

Conference Proceedings

Kabarak University International Research Conference [on](#) Emerging Trends and Issues in
Education

Kabarak University, Nakuru, Kenya

23rd – 24th October 2018

Editors

1. Dr Christopher Maghanga
2. Mr Michael Ndonge
3. Dr Moses M Thiga

Sponsors

This conference was graciously sponsored by the National Research Fund

Foreword

Dear Authors, esteemed readers,

It is with deep satisfaction that I write this foreword to the Proceedings of the Kabarak University 8th Annual International Research Conference held between 22nd and 26th October at the Kabarak University Main Campus in Nakuru, Kenya. This conference focused on the thematic areas of computer, education, health, business and music and attracted a great number of paper and poster publications. The conference also featured workshops in the areas of blockchain and digital skills for business. The participation of developing academics, undergraduate students and graduate students was particularly encouraged in this conference.

In addition to the contributed papers, the conference featured a number of invited keynote and guest speaker presentations as follows;

1. Mr John Walubengo, Dean Faculty of Computing at the Multimedia University of Kenya and a member of the Artificial Intelligence and Blockchain Taskforce.
2. Mr Derrick Rono, Senior Systems Developer with Andela Ltd and our Kabarak University Computer Science alumni
3. Mr John Karanja, Chief Executive Officer, Bithub Africa
4. Ms Roselyne Wanjiru, Education Program Coordinator EOS Nairobi, representing Mr Daniel Kimotho, Community Lead EOS Nairobi
5. Ms Rosemary Koech-Kimwantu, Legal and Regulatory Specialist at Oxygene Marketing
6. Dr Julius Jwan, the CEO Kenya Institute of Curriculum Development
7. Prof Ruth Otunga, Deputy Vice Chancellor, Academic Affairs, University of Eldoret.
8. Dr Edward Nzinga, Senior Lecturer, Instruction and Curriculum Design Scientist, Pan Africa Christian University.
9. Prof Peter Anyang Nyongo, Governor Kisumu County
10. Prof Michael Kiptoo, CEO, Kenya Medical Training College.
11. Dr Geoffrey Wechuli, Head, Department of Family Medicine, Kabarak University
12. Mr Onesmus Kamau, Head of eHealth, Ministry of Health
13. Ms Edna Tallam-Kimaiyo, CEO Nursing Council of Kenya
14. Mr Davis Njuguna Kamau, Director, East Africa Chamber of Commerce, Industry and Agriculture
15. Mr James Kaka, CEO Kakajames Enterprises Ltd
16. Mr Janet Lagat, CEO Hortigrud Ltd
17. Mr Raphael Osoro, CEO Sunsareg Solar Ltd
18. Mr Kirori Mindo, CEO Qmax Digital Ltd
19. Prof. Kimberly Carballo: Coordinating Opera Coach and Collaborative Piano, Jacobs School of Music, Indiana University
20. Dr Evelyne Mushira. Deputy Director, Permanent Presidential Music Commission
21. Mr Reuben Kigame; Renowned Gospel Artist and Founder of Sifa Voices International
22. Ms Caroline Wanjiku, A renowned Comedian aka “Teacher Wanjiku”

I trust that these proceedings will provide researchers with an excellent source of new and relevant knowledge in their respective disciplines. We thank all authors and participants for their contributions.

Dr Moses M Thiga

Director, Research, Innovation and Outreach

Conference Organizing Committee

- Prof Jackson Kitetu Chairman
- Dr Moses Thiga Director, RIO & Secretary
- Dr Dave Bowen School of Education
- Ms Mary Muriithi School of Pharmacy
- Dr Geoffrey Kamau School of Business and Economics
- Dr Robert Mutwiri School of Computer Science and Bioinformatics
- Dr Pamela Kimeto School of Medicine and Health Sciences
- Dr Patrick Monte School of Music and Performing Arts
- Ms Rahab Wakuraya School of Law
- Prof Gladys Kiptionny Director, Excellence in Learning and Teaching
- Mr Anthony Somba Director, Quality Assurance and Institutional Planning
- Dr Betty Tikoko Director, Institute of Postgraduate Studies
- Ms Patricia Chebet University Librarian

