be able to reflect on research practices and analyze the knowledge, techniques and methods that make them effective. Frischer & Larsson (2000) and Phillips & Pugh (2000) take a slightly different view, in that they suggest that graduate students were recommended to select a supervisor based on the key factor of whether the latter has an established research record and is continuing to contribute to the development of his or her discipline. This includes whether the person has recently published research, holds research grants and is invited to speak at conferences in their own country or abroad. Therefore, an effective supervisor should satisfy such criteria.

Spear (2000) supports this statement and adds that often it will be sufficient for the supervisor to be competent in the general area of the student's research even if not expert in the detailed area of the thesis topic. Lessing & Schulze (2002) distinguishes between the support needs of Master's and doctoral students, where the Master's student needs to methodologically master the research process and the doctoral candidate is expected to produce more original work and might therefore need more input in developing depth, synthesis and critical ability.

All graduate students need to acquire technical competence, analyze data, manage their time and personal responsibilities, and build up a network of peers and expert colleagues. Lessing & Schulze (2002) emphasize students' needs in terms of finding literature, data analysis and interpretation, and interactive learning opportunities.

Training in research methods, seminars, response time for students, and supervisory input was deemed important factors in enhancing students' success.

Mackinnon (2004) summarized the influences on the graduate experience as personal, professional and organizational factors. Graduate studies, therefore, have both an intellectual and a psychological component that needs to be acknowledged. Mackinnon (2004) and McAlpine & Norton (2006) therefore argued that graduate students' needs need to be addressed at institutional, departmental and individual levels. Research is a long way from being evenhanded. Furthermore, control functions in the selection of who manages the research, how the research is conducted, what is examined, what the results were, whether the results bolster bias and whether results were disregarded or used to make a difference. Hence, valuing subtle distinctions is recommended for anyone facilitating the doctoral dissertation process (Wisker & Robinson, 2014).

Chairs also impact candidates' perceptions of research topics, as maintained by Jaeger et al. (2011). As a consequence, more focus needs to be given to chair-candidate interactions for doctoral candidates selecting a dissertation research topic to encourage chairs to be aware of and to learn from candidates and to deliberately demonstrate mutuality and reciprocity. Jaeger et al. (2011) uncovered five common characteristics of chair candidates interactions: a) education and qualifications count, b) chairs and candidates learn together c) chair-candidate interactions could become synergistic, d) chairs frequently act as translators and advocates, and e) chairs and candidates both claimed that dissertation studies might need organizational backing.

Mhunpiew (2013) claimed that facilitating the dissertation process encompasses roles such as coach, teacher, friend, colleague, trainer, good role model, and guide to

facilitate total development for each student. The chair is an essential resource for candidates during the dissertation process. The most effective chair generally is one who shares the graduate student's topic of interest; has served on dissertation committees several times before taking on the role of a chair; and is familiar with the process, its pace, nuances, and possible barriers (Berger, 2015). Kuo (2009) alleged that candidates with effective chairs perceived better progress with satisfying degree obligations than do candidates with ineffective chairs.

Learning is enhanced when candidates were facilitated through the dissertation process with an informed chair and committee of professors who were capable of providing fundamental encouragement and guidance. This interaction of informed encouragement and guidance allows candidates to develop into specialists in the area of study during the dissertation process (Liechty, Liao, & Schull, 2009). Moreover, dissertation success is dependent on the candidates' current knowledge and the potential for development; the facilitation by others who were more knowledgeable to provide encouragement and guidance according to the needs of the candidate; and the ability of the program, department, and university to provide programs, workshops, and courses.

The candidate, chair, program, department, and university were all indispensable for effective learning and dissertation completion (Liechty Liao, & Schull, 2009). Alternatively, candidates, chairs, programs, departments, and universities were also negatively impacted when candidates fail to graduate (Neale-McFall & Ward, 2015). Candidates who select dissertation chairs based on their perceptions of how the chairs work and how the candidates will work with the chairs tend to have more positive experiences than candidates who select chairs based on prior personal interactions.

Basing selections on chairs' work ethics, patience and endurance, interests in candidates, support for candidates and pattern of providing valuable feedback to candidates could lead to more positive dissertation experiences (Neale-McFall & Ward, 2015).

In a mixed-methods study on the positive and negative perceptions of dissertation experiences, Burkar (2014) recommended to those facilitating the dissertation process to establish a chair-candidate interaction that is designed to persevere through dissertation challenges. Establishing this interaction should include clarifying expectations and the process for handling differences in advance. Both the chair and candidate must be responsible for the quality of the interaction, as maintained by Burkar. Chairs might need to take the first step during a disagreement, however, because they hold the power. Chairs and candidates should be well versed on the policies and procedures guiding the dissertation process. Burkar claimed that candidates that had previous experiences working on research projects with chairs reported more positive experiences with the dissertation process. Burkar also recommended that chairs should be provided with training and mentoring opportunities to facilitate the dissertation process more effective for the benefit of the candidates.

2.5 Research Gap

From the literature, it was clear that very little has been done in the Kenyan context with regards to this student-supervisor interaction phenomenon. This was because Tonya Nicole Saddler (2008) saw socialization to research: A qualitative exploration of the role of collaborative research experiences in preparing doctoral students for

faculty careers in education and engineering, Susan Elaine Swarts (2016) saw socialization experiences of doctoral student mothers:

"Outsiders in the Sacred Grove". Redux, David Laurance Giles (2008) studied on exploring the teacher-student relationship in teacher education: A hermeneutic phenomenological inquiry, Lynne E. Sullivan and James R. P. Ogloff (1998) researched on appropriate supervisor-graduate student relationships on ethical issues. Tim Mainhard , Roeland van der Rijst, Jan van Tartwijk & Theo Wubbels (2009) studied a model for the supervisor–doctoral student relationship and Andrew Jenkins (2008) studied on time to complete a Ph D: A review of the Longitudinal methods and international evidence while Cornelius Kipleting Rugut (2017) was able to see the nature of graduate student-supervisor relationship in the completion of doctoral studies in education. An exploration in two African universities. There was need, therefore, to re-look into the process of interaction and socialization on student-supervisor interactions in the developing countries like Kenya because most of the studies done on the phenomena have been conducted in the developed world

2.6 Summary of Reviewed Literature

The literature reviewed in this section on the student-supervisor interaction in graduate studies indicated the styles employed in graduate studies supervision, characteristics of student-supervisor interaction, experiences faced and encountered during socialization process of thesis writing, practices and strategies that could be used to improve the process.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the research methods and procedures that were used in the study. In particular, the chapter described the research philosophy, research design, locale of the study, target population, sample population, sample size and sampling procedures, research instruments, pilot study, validity and reliability of the research instruments. Before the summary, it concludes with an explanation of the data collection procedures, data analysis and ethical considerations of the research study.

3.2 Research Design

The study used a descriptive survey research design. A research design is the set of methods and procedures used in collecting and analyzing measures of the variables specified in the research problem (Muaz, 2013). The design of a study defines the study type (descriptive, correlational, semi-experimental and experimental) and sub-type (descriptive, longitudinal or case study), research problem, independent and dependent variables, experimental design, and data collection methods and a statistical analysis plan (Adèr, Mellenbergh& Hand, 2008). Research design is the framework created to find answers to research questions. The design in this study was linked to pragmatism philosophy because both try to give empirical and normative meaning on how the student-supervisor interaction affects graduate studies.

This design was adopted to examine student-supervisor interaction in graduate studies in public universities in Kenya. It is used to investigate large populations by selecting samples to analyze and discover occurrences. Graduate students in public universities in Kenya formed the target population. The design involved observing and describing the general behaviour of subjects without influencing them in any way (Shuttleworth,

2008). The purpose of using the descriptive survey design for this study was to provide numeric descriptions of some part of the population which was quantitative in nature. When it was observed that groups differ on some variable, the researcher attempted to identify the major factors that might have led to any difference. The researcher then described and explained events as they were. The phenomenon that was considered in this study was interactions in student-supervisor socialization in public universities. The approach was appropriate because it enabled the researcher to portray situations, perceptions, opinions, attitudes and the general demographic information that were currently influencing student-supervisor interactions in public universities in Kenya.

The researcher sought to find out how the supervisors manage their tasks and roles at Moi University (MU) and the University of Eldoret (UoE). This design allowed for the shared dialogue between the researcher and the participants through interviews. After each step, the researcher used the procedures of data collection, note-taking, coding and memoing which occurred simultaneously from the beginning. Sorting was done when all categories were saturated and finally writing. Situational analysis of the study sites was done by visiting all the sampled public universities in Kenya. The visits aimed to find out what was happening on the ground concerning student-supervisor interaction in graduate studies in public universities in Kenya. This helped in creating rapport which is a powerful technique in research and the root of effective communication, success and performance. I sought to find out the background of the institutions concerning student-supervisor interaction in graduate studies in public universities in Kenya.

3.3 Research Philosophy

This study adopted pragmatism as the research philosophical paradigm. Creswell (2009) describe the philosophical paradigm as the overall approach to design. Pragmatism relates to matters of fact or practical affairs often to the exclusion of intellectual or artistic matters: practical as opposed to idealistic (Saunders, Lewis & Thornhill, 2012). Pragmatism is a philosophical tradition centred on the linking of practice and theory. It describes a process where theory is extracted from practise and applied back to practice to form intelligent practice. There is a consensus among pragmatists that philosophy should take the methods and insights of modern science into account (Collis & Hussey, 2014).

Tashakkori & Teddlie (1998) asserts that the function of inquiry should be to relieve and benefit the condition of man. This is to make them happier by enabling them to cope more successfully with the physical environment and with each other. It was applied in this study because supervision of thesis in graduate studiesshould be beneficial and relieve to the graduate students.

Pragmatists belief that both knowledge (epistemology) and social reality (ontology) were based on beliefs and habits which were socially constructed by the process of institutionalization and socialization. The epistemological orientation adopted by this research was positivism. Epistemology questions the assumptions of what is acceptable as knowledge and that which constitutes an acceptable knowledge in a field of study (Saunders et al, 2009). In mixed-method research, epistemology questions the interaction of the researcher to that being researched. The researcher should remain distant and independent from that which has been researched, therefore, attempting to control for bias, selecting a systematic sample, and hence, being objective in assessing

a situation is positivism. O'Leary (2010) defines epistemology as "how we come to have legitimate knowledge of the world" while ontology refers to "the study of what exists and how the things that exist were understood".

Cresswell (2009) further argues that knowledge and social reality were historical because institutions were not created instantaneously but always have a history of which they were the products. It is impossible therefore to understand an institution adequately without understanding historical normative processes in which it was produced. Pragmatists see "truth" as a normative concept just like 'good' and maintain that 'truth is what works', hence knowledge claims could not be totally abstracted from contingent beliefs, interests and projections (Tashakkori & Teddlie, 1998).

This philosophy is relevant to this research because student-supervisor interaction in graduate studies is assumed to affect the completion rate of graduate studies in public universities in Kenya. The pragmatism philosophy is relevant to this study because it tries to give empirical and normative meaning to how the student-supervisor interaction affects graduate studies. Therefore, student-supervisor interaction in graduate studies in Kenya is a process that needs to be legitimized, accepted and be internalized to exist as a process of socialization in graduate levels of education in Kenya and the rest of the world.

3.4 The Study Area

The study was done in main public universities in Uasin-Gishu County, Kenya. The study locale comprised of the public universities in Uasin-Gishu County, which were: Moi University (MU) and University of Eldoret (UoE). This study targeted the main campuses within the region and therefore, MU and UoE formed the study locale.

3.4.1 Justification for the study area

The study used the two public universities in Uasin Gishu County of Kenya because they had the main campuses found in the study area. They were purposively selected due to their uniqueness in the area of student diversity among other universities in Kenya. First, they had opened doors to post-graduate students. Secondly, each had unique historical and sociological characteristics of its own which prompted the researcher to have a desire to find out how student-supervisor interaction was designed and conducted to post-graduate students in those universities and how they were socialized and mentored by their supervisors. Uasin-Gishu County was purposively sampled as the locale for the study because it hosts a third of the public universities in Kenya comprising of other universities branches.

Uasin Gishu County is one of the 47 counties of Kenya, located in the former Rift Valley Province. The city of Eldoret (capital and largest town in the county) is the county's educational, administrative and commercial centre. The county is located on a plateau and has a cool and temperate climate. It borders Trans-Nzoia, Elgeiyo-Marakwet, Nandi, Kericho and Baringo Counties in Kenya. These institutions were located within the city of Eldoret and its environs.

The area is selected because it hosts more than a third of Kenya's satellite campuses and universities and there is no record of a similar study having been conducted in the institutions of higher learning in the area and will, therefore, shed more light on the student-supervisor interaction in graduate studies in Kenya. The study area was also chosen because of the completion rate of graduate students in their studies. From the university records it was found out that on average, the completion rate for the MU and UoE is five to six years. The summary is presented in table 3.1.

Table 3.1 Completion Rate

Completion rate						
MU & UoE	2013	2014	2015	2016	2017	Average
Masters	[2-9 YRS] 4.3	[2-11YRS] 5.1	[2-11YRS] 5.7	[2-16YRS] 5.7	[3-14 YRS] 6.8	5.52
PhD	[3-7YRS] 4.4	[3-10YRS] 6.1	[3-12YRS] 5.1	[3-18YRS] 7.0	[3-14YRS] 5.8	5.68
Average	4.4	5.6	5.4	6.4	6.3	5.62

Source: Office of postgraduate studies MU and UOE (2018)

3.4.2 Moi University

Moi University is a public university located in Kesses, Uasin-Gishu County, in Rift Valley, Kenya. It was established in 1984 by the Moi University Act of Parliament of Kenya, after recommendations from the Mackay Commission. MU as a choice of study was influenced by the fact that the university admits post-graduate students as regular, school-based/part-time and evening students in the campuses. On the other hand, MU which was the first University to be managed by Africans came to existence as a result of the Mackay Report that also brought forth the 8-4-4 system of education in Kenya. In the report, Mackay insisted that Kenya ought to have a University that is situated far from the main road as well as the urban centre.

Mackay's report was inspired by the several hapless cases of a misdemeanour of campus students in Nairobi City who kept disrupting peace in the highly congested and busy government centre. Therefore, this university started a post-graduate unit to mentor and ensure students-supervisor interaction process was good to ensure completion rates were good and be able to cope up with the life far from the urban centres to show a difference. At the same time the retired President Daniel Toroitich Arap Moi, at the time, decided to have this 'ideal' University built in Eldoret under his name.

That is how MU ended up 15 Kilometers from the Nakuru-Eldoret Highway and 35 kilometres from Eldoret Town. MU admits post-graduate students in all its Campuses at the time of study which includes; Main, Odera Akang'o Campus in Yala, Town Campus, including College of Health Sciences Medical Complex, School of Aerospace Sciences (Rivatext)and School of Law (Annex). While the Satellite campuses include; Alupe Campus, Kitale Campus, Nairobi Campus and Coast Campus. The university has a post-graduate population of 5,357 by 2016- 2017 of which 427were post-graduate students from the school of education who were the major concern for this study.

3.4.3 University of Eldoret

The University of Eldoret is one of the 31 public universities in Kenya and situated 9 km along Eldoret-Ziwa road in Eldoret town, Uasin-Gishu County. It was founded in 1946 by the white settlers as a large scale farmers training centre. In 1984, it was converted to a teachers training college and renamed Moi Teachers Training College to offer diploma in sciences. Due to the double intake crisis, the college was taken over by Moi University as a campus in 1990, renaming it Chepkoilel Campus. It was a campus of Natural, Basic and Applied Sciences. In August 2010, the President through Legal Notice No 125 of 13 August 2010 upgraded the campus into a University College with the name Chepkoilel University College, a constituent college of Moi University. Upon the award of Charter by the President on March 2013, the University College has renamed University of Eldoret. The university has a post-graduate population of 800 by 2016-2017 of which 290 were post-graduate students from the school of education who were the major concern of this study.

3.5 Target Population

Kothari (2009) defines a target population as that population which a researcher wants to generalize the results of the study. A population is the entire group of individuals, events and or objects having similar observable characteristics. A target population is defined as all members that were described by the characteristics selected by the researcher. This entailed all the lecturers, and graduate students who had graduated between 2013 and 2017 in the school of education for masters' and PhDs degree at the time of the study.

This was because all the graduate students shared characteristics as conceptualized in Chapter One of this study. The target population for the study included all the lecturers teaching and supervising graduate students and graduate participants who had graduated by 2017 from 2013 a period of five years in the school of education in all public universities in Kenya. The graduate participants and supervisors in the public universities constituted the universe sample.

The target population is the accessible population within the area of study and which the researcher intends to study. The study targeted graduate participants and lecturers from the faculty of education at Moi University (MU) and the University of Eldoret (UoE). The target population for this study entailed all the graduate participants, supervisors, deans and heads of department in the school of education who were also lectures in MU and UoE universities in Kenya. A target population is defined as all members that were described by the characteristics selected by the researcher.

The supervisors comprising 55 from MU and 25 from UoE totalling to 80, 6 heads of department, 2 deans were researchers specific target population of lecturers because they hold PhDs and therefore qualified to be supervisors of the post-graduate

participants. The 427 post-graduate students from MU having done their graduate studies and 287 post-graduate students also done their graduate studies in UOE giving a total of 714 graduate students from the two public Universities were targeted. The target population was therefore 794 participants as illustrated in table 3.2.

Table 3.2: Target Population: Supervisors

University	Supervisors	Graduate Participants	Heads of	Deans
			department	
Moi University	55	427	3	1
University of Eldoret	25	287	3	1
Total	80	714	6	2

Source: Records of MU and UoE Registrars Office (2018)

3.6 Sample Size and Sampling Procedure

This section covered how the sample size was arrived at and the formula used to calculate. It also presented the sampling technique used to select the respondents who participated in the study.

3.6.1 Selection of the public universities: sampling procedure

The study should have ideally involved all the public Universities in Kenya. However, the Universities were, widespread throughout the country and application of research instruments was likely to pose administrative and financial challenges. Therefore, Moi University and the University of Eldoret were purposively sampled for the study because they had graduate schools and graduate students under the supervision and those who had graduated. Among the two sampled universities, all have established directorates of post-graduate studies which were good for the study. Therefore, the researcher wanted to find out how these universities were dealing with the graduate

students in their studies and especially student supervision interaction process to enhance their completion rates and quality education at graduate levels.

3.6.2 Sample Size Determination

Kothari (2009), defines a sample as part of the target population that has been procedurally selected to represent the population under study. Sampling is the process of systematically selecting representative elements of a population. The sample size of the study was calculated using Krejcie and Morgan (1970) formula for the finite population which is calculated as under.

3.6.3 Sample Size for Supervisors

$$S = \frac{X^2NP(1-P)}{d^2(N-1) + X^2P(1-P)}$$

Where:

S = Required Sample size

X = Z value (e.g. 1.96 for 95% confidence level)

N = Population Size

P = Population proportion (expressed as decimal) (assumed to be 0.5 (50%))

d = Degree of accuracy (5%), expressed as a proportion (.05); It is margin of error

Therefore:

$$S = \frac{1.96^2 \times 80 \times 0.5 (1-0.5)}{0.05^2 (80-1) + 1.96^2 \times 0.5 (1-0.5)}$$

$$S = \frac{76.832}{1.1579}$$

$S=60$

Sample size therefore equal to 60

3.6.4 Sample size for graduate participants

$$S = \frac{X^2NP(1-P)}{d^2(N-1) + X^2P(1-P)}$$

Where:

S = Required Sample size

X = Z value (e.g. 1.96 for 95% confidence level)

N = Population Size

P = Population proportion (expressed as decimal) (assumed to be 0.5 (50%))

d = Degree of accuracy (5%), expressed as a proportion (.05); It is margin of error

Therefore:

$$S = \frac{1.96^2 \times 714 \times 0.5 (1-0.5)}{0.05^2 (714-1) + 1.96^2 \times 0.5 (1-0.5)}$$

$$S = \frac{685.7256}{2.7429}$$

S=250

Sample size therefore equal to 250

Table 3.3: Sample Frame of the Participants

University	Supervisors	Graduate	Sample
Moi University	55/80 * 60 =41	427/714*250=150	191
University of Eldoret	25/80 * 60 =19	287/714*250=100	119
Total	60	250	310

Source: (Author, 2018)

Sampling technique refers to a procedure of selecting a part of the population on which research can be conducted, which ensures that conclusions from the study can be generalized to the entire population. The study used a stratified sampling technique where the two universities formed the strata. Proportionate sampling was used to distribute the sample among the universities where 41 supervisors and 150 graduate participants were selected from Moi University. From the University of Eldoret, 19 supervisors and 100 graduate participants were selected. The justification for using a

stratified sampling technique was appropriate because the population from which the sample was drawn did not constitute a homogenous group. In stratified sampling, the population is divided along with some characteristics before the simple sampling is done (Yates, David & Dweren, 2008).

In this study, the year of study of the post-graduate students was the most important characteristics to be considered. The simple random sample was used to select the graduate participants because each member of the subject has an equal probability of being chosen. The sampling is a random sampling without replacement, and this is the form of random sampling most used in education practice. In simple random sampling, researchers provide all possible subsets of a population of their research interests with an equal probability of being chosen as a part of their sample. In this technique, each member of the population has an equal chance of being selected as a subject. The entire process of sampling is done in a single step with each subject selected independently of the other members of the population. Purposive sampling technique was used in the selection of 6 heads of department and 2 deans.

3.7 Research Instruments for Data Collection

The researcher used questionnaires and interview schedules as the main tools for data collection. Each of the tools is described below.

3.7.1 Questionnaires

The study employed the use of questionnaires to collect the data for the study. The questionnaires were administered to both the supervisors and graduate students. Kothari (2009) points out that a questionnaire is made up of several questions printed or typed in a formal order on a form or forms. In this study, questionnaires were administered to all the sampled graduate participants and supervisors in MU and UoE.

They included both open-ended and closed-ended questionnaires. Close-ended questions were especially used to elicit the most important and precise responses on particular aspects of graduate studies interaction needs.

A 5-point Likert scale was used to construct the closed-ended questionnaire where; 1=Strongly Disagreed, 2=Disagreed, 3=Undecided, 4=Agreed, and 5= Strongly Agreed. Likert scale is a measuring system whereby a value is assigned to a statement to transform it from qualitative to quantitative as it is desired in this current study (Upagade & Shende, 2012). The questionnaire contained two sections: part I consisted of the participants' background information also known as demographic data (Gender, associated university, programme at university, the period of supervision). Part II addressed the objectives of the study; section B covered supervisory styles, section C covered graduate students opinion on characteristics of the supervisor, section D covered experiences of student-supervisor interactions section E covered practices that would improve student-supervisor interaction. This was done to determine graduate studies in public universities in Kenya concerning student-supervisor interaction and socialization process.

The open-ended questions were used to collect qualitative data while the closed-ended questions were used to collect quantitative data. They were preferred because they could be used to gather data quickly from a geographically dispersed sample population. They were also deemed appropriate as many participants could be reached (Mugenda, 2003). The semi-structured questionnaires were administered through an on the spot filling method. With a questionnaire, large amounts of data could be collected from a large number of people in a short period of time and in a relatively cost-effective way, data could easily be quantified, it could be used to compare and

contrast other research and might be used to measure change. A questionnaire is a useful instrument for gathering extensive amounts of information for large groups of individuals in a short time span. Questionnaires usually collect data that shows how widespread certain opinions were within a large group. It is a research instrument that gathers data over a large sample.

3.7.2 Interview schedule

There was the need to interview the deans and heads of departments who were also supervisors of post-graduate students in graduate school in public universities in Kenya and therefore in this study, interview schedules were administered to the deans and heads of departments. This was the oral administration of questions which involves a face to face interaction with the participants. Kothari (2009) observes that interview schedules were particularly suitable for intensive investigations.

The advantage of using an interview schedule is that the researcher obtained more information in greater depth. The schedules provided the researcher with a greater opportunity to explain the purpose of the study and the items in the interview schedule (Cooper & Schindler, 2004). The two deans and heads of departments from the two public universities were purposely selected. The interview schedule enabled the researchers to seek in-depth information on student-supervisor interaction and socialization processes involved in the study.

3.8 Pilot Study

According to Anastasi and Urbina, (2007) the pilot study is often defined as a smaller version of the proposed study and it is conducted to refine the methodology. They were frequently carried out before large-scale quantitative research in an attempt to avoid time and money being wasted on an inadequately designed project. A pilot

study was conducted in the month of January 2018 in Kisii University Eldoret campus in the graduate faculty of education which had similarities with the universities studied in the main study. The participants who took part in the pilot study were not included in the main study.