Table of Contents

Impact of Family Structure and Family Change in Child Outcomes: A case study of Undergraduate Students of Kabarak University.....	7
Can Church Conflict Inhibit Moral Development and Christian Formation? A Study of Emmanuel Kengeleni Parish of Mombasa Diocese in the Anglican Church of Kenya (2000-2010).....	23
Gender Inequality in Enrolment for Accountancy Programme in Nigeria Federal Polytechnics: Emerging Issues in Education.....	33
Can't Pay. Won't Pay; Discourse of Kenyan Teachers in their Quest for Better Terms and Remuneration.....	41
Prevalence, Perception and Consequences of Sexual Harassment in Kenyan Institutions of Higher Learning.....	51
Students' Perception of the Teaching Profession as Antecedents of Sustainability in Teacher Education.....	65
Social Media Neologisms; Made in Kenya for Kenyans: A case Study of Facebook.....	74
Supervision of Postgraduate Students: A Personal Experience.....	84
Technological Advances That Enabled The Tugen To Adapt To The Physical Environment; A Historical Perspective.....	99
Birthing Fake Journalism: Problematizing Online Fake Political Analyses during 2017 Electoral Period in Kenya.....	109
Influence of Teacher-related Factors on Timely Coverage of KCSE Biology Syllabus in Secondary Schools in Rongai Sub-County, Kenya.....	123
Influence of Roles Played by Student Councils on Curbing Frequency of Student Unrests in Public Boys Boarding Secondary Schools in Elgon Sub-County, Kenya.....	134
Influence of Institutional Context Factors on Female Students' Career Choice in TVET Science Programmes in Technical Training Institutes in Siaya County, Kenya.....	146
The Effect of Teaching Using Preferred Learning Styles on Students' Performance, in Biology and Geography in Secondary Schools in Nairobi County, Kenya.....	157

Antecedents and Consequences of Work Engagement among Professional Counsellors in Kenyan Institutions of Higher Learning.....167

The Relationship between Secondary School Students’ Attributes and their Attitudes Towards Agriculture Subject: The Case of Migori District, Kenya.....179

Market Forces versus Professionalism:A Priority Dilemma Resultingin Departures from Traditional Layout of*the Standard* Newspaper.....189

Tutors’ Attitudes Towards Integration Of Adaptive Technology Devices For Visually Impaired Student Teachers In Primary Teacher Training Colleges In Kenya.....198

Impact of Family Structure and Family Change in Child Outcomes: A case study of Undergraduate Students of Kabarak University

Julius Kiprono Langat & Nelly Jebet Murgor
Email: jklangat@kabarak.ac.ke ; Mobile Phone: 0721976772
School of Theology & Education, Kabarak University,
P.O Box Private Bag Kabarak- Code 20157

Abstract

Students in the universities and tertiary institutions manifest damning consequences of a dysfunctional family structure and family change. Family is a very important unit of the society and requires effort to build it. At some point in life people get married and develop a desire to have children and desire also that children should grow up to be healthy, happy and self reliant. For the parents who succeed the rewards are great; but for the parents who have children but fail to rear them to be healthy, happy and self reliant the penalties are anxiety, frustration, friction, and perhaps shame or guilt, may be severe. Therefore, a research was conducted at Kabarak University among first year undergraduate students who joined the university in September 2016 to ascertain the impact of family structure and family change on the students' lives. The study was guided by the social learning theory by Albert Bandura. The study was undertaken in Kabarak University. It adopted a descriptive survey research design. The target population was 1222 first year undergraduate students who were admitted in September 2016. A sample of 310 respondents aged 17-24 years were selected through simple random sampling derived from the undergraduate first year students. The data was collected through questionnaire. Data analysis encompassed descriptive and statistical method. The study revealed that family structure and family change impacts a great deal on the child outcomes i.e. students who engage in unhealthy behaviors like those who engage in alcohol & drugs (10%), socio-economic challenges (25.2%), emotional disturbances (29.2%), medical related issues i.e. ulcers and blood pressure (12%), academic and career issues (10%), and those who raised no issues were only 13.6%. The rest were as a result of a dysfunctional family structure and change due to separation and divorce, single parenting, and loss of both parents due to death. Parenting styles also contribute a great deal to the unhealthy behaviors among children especially those in the university. The study is important such that it yields data and information on the impact of family structure and family change on child outcomes. The study recommends that parents should be more proactive in the way they bring up their children right from birth until they become adults and mature enough to make their own life decisions.

Key words: Familystructure, family change, parenting style, child outcome

Introduction/Background

This paper sought to highlight how the family structure and family change impacts on child outcomes. Family is a very important unit of the society and requires effort to build it. According to Bolby (1998) at some times of the human beings' lives development of a desire to have children and desire also that children should grow up to be healthy, happy and self reliant. For those who succeed the rewards are great; but for those who have children but fail to rear them to be healthy, happy and self-reliant the penalties are anxiety, frustration, friction, and perhaps shame or guilt, may be severe. Bolby (1998) further notes that engaging in parenthood therefore is playing for high stakes. Furthermore, because successful parenting is a principal key to mental health of the next generation, there is a need to know that all it can be done about its nature and

about the manifold social and psychological conditions that influence its development for better or worse. Gonye (2011) agrees that, a healthy family relationships are cultivated, not inherited. Gonye highlights the following characteristics that make families strong and happy indeed: first, shared values which all members of the family embrace to which all members submit i.e. honesty, kindness, truthfulness, obedience, and fairness; secondly, communication with each other. Communication is not just giving commands, but it is about sharing feelings and emotions. Children should be given time to talk and communicate. It is unfortunate that majority of young people feel that they cannot talk with their parents. Gonye (2011) further observes that, studies show a major deficiency in parental communication. One study found that the average five year old spends about twenty-five minutes a week in close interaction with his dad and twenty-five hours with television; thirdly, time to be with each other and to attend each other's events; fourthly, family members should be loyal to each other. Children are always ready to stand with and help one another; fifthly, parents who are not afraid to admit that they were on the wrong and ask for forgiveness. It is always very hard for a parent to admit he is wrong. It is more difficult if the parent does not feel he did anything wrong. However, admitting there was an offence and asking for forgiveness begins the healing process and reopens the child to listen to the parent; sixthly, marriage as a recognized priority of family health. The husband/ wife relationship is the first social relationship established for a good reason. All other relationships within the family are dependent upon the healthy alliance of the husband and wife. The quality of the child/parent relationship depends on the quality of the husband-wife relationship. It is worth noting that every child longs for the security that a healthy marriage brings to the family; seventhly, conflict resolution over conflict avoidance. Healthy families choose to resolve conflict rather than avoiding or running away from it. Running from or attempting to avoid conflict, breeds frustration and bitterness; eighth, children who are confident of their parent's trust in them, what motivates the children most and what holds them close to the family, is the knowledge that parents trust them; ninth, corporate sense of responsibility to all members; and finally, swapping family rules for family courtesies as the child matures (Gonye, 2011). In line to the above introduction, the researcher therefore, defines the terms, discusses the types and categories of family structure. The types of families will be a focus and how it impacts on child outcome in early child hood, middle and later adult life.

Problem Statement

The current wave of unhealthy behaviors among students in institutions of higher learning is quit wanting. These behaviors include the following: alcohol and drug abuse, pre-marital sex, pornography, masturbation, dropouts because of lack of fees, theft, and rebellion to authorities. These behaviors are caused by the dysfunctional family structure ad family change. Family is a very important unit of any society. When there is a break down in family structure due to separation or divorce, or single parenting due to loss of one of the parents or due to children born outside wedlock and one parent is forced to raised the children alone impacts on children physically, psychologically, emotionally and even economically. Parenting structure and style also contributes a great deal to the success or failure of children. This includes blended failies. This kind of family comes into existence when a widowed or divorced person, with or without children remarries another person who may or may not have been married before who may or may not have children (Rice, 1999). In most cases, blended families give birth to step families. Fourthly, a polygamous family- in this a man can marry two or more than one woman. Also a woman may have more than one husband thus polyandrous family is formed. These kind of families are common in Africa. In addition, single parents families- this is one of the fastest