According to Connelly (2008), extant literature suggests that a pilot study sample should be 10% of the sample projected for the larger parent study. The pilot study used 6 supervisors and 25 graduate students at Kisii university graduate faculty. Therefore, targeting Kisii university graduate faculty of education for the pilot study was a sufficient representative for the study. A pilot study allowed the researcher to test the prospective study and was done on a smaller number of participants having similar characteristics as those of the target participants. The results of the piloted research instruments enabled the researcher to determine the consistency of responses made by respondents and adjust the items accordingly by revising the document (Levoset *al*, 2014).

3.8.1 Validity of research instruments

The validity of an instrument is the success of a scale in measuring what it sets out to measure so that differences in individual scores could be taken as representing true differences on the characteristics under study (Koul, 2002). Predictive validity of scores was employed to test the validity of the research instruments. This was examined to determine the extent to which a particular measure is a good predictor of another variable. Content validity was ensured by doing a thorough literature review study on which the content of the questionnaire was based. Face validity was ensured by pre-testing of the data collection tool and scrutiny of the instruments by the research supervisor. The external validity of a study is said to exist when the results

obtained in a study could be generalized to other people and other settings. Generalization was made considering the degree of confidence with which the sample findings could be conferred on the population and whether similar findings would be obtained at other times and places.

3.8.2 Reliability of research instruments

Reliability refers to the extent to which an instrument yields similar results each time it is administered by independent persons under comparable conditions (De Vos et al., 2010). Odek (2002) notes that the reliability of research instruments is concerned about the degree to which a particular measuring procedure gives similar results in repeated trials. The study used the reliability of the questionnaire, which set the rating scale by using Cronbach's Alpha-Coefficient: This tests the level in which the questions in the questionnaire are consistent in giving almost similar findings whenever the instruments are used on the same target population. The study used a Cronbach's Alpha coefficient of at least 0.7 as the threshold of reliability (Mugenda & Mugenda, 2003).

$$\alpha = \frac{n}{n - 1} \left[\frac{1 - \sum V_i}{V_{test}} \right]$$

Where :

α = Reliability

n = Number of questions in the questionnaire

V_i = Variability of each of question score

V_{test} = Variability of each of overall questions' score

As a general rule whereby, a value of $\alpha > 0.7$ was considered reliable enough for the study. Reliability results were presented in table 3.4.

Table 3.4 Reliability Results

Before	After	Objective	Comment
0.631	0.873	Supervisory styles	Reliable
0.521	0.793	Characteristics of Supervisors	Reliable
0.523	0.800	Experience of student-supervisor interaction	Reliable
0.721	0.932	Practices to improve student-supervisor interaction	Reliable

Source: (Author, 2018)

3.9 Data Collection Procedures

To carry out the study, the researcher sought to adhere to all the ethical issues that pertain to data collection. Permits were sought from The National Council for Science, Technology and Innovation (NACOSTI) and the management of Moi University and the University of Eldoret to carry-out the study. Once the permits were granted appointments were booked with the faculties of the two universities to determine the most suitable day and time to carry out the study. Research assistants were recruited who helped in administering the questionnaires after briefing them on ethical issues and how to conduct the research. While filling the questionnaires; participants were not required to write their names. This was expected to enable them to give sincere and reliable responses. The information was gathered through on-the-spot questionnaire filling for the respondents who consent to take part in the study. This ensured a high return rate of the questionnaires and rule out the problems likely to be encountered by collecting them later.

3.10 Data Analysis

The study collected both qualitative and quantitative data. During analysis, a side-by-side comparison of the two forms of data was used. These comparisons involved the researcher reporting the quantitative statistical results and then discussing the qualitative findings drawn from the interviews that either confirmed or disconfirmed the statistical results (Creswell, 2014; Gall, Gall & Borg, 2010).

3.10.1 Quantitative Analysis

Quantitative research is about measuring things in a way that can give meaningful numerical results (Shaughnessy, Zechmeister & Zechmeister, 2012). Therefore, mathematical and statistical methods were used. Descriptive statistics were used to analyze the data in this research as some of the objectives lend themselves to statistical manipulations. Quantitative data analysis was done with the aid of the Statistical Package for Social Sciences (SPSS) software version 24. Descriptive statistics included percentages, frequencies, mean and standard deviation. The analyzed data was presented in form of tables.

3.10.2 Qualitative Data

In-depth interviews with heads of department and deans generated sizeable amounts of qualitative data. The thematic analysis strategy was used to identify themes from this data. Colaizzi's descriptive phenomenological method approach to data analysis (Morrow, Rodriguez, and King, 2015) was utilized. It entailed the following steps:

1. All interview transcripts were read through to comprehend their overall meanings
2. Relevant statements to study objectives were then captured
3. Meanings of the extracted statements were articulated
4. Data was structured into bands of themes and authenticated

5. These findings were unified into an exhaustive description of the topic
6. The researcher then summarized the exhaustive description down to short highly descriptive statements that capture just those characteristics deemed to be essential in understanding the study variables.
7. The researcher returned the fundamental structure statements to three respondents to ask whether it captured their experience clearly.

The transcriptions and print outs of the qualitative data were read through carefully several times and synopses of each contribution written up. The participants were given a code to hide their identity.

3.11 Ethical Considerations

Ethical considerations in the research were critical. Ethics were the norms or standards for conduct that distinguish between right and wrong. They help determine the difference between acceptable and unacceptable behaviours (Burgess, 1989). Ethical is the philosophy of relating to the study of ethics and or morally approvable when referring to an action that affects others. This was done by informing the administration of the public universities about the research work through the application of request letters to collect data in their institutions. To ensure that the study complies with the ethical standards of research, permission to conduct the research was sought from the respective authorities. Full disclosure of all the activities concerning the study was provided to the authorities. A high level of confidentiality and privacy was observed and the findings of the study would not be disclosed to unauthorized individuals. A letter of introduction was also obtained from the University.

CHAPTER FOUR: DATA PRESENTATIONS, ANALYSIS, INTERPRETATION AND DISCUSSIONS

4.0 Introduction

The section presented the results of the study findings from the field based on the study objectives. However, the study started with the description of the response rate of respondents followed by demographic data of supervisors and graduate participants. The purpose of this study was to establish student-supervisor interaction in graduate studies in public universities in Kenya. The guiding objectives were;

1. To investigate the supervisory styles used in student-supervisor interaction in public Universities in Kenya.
2. To determine the characteristics of student-supervisor interaction in public universities in Kenya.
3. To assess the experiences of student-supervisor interactions in public universities in Kenya.
4. To examine practices that would improve student-supervisor interaction in public universities in Kenya.

4.0.1 Response rate

The response rate is the number of people who properly completed the research tools divided by the total number of people in the entire sample (Fowler, 2004). A total of 60 supervisors were sampled to participate in the study, but only 55 participated in the study, two deans and six heads of departments included. This was a response rate of 91.67% which was considered sufficient for the study. A total of 250 graduate participants were sampled to participate in the study, but only 240 participated in the study. This was a response rate of 96% which was considered suitable for the study. Babbie (1990) suggested that a response rate of 50% is adequate 60% is good and

70% and above very good for analysis. Chen (1996) argued that the larger the response rate, the smaller the non-response error. This implies that 93.8% response rate was very appropriate for data analysis. The results of the response rate were presented in table 4.1.

Table 4.1: Response Rate

Response Rate	Frequency	Percentage
Completed	295	95.2%
Not completed	15	4.8%
Total	310	100%

4.0.2 Demographic information

The study sought to determine the gender of the participants. The study results were presented in table 4.2.

Table 4.2: Demographic Information of Supervisors

	Frequency	Per cent
Male	43	78.3%
Female	12	21.7%
Total	55	100%

Source: (Author, 2018)

The study findings from table 4.2 indicated that 43(78.30%) of the supervisors were male while 12(21.70%) of the supervisors were female. This gives a clear indication that most of the respondents were male compared to that of females. Despite male being most respondents both genders were represented. The study results concur with those of Mann and Mikesell (2006) who found out that the majority of institutions and colleges have more male than female.

4.0.3 Demographic information of the graduate students

The study findings sought to determine demographic information of the graduate students. The study findings are presented in table 4.3.

Table 4.3: Demographic Information of the Graduate Students

	Frequency	Per cent
Male	125	52.08%
Female	115	47.91%
Total	240	100%

Source: (Author, 2018)

The study findings indicated that 125(52.08%) of the graduate students who participated in the study were male as compared to female students who were 115(47.91%). This implies the study got information concerning student-supervisor interaction in graduate studies in public universities in Kenya from both genders. The study also gives an implication that both genders completed graduate studies hence had information's concerning student-supervisor interaction.

4.1 The Supervisory Styles used in Student-Supervisor Interaction in Public Universities in Kenya

The first objective of the study sought to find out graduate students and supervisors opinion on the supervisory styles and modes used in student-supervisor interaction in the sampled public universities in Kenya. The researcher sought to find out the opinion of graduate students on supervisory styles and modes used in student-supervisor interaction in the sampled public Universities in Kenya. In this section, descriptive analysis of study objectives was done and presented. A scale was used to show the extent to which the respondent thought the statement of study variables. Therefore, the results of the study were as shown below. Using a five Likert scale with; 5=strongly Agree, 4= Agree, 3= Undecided, 2=Disagree, and 1=Strongly Disagree as shown in table 4.4.

Table 4.4: Supervisory Styles used in student-supervisor Interaction

Key SA- Strongly Agree, A –Agree U– Undecided, D – Disagree, SD – Strongly Disagree

Graduate Students Responses on Supervisory Styles	Opinions of Graduate Students				
	SA	A	U	D	SD
The supervisor expected me to follow what he/she said without necessarily being very creative.	5 (2.1%)	11 (4.6%)	3 (1.3%)	93 (38.8%)	128 (53.3%)
The supervisor expected me to be his/her research assistant but never assisted me much during my research process.	4 (1.7%)	3 (1.30%)	30 (12.5%)	112 (46.7%)	91 (37.9%)
My supervisor was busy and he/she responded to emails only occasionally and he/she rarely understood either of my needs.	4 (1.7%)	9 (3.8%)	57 (23.8%)	115 (47.9%)	55 (22.9%)
The relationship with my supervisor was overly familiar, with the assurance that we were all good friends, but never supported in the research process as such.	N	44 (18.3%)	68 (28.3%)	89 (37.1%)	32 (13.3%)
My supervisor was a high-powered researcher, and the relationship was based on minimal contact, because of frequent significant appearances around the world.	4 (1.7%)	34 (14.2%)	50 (20.8%)	100 (41.7%)	52 (21.7%)
The supervisor made me believe that I was not doing my research well by criticizing everything I presented.	5 (2.1%)	29 (12.1%)	43 (17.9%)	98 (40.8%)	65 (27.1%)
The supervisor used to follow me around with an obsession other than my research process.	0 (0%)	18 (7.5%)	24 (10.0%)	114 (47.5%)	84 (35.0%)
The supervisor was skilled in dealing with the emotional issues affecting me during the research process.	88 (36.7%)	104 (43.3%)	27 (11.3%)	11 (4.6%)	10 (4.2%)
The supervisor treated me as a colleague in training; the relationship was always on a professional basis, where the work and their work were held in respect.	128 (53.3%)	101 (42.1%)	10 (10.2%)	1 (0.4%)	0 (0%)

Source: Field Data (2018)

The study findings on the graduate students' expectations to follow what the supervisor said without necessarily being very creative were presented in table 4.4. It

indicated that 5(2.1%) and 11(4.6%) of graduate students strongly agreed and agreed respectively on the opinion. Those who took a neutral stand were 3(1.3%), while those who disagreed and strongly disagreed with the statement were 93(38.8%) and 128(53.3%) respectively.

However, 4(1.7%) of the graduate students held the view that the supervisor expected them to be their research assistant but never assisted them much during their research process. At the same time, 3(1.30%) of the graduate students' agreed on the opinion whereas 30(12.5%) took a neutral position on the opinion and a further 112(46.7%) of the graduate students' disagreed on the opinion while another 91(37.9%) of the graduate students' strongly disagreed on the opinion.

Further, the study found out that, 4(1.7%) of the graduate students' strongly agreed that their supervisors were busy and responded to emails only occasionally and they rarely understood either of my needs and another 9(3.8%) of the graduate students' agreed on the opinion while 57(23.8%) took a neutral ground on the opinion. The study found out that 115(47.9%) of the graduate students' disagreed on the opinion and a further 55(22.9%) of the graduate students' strongly disagreed on the opinion that their supervisors were busy and responded to emails only occasionally and they rarely understood either of my needs.

The study findings indicated that 7(2.9%) of the graduate students' strongly disagreed on the opinion that the relationship with their supervisors. They indicated that 44 (18.3%) of participants agreed they were overly familiar, with the assurance that they were all good friends, but never supported in the research process as such. The study findings further indicated that 68 (28.3%) were undecided on the opinion

and 89 (37.1) of the graduate students' disagreed on the opinion and a further 32 (13.3%) strongly disagreed on the opinion.

The researcher further sought to find out the opinion of graduate students' on whether their supervisors were high-powered researchers, and whether their relationship was based on minimal contact, because of frequent significant appearances around the world and the findings showed that 4(1.7%) of the graduate students strongly agreed and 34(14.2%) of the graduate students agreed on the opinion whereas 50(20.8) of the graduate students were undecided while 100(41.7%) of the graduate students disagreed on the opinion and a further 52(21.7%) of the graduate students strongly disagreed on the opinion.

The study findings on the opinion of whether the supervisors made them believe that they were not doing their research well by criticizing everything they presented found out that, 5(2.1%) of the graduate students strongly agreed on the opinion and 29(12.1%) of the graduate students agreed on the opinion and a further 43(17.9%) of the graduate students were undecided on the opinion while 98(40.8%) of the graduate students disagreed on the opinion and 65(27.1%) of the graduate students strongly disagreed on the opinion that their supervisors were high-powered researchers, and their relationship was based on minimal contact, because of frequent significant appearances around the world.

The study sought to find the opinion on whether the supervisors used to follow them around with an obsession other than their research process and the findings indicated that 18(7.5%) of the graduate students agreed on the opinion and 24(10.0%) of the graduate students were undecided while 114(47.5%) of the graduate students disagreed on the opinion and a further 84(35.0%) of the graduate students strongly

disagreed on the opinion that their supervisor followed them around with an obsession other than their research process.

Also, the study sought to find out the opinion of graduate students' on whether the supervisors were skilled in dealing with the emotional issues affecting them during the research process and the study indicated that 88(36.7%) of the graduate students strongly agreed on the opinion. Further 104(43.3%) of the graduate students agreed on the opinion. 27(11.3%) of the graduate students' took a neutral position while 11(4.6%) of the graduate students disagreed and 10(4.2%) of the graduate students strongly disagreed on the opinion.

The study sought to find out whether the supervisors treated them as colleagues in training; and whether their relationship was always on a professional basis, where the work and their work were held in respect and the study indicated that 128(53.3%) of the graduate students strongly agreed on the opinion and a further 101(42.1%) of the graduate students agreed on the opinion whereas 10(10.2%) of the graduate students were undecided and 1(0.4%) of the graduate students disagreed on the opinion.

The study findings concur with Tartwijk and Wubbels, (2015) on the styles used by students supervisors in guiding students contribute to the success or failure of the treatment in one case, and in the other, the writing of a thesis. If they used the interactive and professional style in supervising students there would be high chances of completing the thesis within the required time unlike when there was no professional work. The study results agree with Spear (2015) findings which indicated that the expected desire for the supervisor to see quality research work and its completion according to schedule did not in itself require a close friendship between the two, although this at times developed.

Although the professionally acceptable level of friendship and social interaction with students might be difficult to define and perhaps is best left to individual judgment, there was a level that could ruin the quality of the supervision process.

One of the problems is the extent to which the supervisor could get involved with the students personal challenges and experiences that might contribute to delayed completion of the research work, for example, financial and family problems. The study findings further concurred with Cornwall, Schmithas and Jaques (2017) when they found out the break down of relationships between supervisors and graduate students slowed the supervision process. The situation was occasioned by graduate students who might have been dissatisfied with the supervisor's performance in guiding the research work. The conflict could go out of control, especially in the departments and faculties without mechanisms to resolve the difficulties. When this happens, it could result in the change of supervisor, as a result of which the graduate student might have to start the research work all over again. The conflicts could be resolved through either graduate boards or academic advisors as initiators and mediators in conflict resolution, responsibilities as well as how far to engage in the former (Young, 2017).

The study results gave an implication that some of the supervisors gave instructions and guidelines to students without giving them room to be creative hence when challenged during presentations they could not defend themselves beyond what the supervisors gave. However, some supervisors left room for students to be creative in their work and were there only to give directions and advice. Some of the supervisors opted to use emails on most occasions and only needed printed work when students met with them face to face to discuss the work. This was encouraged by supervisors

because it reduced the perceptions of students seeing supervisors as overly familiar or good friends hence not getting the required support in the research process as such.

Also, the use of emails by supervision was because some supervisors were high-powered researchers who travelled a lot hence minimal contact with the students and decided to use emails. This style despite having advantages has also disadvantages where the supervisors saw also the work of students and correct online. The students could not understand well these corrections and ended up not doing exactly what was required. When they met with the supervisor he/she would be criticized making them believe that they were not doing their research well. However, some of the supervisors followed the student's research process which encouraged them to put more effort and presented within the time. They were also skilled in dealing with the emotional issues affecting students during the research process treating them as colleagues in training; the relationship was always on a professional basis, where the work was held in respect.

4.1.1 Supervisors opinion on supervisory styles used in student-supervisor interaction in public universities in Kenya

The researcher further sought to find out the supervisory opinions on supervisory styles used on student-supervisor interactions in the public universities in Kenya using a five Likert scale where 5=strongly Agree, 4= Agree, 3= Undecided, 2=Disagree, and 1=Strongly Disagree as shown in table 4.5.

Table 4.5: Supervisors Opinion on Supervisory Styles used in student-supervisor Interaction in Public Universities in Kenya

Key SA- Strongly Agree, A –Agree U– Undecided, D – Disagree, SD – Strongly Disagree

Supervisory Styles	Opinions of Supervisors				
	SA	A	U	D	SD
I expected the students to follow what I advised without necessarily being very creative.	0 (0.0%)	3 (5.5%)	6 (10.5%)	22 (40%)	24 (43.6%)
I expected my students to be my research assistants even when it is not during their research process.	8 (14.5%)	5 (9.1%)	9 (16.4%)	20 (36.4%)	13 (23.6%)
I responded to students emails only occasionally and rarely understand either of their needs because I was too busy.	0 (0.0%)	3 (5.5%)	3 (5.5%)	25 (45.5%)	24 (43.6%)
The relationship with my students was overly familiar, with the assurance that we were all good friends, but never support in the research process as such.	3 (5.5%)	3 (5.5%)	9 (16.4%)	25 (45.5%)	15 (27.3%)
I am a high-powered researcher, and the relationship between me and students was based on minimal contact, because of frequent significant appearances around the world	0 (0.0%)	2 (3.6%)	4 (7.3%)	27 (49.1%)	22 (40.0%)
I made my students believe that they were not doing their research well by criticizing mostly everything they presented.	2 (3.6%)	2 (3.6%)	2 (3.6%)	20 (36.4%)	29 (52.7%)
I followed my students around with an obsession other than their research process.	1 (1.8%)	1 (1.8%)	6 (10.9%)	22 (40.0%)	25 (45.5%)
I was excellent in dealing with emotional issues affecting my students.	20 (36.4%)	22 (40.0%)	6 (10.9%)	4 (7.3%)	3 (5.5%)
The students treated me as a colleague in training; the relationship was always on a professional basis, where the work and their work was held in respect.	29 (52.7%)	24 (43.6%)	1 (1.8%)	0 (0.0%)	1 (1.8%)

Source: Field Data (2018)

Further, table 4.5 shows the results on the supervisors' opinion on supervisory styles used in student-supervisor interaction in public universities in Kenya. The study findings indicated that 3(5.5%) of supervisors agreed that they expected the students to follow what they were advised without necessarily being very creative, while

6(10.5%) of supervisors were undecided about the supervisory styles used. The respondents who disagreed that the students followed what supervisors advised them without necessarily being very creative were 22(40%) of supervisors and 24(43.6%) of supervisors strongly disagreed with the statement.

The study findings further showed that 8(14.5%) and 5(9.1%) of the supervisors strongly agreed and agreed respectively that they expected their students to be their research assistants even when it was not during their research process. However, 9(16.4%) of supervisors were undecided, 20(36.4%) and 13(23.6%) of supervisors disagreed and strongly disagreed with the statement.

The study findings further indicated that 3(5.5%) of the supervisors agreed that they responded to students emails only occasionally and rarely understood either of their needs because they were too busy. However, 3(5.5%) of the supervisors were undecided while 25(45.5%) disagreed that they responded to students emails only occasionally and rarely understood either of their needs because they were too busy. Further, 24(43.6%) of the supervisors strongly disagreed that they responded to students emails only occasionally and rarely understood either of their needs because they were too busy during the process of thesis writing in graduate studies in public universities.

The study findings on the relationship with my students were overly familiar, with the assurance that we were all good friends, but never supported in the research process as such indicated that 3(5.5%) of supervisors strongly agreed and 3(5.5%) of the supervisors agreed. Those who were undecided with the opinion were 9(16.4%) and 25(45.5%) of supervisors disagreed that the relationship between the supervisor and graduate students were overly familiar, with the assurance that they were all good

friends, but never supported in the research process as such. Those supervisors who strongly disagreed with the opinion that the relationship between the supervisor and graduate students were overly familiar, with the assurance that they were all good friends, but never support in the research process were 15(27.3%).

The study findings further indicated that 2(3.6%) of supervisors agreed that supervisors were high-powered researchers, and the relationship between them and their graduate students was based on minimal contact, because of frequent significant appearances around the world. Those supervisors who were undecided with the statement were 4(7.3%) while 27(49.1%) disagreed with the statement. Lastly 22(40.0%) of the supervisors strongly disagreed that they were high-powered researchers, and the relationship between them and their graduate students was based on minimal contact, because of frequent significant appearances around the world.

Further, the study findings showed that 2(3.6%) and 2(3.6%) of the supervisors strongly agreed and agreed respectively that they made their graduate students believe that they were not doing their research well by criticizing mostly everything they presented. Further, 2(3.6%) of the supervisors were undecided on the opinion. The research findings also showed that 20(36.4%) of the supervisors disagreed with the opinion that they made their graduate students believe that they were not doing their research well by criticizing mostly everything they present, and 29(52.7%) of the supervisors strongly disagreed that they were not doing their research well by criticizing mostly everything they presented.

Further, the study finding indicated that 1(1.8%) and 1(1.8%) of the supervisors strongly agreed and agreed that they followed their students around with an obsession other than their research process. Further, 6(10.9%) of the supervisors were undecided

whereas 22(40.0%) disagreed that they followed their students around with an obsession other than their research process, while 25(45.5%) of the supervisors strongly disagreed that they followed their students around with an obsession other than their research process.

Furthermore, the study also revealed that 20(36.4%) of the supervisors strongly agreed that they were excellent in dealing with emotional issues affecting their students. Furthermore, 22(40.0%) of the supervisors agreed that they were excellent in dealing with emotional issues affecting their graduate students, 6(10.9%) of the supervisors were undecided while 4(7.3%) disagreed and 3(5.5%) of the supervisors strongly disagreed that the supervisors were excellent in dealing with emotional issues affecting their graduate students.

Lastly, the study findings on the supervisors' opinion on whether the graduate students treated supervisors as their colleague in training; the relationship was always on a professional basis, where the work and their work was held in respect indicated that 29(52.7%) of the supervisors upheld the opinion by strongly agreeing on the opinion while 24(43.6%) of the supervisors agreed that graduate students treated supervisors as their colleague in training; their relationship was always on a professional basis, where the work and their work was held in respect. One (1.8%) of the supervisors was undecided and 1(1.8%) of the supervisor strongly disagreed with the opinion that students treated supervisors as colleagues in training and their relationship were always on a professional basis, where the work and their work was held in respect.

The study findings concur with Cakmak, (2015) who observed that from decades of experience of conducting and observing graduate students there were different types of supervisor interactions that occur during supervision. Cakmak (2015) indicated that

there was close supervision where the students were supposed to follow what the supervisor gave out. This implied that they should always replicate the supervisor's works and create room for the student not attempt to be too creative. The second type of supervision style was cheap labour where the student becomes a research assistant to the supervisor's projects and becomes caught forever in that power imbalance. The patron-client roles often continue long after graduation, with the student forever cast in the secondary role. Their own work was often disregarded as being unimportant.

Further, there was a ghost supervisor where the supervisor was seen rarely, responds to emails only occasionally and had rarely any understanding of either the needs of the student or of their thesis. For determined students, who would work autonomously, the ghost supervisor was often acceptable until the crunch comes usually towards the end of the writing process. For those who need some support and engagement, this is a nightmare. The chum type of supervision is where the relationship was overly familiar, with the assurance that we were all good friends, and the student was drawn into family and friendship networks. Situations occurred where the graduate students were engaged as baby sitters or in other domestic roles (usually unpaid because they do not want to upset the supervisor by asking for money). The chums, however, often do not support the student in professional networks: (Cakmak, 2015).

The collateral damage type of supervision was where the supervisor was a high-powered researcher; the relationship was based on minimal contact, because of frequent appearances around the world. The students found themselves taking on teaching, marking and administrative functions for the supervisor at the cost of their own learning and research. The Combatant type of supervision was the practice of supervision that became a method of intellectual torment, denigrating everything

presented by the student. Each piece of research was interrogated rigorously, every meeting was an inquisition and every piece of writing was edited into oblivion. The student is made to believe that they were worthless and stupid.

The creepy crawlers type of supervision was where some supervisors prefer to stalk their students; sometimes students stalked their supervisors, each with an unhealthy and unrequited sexual obsession with the other. Most Australian universities have moved actively to address this relationship, making it less common than in previous decades. The captivate and con type of supervision was where the supervisor and students occasionally enter into a sexual relationship. This could be for several reasons, ranging from a desire to please the supervisor. These affairs could sometimes lead to permanent relationships (Cakmak, 2015).

However, what remained from the supervisor-student relationship was the asymmetric set of power balances. The counsellor was almost all supervision relationships contain some aspect of the counsellor or mentor, but there was often little training or desire to develop the role and often dismissed as pastoral work. Although the life experiences of students became obvious, few supervisors were skilled in dealing with the emotional or affective issues and the colleague in training type of supervision was when a graduate student was treated like a colleague in training, the relationship was always on a professional basis, where the individual and their work was held in respect. The supervisor recognized that their role was to guide through the morass of regulation and requirements, offer suggestions and do some teaching around issues such as methodology, research practice and process, and be sensitive to the life-cycle of the graduate process. The experience for both the supervisor and students should be one of acknowledgement of each other, recognizing the power differential but

emphasizing the support at this time. This was the best of supervision (Cakmak, 2015).

4.1.2 Heads of departments opinion on supervisory styles used in public universities in Kenya

According to Heads of Department (HODs), 5 out of 6 HODs (83.33%) believed that colleague in training supervisor integration was the main supervisory style used in their universities and 1 HOD (16.67%) believed that the clone supervisor interaction was the main supervisory style used in the department.

"There are many supervisor interaction styles that supervisors can use but the choice is theirs to decide the one they were most comfortable within the process of supervising their graduate students. The choice of supervisor interaction style is dependent on the time available for interaction with an individual student during the socialization process of supervision".

In this case colleague in training was considered most appropriate by most supervisors because their interaction was in form of discussion where they both tried to solve issues and problems in thesis writing. The colleague in training was used extensively because of the assumption that the students were conversant with thesis writing and the main role of the supervisor was to do confirmation and correction of the thesis. The study findings agree with Cakmak (2015) that the experience for both the supervisor and student should be one of acknowledgement of each other, recognizing the power differential but emphasizing the support at this time. The best supervision was where there was good supervisor interaction, such as supervisor panels, and dedicated training in supervising and mentoring practices.

The study findings also concur with Spear (2015) who observed that the best style of supervision was where the supervisor was expected to guide the student to produce

quality research work. Students should also complete the research work within the scheduled time. This required a close friendship between the two which was a professional one. The supervisor should try to avoid problems which might arise in their interaction which might contribute to delay of the research work.

4.1.3 Deans opinion on supervisory styles used in public universities in Kenya

The study findings indicated that 2(100%) of the deans were for the opinion that supervisors were advised to use various appropriate supervisory styles to encourage good interaction with their students but colleagues in training were preferred by all of them.

"Supervisors are advised to use various appropriate supervisory styles to encourage good interaction with their students but colleagues in training is preferred because it enhances good interaction. As noted frequently supervisors have only a limited time due to workload to attend to all the students and therefore, used the little time available to discuss the way forward as they guided them during thesis writing".

Deans further indicated that supervisor's role was to guide through the quagmire of rules and regulation within the requirements as per the policy of the graduate studies, offered suggestions and did some teaching around issues such as methodology, research practice and theory process. The experience for both the supervisor and student should be one of acknowledgement of each other, recognizing the power differential but emphasizing the support required at this time. As a result colleague in training is considered by the majority of supervisors as the best supervisory style in public universities in Kenya.

The study findings also agreed with Diamandis (2017) who noted that the relationship between the thesis supervisor and the student was a complex one. Goold and Lipkin (2014) noted that when this relationship was neither effective nor efficient, it might

yield negative consequences, such as academic failure. Mainhard, Rijst, Tartwijk and Wubbels (2015) indicated that the kind of interaction between the supervisor and the students and perceived satisfaction with the interaction would contribute to the success or failure of thesis writing.

This was because breaking down the interaction between supervisors and graduate students slowed the supervision process. The situation was occasioned by graduate students who were dissatisfied with the supervisors' performance in guiding the research work. The conflict could go out of control, especially in the departments and faculties without mechanisms to resolve the difficulties. When this happens, it could result in the change of supervisor, as a result of which the graduate student might have to start the research work all over again. However, Young (2017) indicated that these conflicts could be resolved through either graduate boards or academic advisors as initiators and mediators in conflict resolution.

".....admission process can also cause delays in graduate studies and also teaching during coursework where methodology should be grounded well to quicken proposal writing and defences in different departments if not coordinated well by all authorities concerned, graduate students sometimes get challenged in coming up with research topic".

The information from deans gave implications that colleagues in training style of supervisory encouraged learning and contributions among the graduate students under supervision. This was because it allowed the supervisor to identify weak points in terms of the level of understanding of the student being supervised and help them accordingly and appropriately. The colleague in training style was attributed to increased quality of graduate studies in thesis writing. The colleague in training supervisory style was the renowned mode widely used in Kenyan public universities.

4.2 The Characteristics of the Student-Supervisor Interaction in Public Universities in Kenya

The second objective of the study sought to describe students and supervisors opinion on the characteristic in the student-supervisor interaction in the public universities in Kenya. The study sought to describes the characteristics of the student-supervisor interaction in public Universities in Kenya. The study findings were presented in table 4.6. The study started with findings from graduate students opinion on the characteristics in the student-supervisor interaction in public universities in Kenya. In this section, descriptive analysis of study objectives was done and presented. A scale was used to show the extent to which the respondent thought the statement of study variables. Therefore, the results of the study were as shown below. Using a five Likert scale with; 5=strongly Agree, 4= Agree, 3= Undecided, 2=Disagree, and 1=Strongly Disagree. The study findings were presented in table 4.6.

Table 4.6: Students Opinions on the Characteristic in the Student-Supervisor Interaction in Public Universities in Kenya

Key SA- Strongly Agree, A –Agree U– Undecided, D – Disagree, SD – Strongly Disagree

Graduate Students Opinion on the Characteristics	Opinions of Graduate Students				
	SA	A	U	D	SD
My supervisor was consistent with what we agreed on during thesis writing.	86 (35.8%)	97 (40.4%)	24 (10.0%)	20 (8.3%)	13 (5.4%)
My supervisor did not assume he/she knew but was able to influence progress through inspiring rather than commanding or demanding compliance.	99 (41.3%)	125 (52.1%)	8 (3.3%)	8 (3.3%)	0 (0.0%)
My supervisor had good communication skills and was a good listener during the process of thesis writing.	106 (44.2%)	100 (41.7%)	16 (6.7%)	18 (7.5%)	0 (0.0%)
The supervisor encouraged the best out of me and helped identify the unique talents which contributed to my research process.	98 (40.8%)	127 (52.9%)	9 (3.8%)	6 (2.5%)	0 (0.0%)
The supervisor gave me credit for my work, pointed out my accomplishments, and acknowledged them either privately or in front of others.	83 (34.6%)	97 (40.4%)	39 (16.3%)	21 (8.8%)	0 (0.0%)
The supervisor from time to time gave me advises on how to improve whenever I encountered roadblocks during my thesis writing.	110 (45.8%)	121 (50.4%)	7 (2.9%)	2 (0.8%)	0 (0.0%)
The supervisor resolved conflicts issues through an open and honest discussion as soon as possible so that they do not continue to escalate as we interacted.	109 (45.4%)	107 (44.6%)	15 (6.3%)	9 (3.8%)	0 (0.0%)
The supervisor was wise and experienced such that he/she had the exact words to say during the research process.	91 (37.9%)	90 (37.5%)	29 (12.1%)	22 (9.2%)	8 (3.3%)
The supervisor was professionally trained and respectful during the process of thesis writing.	112 (46.7%)	107 (44.6%)	13 (5.4%)	8 (3.3%)	0 (0.0%)

Source: Field Data (2018)

The study findings on the characteristic on the opinions of graduate students in Kenyan public universities showed that 86(35.8%) and 97(40.4%) of graduate

students respondents strongly agreed and agreed that their supervisors were consistent on what they agreed on during thesis writing respectively. Further, 24(10.0%) of graduate students respondents were undecided and 20(8.3%) of graduate students disagreed on the opinion whereas 13(5.4%) of graduate students strongly agreed on the opinion. The study finding also indicated that 99(41.3%) of graduate students strongly agreed that their supervisor did not assume they knew but were able to influence progress through inspiring rather than commanding or demanding compliance from them. Further 125(52.1%) of respondents agreed on the same opinion while 8(3.3%) were undecided and 8(3.3%) disagreed with the opinion.

However, 106(44.2%) of graduate students strongly agreed that their supervisors had good communication skills and were good listeners during the process of thesis writing and a further 100(41.7%) of the graduate students supported the opinion by agreeing with the opinion while 16(6.7%) were undecided and 18(7.5%) of the graduate students disagreed with the opinion. The study findings also indicated that 98(40.8%) of the graduate students strongly agreed on the opinion that their supervisors encouraged the best out of them and helped identify the unique talents which contributed to their research process and success and 127(52.9%) of the graduate students agreed on the opinion too while 9(3.8%) of the graduate students took a neutral stand and 6(2.5%) of the graduate students disagreed with the opinion that their supervisors encouraged the best out of them.

Study findings indicated that 83(34.6%) of the graduate students strongly agreed that their supervisor gave them credit for their work, pointed out their accomplishments, and acknowledged them either privately or in front of others, while 97(40.4%) of the graduate students' agreed with the opinion and 39(16.3%) of the graduate students

were undecided. A further 21(8.8%) of the graduate students disagreed with the opinion. The study sought to find out whether the supervisor gave them advises from time to time on how to improve whenever they encountered roadblocks during their thesis writing and indicated as follows, 110(45.8%) of the graduate students strongly agreed that supervisors gave them advice and a further 121(50.4%) of the graduate students agreed with the opinion while 7(2.9%) of the graduate students were undecided and 2(0.8%) of the graduate students disagreed with the opinion.

The findings also indicated that 109(45.4%) of the graduate students strongly agreed that the supervisors resolved conflict issues through an open and honest discussion as soon as possible so that they did not continue to escalate as they interacted during the process of thesis writings. Those who agreed with the opinion were 107(44.6%) of the graduate students, while 15(6.3%) of the graduate students were undecided and 9(3.8%) of the graduate students disagreed with the opinion of others.

Further, the study found out that 91(37.9%) of the graduate students strongly agreed that their supervisors were wise and experienced such that they had the exact words to say during the research process and 90(37.5%) of the graduate students agreed on the same opinion while 29(12.1%) of the graduate students were undecided. Twenty-two 22(9.2%) of the graduate students disagreed and 8(3.3%) of the graduate students strongly disagreed on the same opinion. Lastly, the study found out that 112(46.7%) of the graduate students strongly agreed that the supervisors were professionally trained and respectful during the process of thesis writing and 107(44.6%) of the graduate students agreed on the opinion while 13(5.4%) of the graduate students were undecided and 8(3.3%) of the graduate students disagreed with the opinion taken by others.

The study results concur with Spears (2000) who stated that supervisors should read the student's written work thoroughly and provide constructive criticism as this was an essential element in the student's intellectual development. It was also supported by Lessing and Schulze (2002) who described the supervisory role as a balancing act between various factors: expertise in the area of research, support for the student, critique, and creativity. Further, advice on the desired amount of reading, experimentation and analysis would normally be expected (Holdaway et al., 1995). According to Spear (2000), feedback is normally given concerning topic selection, methods of inquiry, writing style and layout, the clarity of the student's work and ideas, the completeness and direction of the work, and the student's general progress.

The study findings also agreed with Hodza (2007) who indicated that supervisors must be willing to make adjustments in the interaction process to meet the supervisee's learning needs. This includes consultation and appointment with the students. Therefore, faculty and even the university must assist graduate students by providing enough information for a potential supervisor and supervisors should make themselves accessible for the students. The supervisor should make equal information, time and energy available to all students (Brown and Krager, 1985). According to them, the supervisor needed to be sensitive to students' time and competence limitations and to assist them to become aware of their own limitations and any constraints on them. Russell (1996) and Moses (1992) found that both supervisors and students agreed that one role of the supervisor was to assist graduate students. The amount of assistance that supervisors gave to graduate students varied, depending upon the stage that the latter had reached (Moses, 1992). Thus, supervisors should help students more in research input.

The study findings also agreed with Phillips and Pugh (2000) who reviewed that academic research work is an interactive process and requires the development of social as well as academic skills. The school administrator and supervisor should support students towards the completion of graduate studies. They also indicated that for good progress in supervision there should be a definite plan in writing, probably different for each department, that describes the department's view on good supervisory practice; establishing regular meetings between student and supervisor, setting up adequate methods of assessing coursework and thesis supervision record-keeping, thesis advancement and submitting a comprehensive annual progress report to the supervisor.

However, according to Malfroy (2005) students still need support from the institution and supervisors because they often experience frustration as a result of a perceived lack of support or what is referred to as a disjunction in expectations between the student and the supervisor. Moses (1992) noted that given the length and complexity of graduate student supervision, it is understandable that various difficulties arise due to organizational or professional factors. Some of the professional factors influencing the interactions of the student-supervisor were misinformed or inadequately prepared supervisor or a supervisor whose research interests were different from those of the student.

Further, Salmon (1994) noted that the supervisor needed to be flexible in an attempt to meet the needs of individual students. Supervisors who have this flexibility could be more helpful to their research students. Supervisors contribute to thesis writing advising students on how to organize the work, how to develop thesis writing skills,

how to collect relevant literature and how to interact with colleagues as they write the thesis.

The study results imply that postgraduate supervisors were consistent with advising students thesis writing. They were able to influence thesis writing progress through inspiring rather than commanding or demanding compliance and good communication. They were able to listen to student's views before advising on how to write the thesis. By listening to students opinion first supervisors were able to encourage students to identify the unique skills and knowledge which could contribute to the research process. The supervisor resolved conflicts issues through an open and honest discussion as soon as possible so that they did not continue to escalate as they interacted.

Student-supervisor interaction was characterized by advising and encouraging graduate students because thesis writing was inspired by the general principle of good writing: therefore students should be advised and encouraged through the socialization process of graduate studies. Also since the supervisors acted as the third party in thesis writing, they were responsible for handling issues and challenges since they were responsible for what was required in a thesis.

Table 4.7: Supervisors Opinions on the Characteristic of the Student-Supervisor Interaction in Public Universities in Kenya

Key SA- Strongly Agree, A –Agree U– Undecided, D – Disagree, SD – Strongly Disagree

Supervisor Opinion on the Characteristic	Opinions of Supervisors				
	SA	A	U	D	SD
My students were consistent with what we agreed on during thesis writing.	24 (43.6%)	25 (45.6%)	3 (5.5%)	3 (5.5%)	0 (0.0%)
My students did not assume they know but were motivated to always consult on what they did not understand during thesis writing.	20 (36.4%)	33 (60.0%)	1 (1.8%)	1 (1.8%)	0 (0.0%)
My students had good communication skills and were good listeners during the process of thesis writing.	23 (41.8%)	27 (49.1%)	2 (3.6%)	3 (5.5%)	0 (0.0%)
I encouraged a good relationship with my students which contributed to research success during the process of thesis writing.	30 (54.5%)	25 (45.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
The students acknowledged my work; pointed out my accomplishments despite the minimal contact I had with them during the process of thesis writing.	8 (14.5%)	20 (36.4%)	19 (34.5%)	6 (10.9%)	2 (3.6%)
I gave my students advise from time to time on how to improve whenever they encounter roadblocks during thesis writing.	30 (54.5%)	25 (45.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
I resolved the issues of the conflict through an open and honest discussion with my students as soon as possible so that they did not continue to escalate.	30 (54.5%)	23 (41.8%)	1 (1.8%)	1 (1.8%)	0 (0.0%)
My students were wise and motivated such that they knew the exact words to say during the research process.	5 (9.1%)	26 (47.3%)	17 (30.9%)	7 (12.7%)	0 (0.0%)
My students' were professionally trained and respectful during the process of thesis writing.	22 (40.0%)	28 (50.9%)	5 (9.1%)	0 (0.0%)	0 (0.0%)

Source: Field Data (2018)

The study findings on the characteristic in the student-supervisor interaction in the public Universities in Kenya were presented in table 4.7. The results indicated that 24(43.6%) of respondents strongly agreed that the students were consistent in what was agreed on during thesis writing, and 25(45.6%) of the supervisors also agreed that there was consistency on both parties during thesis writing. However, 3(5.5%) of the supervisors were undecided while 3(5.5%) of the supervisors disagreed that there was consistency during the process of thesis writing. The study findings also revealed that 20(36.4%) of the supervisors believed that graduate students did not assume they knew but were motivated to always consult on what they did not understand during thesis writing. Those who were undecided with the opinion were 33(60.0%) of the supervisors while those who disagreed with the opinion were 1(1.8%).

Further, the study findings indicated that 23(41.8%) of the supervisors strongly agreed that their students had good communication skills and were good listeners during the process of thesis writing. Those supervisors who agreed that their students had good communication skills and were good listeners during the process of thesis writing were 27(49.1%). However, 2(3.6%) of the supervisors were undecided and 3(5.5%) of the supervisors disagreed respectively on the opinion that students had good communication skills and were good listeners during the process of thesis writing.

On the opinion that supervisors encouraged a good relationship with their students which contributed to research success during the process of thesis writing, the study found out that 30(54.5%) of the supervisors strongly agreed that supervisors cultivated the relationship well. Those supervisors who agreed that that supervisor encouraged a good relationship with their students which contributed to research success during the process of thesis writing were 25(45.5%).

The study findings on the acknowledgement of accomplishment, 8(14.5%) of the supervisors strongly agreed that the students acknowledged their work; pointed out their accomplishments despite the minimal contact supervisors had with the graduate students during the process of thesis writing, while 20(36.4%) of the supervisors agreed on the same opinion as 19(34.5%) of the supervisors were undecided on the opinion that students acknowledged their work; pointed out their accomplishments despite the minimal contact supervisors had with the graduate students during the process of thesis writing. However, 6(10.9%) and 2(3.6%) of the supervisors disagreed and strongly agreed respectively on the same opinion about student acknowledgement of supervisors work.

The study finding on frequent advice during thesis writing, 30(54.5%) of the supervisors strongly agreed that they gave their students advice from time to time on how to improve whenever they encountered roadblocks during thesis writing, while 25(45.5%) of the supervisors agreed on the opinion that they give their students from time to time advises on how to improve whenever they encountered roadblocks during thesis writing.

The study findings on conflict resolution during supervision indicated that 30(54.5%) of the supervisors strongly agreed that they resolved the issues of the conflict through an open and honest discussion with their students as soon as possible so that they did not continue to escalate during the process of thesis writing, while 23(41.8%) of the supervisors agreed that they resolved the issues of the conflict through an open and honest discussion with their students as soon as possible so that they did not continue to escalate during the process of thesis writing. However, 1(1.8%) of the supervisors were undecided as a similar number of supervisors disagreed that they resolved the

issues of the conflict through an open and honest discussion with their graduate students as soon as possible so that they did not continue to escalate during the process of thesis writing.

The study findings on respectful interaction during supervision indicated that 5(9.1%) of the supervisors strongly agreed while 26(47.3%) of the supervisors agreed that the students were wise and motivated such that they knew the exact words to say during the research process. However, 17(30.9%) of the supervisors took a neutral ground as they were undecided on the opinion. The graduate students were respectful and motivated during the process of thesis writing. However, 7(12.7%) disagreed on the opinion that the students were wise and motivated such that they knew the exact words to say during the research process. Further, on professionalism during interaction of student and supervisor, the study findings indicated that 22(40.0%) of the supervisors strongly agreed that their students' were professionally trained and respectful during the process of thesis writing, while 28(50.9%) of the supervisors agreed that students' were professionally trained and respectful during the process of thesis writing. However, 5(9.1%) were undecided whether students' were professionally trained and respectful during the process of thesis writing.

The study results gave implications that students were not consistent with getting advice from the supervisor during thesis writing. Some students assumed that they knew how to write the thesis and failed to always consult on what they did not understand during thesis writing. However, for those students who responded to supervisors, the advice was, therefore, the natural complement to the struggles of a graduate student, because this could provide quicker and better solutions to problems that the student might encounter during thesis writing. Supervisors preferred students

with good communication skills and who were good listeners during the process of thesis writing. Supervisors encourage students to use online communication because some students were far and could not meet frequently to discuss the thesis writing progress face to face.

The study results concurred with Cox, Carr and Hall (2004) who observed that online communications have been used with success in several studies of distance learning environments. The most common forms of such communication were; emails, chat or instant messaging. Schwier and Balbar (2002) noted that synchronous chat created a feeling of community among students enrolled in a graduate course. Spencer and Hiltz (2003) conducted a study of synchronous chat in an online course and found out that student satisfaction was highest in courses where synchronous chat sessions were offered in addition to face-to-face methods. This finding was consistent with Cox, Carr, and Hall's (2004) study which found out that the "chat" function of commercial course management systems was less effective for more in-depth topics.

Further, Meyers (2003) found that students who had participated in virtual class discussions had higher levels of comfort and confidence during traditional classroom discussions. In a recent experiment at Harvard Business School, virtual office hours were offered to students in an introductory computer science class with the intent of addressing the need for flexibility and convenience. Feedback from students was generally positive about the availability of help outside the classroom although professors indicated they did not foresee virtual office hours completely replacing traditional hours anytime soon (Riley, 2007).

Also, Jeong (2007) noted issues related to miscommunication due to a lack of verbal cues and drawbacks associated with lack of interoperability between IM clients. This

also addresses the lower level of media richness that might be found in any non-face-to-face communication media (Daft, 1987; Dennis, 1999). A recent study by (Li & Pitts, 2009) found that, while offering virtual office hours improved students' satisfaction of outside-of-classroom student-faculty interaction, students' usage of virtual office hours was very limited. The study also reported that students preferred asynchronous tools such as email to communicate with professors. This study, therefore, aimed to look at how these different types of student-faculty interactions influenced the student-supervisor socialization process.

Research, therefore, was an interactive process and requires the development of social as well as academic skills (Phillips & Pugh, 2000). A school's administrative function was commonly interpreted as referring to managing, operating or directing an organization (Burton and Bruekner, 1995) to support students towards the completion of graduate studies. Some suggestions regarding the supervisory framework and timelines for supporting and defining the students' graduate programme included producing a definite plan in writing, probably different for each department. These described the department's view on the good supervisory practice.

It also established regular meetings between student and supervisor, setting up adequate methods of assessing coursework, thesis or dissertation supervision record keeping and project advancement (Brown and Atkins, 1988; Council of Graduate Schools, 1990). It also involved submitting a comprehensive annual or monthly progress report to the supervisor. Given the length and complexity of graduate student supervision, it was understandable that various difficulties arose (Brown and Atkins, 1988; Moses, 1992) due to organizational or professional factors. Some of the professional factors influencing the interactions of the student-supervisor had

misinformed or inadequately prepared supervisor or a supervisor whose research interests were different from those of the student.