growing family style. It is due to the separation, divorce, death of spouse or unwed motherhood (Dunson, Hoose & Marshall, 1988). The economic factor has encouraged more women to be single parents since they are economically stable. Another one is homosexual couples- This consists of couple of same sex living together, sharing sexual expression and commitment. Lastly, a cohabiting family- this consists of two people of the opposite sex living together, sharing sexual expression who are committed to their relationship without formal legal marriage (Rice, 1999). The impact of family structure and family change is evident.

Divorce leads to step families (blended families) and single parent family. When divorce occurs, couple part ways and child remain with one parent which in most cases is the mother. Brown (2003) argues that fathers' unique interaction is critical to balanced social and emotional development of child. Male child needs fathers to model manhood while female child needs fathers to facilitate woman hood. Rice (1999) observes that children from single parent or high stress level families demonstrate the highest incidences of behavior problems, the lowest social competence and low academic performance. Rice further observes that boys who lack fathers' presence have psychological maladjustments and difficulty in the development of their masculinity. Wanyoike (2003) concurs that, fathers' absence at home for a longtime seems to affect male children more than female children in terms of gender identity. Male children raised without father figure tend to veer towards femininity and female cognitive style. Clapp (1992) observes that, separation and divorce affects the children so much in that there is loss of lifestyle, future plans, a big part of a child's identity at home, financial security, free access to children and shared friendship. This creates a feeling of root-lessness and a need to feel connected. Also there is a sense of failure and dwindling feelings of self-worth. Therefore, the researcher investigated the impact of family structure and family change in child outcome: a case study of undergraduate students of Kabarak University.

Research Objectives

The main objective was to investigate the impact of family structure and family change on the child outcome: a case study of undergraduate students of Kabarak University. The specific objectives are two: first, to identify the types of family structure and family change, and secondly, the impact of the family structure and family change in child outcomes.

Literature Review

Types of Family Structure: Family structure varies from one society to another; extended families are the larger units of nuclear family. Globally, family has evolved from the traditional family structure of nuclear and extended families. The modern society view family structure in a different perspective as compared to previous centuries. The World Book Encyclopedia (2004) points out that in contemporary society people apply the word family to any group that feels a sense of kinship. Rana (2000) notes that each family evolve unique structure and dynamic system whose unwritten and largely unacknowledged roles govern the lives of its members. Haralambos and Holborn (2004) argue that the family has often been regarded as the cornerstone of society. It has played the role of social organization. The nuclear family was seen as well adapted to the demands of modern societies, but this approach has faced critical questioning by feminists, Marxists as well as critical psychologists. Haralambos & Holborn (2000) further point out that change in family structure has worrying effects on the society. The changes in the family

has been seen as both a symptom and cause of instability and insecurity in people's lives and in society as a whole.

Rice (1999) points out that, families are different today i.e. that structure and composition, size and function. These are trends like marriage rates and ages, birthrates, working mothers, divorce, remarriage rates, and the number of reconstituted families, single parenthood and alternative form of family. In the modern society, family forms have increased. There are a number of types but the key structure for this study include the following: nuclear family which consist of a father, a mother and children, secondly, extended family which consist of larger units of nuclear families included the spouses parents and other relatives, thirdly, the blended or reconstituted family structure. This kind of family comes into existence when a widowed or divorced person, with or without children remarries another person who may or may not have been married before who may or may not have children (Rice, 1999). In most cases blended families give birth to step families. Fourthly, a polygamous family- in this a man can marry two or more than one woman. Also a woman may have more than one husband thus polyandrous family is formed. These kind of families are common in Africa. Fifthly, single parents families- this is one of the fastest growing family style. It is due to the separation, divorce, death of spouse or unwed motherhood (Dunson, Hoose & Marshall, 1988). The economic factor has encouraged more women to be single parents since they are economically stable. Sixthly, homosexual couples- This consists of couple of same sex living together, sharing sexual expression and commitment. Lastly, a cohabiting family- this consists of two people of the opposite sex living together, sharing sexual expression who are committed to their relationship without formal legal marriage (Rice, 1999).