Further, Humphrey and McCarthey (1999) explained that many graduate students were mature and/or distance learners with needs different from those of residential and undergraduate students.

Salmon (1994) picked up the theme of changing research stages and the need for a supervisor to be flexible in an attempt to meet the needs of individual students. Supervisors who have this flexibility could be more helpful to their research students, Haksever and Manisali (2000). Supervisors believed that they were contributing by organizing help with skills, developing English, writing, by collecting relevant literature and through networking or putting students in contact with others in the area (Brown and Atkins, 1988).

However, support from the institution and supervisor still needed as reported by Malfroy (2005) that graduate students often experienced frustration as a result of a perceived lack of support or what is referred to as "a disjunction in expectations" between the student and the supervisor. Spears (2000) further stated that supervisors should read the student's written work thoroughly and provide constructive criticism as this was an essential element in the student's intellectual development. This was further supported by Lessing and Schulze (2002) who describe the supervisory role as a balancing act between various factors: expertise in the area of research, support for the student, critique, and creativity. Also, advice on the desired amount of reading, experimentation and analysis will normally be expected (Holdaway et al., 1995). According to Spear (2000), the feedback was normally given concerning topic selection, methods of inquiry, writing style and layout, the clarity of the student's work

and ideas, the completeness and direction of the work, and the student's general progress.

According to Hodza (2007), supervisors must be willing to make adjustments in the interaction process to meet the supervisee's learning needs. This includes consultation and appointment with the students. Holloway (1995) referred to this as the artistry of supervision. Therefore, faculty and even the university must assist these students by providing enough information for a potential supervisor and supervisors should make themselves accessible for the students. The supervisor should make equal information, time and energy available to all students (Brown and Krager, 1985).

According to them, the supervisor needs to be sensitive to students' time and competence limitations and to assist them to become aware of their own limitations and any constraints on them. Russell (1996) and Moses (1992) found that both supervisors and students agreed that one role of the supervisor was to assist students in general. The amount of assistance that supervisors give to graduate students varies, depending upon the stage that the latter had reached (Moses, 1992). Thus, supervisors should help students more in research input.

The supervision literature indicated that ethical, technical and methodological problems could be minimized or prevented if all the participants in the interaction strive to enter it with clear expectations for their respective roles and about the rules for their interactions (Goodyear et al., 1992). Therefore, both on a departmental and individual basis, the supervisor must be diligent about explicitly working with students to establish mutual expectations, responsibilities and benefits for working together and with other interested parties (Phillips & Pugh, 2000).

On the other hand, Moses argued that at each stage of the research progress, students were likely to need different forms of guidance. They need particular guidance on when to stop data collection and analysis, when to start drafting the thesis and how to structure it (Moses 1992). Thus, the supervisors were expected and assumed to be guides (Cryer, 2000) and critical friends during and after thesis writing (Hockey, 1996; Sheehan, 1994). On the other hand, they should also be able to adopt flexible supervision strategies depending on the individual requirements, which were influenced by the attributes of the particular student (Hockey, 1996; Hill et al., 1994; McQueeney, 1996). This was because graduate students were not homogenous, but highly diverse in terms of academic ability, personality attributes, motivation and attitude.

Hence, how supervisors responded to students was, in part, be conditioned by these different factors and applying the same rigid strategy for each student might not always work effectively (McQueeney, 1996). Burgess et al. (1994) also picked up the theme of changing research stages and the need for supervisors to be flexible in an attempt to meet the needs of individual students. Supervisors who had this flexibility could be more helpful to their research students (Haksever & Manisali, 2000). Norhasni & West (2007) explained that research student supervision had a blend of academic expertise and the skilful management of personal and professional relations. Accessibility of the supervisors should be improved so that the graduate students could seek advice from them. Students needed guideline from the institution to select a potential supervisor.

Haksever & Manisali (2000) defined the supervisory requirements of the student as follows: (1) personal help: support, motivation, socializing, help in organizing

accommodation and other things that might be required, but were unrelated to the research; (2) indirect research related help: providing contacts, both industrial and academic, providing equipment and initial help in locating references; and (3) direct research-related help: a critical analysis of work, help with methodological problems, precise direction and help with the management of the project.

Therefore, the interaction between the student and supervisor involved selecting a research topic, planning the research, identifying and acquiring the necessary resources, managing the project, actively conducting the research, carrying out the literature review, analysis and interpretation of the data, writing the thesis, defending it and possibly publication (Piccinin, 2000). Consequently, the supervisory process required constant adjustment, great sensitivity and interpersonal skill on the part of both the supervisor and graduate student (Hockey, 1995, 1996; Piccinin, 2000). Good communication between students and their supervisors was the most important element of supervision (Barger & Michto-Chamberlain, 1983; Donald et al., 1995; Haksever & Manisali, 2000; Hockey, 1996; McQueeney, 1996; Phillips & Pugh, 2000; Spear, 2000; Waitie, 1994). Without open and honest communication it was difficult to identify the nature of and reasons for the shortfalls perceived by the graduate student. Both parties should be open to criticism, willing to listen to each other and to talk openly (Haksever and Manisali, 2000) and trustworthy (Armitage & Rees, 1988; Hockey, 1996; Salmon, 1992).

In summary, the study findings on the characteristic in the student-supervisor interaction in the public universities in Kenya indicated that 46(83.29%) of the supervisors were for the opinion that there was good characteristic in the student-supervisor interaction in the sampled public universities in Kenya. While 207(83.89%)

of the graduate students held that there was a positive characteristic in the student-supervisor interaction in the sampled public universities in Kenya. This implies that there was good characteristic in the student-supervisor interaction in the public universities in Kenya.

Student-supervisor interaction was characterized by advising and encouraging graduate students because thesis writing was inspired by the general principle of good writing: therefore students should be advised and encouraged through the socialization process of graduate studies during their seminar presentation sessions. Also since the supervisors act as the third party in thesis writing, they should be responsible for handling issues and challenges since they were responsible for what was required in a thesis. Responding to supervisors pieces of advice was therefore the natural complement to the struggles of a graduate student because this could provide quicker and better solutions to problems that the student might encounter during thesis writing. Though there were many sources for such feedback most graduate students considered their supervisors to be the most important figures in this respect because their supervisor was not only closest to their work but also the one who eventually and ultimately decide whether the students' dissertation was ready to be defended or not.

Moreover, since the supervisor was primarily someone who helped students to write a good dissertation: assists in formulating the research questions, planning the work, organizing fieldwork and experiments, and analyzing and interpreting their results, the graduate students always prioritised their advice. The supervisors also helped the students to get in touch with the academic community by opening their networks for them in the research field. This implied that students who responded to supervisors

advice had better solutions to problems that they might encounter during thesis writing and could complete within the scheduled period.

4.2.1 Heads of departments opinion on the characteristic of the student-supervisor interaction in public Universities in Kenya

According to heads of departments, the characteristic in student-supervisor interaction in public universities in Kenya showed that 4(66.67%) of the HODs gave their opinion that characteristic supervisory interactions used in their departments included the assumption of knowledge by the student because both graduates and supervisors were lecturers, therefore, they treated each other as equals. Further, 2(33.33%) of heads of departments agreed that advancing and encouraging students was the main supervisory characteristics of interaction used. This was because the supervisors also acted as role models and mentors to the graduate students and therefore, they were responsible for encouraging and advising students.

“Supervisors act as role models and mentors to the graduate students and therefore, they were responsible for encouraging and advising them on best ways to do the thesis. They should always discuss with the student on the research to be done, the research design, the progress of analysis, writing and publication strategies”.

The supervisor should try to know everything about the personal feelings and emotional characteristics of the students and in meeting personal characteristics and emotions get a lot of attention.

“Energy invested by the supervisors during thesis writing was always very optimal and also it could be very intensive, with daily meetings, teaching and lots of joint activities for the department”. One of the heads of the department said.

They recommended that the substantial relationship should only be of two kinds, a product orientation or a process orientation during thesis writing. Where all meetings were always about the results, with a tendency to focus on concept publications or

chapters and also meetings were never about results, but always about the process to get to results. To achieve this, supervisors were advised to have schedules of meetings about the discussion of written chapters, and they tend to stick to deadlines and timelines given. In the second case scenario, supervisors saw their roles mainly as process managers, stimulating candidates to grow and complete their work on time.

The study findings concurred with Kim and Sax (2009) who indicates that students needed adequate supervision and clear communication with supervisors. They should also be familiar with evaluation criteria (Shannon, 1995). Research is an interactive process and requires the development of social as well as academic skills (Phillips & Pugh, 2000).

It was supported by Lessing and Schulze (2002) who described the supervisory role as a balancing act between various factors: expertise in the area of research, support for the student, critique, and creativity. Also, advice on the desired amount of reading, experimentation and analysis was normally expected (Holdaway et al., 1995). According to Spear (2000), the feedback was normally given concerning topic selection, methods of inquiry, writing style and layout, the clarity of the student's work and ideas, the completeness and direction of the work, and the student's general progress.

According to Hodza (2007), the supervisor must be willing to make adjustments in the interaction process to meet the supervisee's learning needs. This included the consultation and appointment with the students. Holloway (1995) referred to this as the artistry of supervision. Therefore, faculty and even the university must assist these students by providing enough information for a potential supervisor and supervisors

should make themselves accessible for the students. The supervisor should make equal information, time and energy available to all students (Brown and Krager, 1985).

According to them, the supervisor needed to be sensitive to students' time and competence limitations and to assist them to become aware of their own limitations and any constraints on them. Russell (1996) and Moses (1992) found that both supervisors and students agreed that one role of the supervisor was to assist students in general. The amount of assistance that supervisors gave to graduate students varied, depending upon the stage that the latter had reached (Moses, 1992). Thus, supervisors should help students more in research input.

"....some graduate students drop out after coursework only to resurface long after their cohort had graduated delaying themselves with varied excuses like family issues, work constraints, broken relationships, or fees for their children took priority"

The study findings implied that supervisors were role models and mentors to graduate students. Students believed that because the supervisors had passed the same process understand what should be done during thesis writing. Therefore, supervisors were responsible for encouraging and advising students. They should have a professional relationship where they focus on research work. Personal elements were less important during my thesis journey in graduate studies. They should not try to know everything about the personal feelings and emotional characteristics of the students because this diverted the attention of discussion. The meeting between the supervisor and the student should always be about the progress of the thesis in terms of chapters, corrections, challenges encountered, advice and way forward to complete the thesis.

4.2.2 Dean's opinion on the characteristic of the student-supervisor interaction in public universities in Kenya

According to deans opinion on the characteristic in supervisor interaction in public universities in Kenya all of them 2(100%), were for the opinion that there were good characteristics of supervisory interaction in the university.

“Both supervisors and graduate students had their own unique ways of interaction among themselves depending on the graduate students. There are different approaches used to supervise graduate students appropriately depending on graduate student's ability and commitment since weaker graduate students are approached differently from the able one. The supervisors must understand their graduate students and then decide on the best way to handle them”.

McDonald (2017) suggested that to improve the mentioned satisfaction, not only was there a need to invest time, as does the physician to his/her patients but also both the supervisor and the graduate student must be willing to negotiate a research path to follow that would be practical and achievable. The communication between the physician and patient is of paramount importance for the provision of health care(Ha & Longnecker, 2013) so was the communication between the supervisor and graduate student which encouraged the progression of both the research and the graduate study (Yarwood-Ross & Haigh, 2014).

According to the Ogedegbe et al (2012) who further said that for a smooth transition to the graduate life, supervisors should start thinking about providing the same kind of positive reinforcement that every student was experiencing in the undergraduate. The recognition for a job well done would mean a lot for a graduate student, as it did for a patient.

"...flexibility was a key characteristic in the student-supervisor interaction especially on the graduate student who was required to adapt to changes in corrections of thesis writing even after oral defence, flexibility is a major characteristic for a smooth transition to next levels of the thesis"

Bazrafkan, Shokrpour, Yousefi & Yamani (2016) further said that supervisors could organize regular meetings for graduate students to not only discuss their projects but also improve their coping skills, including critical thinking and problem-solving methods. The act of sharing knowledge and experiences could motivate the graduate students to persevere in their studies (McCarthy, Hegarty, Savage & Fitzpatrick, 2010). When needed, supervisors should use their power of influence to increase the time that the graduate student had devoted to research while maintaining part of their employment activities, since many graduate students were also full-time workers.

According to Bazrafkan, Shokrpour, Yousefi & Yamani (2016), supervisors and faculty members must encourage graduate students to pursue the available funding opportunities. Socioeconomic problems were known to be an issue for graduate students. Without the supervisor's support by dealing with graduate student's emotions and personality, research time, funding, and the student's pro-activeness, the graduate journey might not attain success and encounters a long time to completion.

The roles and responsibilities of the supervisor and supervisee should be clear to all participants in supervision (Kohner, 2014). Besides, supervisors and supervisee should be aware of the ethical codes for supervision (Butterworth et al., 2012). As Carroll (2016) mentioned, good supervisors were able to adopt a multiplicity of roles concerning the supervisee. Carroll (2016) emphasized the meaning of the task and role of the supervisor and states that tasks were the behavioural side of functions and roles. The role was person-centred, the task was action-centred, and the function was a combination of both roles and tasks. Van (2010) argues that, even though a strong notional distinction was made between roles and tasks, in reality, they combined.

Traditionally, part of the supervisor's job was to ensure that work was done well and to standard (Rogers, 2017).

Hawkins and Shohet (2014) and Proctor (2018) argue that a supervisor could be seen as having three tasks. The administration or normative task examines the management part of practitioners' roles and was concerned with on-going monitoring and quality (Berger and Bushholz, 2013; Carroll, 2016; Goldhammer et al., 2012). The formative task involved the process of skill development and the ability to reflect on experiences. Lastly, the support or restorative task involved the supportive and helping function. Goldhammer et al. (2012) additionally suggest curricular and instructional components as the supervisor's job. Carroll (2016) states that the generic tasks of counselling supervision should include consulting, evaluating (Pierce, 2014; Van, 2010) and monitoring professional or ethical issues and highlights the fact that emotional awareness and self-evaluation were also among the tasks that were necessary for all counsellors as they work with clients. The study results gave an implication that characteristics on student-supervisor interaction might impact on the performance and extent their length of study because some of them required close attention for them to accomplish their tasks on time. Knowledge should not be assumed when interacting with graduate students because the students might think that they were right on their own views but they were in most cases completely wrong and thus they needed to be guided throughout thesis writing. Supervisors should not only use a feature only to fulfil the need of supervision only but they should ensure that graduate students get the necessary knowledge and concepts needed for the thesis writing.

4.2.3 Supervision characteristics according to supervisors

The study findings sought to describe the supervision characteristics according to supervisors. The study findings were presented in table 4.8. It was presented in form of frequency and percentages. The characteristics described were the number of universities the supervisor had supervised in, programmes supervised, starting dates in teaching and supervision length.

Table 4.8: Supervision Characteristics according to Supervisors

Number of Universities		
Supervisors have Supervised in	Frequency	Percent
One	10	19.2%
Two	30	57.7%
Three	6	11.5%
Six	4	7.7%
Ten	2	3.8%
Total	52	100%
Programmes Supervised		
	Frequency	Percent
Masters	12	26.09%
Both Masters and PhD	35	73.91%
Total	47	100.00%
Starting Dates in Teaching		
	Frequency	Percent
Before 2000	4	8%
Between 2001-2010	28	56%
Between 2011-2017	18	36%
Total	50	100%
Supervision length		
	Frequency	Percent
Five years	2	4.2%
More than 5 years	2	4.2%
Less than 5 years	43	87.5%
Total	47	100%

Source: (Author, 2018)

The study findings indicated that 30(57.7%) of the supervisors have supervised in two universities, 10(19.2%) of the supervisors have supervised only one university and 6(11.5%) have supervised in three universities. While 4(7.7%) of the supervisors have supervised in four universities and 2(3.8%) of the supervisors have supervised in 10 universities. Overall the findings implied that most supervisors were supervising students in more than one university.

This was because the numbers of graduate students in Kenya's universities had grown high, while the number of lecturers and supervisors had remained constant. This forces most staff in public universities to do part-time jobs. They mostly teach in other universities and spending their days crisscrossing from one university hall to another to fill a gap in service provision. This has forced them to handle the huge number of graduate students that were enrolling in large numbers. Additionally, the public universities in Kenya were not able to pay a rewarding amount of money to their lectures thus forcing them to look for extra money by providing their services in other universities on a part-time basis.

The study findings indicated that 35(73.91%) of the supervisors supervises both masters and Ph D and 12(26.09%) of the supervisors supervises only masters. This implied that the researcher considered the opinion of all supervisors who supervised Ph D, masters and undergraduate programmes. The supervisory rules and regulations in Kenyan universities allowed the supervisors to supervise both Ph D and master students at the same time and to be precise the supervisor is expected to supervise three Ph D and five Masters students in an academic year. It might be also due to the small number of supervisors in public universities the few available ones were overused and overworked by being assigned duties to supervise more of both Ph D

and masters students. Assigning of supervision duties to supervisors in public universities might be depending on the supervisor's ability to supervise therefore some supervisors might choose to supervise more students either masters or Ph D to increase their rewards although the requirements demand that each supervisor must supervise at most three Ph D and five masters students at a given time. In addition to supervision of Ph D programmes in graduate studies, it requires a highly qualified and experienced supervisor to supervise Ph D and masters students. There were strict rules and regulations governing supervision of Ph D and masters students therefore the universities policy on the guidelines of graduate supervision is in place and must be followed to the later.

The study findings indicated that 28(56.00%) of the supervisors started working in the university between 2001 and 2010 and 18(36.00%) of the supervisors started working in the university between 2011-2017. While 4(8.00%) of the supervisors started working in the university before 2000. This implies that the researcher considered the opinion of all supervisors irrespective of the time they started supervision to get rich information on supervision interaction in public universities in Kenya. Hence the findings represented the opinion of very experienced supervisors in Kenyan public universities. Also, the findings implied that few lecturers were completing their PhD programs in universities in Kenya therefore most supervisors have been supervising for a longer period of time.

The study findings indicated that 43(87.50%) of the supervisors have supervised in less than five years and 2(4.20%) of the supervisors have been supervising for five years while 2(4.20%) of the supervisors have supervised for more than five years hence good experienced in the supervision process.

This implies that the supervisory rules and regulations in Kenyan universities allow the supervisors to supervise both PhD and master students at the same time and to be precise the supervisor is expected to supervise two Ph D and three Masters students in an academic year. This is due to the small number of supervisors in public universities the few available ones were overused and overworked by being assigned duties to supervise more of both PhD and masters students. There might be few experienced supervisors in public universities and also PhD students. Assigning of supervision duties to supervisors in public universities might be depending on the supervisor's ability to supervise therefore some supervisors might choose to supervise more students either masters or Ph D to increase their rewards although the requirements demand that each supervisor must supervise at most three PhD and five masters students at a given time. In addition to supervision of PhD programmes in graduate studies, it requires a highly qualified and experienced supervisor to supervise PhD and masters students.

The study findings agreed with Nagda et al. (2011) that research engagement is an important feature of doctoral student completion in time, though seldom mentioned, is the level of engagement in academic research. Hughes and Pace (2013) conducted a study with college students, concluded that students who were less engaged in such activities delay in college completion or without completion.

Lambie, Hayes, Griffith, Limberg, and Mullen (2014) showed that doctoral students' levels of engagement in research activities, including publishing manuscripts, have significantly higher levels of research self-efficacy, which is also related to research knowledge and productivity. Given that preparing scholars in the field are the primary

goal of PhD programs, it makes doctoral students' engagement in research activities critical in the formation of scholars.

4.2.4 Supervision characteristics according to graduate students

The study sought to determine supervision characteristics according to graduate students in Kenyan public universities. The study findings were presented in table 4.9.

Table 4.9: Supervision Characteristics according to Graduate Students

University Attended	Frequency	Percent
Moi university	135	54.8
U.O.E	70	29
U.O.N	7	3.2
S. Technical U.	7	3.2
Catholic	7	3.2
Kenyatta U.	14	6.5
Total	240	100
Reasons for Choosing the Programme		
Good quality	157	95.00
Poor quality	8	5.00
Total	165	100.00
Start of Programme		
Before 2010	128	53.3
Between 2010-2015	111	46.7
Total	239	100
Length to Complete Programme		
Between 2-5 years	183	85.19
More than 5 years	32	14.81
Total	215	100
Completion Dates		
Before 2010	56	24.1
Between 2010-2015	127	55.2
Between 2016-2017	48	20.7
Total	231	100

Source: (Author, 2018)

The study findings indicated that 135(54.80%) of the graduate students who participated in the study were from Moi University, 72(29.00%) of the graduate were

from university of Eldoret and 16(6.50%) of the graduate students were from Kenyatta University. The Remaining 8(3.2%) of the graduate students were from Southern Technical University, 8(3.20%) of the graduate students were from Catholic university and also 8(3.20%) of the graduate students were from University of Nairobi. This might be because the study was conducted in Eldoret and thus most graduate students who participated in the study were employed in Moi University which is one of the biggest employers in the region

The study findings indicated that 157(95.00%) of the graduate students held that they selected their respective university for the graduate programme because of good quality education according to referrals. While 8(5.00%) of the graduate students held that they selected their respective universities for graduate programmes because of other factors. This might be because most students who paid for their own education at the graduate level would prioritize good education over other forms of considerations. Good quality of education at this level was necessary to ensure that the graduates get good jobs after the programme was completed including the lecturing jobs at the universities in Kenya.

The study findings indicated that 128(53.30%) of the graduate students started the graduate program before 2010 and 111(46.70%) of the graduate students started post-graduate program between 2010- 2015. This indicated that very few students were able to complete their graduate programs within a period of 5 years as evidenced by the low numbers of Alumni students available and having completed the 2 years and 3-year programs respectively between 2010 and 2015.

The study findings indicated that 183(85.19%) of the alumni students' in post-graduate programs took between 2-5 years and 32(14.81%) of the graduate students

took more than 5 years. This might be because the graduate program could either be 2 or 3 years a total of five years. This was also an indication of some form of delay in undertaking the graduate programs. The number taking more than 5 years was still high considering that the program should take a maximum of 2 years for the master's program and 3 years for the Ph D program.

The study findings indicated that 127(55.2%) of the graduate students completed a post-graduate programme in between 2010-2015, 56(24.1 %) of the graduate students completed the undergraduate programme before 2010 and 48(20.70%) completed the graduate programme between 2016 to 2017. This might be because most students take more than the expected time to complete graduate programmes. This might be because most post-graduate students' combine works with studies by studying on a part-time basis but it could also be an indication of other related university experiences and challenges such as the student-supervisor interaction during the thesis writing period which was investigated by this study.

Therefore, it was common for them to experience self-doubt as they juggle their coursework with other undertakings depending on their motivation and self-drive. Additionally, some students were struggling with payment of fees and therefore some were forced to delay their completion time by some years. Graduate students were underestimating the time they spend on existing commitments whether these involved work, family or friends while overestimating their available time to study. Due to high commitment among the supervisors, they lack time for each student independently and as a result, they might not know the delay they were causing to the students. Finally, the university might not be able to provide support to all graduate students as a way of ensuring that they complete their studies on time.

According to Nagda et al., 2011, Research engagement was an important feature of graduate student completion in time, though seldom mentioned, was the level of engagement in academic research. Although other studies that have explored this issue of student engagement primarily utilized undergraduate students, results convey compelling evidence that student engagement in academic and educational activities should be considered when discussing graduate students' completion. For example, Hughes and Pace (2013) conducted a study with college students, concluded that students who were less engaged in such activities delayed in college completion or without completion.

Similarly, a more recent study with college students showed that student engagement had a significant impact on students' persistence and grades (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2012). Lambie, Hayes, Griffith, Limberg, and Mullen (2014) showed that doctoral students' levels of engagement in research activities, including publishing manuscripts, have significantly higher levels of research self-efficacy, which is also related to research knowledge and productivity. Given that preparing scholars in the field were the primary goal of graduate programs, it made graduate students' engagement in research activities critical in the formation of scholars.

Hadjoannou, Shelton, Fu and Dhanarattigannon (2017) on their study found out that, the challenges to graduate education include high attrition rates, lack of financial resources, the mismatch between opportunities and experiences, difficulties establishing support in addition to domestic responsibilities, especially for non-traditional students. Creating opportunities and an environment that promotes scholars who were able to be successful and productive participants in the greater academic

and educational research community was a challenging task that required unwavering dedication.

Gardner (2017) on his research argued that a key component in doctoral student success was the socialization process among peers, the supervisors and the support they provided each other. Twale and Stein (2001) described four developmental stages of socialization in doctoral education: anticipatory stage, formal stage, informal stage, and personal stage. Within each of these stages, graduate students were navigating their social experiences to foster developmental growth as a scholar by gaining knowledge, skills, and values necessary for completing their degrees and advancing their careers in the field.

4.3 Experiences of Student-Supervisor Interaction in Public Universities in Kenya

The third objective sought to explore the experiences encountered during student-supervisor interaction in public Universities in Kenya. To achieve these results, it was important to find out university ability to deal with the student-supervisor interaction experiences in case of complaints. The study findings were presented in table 4.10.

Table 4.10: University Ability to Deal with the Student-Supervisor Interaction Experience and Challenges in Case of Complain

	Supervisors		Graduate students	
	Frequency	Valid	Frequency	Valid Percent
Yes	42	76.4%	144	60.0%
No	13	23.6%	96	40.0%
Total	55	100.0%	240	100.0%

Source: (Author, 2018)

The study findings indicated that 42(76.4%) of the supervisors and 144(60.0%) of the graduate students agreed that university was able to deal with the student-supervisor

interaction experience in case a student had complained. While 13(23.6%) of the supervisors and 96 (40.0%) of the graduate students were not in agreement with university's ability to deal with student-supervisor interaction experience in case a student had complained.

The study results showed that universities were at better capacity to manage student-supervisor interaction experience and challenges in case of a complaint. The university had guiding rules and regulations used in the management of the student-supervisor interaction. Students had a right to be supervised well as they pursued their academic studies. It was the mandate of the supervisor to provide appropriate academic guidelines to the student throughout his/her study program. The university also had the senate and the council to monitor student-supervisor character while under the academic umbrella. Either student or the supervisor had the right to report indisciplinary cases to the respective university statutory body.

It was also assumed that supervisors have had over a long time good experience to interact with many students and were easy for them to learn and understand the challenges that students were going through in the academic life. Students as well had good knowledge to understand the expectations of the supervisor through the interaction period. The minimal number of graduate students who do not have good ability to interact with supervisors well were naturally not aggressive to learn and understand from their supervisors. Also, the supervisors who did not have the ability to interact with students well were either arrogant, had a self-interest or knew little about the academic needs of the students.

Clark (2017) concurred that each college had a specific committee with responsibility for graduate research matters. The committee's name varied by college, but it had

overall responsibility for graduate research supervision, annual progression review decisions (based on recommendations from schools) and authorising periods of leave or changes to study periods. In practice, Colleges delegated some of these decision-making responsibilities to schools (for example the Graduate Director). The College Committee also acted as the Board of examiners for postgraduate research degree awards. Throughout this document, the term "College Committee" was used to refer to all these roles.

Further, the study by Robertson, Williams, Jones, Isbel and Loads (2017) showed that respect, trust, confidence and fairness were essential elements of the student-supervisor relationship. Most interpersonal problems between students and supervisors could be avoided if students and supervisors contributed responsibly and professionally to their working relationship by being respectful, courteous, punctual and conscientious. The University's Dignity and Respect policy promotes a positive working and studying culture which every student and member of staff contributes to and within which they could fulfil their potential.

Table 4.11: Supervisors' Opinions on University Ability to Deal with the Student-Supervisor Interaction Experience and Challenges in Case of Complain

Supervisors' Opinions	Frequency and Percent
Provide training, workshops and seminars	10(18.2%)
Monitor progress and meet regularly	17(30.9%)
Follow rules, regulations and guidelines	20(36.4%)
There are guidelines provided	3(5.5%)
Supervisors were overloaded	5(9.1%)

Source: Supervisors 2018

According to the supervisors who agreed that the university dealt effectively with matters about graduate students-supervisor interaction 10(18.2%) of the supervisors argued that the university provided training, workshops and seminars to the supervisors which in turn improved their performance in dealing with graduate students during their thesis writing, they further argued that the university provides seminars, workshops, meeting at the departmental level and deans level to encourage to train and encourage the supervisors to supervise to completion while 17(30.9%) of the supervisors agreed that effective and frequent monitoring of graduate students progress enhances student-supervisor interaction, they further argued that the university monitor student progress to ensure that they complete on time and also. However, 20(36.4%) of the supervisors argued that if only the graduate students could follow rules, regulations and guidelines as contained in the graduate universities policy then it could be easy and friendly to deal with the student-supervisor interaction experiences and challenges in case of complaint.

On the other hand, 3(5.5%) of the supervisors believed that there were guidelines provided governing the graduate studies. They further argued that there were guidelines to guide interaction but they were not clear and were not known to both students and supervisors while 5(9.1%) of the supervisors were overloaded as shown by the study findings in table 4.11.

The study results revealed that supervisors were contented when graduate students stick to the guidelines provided by the university school policy. Graduate students were expected to show great co-operation and team up with the supervisor to sought out all the issues. Graduate students who avail themselves up to meet the supervisor at a convenient time get assistance at once. Most graduate students who show low

interaction with their supervisors took longer time before graduating. The reason was that skipping classes and missing out important schedules delayed completion of the course.

According to Proctor (2018), the absence in the context of the unavailability of the supervisors to the students in terms of consultations and provision of timely feedback. The absence of the supervisors causes anxieties to students and was one reason for the delayed completion of the graduate students. Some of the reasons for the unavailability were commitment in activities outside the University for personal gains or other personal commitments, involvement with management and administrative roles in the university, being on part-time engagement in the faculty, or too many students for supervision Berger and Buchholz, 2013).

Whatever the reasons for the absence, the solution would be to explore the university's support for none face to face modes of supervision through email, teleconference, phone or skype (Rudd, 2015). While some of these facilities were not readily available in some public universities in developing countries like Kenya, their use could have high financial commitments for the students and supervisors. The other aspect to improve on the availability and commitment of the supervisors was the provision of incentives to staff for engaging in research uptake activity; perhaps based on the number of students, one was able to help complete the theses (Acker, Hill & Black 2014). An indirect incentive that might work was the consideration of the number of a student successfully supervised as a promotion criterion to the next level for the supervisors. Some universities had sought to improve supervisor's commitments by attaching monetary gains for successful supervision, giving PhDs more money,

compared to Masters’ theses and projects, respectively. Absence by the students also affects the quality of supervision process Holdaway, Deblois and Winchester, 2015).

Table 4.12: Graduate Students’ Opinions on University Ability to Deal with the Student-Supervisor Interaction Experience and Challenges in Case of Complain

Graduate Students’ Opinions	Frequency and Percent
Monitor and enhance Student-Supervisor interaction	81(33.8%)
Set together timelines and ensure good environment	49(20.4%)
There is partial neglect by university	30(12.5%)
Graduate Students were under the mercy of supervisors	20(8.3%)
University Graduate policy, rules and regulations	60(25.0%)

Source: Graduate Students 2018

The study findings on graduate student opinion on the university ability to deal with student-supervisor experience and challenges indicated that the graduate students who agreed that the university was able to deal with the student-supervisor interaction experiences in case a student had complained believed that 81(33.8%) of the graduate students argued if only the universities could monitor and enhance student-supervisor interaction then graduate students could comfortably complete their graduate studies on time. The study findings also showed that 49(20.4%) of the graduate students agreed that their supervisors set together timelines and ensured good environment for the smooth completion of their graduate studies while 30(12.5%) of the graduate students were dissatisfied with the way the graduate school handled them by saying that there was partial neglect by the university in dealing with their issues when arose during the study.

The study findings also indicated that the graduate students who were against the opinion that the university was able to deal with the student-supervisor interaction experience in case of student had complained they argued that the process of

complaining and conflict resolution was laborious and time-consuming and further argued that nothing much was done on issues because there was no follow-up by the university to ensure a good relationship between graduate students and supervisors and that issues could not be handled at the individual level. Graduate students were under the mercy of supervisors was supported by only 20(8.3%) of the graduate students in all the sampled universities in Kenya they further argued that there is no strategy for resolving issues by a university department and argued that graduate students sought issues on their own and that supervisors were given a large number of graduate students to supervise in an academic year.

However, the study also sought to establish whether the policy governing graduate was adhered to and 60(25.0%) of the graduate students dissatisfied that the University Graduate policy, rules and regulations were not strictly followed to ensure students complete their studies on time.

The university as a learning institution was responsible for the good interaction between the supervisor and the graduate students because it was responsible for providing guidelines, policy and regulations so that students and supervisors might carry out their research and present their results to the best advantage possible as they observe timelines. The university also encouraged professional development for both graduate students and through seminars and workshops and also ensuring that the supervisors undertook training as part of their continuing professional development and documentary monitoring and checking signs of progress using signing agreements for both parties. The university was responsible for the motivation of the supervisors through encouraging rewards and payment on time which increases the level of commitment also the university should provide rooms for interaction with the graduate

students within the school and also encourage studies on a part-time basis. Universities also to provide funding for research which could provide a conducive environment for studies in graduate studies.

According to Carroll (2016), the absence has been caused by laxity after completion of the coursework. Some students even disappear soon after completion of course work and only appear after a long time delaying the completion time. Some of the reasons for this were that most students at the graduate level were on paid employment with some working far away from the universities (Rogers 2017). Some disappear soon after conceptualizing the research topic or before finalizing the proposal. At whatever time they might disappear, the supervision process could not be of quality, due to disruption of the socialization process.

With compromised supervision due to the disappearance of either the supervisor or the graduate student, the problem was usually heightened when either party blame the other for the delayed process (Kezar. 1999). Since graduate school or the unit in charge of graduate studies was responsible and accountable to the students and the university for quality assurance in the graduate programme, the solution was the introduction of a form of a supervision tracking tool, meant to make the graduate students and supervisors accountable to each other (Lessing and Schulze, 2012). The tool could be a simple one meant to take stalk of when the student hands in the work to the supervisor, the date when the feedback was provided, mode of feedback delivery (telephone, SMS, email, skype, among others), nature of the feedback given, remarks and signature of both the supervisor and student.

According to McAlpine and Norton (2016), for the sake of accountability and quality control, the duly completed tool could be photocopied and submitted to Graduate

School to serve as a form of progress record, regularly, for example, once in three months. However, the tool could serve the purpose only if it has clear guidelines and timelines as to how often meetings should be held between the graduate student and the supervisor, the expected roles and responsibilities for both the supervisors and the students. At the same time, there should be clarities on the procedure for consultations, the timing of feedback from the supervisor and measures to monitor the completion timeframe for the graduate students once admitted in graduate school (Moses, 2012).

4.3.1 What students should do to enhance interactions to complete thesis writing within the time

Table 4.13. What would be done by graduate students to enhance the Student-Supervisor Interaction to curb resultant delays in thesis writing

Graduate Students' Opinions	Frequency and Percent
Enhance interaction and advice through seminars and workshops	93(38.8%)
Adhere to deadlines and timelines	60(25.0%)
Follow rules and regulations and consult regularly	50(20.8%)
Do corrections on time	27 (11.3%)
Report uncooperative supervisors	10 (4.2%)

Source: Field Data (2018)

According to the graduate students on table 4.13, 60(25.0%) of the graduate students held that the graduate students should adhere to timelines and 27(11.3%) of the graduate students further said that, they should do corrections on time and availing themselves on the set dates with their supervisors. Also 15(27.3%) of the supervisors held that the graduate students should follow up their work through continuous consultation and doing comprehensive work always and should put more effort and hard work on their work and also doing their work diligently.

While 50(20.8%) of the graduate students held that they should follow rules and regulations as they consult their supervisors regularly and create good relationships with their supervisors and held that the graduate students report to the supervision office in case of any problem or challenge because rules and regulations were governing the graduate studies. However, 10(4.2%) of the graduate students believed that they should report uncooperative supervisors to the authorities concerned.

Table 4.14: What would be done to enhance the Student-Supervisor Interaction to complete the thesis writing within the time

Supervisors' Opinions	Frequency and Percent
Improve student supervisor interaction	20 (36.4%)
Give timelines and immediate feedback	12(21.8%)
Do corrections immediately	15(27.3%)
Reduce overloads from supervisors	8 (14.5%)

Source: Field Data (2018)

Findings from Table 4.14 shows that 20(36.4%) of the supervisors held that the students should meet regularly to improve student-supervisor interaction with their supervisors for consultation by ensuring that they were available, 93(38.8%) of the students held that the graduate students should initiate interaction with the supervisors through seminar papers and workshops from time to time to remind them on their work and 60(25.0%) of the students held that they should be available and stick to arranged timelines, guidelines and schedules and timely correction because it acts as a motivator to the supervisor. The graduate students should communicate constantly with the supervisors to enhance good interaction. However, 8(14.5%) of the supervisors held the idea that the university authorities concerned should reduce overloads from supervisors by employing more lecturers to meet the growing demand of graduate studies in Kenyan public universities.

In conclusion, therefore, communication and frequent meetings between graduate students and their supervisors was the most important factor in their interaction process to build a good relationship and become a successful team able to complete their thesis writing within the timelines. This could also ensure that the supervisors and the graduate students had enough time to work on their thesis. The supervisors also had many roles which included acting as lecturers, heads of departments, mentors, trainers, supporters, and fellow researchers which affected their interaction with students. The frequent communication and meeting would enable the supervisors to provide advice and guidance to help keep research work on track. Through the supervisory meeting, the supervisors were able to provide feedback on the progress of the thesis work. Frequent communication and meetings with the supervisors would build supervisors interest in making sure the graduate student developed skills that were needed to complete the research process.

4.3.2 Extent that university enhances supervisor-interactions in graduate studies in Kenya

The study findings sought to determine the extent that university enhanced student supervisor-interaction in graduate studies. The study findings were presented in table 4.15.

Table 4.15: Extent that University Enhances Supervisor-Interaction in Graduate Studies in Kenya

	Supervisor		Graduate Student	
	Frequency	Valid Percent	Frequency	Valid Percent
Great extent	55	100%	60	25%
Small extent	0	0.00	180	75%
Total	55	100%	240	100

Source: Field Data (2018)

Table 4.15 indicates that 55(100%) of the supervisors and 60(25.00%) of the graduate students held that the university had enhanced the student-supervisor interaction in graduate studies in Kenya at a great extent. On supervisor-interaction, the supervisors did not comment on whether it was in small extent while 180(75%) of the graduate students held that the university had enhanced the student-supervisor interaction in graduate studies in Kenya at a small extent. This shows that Kenyan universities have enhanced student-supervisor interaction to a great extent as indicated by both the supervisors and graduate students. Nevertheless, 180(75%) of the graduate students reported that student-supervisor interaction in graduate studies in Kenyan Universities was at a small extent.

A study by Zuber-Skerritt et al. (1994) summarized the main problems in graduate supervision as (1) inadequate supervision: supervisors' lack of experience, commitment, and/or time; (2) emotional and psychological problems: students' intellectual and social isolation; their insecurity to fulfil the standards and lack of confidence in their ability to complete their theses within the specified time or not at all; (3) lack of understanding and communication between supervisor and student; and (4) students' lack of knowledge, skills, training or experience in research methods.

Further, Spear (2000) concludes that one of the most common complaints from research students concerns infrequent or erratic contact with supervisors, who were too busy with administrative or teaching responsibilities, have too many students or be away from the university too often. Therefore, the supervisor should make equal information, time and energy available to all students (Brown & Krager, 1985) and should also meet regularly with students (Hockey, 1996; Russell, 1996). Research has

shown that constant, thoughtful supervision and availability was key to successful graduate program completion (Donald et. al., 1995; Holdaway, 1991).

Table 4.16: Supervisors' Opinions on the Extent that University Enhances Student-Supervisor-Interaction in Graduate Studies in Kenya

Supervisors' Opinions	Frequency and Percent
Conducive environment for training, workshops and seminars	41(17.1%)
Monitor progress and meet regularly	60 (25.0%)
Follow rules, timelines, regulations and guidelines	39 (16.3%)
Uncooperativeonline supervisors	40(16.7%)
Supervisors were overloaded on student supervisor ratio	60(25.0%)

Source: Field Data (2018)

According to the supervisors, the university could enhance the student-supervisor interaction since most factors affecting graduate student supervisors were based on the roles and functions of the supervisors and university, 41(17.1%) of the supervisors held that the university was responsible for providing conducive environment for student-supervisor interaction by providing training through compulsory workshops and seminars to enhance knowledge to both students and supervisors. The university was also responsible for investing and facilitating research by providing funds for research and ensuring that students and the supervisors adhere to graduate policies by introducing contract forms to be signed by both supervisors and the graduate students and also to ensure continuous monitoring and tracking of interaction between graduate students and the supervisors and further argued that the university provided a conducive environment for student-supervisor interaction by providing payment to the supervisors on time.

Also, 60(25.0%) of the supervisors argued that there should be an improvement of the student-supervisor ratio by ensuring that the university had put in place mechanism for tracking supervision process by introducing work schedule for signing whenever consultation took place between graduate student and supervisors and also following such rules strictly to enhance interaction and also 39(16.3%)of the supervisors held that both graduate students and the supervisors should ensure that they stick to timelines to enhance student-supervisor interaction in graduate at a great extent and on the other hand the university ensured that deadlines were always achieved through assigning supervisors on time and using university policies which ensured that the students complete their graduate studies on time.

While 60(25.0%) of the supervisors argued that they do not have time for interacting with the graduate students because there were over engaged due to the high number of graduate students they were supervising and other commitments and they recommended that the universities should sponsor many graduate students to increase the number of supervisors and 40(16.7%) of the supervisors argued that the interaction depended entirely on the graduate student because some of the supervisors were regarded uncooperative and online supervisors by the graduate students who said it was entirely their effort and a minimal effort from the supervisor but the university was doing nothing to enhance proper interaction.

The university was able to enhance the student-supervisor interaction in graduate studies in Kenya because of their main objective of providing quality service to the graduate students which included proper supervision. The university also ensured good order and an atmosphere conducive to academic activity by producing timely and accurate statistics, class rosters, grades, certifications and other reports, and by

serving as a watchdog for academic policies and also monitoring the progress of the graduate students. The university also ensured that the graduate students completed their studies by producing class and examination schedules which, as much as possible, served the needs and preferences of the faculty and graduate students and ensured that the conditions of the classrooms met the needs of quality instructions in graduate studies.

4.3.3 Heads of departments opinion on experiences and challenges facing student-supervisor interactions in public universities in Kenya

The study findings on heads of department opinion on the extent to which the university solve challenges showed that 5(83.33%) of the HODs held that the university could solve challenges facing graduate supervisor interaction at a great extent. While 1(16.67%) of the HODs held that the university could solve student-supervisor interaction in graduate at a great extent.

"There are many challenges and experiences that face student-supervisor interaction in public universities in Kenya. These challenges and experiences included supervisors who are not available to the graduate students for consultation and also those who fail to give feedback to the students on time so that they could do corrections. The unavailability of the supervisors affected graduate students by delaying or extending the time of completion of the graduate programme".

The other possible causes of unavailability of the supervisors were a large number of students to be supervised and other commitments outside university since most of the supervisors were on a part-time basis. Supervisors were in most cases communicated and performed their operations online through mail and telephone. Another challenge affecting student-supervisor interaction was inadequate research facilities in the university and also some students had financial problems therefore hindering their smooth progress in graduate studies.

They argued that the university was able to deal with such challenges by ensuring that they provided timely payments to their supervisor so that they reduce the outside of university commitments. Also, the supervisors recommended that the university should employ supervisors on a full-time basis so that to increase their level of commitment and job security confidence. This would reduce other commitment including outside activities. The heads of the department also proposed that the government should provide through the university graduate admission loans to graduate students so that to reduce cases of delay on graduation caused by fees balance. The universities need to increase the level of support of graduate programmes by ensuring that there were enough research facilities in the university.

"the majority of graduate students drop out after coursework mainly because of huge areas of graduate fees, their job and family commitments which affect their interaction with supervisors".

The study concurred with Acker, Hill and Black (2014) who noted that for good supervision of graduate students supervisors should be provided with incentives. These incentives improve the availability and commitment of the supervisors to participate in supervising the students. An indirect incentive that might work is the consideration of the number of post-graduate students successfully supervised as a promotion criterion to the next level for the supervisors.

The study also agreed with study findings of Holdaway, Deblois and Winchester (2015) who noted that some universities have sought to improve supervisor's commitments by attaching monetary gains for successful supervision, giving PhDs more money, compared to Masters' theses respectively. However, the lack of commitment by students might affect the quality of the supervision process.

4.3.4 Deans opinion on experiences and challenges facing student-supervisor interactions in public universities in Kenya

The study findings on deans' opinion on the extent to which the university could solve challenges facing graduate programme 2(100%) of the deans held that the university could solve student-supervisor challenges at a great extent.

"The challenges facing student-supervisor interaction in graduate studies are delays in giving out feedback for both graduate students and the supervisors and failure to meet deadlines and timelines set by both parties. Most supervisors do not provide guideline and timelines to the graduate students with the assumption that all the graduate students were aware of what they were supposed to do".

However, they argued that the university could solve these challenges by ensuring that they monitored all the interactions between graduate students and the supervisor by providing signed sheets and agreements that should be signed by both the graduate students and the supervisors. The supervisors should be put on toes on meeting deadlines by setting dates for interactions and socialization with the graduate students and reminding them regularly and also they should give penalties to any supervisor who failed to avail themselves on guidelines. The most appropriate thing that the university should do is to re-train their supervisors on how to provide proper guiding and mentoring to the graduate students to avoid cases of misleading and misguiding of the graduate students to complete their graduate studies on time.

According to Proctor (2018), the absence in the context of the unavailability of the supervisors to the students in terms of consultations and provision of timely feedback. The absence of the supervisors causes anxieties to students and was one reason for the delayed completion of the graduate students. Some of the reasons for the unavailability were commitment in activities outside the university for personal gains or other personal commitments, involvement with management and administrative

roles in the university, being on parttime engagement in the faculty, or too many students for supervision Berger and Buchholz, 2013).

However, whatever the reasons for the absence, the solution would be to explore the university's support for none face to face modes of supervision through email, teleconference, phone or skype (Rudd, 2015). While some of these facilities might not be readily available in some public universities in developing countries like Kenya, their use could have high financial commitments for the students and supervisors. The other aspect to improve on the availability and commitment of the supervisors was the provision of incentives to staff for engaging in research uptake activity; perhaps based on the number of students, one was able to help complete the theses (Acker, Hill & Black 2014).

An indirect incentive that might work was the consideration of the number of a student successfully supervised as a promotion criterion to the next level for the supervisors. Some universities have sought to improve supervisor's commitments by attaching monetary gains for successful supervision, giving PhDs more money, compared to Masters' theses and projects, respectively. Absence by the students also affects the quality of supervision process Holdaway, Deblois and Winchester, 2015).

"The delay in payment of supervisors had occasionally hampered the progress of graduate students because the supervisors view the thesis fee as a motivation and an incentive to do their work and ensure students complete their studies on time".

According to Carroll (2016), the absence has been caused by laxity after completion of the coursework. Some students even disappear soon after completion of course work and only appear after a long time delaying the completion time. Some of the reasons for this were that most students at the graduate level were on paid employment with some working far away from the universities (Rogers 2017). Some

disappear soon after conceptualizing the research topic or before finalizing the proposal. At whatever time they might disappear, the supervision process could not be of quality, due to disruption of the socialization process.

"some graduate students disappear immediately after coursework when they fail to conceptualize the research topic and anticipate challenges in the methodological work especially on the data collection tools like questionnaires and interview schedules while in the field".

Further, with compromised supervision due to the disappearance of either the supervisor or the graduate student, the problem was usually heightened when either party blame the other for the delayed process (Kezar. 1999). Since Graduate school or the unit in charge of graduate studies was responsible and accountable to the students and the university for quality assurance in the graduate programme, the solution could be in the introduction of a form of a supervision tracking tool, meant to make the graduate students and supervisors accountable to each other (Lessing and Schulze, 2012). The tool could be a simple one meant to take stalk of when the student hands in the work to the supervisor, the date when the feedback was provided, mode of feedback delivery (telephone, SMS, email, skype, among others), nature of the feedback given, remarks and signature of both the supervisor and student.

According to (McAlpine and Norton 2016), for the sake of accountability and quality control, the duly completed tool could be photocopied and submitted to graduate school to serve as a form of progress record, regularly, for example, once in three months. However, the tool could serve the purpose only if it had clear guidelines and timelines as to how often meetings were held between the graduate student and the supervisor, the expected roles and responsibilities for both the supervisors and the students. At the same time, there should be clarities on the procedure for consultations, the timing of feedback from the supervisor and measures to monitor the

completion timeframe for the graduate students once admitted in graduate school (Moses, 2012).

4.4 Practices that would Improve Student-Supervisor Interaction in Public Universities in Kenya

The fourth objective sought to determine practices that would improve student-supervisor interaction in public universities in Kenya. The findings were presented in table 4.17.

4.4.1 Graduate students opinion on practices that would improve student-supervisor interaction in public universities in Kenya

The study sought to determine practices that would improve practices that would improve student-supervisor interaction in public universities in Kenya. The study findings were presented in table 4.17.

Table 4.17: Graduate Students opinion on the Practices

Key SA- Strongly Agree, A –Agree U– Undecided, D – Disagree, SD – Strongly Disagree

<i>Graduate Students opinion on the practices</i>	<i>Opinions of GraduateStudents</i>				
	SA	A	U	D	SD
The institution should organise mandatory seminars for the student and supervisors which would help improve their socialization process in defence writing.	108 (45.0%)	128 (53.3%)	4 (1.7%)	0 (0.0%)	0 (0.0%)
Supervisors should be rated at the end of the supervision period to help identify the supervisor's weakness and strengths.	100 (41.7%)	125 (52.1%)	9 (3.8%)	6 (2.5%)	0 (0.0%)
The student and the supervisor should jointly set deadlines to complete the research work.	105 (43.8%)	117 (48.8%)	10 (4.2%)	8 (3.3%)	0 (0.0%)
Lecturers should be trained on modern Student-Supervision Interaction techniques to help better supervise students.	99 (41.3%)	109 (45.4%)	13 (5.4%)	15 (6.3%)	4 (1.7%)
Additional Training in research methods should be provided to the students after course work to address the shortfall in knowledge and skills of the supervisor.	108 (45.0%)	127 (52.9%)	1 (0.4%)	3 (1.3%)	1 (0.4%)
Students should be allowed to pick their own supervisors as it increases student motivation and confidence.	59 (24.6%)	73 (30.4%)	22 (9.2%)	57 (23.8%)	0 (0.0%)
The university should ensure that allocation of Supervisors to Students should strictly adhere to the rules and regulations provided.	108 (45.0%)	129 (53.8%)	3 (1.3%)	0 (0.0%)	0 (0.0%)
The university should ensure that there is strict adherence to rules and regulations governing the post-graduate supervision process in an academic year.	128 (53.3%)	110 (45.8%)	2 (0.8%)	0 (0.0%)	0 (0.0%)

Source: Field Data (2018)

The study findings on practices that would improve student-supervisor interaction in public universities in Kenya indicated that 108(45.0%) of the graduate students strongly agreed that the institutions of higher learning should organise mandatory

seminars for the student and supervisors which will help improve their socialization process in defence writing and a further 128(53.3%) of the graduate students agreed on the same opinion while 4(1.7%) of the graduate students were undecided.

The study further sought to find out whether supervisors should be rated at the end of supervision period to help identify supervisor's weakness and strengths and 100(41.7%) of the graduate students strongly agreed on the opinion and 125(52.1%) of the graduate students further agreed that the opinion holds for successful socialization of graduate students. Another 9(3.8%) were undecided and 6(2.5%) of the graduate students disagreed with the opinion of others.

On the opinion on whether the student and the supervisors should jointly set deadlines to complete the research work, 105(43.8%) of the graduate students strongly agreed on the opinion and a further 117(48.8%) of the graduate students agreed on the same opinion while 10(4.2%) of the graduate students were undecided on whether to agree or disagree but 8(3.3%) of the graduate students disagreed on the opinion of others.

The study further sought to find out on whether the supervisors should be trained on modern student-supervision interaction techniques to help better supervise students in graduate studies and 99(41.3%) of the graduate students strongly agreed on the opinion and a further 109(45.4%) of the graduate students agreed that supervisors should be given more training on supervision work while 13(5.4%) of the graduate students were undecided and 15(6.3%) of the graduate students disagreed when 4(1.7%) of the graduate students strongly disagreed on the opinion. "Additional training in research methods should be provided to the students after course work to address the shortfall in knowledge and skills of the supervisor".

The findings indicated that 108(45.0%) of the graduate students strongly agreed on the opinion while 127(52.9%) of the graduate students agreed on the same opinion while 1(0.4) of the graduate students took a neutral stand, 3(1.3%) of the graduate students disagreed and 1(0.4%) of the graduate students strongly disagreed. “Students should be allowed to pick their own supervisors as it increases student motivation and confidence”. The findings indicated that 59(24.6%) of the graduate students strongly agreed while 73(30.4%) agreed on the same opinion. However, 22(9.2%) of the graduate students’ were undecided while 57(23.8%) of the graduate students disagreed on the opinion.

The study findings on whether the university should ensure that allocation of supervisors to students should strictly adhere to the rules and regulations provided indicated that 108(45.0%) of the graduate students strongly agreed and 129(53.8%) of the graduate students agreed on the same opinion that rules and regulations provided should be followed on the later while 3(1.3%) of the graduate students were undecided. “The university should ensure that there is strict adherence of rules and regulations governing the post-graduate supervision process in an academic year”. The findings showed that 128(53.3%) of the graduate students strongly agreed on the opinion and a further 110(45.8%) of the graduate students agreed that policy guidelines should be adhered to while 2(0.8%) of the graduate students were undecided on the opinion of others.

The study findings imply that universities should have come up with strategies of trying to improve the quality of postgraduate supervision by organising mandatory seminars for the student and supervisors. These seminars help in improving the socialization process before and during defence presentation. These also alert the

supervisors to rate themselves in the supervision to help identify their weakness and strengths and improve where necessary. The university also has given datelines which drives the student and the supervisor jointly set datelines to complete the research work.

However, there were no seminars for lecturers to be trained on modern student-supervision interaction techniques to help better supervise students. Additional training in research methods should be provided to the students after course work to address the shortfall in knowledge and skills of the supervisor. This has forced some students to pick their own supervisors as it increases student motivation and confidence. In conclusion, the university should ensure that there is strict adherence to rules and regulations governing the post-graduate supervision process in an academic year for students to complete their thesis within the scheduled time.

The study findings agreed with Dillon & Malott (2011) who indicated that the quality of supervision has been often indicated as the main reason for the delay in completing the thesis writing. Hockey (1991) study results noted dissatisfaction with the process of supervision with reasons for dissatisfaction, which include poor direction and structure. Acker, Hill and Black (2011) indicated that allocation to a supervisor with interests not matching with those of the student, and insufficient guidance and time scaling (Eggleston & Delamont, 2013). Such dissatisfaction rates are higher in the domain of social sciences than in natural sciences (Young, Fogarty & McRea, 2017). In a study of the research supervision process for graduate students, Eggleston and Delamont (2013), found that the matching of the student to supervisor for effective relationships is crucially important.

Table 4.18: Supervisors opinion on the practices

Key SA- Strongly Agree, A –Agree U– Undecided, D – Disagree, SD – Strongly Disagree

Supervisors opinion on the practices	Opinions of Supervisors				
	SA	A	U	D	SD
The institution should organize mandatory seminars for the student and supervisors which would help improve their socialization process in defence writing	32 (58.2%)	23 (41.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Supervisors should be rated at the end of the supervision period to help identify the supervisor's strength by supervisees.	26 (47.3%)	27 (49.1%)	0 (0.0%)	1 (1.8%)	1 (1.8%)
The students and the supervisor should jointly set dates for completion of research work	30 (54.5%)	25 (45.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
More opportunities for supervisor training on modern technique of supervision to help better supervise students as a way of improving their work with supervisees	31 (56.4%)	24 (43.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Additional research method training should be provided to the students after course work to address the shortfall in knowledge and skills of the supervisor.	25 (45.5%)	29 (52.7%)	0 (0.0%)	0 (0.0%)	1 (1.8%)
Students should be allowed to pick their own supervisors as it increases student motivation and confidence.	29 (52.7%)	21 (38.2%)	4 (7.3%)	0 (0.0%)	1 (1.8%)
The university should ensure that allocation of supervisors to students should strictly adhere to the rules and regulations	39 (70.9%)	15 (27.3%)	1 (1.8%)	0 (0.0%)	0 (0.0%)

Source: Field Data (2018)

The study findings on practices that would improve student-supervisor interaction in public Universities in Kenya indicated that 32(58.2%) and 23(41.8%) of supervisors strongly agreed and agreed that the institution should organize mandatory seminars for the student and supervisors which will help improve their socialization process in defence writing respectively. On the opinion that supervisors should be rated at the end of supervision period to help identify supervisor's strength by supervisees, 26(47.3%) of the supervisors strongly agreed that the supervisors should be rated at the end of each supervision period while 27(49.1%) of the supervisors agreed that it is also good to rate them for effective supervision of graduate studies. 1(1.8%) of the supervisor was of the contrary opinion that supervisors should not be rated at the end

of the supervision session, this is evident by the two who disagreed and strongly disagreed that supervisors should not be rated at the end of the supervision period.

On the opinion that the students and the supervisor should jointly set dates for completion of research work, 30(54.5%) of the supervisors strongly agreed that datelines should jointly be set by both parties while 25(45.5%) of the supervisors believed that graduate students and supervisors should set datelines and timelines during the process of socialization as they journey together in thesis writing for 25(45.5%) of the supervisors agreed that this should be so.

The study findings on the opinion that more opportunities for supervisor training on modern technique of supervision to help better supervise students as a way of improving their work with supervisees, 31(56.4%) of the supervisors strongly agreed that More opportunities for supervisor training on modern technique of supervision to help better supervise students as a way of improving their work with supervisees, while 24(43.6%) of the supervisors agreed on the opinion that supervisors should be given more training opportunities on modern methods of supervision to help better supervise graduate students as a way of improving their work with the supervisees during thesis writing.

On the opinion that additional research method training should be provided to the graduate students after course work to address the shortfall in knowledge and skills of the supervisor, 25(45.5%) of the supervisors strongly agreed that this should be done in public universities in Kenya to address the shortfall in knowledge and skills of the supervisor to enhance student-supervisor interaction during thesis writing. On the same opinion, 29(52.7%) of the supervisors agreed that additional research method

training should be provided to the students after course work to address the shortfall in knowledge and skills of the supervisor.

This improves on student-supervisor interaction in graduate studies in Kenyan public universities. However, only 1(1.8%) of the supervisors strongly disagreed that no additional research method training should be provided to the students after course work to address the shortfall in knowledge and skills of the supervisor. On the opinion that Students should be allowed to pick their own supervisors as it increases student motivation and confidence, 29(52.7%) of the supervisors strongly agreed with the opinion and 21(38.2) of the supervisors agreed on the opinion while 4(7.3) of the supervisors could not decide whether to agree or disagree with the opinion, however, 1(1.8%) of the supervisors strongly disagreed on the opinion that students should be allowed to pick their own supervisors as it increases student motivation and confidence during thesis writing.

Finally, 39(70.9%) of the supervisors strongly agreed that the university should ensure that allocation of supervisors to students should strictly adhere to the rules and regulations as given in the guidelines governing graduate supervision in the rules and regulation manual. Also, 15(27.3%) of the supervisors agreed on the same opinion that allocation of supervisors to students should strictly adhere to the rules and regulations, 1(1.8%) of the supervisors could not decide whether to agree or disagree with the opinion on whether the university should allocate supervisors to students while strictly adhering to the rules and regulations.

In summary, the study findings on practices that would improve student-supervisor interaction in public Universities in Kenya indicated that 28(50.62%) of the supervisors and 219(88.57%) of the supervisors recommended for Practices that

would improve student-supervisor interaction in public Universities in Kenya. This might be attributed to the fact that graduate students were the ones in need of improvement in student-supervisor interaction in public universities because they benefit directly.

Setting datelines and timelines jointly professionally and properly ensured to help provide the structure and ensures that ultimately work had to be completed and having no bunch of things hanging over our heads indefinitely which only create stress in the long run during thesis writing. Both supervisors and the graduate students needed to be clear on agreed-upon deadlines to be made and expected outcome to keep track of all of the projects that both the graduate students and supervisors were responsible for making a list indicating the deadlines and kept it handy.

Joint deadline and timelines ensured that large projects were manageable, by breaking them into smaller parts at a set time to complete each at a time. It also ensured that work was completed within the set period of time and avoided the last-minute rush. It also ensured that both the supervisors and the graduate students were working towards achieving a common goal of completion of the task assigned before the date they set to meet next in the schedule.

The study findings agreed that McQueeney (1996) that effective supervision requires supervisors to be knowledgeable and skilled in the research field. Supervisors should be a competent researcher to be able to supervisors students. However, the Frischer & Larsson (2000) suggest that students were recommended to select a supervisor based on the key factor of whether the latter has an established research record and is continuing to contribute to the development of his or her discipline. Further, the study

concur with Spear (2000) supervisor should be competent in the general area of the student's research even if not expert in the detailed area of the thesis topic.

Lessing&Schulze (2002) emphasize students' needs in terms of finding literature, data analysis and interpretation, and interactive learning opportunities. Training in research methods, seminars, response time for students, and supervisory input was deemed important factors in enhancing students' success. Mackinnon (2004) summarizes the influences on the graduate experience as personal, professional and organizational factors. Graduate studies, therefore, have both an intellectual and a psychological component that needs to be acknowledged. Mackinnon (2004) and McAlpine& Norton (2006) therefore argue that graduate students' needs need to be addressed at institutional, departmental and individual levels.

Chairs also impact candidates' perceptions of research topics, as maintained by Jaeger et al. (2011). As a consequence, more focus needs to be given to chair-candidate interactions for doctoral candidates selecting a dissertation research topic to encourage chairs to be aware of and to learn from candidates and to deliberately demonstrate mutuality and reciprocity. Jaeger et al. (2011) uncovered five common characteristics of chair-candidate interactions: a) education and qualifications count, b) chairs and candidates learn together c) chair-candidate interactions could become synergistic, d) chairs frequently act as translators and advocates, and e) chairs and candidates both claimed that dissertation studies might need organizational backing.

Mhunpiew (2013) claimed that facilitating the dissertation process encompasses roles such as coach, teacher, friend, colleague, trainer, good role model, and guide to facilitate total development for each student. The chair is an essential resource for candidates during the dissertation process. The most effective chair generally is one

who shares the student's topic of interest; has served on dissertation committees several times before taking on the role of a chair; and is familiar with the process, its pace, nuances, and possible barriers (Berger, 2015).

4.4.2 Heads of department opinion on practices that would improve student-supervisor interaction in Public Universities in Kenya

According to the heads of departments....

"The graduate students should be allocated to the supervisors who have the willingness to supervise fully to satisfy the needs of the graduate students and ensure that the graduate students complete their graduate studies on time. This would also improve the socialization effectiveness of the relationship which was very crucial in the student-supervisor interaction".

They further argued that in cases where no supervisor matched the needs of the graduate students which was likely to occur in graduate Ph D programmes, the graduate student should be allowed to choose the supervisors whom they were comfortable with during thesis writing.

"The graduate students should be guided and made aware on their rights and responsibilities as per rules and regulations governing graduate supervision in the public universities in Kenya to avoid being delayed by their supervisors and eventually delay their completion time. The graduate students should be guided by their supervisors based on the topics and concepts that they choose on their own so that their drive and commitment is enhanced. The university should make clear rules on student-supervisor interactions such as monitoring meetings and graduate student progress as they try to meet timelines. There should be ways in which students should raise their issues as they interact with their supervisors and the university should act accordingly on such issues by providing solutions and providing enabling environments such as change of supervisors or addition of another supporting supervisor in case an issue arose in the process of thesis research".

In conclusion graduate, students should be guided and made aware on their rights and responsibility as per rules and regulations governing graduate supervision in the public

universities in Kenya to avoid being misled by their supervisors and eventually delay their completion rate.

Students had come up with ways to raise their issues as they interact with their supervisors and the university should act accordingly on such issues by providing solutions and providing enabling environment such as change of supervisors or addition of another supporting supervisor in case an issue arose in the process of thesis research. The study findings concur with Cornwall, Schmithals and Jaques (2017) that graduate students had socialized well with their lecturers who delivered most of the courses during coursework in the graduate studies.

Harding (2013) research graduate students do not only need guidance, but they also need to develop sufficient autonomy and freedom to design and execute their own projects. Clearly, there were several qualities that a graduate student expects to see in his or her research supervisor, all of which might or might not be of equal significance to the graduate student (Ray, 2017). Consequently, the process of selection of the supervisor become one of the critical factors in determining the rate of completion of graduate degree between the graduate student and his or her supervisor.

4.4.3 Deans opinion on practices that would improve student-supervisor interaction in public universities in Kenya

According to the deans' opinions on the practices that would improve student-supervisor interaction in public Universities in Kenya, "the university should ensure there is some good order and an atmosphere conducive to supervision activity by providing an enabling environment for supervision rules, regulations and policies to be implemented fully as they monitor the progress of the graduate students. The university also should make sure the graduate students completed their graduate

studies on time by providing conducive supervision environments, offices and examination schedules on timelines and should be abided by both the graduate students and supervisors. The universities should give rewarding payments to the supervisors to improve on their commitment and reduce out of university activities to ensure maximum supervision. The university should support graduate students by making sure that they have all the resources and materials required for researching offices for the supervisors and to be allowed to study and submit their thesis for examination even with fee balances provided they complete paying before collection of their graduate certificates”.

The study concurs with Eggleston and Delamont (2013) who found that the matching of the student to supervisor for effective interaction was crucially important. This interaction was different in many ways from the relationships that graduate students had with the lecturers who delivered most of the courses in the graduate studies. According to Cornwall, Schmithals and Jaques (2017) research graduate students do not only need guidance, but they also need to develop sufficient autonomy and freedom to design and execute their own projects.

The deans and heads of departments also concluded by raising concerns with the externalization process.

"The graduate student work could be delayed because of non-compliance of fees payment which in turn result in the delay of external examiner payment also delaying the constitution of the board of examiners for the oral defence. The graduate student can cause delay on his/her side by not doing corrections on time and non-compliance of the required minimum publications".

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This section describes the summary of the findings based on study objectives; supervisory styles used in student-supervisor interaction in public Universities in Kenya, characteristics of student-supervisor interaction in public universities in Kenya, the experiences of student-supervisor interactions in public universities in Kenya and practices that would improve student-supervisor interaction in public universities in Kenya.

5.1 The Supervisory Styles used in student-supervisor Interaction in Public Universities in Kenya

The study findings on supervisor styles implied that all the supervisory styles were used in Moi University and the University of Eldoret during the student-supervisor interaction, however, the 'Colleague in training' style was widely used in Kenya. This was because most students in graduate lacked knowledge on supervisory style hence they could not differentiate when applied and therefore, they assumed that any method that the supervisor used to supervise them was the supervisory style and it was always right. The supervisors had been dictating their interaction with the students, and therefore the graduate student could not suggest the best way to interact.

According to heads of department, the majority were for the opinion that colleague in training supervisor integration was the main supervisory style used in their universities. They argued that there were many supervisor interaction styles that the supervisors could use but the choice was theirs to decide the one they were most comfortable with. According to deans all of them were for the opinion that the

supervisors employed various supervisory styles as long as it encouraged good interaction with their graduate students but a colleague in training was accepted by most of them. They based their argument on the fact that supervisors had only a limited time to attend all the students and therefore, used the little time available to discuss the way forward while with them.

5.2 The Characteristics of the Student-Supervisor Interaction in Public Universities in Kenya

The study findings on the characteristics of the student-supervisor interaction in public universities in Kenya implied that the graduate opinion on a unique feature of supervisor interaction was slightly higher than the supervisor's opinion. They argued that some unique characteristics in the student-supervisor interaction in the public Universities in Kenya should be enhanced. This implied that there were unique characteristics in the student-supervisor interaction in the public Universities in Kenya which could be used to enhance student-supervisor interaction.

According to heads of department opinions, they held that the main unique characteristics included the assumption of knowledge by the graduate student because both supervisors and some of the graduates were lecturers, therefore, treated each other as equals and colleague in training. According to deans opinion, they held that there were unique features in supervisory interaction in public universities. They argued that both supervisors and graduate students had their own unique ways of interaction among themselves depending on the graduate student socialization process.

5.3 Experiences of Student-Supervisor Interactions in Public Universities in Kenya

The study findings on the characteristics of the student-supervisor interaction in public Universities in Kenya indicated that the majority of the supervisors held that the university could deal with challenges facing student-supervisor interaction at a great extent compared to graduate students. They argued that there were guidelines, policy and regulations in the university on student-supervisor interaction and supervision. Also, they argued that the universities should provide seminars, workshops, meeting at the departmental level and deans level to encourage to train and encourage the supervisors to supervise to completion and also the university monitor student progress to ensure that they complete on time.

They further argued that the departments were independent on deadlines and dealing with issues and also they had the authority to ensure the process was smooth. According to heads of departments, the university could solve challenges facing graduate supervisor interaction at a great extent. They noted that the challenges facing interaction included the absence of supervisor for consultation and failure to meet deadlines and timelines. According to deans, the university could solve student-supervisor challenges at a great extent. They noted that the main challenges include failure to give guidelines and timelines by the supervisor.

5.4 Practices that would Improve Student-Supervisor Interaction in Public Universities in Kenya

The study finding on practices to improve student-supervisor interaction in universities was slightly higher for graduate students compared to the supervisor. This was attributed to the facts that students were the ones in need of improvement to

enhanced student-supervisor interaction in public universities because they benefit directly. According to the heads of the departments, the graduate students should be allocated to the supervisor who had the willingness to supervise fully to satisfy the needs of the students and give sufficient guidance and timelines to ensure timely completion of studies. This also improved the effectiveness of the interaction which was very crucial for their socialization.

They further argued that in cases where no supervisor matches the needs of the graduate student which was likely to occur in graduate Ph D programmes the graduate student should be allowed to choose the supervisor whom they were comfortable with from any department. According to dean's opinion on practices that would improve student-supervisor interaction in public Universities in Kenya, they argued that universities should ensure good order and an atmosphere conducive to academic activity by producing timely graduate students and by serving as a watchdog for academic policies and also monitoring the progress of the graduate students.

5.5 Conclusions

The study concluded that interaction in graduate was on a professional basis where students were treated as colleagues in training. The supervisors treated graduate students as good friends capable of completing their graduate studies on time holding all other factors constant. The supervisors were allocated a large number of graduate students to supervise, and therefore, they did not have enough time for each graduate student and as a result, the little available time was maximised by discussing with the graduate students to save time. The university regulation and policy were not followed strictly because of workloads, how to supervise better, therefore, the supervisors opted for easy ways of supervision.

There were unique features in student-supervisor interaction in public universities in Kenya. Student-supervisor interaction was characterised by other features that were used by supervisors to inspire the graduate students and make their work easier. The graduate students were required to respond to the supervisor's requirements so that they could provide quicker and better solutions to problems that the graduate student might have encountered.

The graduate students also considered their supervisors to be the most important because they were most close and understood their work. Graduate students took more time in graduate studies than expected because of internal and external factors arising from student-supervisor interaction. Supervisors were not available in most cases for consultation and also the delay in giving feedback on correction and the way forward. These extended the time for graduate studies. A large number of graduate students in the programme were supervised by individual supervisors was too large hence taking more time attending to all. The other possible cause of unavailability of the supervisors was a large number of graduate students to be supervised and other commitment outside university since most of the supervisors were on a part-time basis in other universities in Kenya.

The university was able to deal with the challenges facing the graduate student-supervisor interaction. This was because the university was responsible for providing guidelines, policy and regulations so that graduate students and supervisors could carry out their research and present their results to the best advantage on time. The university was able to provide professional training to both graduate students and supervisors through seminars and workshops to educate both graduate students and supervisors on their duties and responsibilities. Commitment and motivation of

supervisors depended entirely on the university efforts to reward the supervisors through timely and rewarding payment also the availability of research equipment depended largely on the institutional resources.

5.6 Recommendations

The study recommended that;

Supervisors and the graduate students should jointly set datelines and timelines for interactions and completion of activities. Setting datelines jointly ensured that work was completed and nothing was left hanging. Setting dates and datelines would provide enough time for each activity and ensuring that large projects were manageable by setting targets to accomplish a given task completed within a given period and avoided incomplete work and last minute rash.

Policies guiding graduate student supervisor interaction should be revised to meet up to date challenges facing student-supervisor interaction. The policy should ensure that graduate students complete post-graduate studies on time and ensure good interaction between graduate students and supervisors.

The university should provide seminars, workshops and training to both supervisors and the graduate students to educate them on their roles and responsibilities and fund research equipment and other resources to create a conducive environment for the graduate students to conduct research effectively.

The university should allocate compulsory dates and timelines for interaction by graduate students and their supervisors and restrict the number of students enrolling in graduate programmes depending on the number of supervisors available in any given university in Kenya.

5.7 Recommendations for Further Research

The study has made some revelations into graduate studies in Kenyan universities.

As mentioned in the background of the study, not many studies have been done on this crucial sector of higher education in Kenya. While the study was made significant by that aspect, it, therefore, points out that more research needs to be done in Kenyan universities and even other African countries. The area that could benefit from further research regards the theoretical framework used in the study.

Socialization theory was successfully used in this study but other studies can employ other sociological theories of education. However, more recommendation for future researchers to focus on correlation research between graduate students and supervisors during graduate thesis writing in Kenyan private universities. Also, a study can be done on institutional factors likely to affect the rate of postgraduate studies in Kenyan universities. lastly, a graduate longitudinal study should be done during the process from entry to completion of study of graduate studies.

REFERENCES

- Acker, S., Hill, T., & Black, E. (2014). Thesis Supervision in the social sciences: Managed or Negotiated? *Higher Education*, 28, 483-498.
- Adèr, H. J., Mellenbergh, G. J., & Hand, D. J. (2008). *Advising on research methods: a consultant's companion*. Huizen: Johannes van Kessel Publishing. ISBN 978-90-79418-01-5
- Ala-Mutkam, K. (2009). *Review of learning in ICT-enabled networks and communities*. Luxembourg: JRC Scientific and Technical Reports.
- Amundsen, C. & McAlpine, L. (2009). 'Learning supervision': trial by fire, *Innovations in Education and Teaching International*, 46:3, 331-342
- Appel, M. & Dahlgren, L. (2003). "Swedish doctoral students' experiences on their journey towards a Ph D: obstacles and opportunities inside and outside the academic building," *Scoulddinavian Journal of Educational Research*, vol. 47, no. 1, pp. 89–110, 2003. View at Google Scholar
- Armitage, S., & Rees, C. (1988). Project supervision. *Nurse Education Today*, 8, 99-104 *artists*, 168.
- Asynchronous Learning Networks." *Journal of Information systems Education*, Vol. 19, No. 3, pp. 321-330.
- Austin, A. E. (2002). Preparing the next generation of faculty. *The Journal of Higher Education*, 73(1), 94–122. Australia.
- Ayiro, L., & Sang, J. (2011). The award of the PhD degree in Kenyan universities: A quality assurance perspective. *The Quality in Higher Education*, 17(2), 163-178.
- Bair, C. R. & Haworth, J.G. (1999). "Doctoral student attrition and persistence: a meta-analysis of research," in Proceedings of the Annual Meeting of the Association for the Study of Higher Education (ASHE), San Antonio, Tex, USA, 1999.
- Bargar, R. R. & Mighto-Chamberlain, J. (1983). Advisor and Advisee Issues in Doctoral Education. *Journal of Higher Education*, 54(4), 407-432
- Bazrafkan, L. Shokrpour, N; Yousefi A, & Yamani N. (2016). Management of Stress and Anxiety Among Ph D Students During Thesis Writing: A Qualitative Study. *The health cwere manager*. ;35: 231–40
- Bennett, J. B. (1997). 'The academy, individualism, and the common good', *Liberal Education*, 83(4): 16–24.
- Berger, R. (2015). Challenges and strategies in social work and social welfare in Ph D education: Helping candidates jump through the dissertation hoops. *Journal of Teaching in Social Work*, 35(1/2), 166.
- Berger, S. S., & Bushholz, E. S. (2013). On becoming a supervisee: Preparation for learning in a supervisory relationship. *Psychotherapy*, 30(1), 1-9.

- Blackedge, D., & Hunt, B. (1985). *Sociological Interpretations of Education*. London.Sydney. Dover, New Hampshire: Croom Helm
- Brown, G. & Atkins, M. (1988). *Effective Teaching in Higher Education*. London: Methuen.
- Brown, R. D. & Krager, L. (1985). Ethical Issues in Graduate Education: Faculty and Student Responsibilities. *Journal of Higher Education*, 56(4), 403-418.
- Buber, M. (1996). *I and thou* (Trans. W. Kaufmann, Trans.), New York: Touchstone.
- Buber, M. (2002). *Between man and man* (R. Gregor-Smith, Trans.), London: Routledge
- Burgess, R. G. (1989). *The Ethics of Educational Research* (Vol.8). Psychology Press.
- Burgess, R. G., Pole, C. J. & Hockey, J. (1994). Strategies for Managing and Supervising the Social Science Ph D. In Hockey, J. (1996). Strategies and Tactics in the Supervision of UK Social Science Ph D Students, *Qualitative Studies in Education*, 9(4), 481-500.
- Burkard, A. Z. (2014). Dissertation experiences of doctoral graduates from professional psychology programs. *Counselling Psychology Quarterly*, 27(1), 19-
- Burton, W. H. & Brueckner, L. J. (1995). *Supervision A Social Process*. New York: Appleton-Century-Crofts,Inc.
- Cakmak, E., Isci, S., Uslu, F., Oztekin, O., Danisman, S., & Karadag, E. (2015). Overview of the dissertation process within the framework of flow theory: A qualitative study. *Educational Sciences: Theory & Practice*, 15(3), 607-620. <http://dx.doi.org/10.12738/estp.2015.3.2606.54>.
- Carroll, M. (2016). *Counselling Supervision- Theory, Skills and Practice*. London: Cassell.
- Cluett, L. (2010). Online social networking for outreach, engagement and community: The UWA Students' Facebook page. In *Educating for sustainability. Proceedings of the 19th Annual Teaching Learning Forum*, 28-29 January 2010, Perth: Edith Cowan University.<http://otl.curtin.edu.au/tlf/tlf2010/refereed/cluett.html>
- Coates, H., James, R. & Baldwin, G. (2005). A critical examination of the effects of learning management systems on university teaching and learning. *Tertiary Education and Management*, 11(1), 19-36. <http://dx.doi.org/10.1080/13583883.2005.9967137>
- Collis, J. & Hussey, R. (2014). "Business Research: A Practical Guide for Undergraduate and Graduate Students" 4th edition, Palgrave Macmillan, p.54

- Connell, R. (1985). How to supervise a Ph D. In Buttery, E. A., (Eds.) (2005). An overview of the elements that influence efficiency in graduate supervisory practice arrangements. *International Journal of Educational Management*, 19(1), 7-26.
- Cornwall, M. G., Schmithals, F., & Jaques, D. (Eds.). (2017). What is project orientation? An overview. In *Proceedings of the Seminar on Project Orientation in Higher Education, 1–16*. University of Bremen, March 2016, University of London, Institute of Education.
- Council of Graduate Schools (1990). Research student and supervisor. In Donald, J. G. (Eds.) (1995). Graduate student supervision policies and procedures: A case study of issues and factors affecting graduate study. *The Couldadian Journal of Higher Education*, XXV(3), 71-92.
- Cox, G., Carr, T. & Hall, M. (2004). "Evaluating the Use of Synchronous Communication in Two Blended Courses." *Journal of Computer Assisted Learning*, Vol. 20, No. 3, pp. 183-193
- Cresswell J.W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. University of Nebraska-Lincoln.
- Cryer, P. (2000). *The Research Student's Guide to Success*. Buckingham: Open University Press.
- Daft, R. L., Lengel, R.H., & Trevino, L.K. (1987). Message equivocality, media selection and manager performance: Implications for information systems," *MIS Quarterly*, 11, 1987, pp. 355-366.
- David L. G. (2008). Exploring the teacher-student interaction in teacher education:
- De Laat, M., Lally, V., Lipponen, L., & Simmons, R., J. (2007). Online teaching in networked learning communities: A multi-method approach to studying the role of the teacher. *Instructional Science*,
- Dennis, A., Valacich, J. (1999). "Rethinking Media Richness: Towards a Theory of Media Synchronicity." *Proceedings of the 32nd Hawaii International Conference on*
- Dezhi, W., Bieber, M. & Hilz, S. (2008). "Engaging Students with Constructivist Participatory Examinations in
- Diamandis, E. A. (2017). *Growing phobia in Academics*. *Nature*. V 544: 129.
- Dillon, M. J., & Malott, R. W. (2011). Supervising masters thesis and doctoral dissertations. *Teaching and Psychology*, 8(3), 195-202.
- Dodge, Y. (2003). *The Oxford Dictionary of Statistical Terms*. OUP. ISBN 0-19-850994-4.
- Donald, J. G., Saroyan, A. & Denison, D. B. (1995). Graduate student supervision policies and procedures: A case study of issues and factors affecting graduate study. *The Couldadian Journal of Higher Education*, XXV(3), 71-92.

- Durkheim, É. (1953). *Sociology and Philosophy*. Translated by D. F. Pocock; with an introduction by J. G. Peristiany. Toronto: The Free Press. ISBN 0-02-908580-2. LCCN 74-19680. *Education Limited Education Research & Development*, 21(1), 41–53.
- Eggleston, J., & Delamont, S. (2013). *Supervision of students for research degrees*. Birmingham, AL: BERA.
- Elgar, F. (2003). *Ph D Completion in Couldadian Universities. Final Report*. Halifax, Nova Scotia: Graduate Students Association of Couldada.
- Elliott, K. M. & Shin, D. (2002). Student satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, 24(2), 200-209. <http://dx.doi.org/10.1080/1360080022000013518>
- Ellis, E. M. (2001). The impact of race and gender on graduate school socialization, satisfaction with doctoral study, and commitment to degree completion. *Western Journal of Black Studies*, 25 (1), 30-45.
- Encyclopaedia Britannica, (2010). "socialization." Encyclopædia Britannica. Encyclopaedia Britannica Student and Home Edition. Chicago: Encyclopaedia Britannica, 2010.
- Endo, J.J., & Harpel, R.L (2012). The effect of student-faculty interaction on students' educational outcomes; *Research in Higher Education*, Vol. 16, No. 2 (1982), pp.115-138
- Farmer, R. (2003). "Instant Messaging – Collaborative Tool or Educator's Nightmwere!" Proceedings of the Annual Conference on Web-Based Teaching and Learning, October 18–21, New Brunswick, Couldada, Retrieved Might 22, 2009 from <http://www.unb.ca/naweb/proceedings/2003/PaperFarmer.html> Franciso, CA: Jossey-Bass.
- Frischer, J. & Larsson, K. (2000). Laissez-faire in research Education – An inquiry into a Swedish Doctoral Program. *Higher Education Policy*, 13(2), 132-155.
- Gardner, S. K. (2009). Conceptualizing success in doctoral education: Perspectives of faculty om seven disciplines. *The Review of Higher Education*, 32(3), 383–406.
- Gardner, S. K. (2017). "I heard it through the grapevine": Doctoral student socialization in chemistry and history. *Higher Education*, 54, 723-740.
- Gardner, S.K. (2008). "'What's too much and what's too little?': the process of becoming an independent researcher in doctoral education," *Journal of Higher Education*, vol. 79, no. 3, pp. 326–350, 2008. View at Publisher · View at Google Scholar · View at Scopus.
- Gibbs, C. J. (2006). *To be a teacher: Journeys towards authenticity*, Auckland, New Zealand: Pearson Education

- Giles, D., Smythe, E. & Spence, D. (2012). Exploring interactions in education: A phenomenological inquiry *Australian Journal of Adult Learning Volume 52, Number 2, July 2012*
- Gill, P. & Burnard, P. (2014). The student-supervisor relationship in the Ph D/Doctoral process. *British Journal of Nursing*. V 17: 668–71.
- Giroux, H. (1983). *Theory and Resistance in Education: A Pedagogy for the Opposition*. Massachusetts: Bergin
- Golde, C. M. (1998). Beginning graduate school: Explaining first-year doctoral attrition. In M. S. Anderson (Ed.), *The experience of being in graduate school: An exploration*. San Francisco, CA: Jossey-Bass.
- Golde, C. M. (2005). The role of the department and discipline in doctoral student attrition: Lessons from four departments. *Journal of Higher Education*, 76(6), 669–700.
- Golde, C. M., & Gallagher, H. A. (2000). The challenges of conducting interdisciplinary ‘research in traditional doctoral programs’. *Ecosystems*, 2, 281–285.
- Golde, C. M., & Walker, G. E. (Eds.). (2005). *Envisioning the future of doctoral education: Preparing stewards of the discipline*. Carnegie essays on the doctorate. San
- Golde, C.M. (2000). “Should I stay or should I go? Student descriptions of the doctoral attrition process,” *The Review of Higher Education*, vol. 23, no. 2, pp. 199–227, 2000. View at Google Scholar · View at Scopus
- Goldhammer, R., Anderson, R. H., and Krajewski, R. J. (1980). *Clinical Supervision-Special Methods for the Supervision of Teachers*. USA: Holt, Rinehart and Winston.
- Goodyear, R., Crego, C. & Johnston, M. (1992). Ethical issues in the supervision of student research: A study of critical incidents. *Professional Psychology: Research and Practice*, 23(3), 203-210.
- Goold, S., D, Lipkin, M. (2014). The doctor-patient relationship. *Journal of general internal medicine*. V 14: S26–S33
- Grix, J. (2010). *Demystifying graduate research*. A&C Black.
- Gross, R. (2010). *Psychology: The Science of Mind and Behaviour* 6E, Hachette UK, ISBN 9781444164367.
- Gutierrez-Folz, A. (2010). The rise of the high-tech classroom. *Finding Dulcinea: Librarian*, 23(3), 203-210.
- Ha, J.F.& Longnecker, N. (2013). Doctor-patient communication: a review. *The Ochsner journal*, 10: 38–43

- Hadjioannou, X., Shelton, N. R., Fu, D., & Dhanarattgannon, J. (2017). The road to a doctoral degree: Cotravelers through a perilous passage. *College Student Journal*, 41, 1.
- Haksever, A. M. & Manisali, E. (2000). Assessing supervision requirements of Ph D students: The case of construction management and engineering in the UK.
- Hart, C. (2018). *Doing a literature review: Releasing the research imagination*. Sage.
- Hartrick, D. G. A. (2002). 'Beyond behavioral skills to human involved processes: Relational nursing practice and interpretive pedagogy', *Journal of Nursing Education*, 41(9):
- Hawkins, P., and Shohet, R. (2014). *Supervision in the Helping Professions. An Individual, Group and Organizational Approach*. Milton Keynes: Open University Press.
- Heath, T. (2002). A quantitative analysis of Ph D students' views of supervision. *Higher higher education: A perilous passage?* San Francisco, CA: Jossey-Bass.
- Hill, T., Acker, S. & Black, E. (1994). Research students and their Supervisor. In McQueeney, E. (1996). The nature of effective research supervision. *A Journal for Further and Higher Education in Scotland*, 20(1), 23-30.
- Hockey, J. (1996). Strategies and Tactics in the Supervision of UK Social Science Ph D Students. *Qualitative Studies in Education*, 9(4), 481-500.
- Hodza, F. (2007). Managing the student-supervisor interaction for successful post-graduate supervision: A sociological perspective. *Graduate Supervision: State of the art*.
- Holdaway, E., Deblois, C., and Winchester, I. (2015). *Supervision of graduate students. The Couldadian Journal of Higher Education*, XXV(3), 1-29.
- Holloway, E. L. (1995). *Clinical Supervision-System Approach*. California: SAGE Publications
- Hooks, B. (2003). *Teaching community: A pedagogy of hope*, London: Routledge.
- Hooper, J., Pollanen, M., & Teismann, H. (2006). "Effective Online Office Hours in the Mathematical Sciences." MERLOT Journal of Online Learning and Teaching, Vol. 2, No. 3, Retrieved December 30, 2008 from <http://jolt.merlot.org/vol2no3/hooper.pdf>
- House, G. (2010). Graduate education in the United Kingdom. *Higher Education Policy Institute and The British Library*.
- Hughes, R., & Pace, C. R. (2013). Using NSSE to study student completion and withdrawal. *Assessment Update*, 15(4), 1-2.
- Irwin, C., Ball, L. & Desbrow, B. (2012). Students' perceptions of using *Facebook* as an interactive learning resource at university; *Australasian Journal of Educational Technology* 2012, 28(7), 1221-1232

- Jaeger, A. J., Sandmann, L. R., & Kim, J. (2011). Advising graduate students doing community- engaged dissertation research: The advisor-advisee interaction. *Journal of Higher Education Outreach and Engagement*, 15(4), 5-25.
- Jafari, A., McGee, P. & Carmean, C. (2006). "Managing Courses, Defining Learning: What Faculty, Students, and Administrators Want." *EDUCAUSE Review*, Vol. 41, No. 4, pp.50–71, Retrieved Might 29, 2009 from <http://www.educause.edu/EDUCAUSE+Review/EDUCAUSEReviewMagazineVolume4>
- Jancey, J., & Burns, S. (2013). Institutional factors and the postgraduate student experience. *Quality assurance in education*.
- Jeong, W. (2007). "Instant Messaging in On-Site and Online Classes in Higher Education." *Educause Quarterly*, Vol. 30, No. 1, pp.30–36, Retrieved. Might 22, 2009 from <http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolume/InstantMessaginginOnSiteandOnl/157440>
- Jones, M. (2013, July). Issues in Doctoral Studies-Forty Years of Journal Discussion: Where have we been and where are we going? In *Proceedings of the Informing Science and Information Technology Education Conference* (pp. 83-104). Informing Science Institute
- Kabre, F. & Brown, U. J. (2011). The influence of Facebook usage on the academic performance and the quality of life of college students. *Journal of Media & Communication Studies*, 3(4), 144-150.
- Karabel, J., & Halsey, A. (1977). Educational Research: A Review and an Interpretation. In *Power and Ideology in Education*. New York: Oxford.
- Kelly, H. F., Ponto, M. K., & Rovai, A. P. (2007). A comparison of student evaluations of teaching between online and face-to-face courses. *The Internet and Higher Education*, 10(2), 89–101
- Kenya National Bureau of Statistics. (2009). *Economic Survey 2009*. Nairobi, Kenya: National Bureau of Statistics.
- Kerlinger, N. (2007). *Foundations of Behavioral Research*. 2nd edition. Holt, Rinehart and Winston
- Kim, Y.K. & Sax, L. J. Res High Educ (2009). 50: 437. doi:10.1007/s11162-009-9127-x
- King, R. (1983). *The Sociology of School Organization*. London and New York: The Chaucer Press
- King, S. B., & Williams, F. K. (2014). Barriers to completing the dissertation as perceived by education leadership doctoral students. *Community College Journal of Research & Practice*, 38(2/3), 275-279.

- Kirschner, P. A., & Karpinski, A. C. (2010). Facebook and academic performance. *Computers in Human Behavior*, 26(6), 1237-1245. <http://dx.doi.org/10.1016/j.chb.2010.03.024>
- Kirst, M., & Kelly, C. (1995). Collaboration to improve education and children services: Politics and policy making. In L. Rigsby, M.C. Reynolds, & M.C. Wang (Eds.), *School-community connections: Exploring issues*
- Knowles, S. (1999). *Feedback on writing in graduate supervision: Echoes in response – context, continuity and resonance*. In A. Holbrook & S. Johnson (Eds.), *Supervision of graduate research education* (pp. 113–128). Coldstream, Vic: Australian Association for Research in Education.
- Kothari, C. R. (2009). *Research Methodology; Methods and techniques* (2nd ed.; New Age International.
- Kuo, Y. (2009). January-February). *Directing and chairing EFL doctoral student' qualitative research dissertations in Taiwan*. Paper presented at the First Philippine International English Language Conference, Manila, Philippines
- Kurtz-Costes, B L. A. Helmke, and B. Ulkusteiner, (2006). "Gender and doctoral studies: the perceptions of Ph.D. students in an American university," *Gender and Education*, vol. 18, no. 2, pp. 137–155, 2006. View at Publisher · View at Google Scholar · View at Scopus
- Lambie, G. W., Hayes, B. G., Griffith, C., Limberg, D., & Mullen, P. R. (2014). An exploratory investigation of the research self-efficacy, interest in research, and research knowledge of Ph. D. in education students. *Innovative Higher Education*, 39(2), 139-153
- Lei, L. Finley, J., Pitts, J. & Guo, R. (2010). Which is a better choice for student-faculty interaction: synchronous or asynchronous communication? *Journal of Technology Research*
- Lessing, A. C. & Schulze, S. (2002). Graduate supervision and academic support: students' perceptions. *South African Journal of Higher Education*, 16(2), 139-149.
- Lessing, A. C., and Schulze, S. (2012). Graduate supervision and academic support: students' perceptions. *South African Journal of Higher Education*, 16(2), 139-149.
- Li, L., Pitts, J. (2009). "Does It Really Matter? Using Virtual Office Hours to Enhance Student-Faculty Interaction", *Journal of Information Systems Education*, 20 (2).
- Li, S., & Seale, C. (2007). *Managing criticism in Ph D supervision: A qualitative case study*. *Studies in Higher Education*, 32(4), 511–526.
- Liechty, J., Liao, M., & Schull, C. (2009). Facilitating dissertation completion and success among doctoral students in social work. *Journal of Social Work Education*, 45(3), 481-497.

- Lin, L., & Cranton, P. (2005). From scholarship student to responsible scholar: a transformative process. *Teaching in Higher Education*, 10(4), 447-459.
- Lovitts, B. E. & Nelson, C. (2000). The hidden crisis in graduate education: Attrition from Ph D. Programs. *Academe*, 86 (6), 44-50. Available at www.aaup.org/publications/Academe/00nd/Nd00lovi.htm. (Accessed November 5 2007)
- Lovitts, B. E. (2001). *Leaving the ivory tower: The consequences of departure from doctoral study*. Lanham, MD: Rowman and Littlefield.
- Macharia, K. (2009). *Methods of Instruction*. Gugno Books and Allied, Nairobi.
- Macionis, J. J. (2013). *Sociology* (15th ed.). Boston: Pearson. p. 126. ISBN 978-0133753271.
- Mainhard, T., van der Rijst, R., van Tartwijk, J., & Wubbels, T. (2015). *A model for the supervisor–doctoral student relationship*. *Higher Education*. V 58: 359–73.
- Mainhard, T., van der Rijst, R., van Tartwijk, J., & Wubbels, T. (2009). *A model for the supervisor–doctoral student interaction*. *High Education* 58:359–373
- Majeed, A., & Navaz1, M. (2013). A Study On Perception Of Lecturer-Student Interaction In English Medium Science Lectures. *Novitas-ROYAL (Research on Youth and Language)*, 7(2), 117-136.
- Majoribank, K. (1985). Sociology of Education. In T. H. T. M. Postleithwaits (Ed.), *The International Encyclopedia of Education, Research and Studies* (pp. 4680-4700). Oxford: Pergamon.
- Makokha, G. L. & Mutisya, D.N (2016). Status of E-Learning in Public Universities in Kenya; *International Review of Research in Open and Distributed Learning Volume 17*, Number 3 April - 2016
- Malfroy, J. (2005). Doctoral supervision, workplace research and changing pedagogic practices. *Higher Education Research and Development*, 24(2), 165-178.
- McAlpine, L. & Norton, J. (2006). Reframing our approach to doctoral programs: an interactive framework for action and research. *Higher Education Research and Development*, 25(1), 3-17.
- McAlpine, L., & Weiss, J. (2000). Mostly true confessions: Joint meaning-making about the thesis journey. *Couldadian Journal of Higher Education*, 30 (1), 1-26.
- McAlpine, L., and Norton, J. (2016). Reframing our approach to doctoral programs: an interactive framework for action and research. *Higher Education Research and Development*, 25(1), 3-17.
- McCarthy G, Hegarty J, Savage E, Fitzpatrick, J. J.(2010) *Ph D Away Days: a component of Ph D supervision*. *International* V 57: 415–8.

- McCarthy, J. (2010). Blended learning environments: Using social networking sites to enhance the first year experience. *Australasian Journal of Educational Technology*, 26(6), 729-740.
- McCarthy, J. (2012). International design collaboration and mentoring for tertiary students through Facebook. *Australasian Journal of Educational Technology*, 28(5), 755-775.
- McDonald, D. A. (2017). Ph D supervisors: invest more time. *Nature*. 545: 158.
- McQueeney, E. (1996). The nature of effective research supervision. *A Journal for Further and Higher Education in Scotland*, 20(1), 23-31
- Meighan, R. (1981). *A Sociology of Educating*. London. New York. Sydney. Toronto: Holt, Reinhart and Wiston.
- Merton, R. (1968). *Social Theory and Social Structure, revised and enlarged*. London: The Free Press of Glencoe. Longman
- Metcalfe, A., & Game, A (2006). 'The teacher's enthusiasm', *The Australian Educational Researcher*, 33(3): 91-106.
- Mhunpiew, N. (2013). A supervisor's roles for successful thesis and dissertation. *A US-China Education Review*, 3(2), 119-122
- Miller, J.P., & Nakagawa, Y. (2002). *Nurturing our wholeness: Perspectives on spirituality in education*, Brandon, VT: Foundation of Educational Renewal
- Moayeri, M. (2010). Classroom uses of social network sites: Traditional practices or new literacies? *Digital Culture & Education*, 2(1), 25-43
- Moses, I. (2012). Good Supervisory Practice. In Holdaway, E., (Eds.) (1995). Supervision of Graduate Students. *The Couldadian Journal of Higher Education*, XXV(3), 1-29.
- Mouton, J. (2001). *How to Succeed in your Master's and Doctoral Studies*. Pretoria: Van Schaik
- Mugenda, O.M., & Mugenda, A. G. (2003). *Research Methods: Quantitative & Qualitative Approaches*. Nairobi: Africould Centre for Technology Studies Press
- Myers, S., Bishop, D., Sayee, S., & Kelly, J. (2004). "Virtual Office Hours: Tutoring Students in Statistics and Economics." Proceedings of the OCDE Convergence of Libraries,
- Naidu, S. (2005). *Learning & teaching with technology: Principles and practices*. Oxon, UK: Routledge Falmer.
- Neale-McFall, C., & Ward, C. A. (2015). Factors contributing to counselor education doctoral students' satisfaction with their dissertation chairperson. *The Professional Counselor*, 1, 185

- Nganga, G. (2014). *PhD to be compulsory qualification for lecturers in Kenya*. Retrieved from <http://www.universityworldnews.com/article.php?story=20141030132504527>. On 16th May 2016.
- Norhasni, Z. A. & West, M. (2007). Effective meeting in graduate research student supervision. *Journal of Social Sciences*, 3(1), 27-35.
- Nunn, C. E. (1996). Discussion in the college classroom: Triangulating observational and survey results. *Journal of Higher Education*, 67(3), 243–66. of Collaborative Research Experiences in Preparing Doctoral Students for Faculty Careers in Education and Engineering.
- O’Leary, Z. (2010). *The Essential Guide to Doing Your Research Project*. New Delhi: Sage Publishers.
- Omanga, D. (2017). *Graduate students also to blame for poor completion rates*; Wednesday February 22 2017
- Ombudsperson for Students (2013). *Twenty-Fifth Annual Report*. Montreal available at <http://www.mcgill.ca/ombudsperson/sites/mcgill.ca.ombudsperson/files/annualreport201,12012.pdf>
- Ombudsperson for Students (2014). *Twenty-Sixth Annual Report*. Montreal: McGill available at <http://www.mcgill.ca/ombudsperson/sites/mcgill.ca.ombudsperson/files/annualreport20122013pdf.pdf>
- Oomen-Early, J., Bold, M., Wiginton, K., Gallien, T., & Anderson, N. (2008). "Using Asynchronous Audio Communication (AAC) in the Online Classroom: A Comparative Study." *MERLOT Journal of Online Learning and Teaching*, Vol. 4, No. 3, pp. 267-276
- Oost, H., & Sonneveld, H. (2004). *Completion Rate and Duration of Ph.D. Studies at Dutch Research Schools, IVLOS/ASSR, Utrecht, The Netherlands, 2004*.
- Oradini, F., & Saunder, G. (2008). The use of social networking by students and staff in higher education. Paper presented at the iLearning Forum, Paris. http://www.eife-l.org/publications/proceedings/ilf08/contributions/improving-quality-of-learning-with-technologies/Oradini_Saunders.pdf
- Orodho, A. J., & Kombo, D. K. (2004). *Research Methods*; Nairobi: Kenyatta University, Institute of Open Learning.
- Ouf, S., Nasr, M. & Helmy, Y. (2010). An enhanced e-learning ecosystem based on an integration between cloud computing and Web 2.0. In *IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)*, 2010, Helwan, Egypt. <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5711721>
- Palmer, P. J. (1997). The heart of a teacher: Identity and integrity in teaching. *Change*, 29(6): 14-21.

- Palmer, P. J. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*, San Francisco: Jossey-Bass.
- Palmer, P. J. (1999). 'The grace of great things: Reclaiming the sacred in knowing, teaching and learning', in Glazer, S. (ed.), *The heart of learning. Spirituality in education*, New York: Tarcher/Putnam: 15–31
- Parsons, T. (1961). The School Class as a Social System. In J. F. A.H. Halsey, and C.A. Anderson (Ed.), *Education, Economy and Society*. New York: Free Press
- Phillips, E., & Pugh, D. (2010). *How to get a PhD: A handbook for students and their supervisors*. McGraw-Hill Education (UK).
- Piccinin, S. J. (2000). Graduate Student Supervision: Resources for Supervisors and Students. *Triannual Newsletter, Centre for Development of Teaching and Learning (CDTL)*. CDTLink: University of Ottawa, Couldada.
- Pierce, E. C. (2014). *Supervision. Helping Professions Graduate Research Training in Kenya*. Commission for University Education. Discussion Paper 03. Nairobi, Kenya. *practice* (pp. 21-43). San Francisco: *for research and* Jossey-Bass.
- Rambe, P. (2012). Critical discourse analysis of collaborative engagement in Facebook postings. *Australasian Journal of Educational Technology*, 28(2), 295-314.
- Ray, S. (2017). Selecting a Doctoral Dissertation Supervisor: Analytical Hierarchy Approach to the Multiple Criteria Problem, *International Journal of Doctoral Studies*,
- Renske, A.M., de Kleijn, M., Mainhard, T., Meijer, P. C., Pilot, A., & Riley, E. (2007). *Research Experiences in Preparing Doctoral Students for Faculty Careers in Education and Engineering*.
- Rizzuto, T. E., LeDoux, J., & Hatala, J. P. (2009). It's not just what you know, it's who you know: Testing a model of the relative importance of social networks to academic performance, *Social Psychology of Education*, 12, 175–189. doi:10.1007/s11218-008-9080-0
- Rotenberg, R. (2005). *The art and craft of college teaching: A guide for new professors and graduate students*. Walnut Creek, CA: Left Coast Press
- Rudd, E. (2015). *A new look at graduate failure*. Guildford, England: SRHE and Slough: NFER Nelson
- Rugut, C. K. (2017). *The nature of graduate student-supervisor relationship in the completion of doctoral studies in education: An exploration in two African universities*. Unpublished Thesis.
- Russell, A. (1996). *Graduate Research: Student and Supervisor Views*. The Flinders University of South
- Ryan, Y., & Zuber-Skerritt, O. (2017). *Quality in graduate education*. Routledge.

- Saddler, T. N. (2008). *Socialization to Research: A qualitative exploration of the role of collaborative research experiences in preparing doctoral students for faculty careers in education and engineering.*
- Salmon, P. (1994). *Achieving a Ph D- Ten Student's Experience.* Staffordshire: Trentham Books Limited.
- Schofield, C., & Dismore, H, (2010) "Predictors of retention and achievement of higher education students within a further education context, *Journal of Further & Higher Education*, 34(2) 207-221. Apr. 2010.
- Schwier, R., & Balbar, S. (2002). The Interplay of Content and Community in Synchronous and Asynchronous Communication: Virtual Communication in a Graduate Seminar. *Couldadian Journal of Learning and Technology*, Vol. 28, No. 2, <http://www.cjlt.ca/index.php/cjlt/article/viewArticle/81/74>
- Seagram, B., Gould, J., & Pyke, S. (1998). An investigation of gender and other variables on time to completion of doctoral degrees, *Research in Higher Education*, 39 (3), 319-335.
- Seidman, I. (2012). *Interviewing as qualitative research: A guide for researchers in education and the social sciences.* Teachers college press.
- Selakovich D. (1984). *Schooling in America: Social Foundations of Education.* New York.
- Shannon, A. G. (1995). Research degree supervision: "more mentor than master". *Australian Universities' Review*, 38(2): 12-15.
- Sheehan, P. (1994). From thesis writing to research application: Learning the research culture. In McQueeney, E. (1996). The nature of effective research supervision. *A Journal for Further and Higher Education in Scotland*, 20(1), 23-30.
- Shuttleworth, M. (2008). *How to choose between different research methods.* Experiment Resources. Available at: <http://www.experiment-resources.com/different-research-methods.html>
- Smith, P., & West-Burnham, J. (1993). *Mentoring in the Effective School.* Essex: Redwood Books.
- Smyth, S., Houghton, C., Cooney, A., & Casey, D. (2012). Students' experiences of blended learning across a range of graduate programmes. *Nurse education today*, 32(4).
- Sparrowe, R. T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. (2001). Social networks and the performance of individuals and groups. *Academy of Management Journal*, 44(2), 316–325.
- Spear, R. H. (2000). *Supervision of Research Students: Responding to Student Expectations.*, Coudberra: The Australian National University.
- Spear, R. H. (2015). *Supervision of Research Students: Responding to Student Expectations.* The Australian National University, Coudberra.

- Spencer, D. & Hiltz, S. (2003). "A Field Study of Use of Synchronous Chat in Online Courses." Proceedings of the 36th Hawaii International Conference on System Sciences, Statistics.
- Steinfeld, C., Ellison, N. B., & Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: A longitudinal analysis. *Journal of Applied Developmental Psychology*, 29(6), 434.
- Strong, J. H. (2007). *Qualities of effective teachers* (2nd ed.). San Francisco: Association for Supervision & Curriculum Development. System Sciences. pp. 19-28.
- Sullivan, L. E., and Ogloff, J. R. P. (2010). Appropriate Supervisor-Graduate Student interaction. *Teaching in Higher Education*, 10(4), 447-459.
- Tashakkori, A. and Teddlie, C. (1998). Mixed Methodology: Combining Qualitative and Taylor, P. (1995). Graduate education and open learning: Anticipating a new order. In Buttery, E. A., (Eds.). An Overview of the elements that influence efficiency in graduate supervisory practice arrangements. *International Journal of Educational Management*, 19(1), 7-26.
- Too, J, Kande, A., Kiptoo, S., Mukhwana, E., and Some, D.K. (2016). National Policy on University Education.
- Twale, D. J., & Stein, E. L. (2015). *Socialization of graduate and professional students in the universities*.
- Valenzuela, S. (2009). Is there social capital in a social network site? Facebook use and college students' life satisfaction, trust, and participation. *Journal of Computer-Mediated Communication*, 14(4), 875-901
- Varda, D., Retrum, J.H., & Kuenzi, K. (2011). The Influence of Teaching Methodology on Student Social Interaction *Journal of Public Affairs Education*.
- Wachira, K. (2011). Africa experiences Ph D shortage. Wed, June 15th 2011 at 00:00 GMT.
- Waitie, D. (1994). Understanding supervision: An exploration of aspiring supervisors' definitions. *Journal of Curriculum and Supervision*, 10(1), 60-76.
- Weidman, J. C., Twale, D. J., & Stein, E. L. (2001). *Socialization of graduate and professional students in higher education: A perilous passage?* (Vol. 28). San Francisco: Jossey-Bass. 123 View publication stats
- Wenglinsky, H. (2001). *Teacher Classroom Practices and Student Performance: How Schools Could Make a Difference*. Research Report; RR-01-19 Statistics & Research Division Princeton, NJ 08541
- Willems, J., & Bateman, D. (2011). The potentials and pitfalls of social networking sites such as Facebook in higher education contexts. In *Changing demands, changing directions. Proceedings ascilite Hobart 2011*.

- Wise, L. Z., Skues, J., & Williams, B. (2011). Facebook in higher education promotes social but not academic engagement. In *Changing demands, changing directions. Proceedings ascilite Hobart 2011*.
- Wisker, G., & Robinson, G. (2014). Examiner practices and culturally inflected doctoral theses. *Discourse: Studies in the Cultural Politics of Education*, 35(2), 190-205. <http://dx.doi.org/10.1080/01596306.2012.745730>.
- Wright, T. (2003). "Graduate research students: people in context?" *British Journal of Guidance and Counselling*, vol. 31, no. 2, pp. 209–227.
- Yarwood-Ross, L., and Haigh, C. (2014). As others see us: *what Ph D students say about supervisors*. *Nurse Researcher*. 38–43.
- Zhao, F. (2003). Transforming Quality in Research Supervision: A Knowledge Management Approach. *Quality in Higher Education*, 9 (2), 187-197.
- Zoia, T. K. (2011). *Completing long term graduate projects: Some critical variables*. Unpublished masters thesis, Western Michigan University, Kalamazoo, MI.
- Zuber-Skerrit, O. and Ryan, Y. (Eds) (1994). Quality in graduate education. In Buttery, E. A., (Eds.) An overview of the elements that influence efficiency in graduate supervisory practice arrangements. *International Journal of Educational Management*, 19(1), 7-26.

APPENDICES

Appendix I: Letter of Introduction

I am a doctorate student of Moi University, as a partial requirement of the coursework assessment; I am required to submit a research report on: **Student- Supervisor interaction In Graduate Studies in Public Universities in Kenya.** I would highly appreciate if you could kindly complete the Questionnaire to assist me collect data. Your information alongside others will help me in my research and will be used strictly for academic purposes and will be treated as confidential, therefore, do not write your name on the questionnaire.

Thank you in advance,

Yours faithfully,



KOSGEI Peter Kipchumba

EDU/D.PHIL-PGF/1010/15

Department of Educational Foundation

School of Education, Moi University.

Appendix II: Questionnaire For Post-Graduate Participants

SECTION A: DEMOGRAPHIC DATA

1. Gender: Male [] Female []

2. Which University did you undertake your post-graduate studies?

3. Which programme did you undertake at the University for your graduate?

4. Why did you choose this particular institution to study this programme in
 relation to Student –Supervisor Interaction?

5. When did you start this program?.....

6. How long did you take to complete your programme?

7. When were you supposed to complete the programme?

SECTION B: Supervisory Styles

To what extent do you agree with the following statement on Supervisory styles used in Student-Supervisor Interaction in public universities in Kenya?

Key SA- Strongly Agree, A –Agree, U-undecided, D – Disagree, SD – Strongly Disagree

Supervisory Styles	SA	A	U	D	SD
The supervisor expected me to follow what he/she said without necessarily being very creative.					
The supervisor expected me to be his/her research assistant but never assisted me much during my research process.					
My supervisor was busy and he/she responded to emails only occasionally and he/she rarely understood either of my needs.					
The relationship with my supervisor was overly familiar, with the assurance that we were all good friends, but never supported in the research process as such.					
My supervisor was a high-powered researcher, and the relationship was based on minimal contact, because of frequent significant appearances around the world.					
The supervisor made me believe that I was not doing my research well by criticizing everything I presented.					
The supervisor used to follow me around with an obsession other than my research process.					
The supervisor was skilled in dealing with the emotional issues affecting me during research process.					
The supervisor treated me as a colleague in training; the relationship was always on a professional basis, where the work and their work were held in respect.					

SECTION C: Graduate Students Opinion on Characteristics of Supervisors

To what extent do you agree with the following statement on the different types of student-Supervisor faculty interactions on Characteristic which could increase Student-Supervisor interaction in public Universities in Kenya?

Key SA- Strongly Agree, A –Agree U– Undecided, D – Disagree, SD – Strongly Disagree

Characteristics according to Graduate Students	SA	A	U	D	SD
My supervisor was consistent on what we agreed on during thesis writing.					
My supervisor did not assume he/she knew but was able to influence progress through inspiring rather than commanding or demanding compliance.					
My supervisor had good communication skills and was a good listener during the process of thesis writing.					
The supervisor encouraged the best out of me and helped identify the unique talents which contributed to my research process.					
The supervisor gave me credit for my work, pointed out my accomplishments, and acknowledged them either privately or in front of others.					
The supervisor from time to time gave me advises on how to improve whenever I encountered roadblocks during my thesis writing.					
The supervisor resolved conflicts issues through an open and honest discussion as soon as possible so that they do not continue to escalate as we interacted.					
The supervisor was wise and experienced such that he/she had the exact words to say during research process.					
The supervisor was professionally trained and respectful during the process of thesis writing.					

SECTION D: Experiences of Student-Supervisor Interactions

Do you think your university was able to deal with the Student-Supervisor Interaction experiences/challenges in case a student had complained?

Yes [] No []

Explain your answer

.....

8. What would the graduate students do to enhance the Student-Supervisor Interaction to curb resultant delays in thesis writing? (explain your answer)

.....

9. To what extent do you think the university had enhanced the Student-Supervisor Interaction in Post-Graduate Studies in Kenya?

To a great extent []

To a small extent []

Explain your answer

.....

SECTION E: Practices that Would Improve Student-Supervisor Interaction.

To what extent do you agree with the following statement on the practices that would improve Student-Supervisor Interaction in Public Universities in Kenya?

Key SA- Strongly Agree, A –Agree, U- Undecided, D – Disagree, SD – Strongly Disagree

Practices	SA	A	U	D	SD
The institution should organise mandatory seminars for the student and supervisors which will help improve their socialization process in defence writing.					
Supervisors should be rated at the end of supervision period to help identify supervisor's weakness and strengths.					
The student and the supervisor should jointly set deadlines to complete the research work.					
Lecturers should be trained on modern Student-Supervision Interaction techniques to help better supervise students.					
Additional Training in research methods should be provided to the students after course work in order to address the shortfall in knowledge and skills of the supervisor.					
Students should be allowed to pick their own supervisors as it increases student motivation and confidence.					
The university should ensure that allocation of Supervisors to Students should strictly adhere to the rules and regulations provided.					
The university should ensure that there is strict adherence of rules and regulations governing the post-graduate supervision process in an academic year.					

Appendix III: Questionnaire for Supervisor

SECTION A: DEMOGRAPHIC DATA

10. **Gender:** Male [] Female []

11. Which Universities have you supervised Post-graduate studies in the past?

.....

12. What were the programmes you supervised? (Masters, Ph D OR Both)

.....

13. When did you start supervising students in Post-graduate studies?

.....

14. On average how long do you take to supervise a student in Post-graduate studies?

.....

SECTION B: Supervisory styles

To what extent do you agree with the following statements on Student-Supervisor Interactions on Supervisory styles used in supervision of graduate students in public Universities in Kenya?

Key SA- Strongly Agree, A –Agree, U-undecided, D – Disagree, SD – Strongly Disagree

Supervisory styles	SA	A	U	D	SD
I expect the students to follow what I advised without necessarily being very creative.					
I expect my students to be my research assistants even when it is not during their research process.					
I respond to students emails only occasionally and rarely understand either of their needs because I am too busy.					

The relationship with my students is overly familiar, with the assurance that we were all good friends, but never support in the research process as such.					
I am high-powered researcher, and the relationship between me and students is based on minimal contact, because of frequent significant appearances around the world.					
I make my students believe that they were not doing their research well by criticizing mostly everything they present.					
I follow my students around with an obsession other than their research process.					
I am excellent in dealing with emotional issues affecting my students.					
The students treat me as a colleague in training; the relationship is always on a professional basis, where the work and their work is held in respect.					

SECTION C: Supervisors Opinions on Characteristics of Supervisees

To what extent do you agree with the following statements on the different types of Characteristics of Supervisees in the Student-Supervisor Interactions in public Universities in Kenya?

Key SA- Strongly Agree, A –Agree U– Undecided, D – Disagree, SD – Strongly Disagree

Characteristics according to Supervisors	SA	A	U	D	SD
My students were consistent in what we agree on during thesis writing.					
My students do not assume they know but were motivated to always consult on what they do not understand during thesis writing.					
My students have good communication skills and were good listeners during the process of thesis writing.					

I encourage good relationship with my students which contribute to research success during the process of thesis writing.					
The students acknowledge my work; points out my accomplishments despite the minimal contact I have with them during the process of thesis writing.					
I give my students from time to time advises on how to improve whenever they encounter roadblocks during their research study.					
I resolve the conflicts issues when it emerges through an open and honest discussion with my students as soon as possible so that they do not continue to escalate.					
My students were wise and motivated such that they know the exact words to express during research process.					
My students' were professionally trained and respectful during the process of thesis writing.					

SECTION D: Experiences of Student-Supervisor Interactions

15. Do you think your university deals effectively with matters pertaining to student supervisor interaction?

Yes [] No []

Explain your answer

16. What would students do to enhance the Student-Supervisor Interaction to finish the thesis writing within time?

(Explain your answer)

17. To what extent do you think the university could enhance the Student-Supervisor interactions in Kenya?

To a great extent [] To a small extent []

Explain your answer

SECTION E: Practices that Would Improve Student-Supervisor Interaction

To what extent do you agree with the following statements on the practices that would improve Student-Supervisor Interactions in public Universities in Kenya?

Key SA- Strongly Agree, A –Agree, U- Undecided, D – Disagree, SD – Strongly Disagree

Practices	SA	A	U	D	SD
The institution should organize mandatory seminars for the Students and Supervisors which would help improve their socialization process in thesis writing.					
Supervisors should be rated at the end of supervision period to help identify supervisor's weakness and strengths by Supervisees.					
The Student and the Supervisor should jointly set timelines for completion of research work.					
More opportunities for Supervisor training on modern techniques of supervision to help better supervise students as a way of improving their work with supervisees					
Additional research method training should be provided to the students during and after course work in order to address the shortfall in knowledge and skills of the supervisor.					
Students should be allowed to pick their own supervisors as it increases student motivation and confidence.					
The university should ensure that allocation of Supervisors to Students should strictly adhere to the rules and regulations provided.					

Appendix IV: Interview Schedule for the Deans and Heads of Departments

1. What were some of the supervisory styles used in student-supervisor interaction in graduate studies in this university?

.....

Explain

.....

2. What are some of the unique Characteristic in student-supervisor interactions which can enhance student-supervisor interaction in this University?

.....

3. What are some of the challenges and experiences facing student-supervisor interactions and socialization?

.....

How do the departments and university in general solve such problems and experiences if they arise?

.....

4. What are some of the practices that the university could use to improve student supervisor interaction during thesis writing?

.....

Appendix V: List of Public Universities in Kenya

1. University of Nairobi
2. Moi University
3. Kenyatta University
4. Egerton University
5. Maseno University
6. Jomo Kenyatta University of Agriculture and Technology
7. Masinde Muliro University of Science and Technology
8. Dedan Kimathi University of Technology
9. Laikipia University
10. South Eastern Kenya University
11. Multimedia University of Kenya
12. University of Kabianga
13. Karatina University
14. Meru University of Science and Technology
15. Kirinyaga University
16. Murang'a University of Technology
17. University of Eldoret
18. Chuka University
19. Jaramogi Oginga Odinga
20. University of Science and Technology
21. Kisii University
22. Technical University of Mombasa
23. Technical University of Kenya
24. Embu University College
25. Garissa University College
26. Kibabii University College
27. Pwani University College
28. Cooperative University College
29. Machakos University
30. Tom Mboya University College
31. Taita Taveta University Colleg

Appendix VI: Research Permit

THIS IS TO CERTIFY THAT:
MR. PETER KIPCHUMBA KOSGEI
of MOI UNIVERSITY, 3900-30100
Eldoret, has been permitted to conduct
research in All Counties

Permit No : NACOSTI/P/17/68535/20566
Date Of Issue : 8th December,2017
Fee Received :Ksh 2000

on the topic: STUDENT- SUPERVISOR
RELATIONSHIP IN GRADUATE STUDIES
IN PUBLIC UNIVERSITIES, KENYA

for the period ending:
7th December,2018



.....
Applicant's
Signature

.....
J.P. Kaleswa
Director General
National Commission for Science,
Technology & Innovation

Appendix VII: Research Authorization



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349,3310571,2219420
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/18/68535/20566**

Date: **8th December, 2017**

Peter Kipchumba Kosgei
Moi University
P.O. Box 3900-30100
ELDORET.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Student-Supervisor relationship in graduate studies in public universities, Kenya,”* I am pleased to inform you that you have been authorized to undertake research in **all Counties** for the period ending **7th December, 2018.**

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.

G.P. Kalerwa

**GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

Vice Chancellors
Selected Universities.

The County Commissioners
All Counties.

Appendix VIII: Map of Uasin Gishu County, Kenya