The types of families have changed with time. These changes in turn have influenced how children are raised. The family being the basic social unit moulds children's character and personality. It provides them an opportunity to learn or acquire important abilities and competences, which will aid them to lead a fruitful life in the society (Kabiru & Njenga, 2007). Besides family structures influencing children's outcome, parenting styles comes in when dealing with children. Parenting styles play an important role in child development and specifically on their self-esteem. Researchers have uncovered convincing links between parenting styles and the effects these styles have on children's self-esteem though further research is still needed in order to cover the gaps still bending. In the past, researchers have identified four important dimensions of parenting: disciplinary strategies, warmth and nurturance, communication styles, and expectations of maturity and control (Baumrind, 1967). The key thing in parenting is the love, attention, support and security parents provide. Ignorance in the area of parenting has led to many problems. Many children grow without proper direction thus become confused which results to them being a source of conflict in most homes. Gonye (2011) points out that children are sent away from. Children blame many things on parents and vice versa.

Parenting styles can be conservative or destructive. The parenting styles that are common that researchers have put forward are as follows: authoritarian parenting, authoritative parenting, permissive parenting, and uninvolved parenting. In the authoritarian parenting, children are expected to follow the strict rules established by the parents. Failure to follow such rules usually results in punishment. Authoritarian parents fail to explain the reasoning behind these rules. If asked to explain, the parent might simply reply, "Because I said so." These parents have high

demands, but are not responsive to their children. They are obedience-status oriented and expect their orders to be obeyed without explanation. The authoritarian parent offers little warmth or explanation for his rigid rules. Punishment can be cruel and unrealistic and produce children who are violent. For the authoritarian parents they have solutions for every problem and do not give their children time to express themselves (Gonye, 2011). When children are given orders and no room to question, they may take it negatively perceiving such parents as rejecting and refusing to give them any autonomy. The interaction is that of giving and taking of orders failure to comply results to discipline which is likely to be both severe and physical (Laver & Laver, 2000). Children raised with this style tend to be discontented, withdrawn and distrustful. They have poor social skills, lower self-esteem and higher levels of depression. Male children raised in such kind of homes tend to be more aggressive than those who experience other parenting styles (Kabiru & Njenga, 2007).

Like authoritarian parents, those with an authoritative parenting style establish rules and guidelines that their children are expected to follow. However, this parenting style is much more democratic. Authoritative parents are responsive to their children and willing to listen to questions. When children fail to meet the expectations, these parents are more nurturing and forgiving rather than punishing. These parents monitor and impart clear standards for their children's conduct. They are assertive, but not intrusive and restrictive. Their disciplinary methods are supportive, rather than punitive. They want their children to be assertive as well as socially responsible, and self-regulated as well as cooperative. Parents should be alert on the child's need for security, love, discipline, self-esteem, acceptance, and awareness of God's presence. Parents should avoid dangers of overprotection, over-permissiveness, over-restrictiveness, and over-meticulousness (Collins, 2007, 231). According to Laver & Laver (2000), the interaction between parent and child is of affection with clear expectation for the child's behavior. The child looks at the atmosphere, as one that encourages autonomy, controls behavior, moderates and allows expression of opinion and develops own decision-making ability. A loving and firm parent establishes a well-planned program of tender discipline exercised in a loving atmosphere to bring compliance (Gonye, 2011).

Permissive parents, sometimes referred to as indulgent parents, have very few demands to make of their children. These parents rarely discipline their children because they have relatively low expectations of maturity and self-control. Permissive parents are more responsive than they are demanding. They are nontraditional and lenient, do not require mature behavior, allow considerable self-regulation, and avoid confrontation. Permissive parents are generally nurturing and communicative with their children, often taking on the status of a friend more than that of a parent. According to Kabiru & Njenga (2007) agrees that in permissive parenting the child is left to make own decision, no guidance or control. The children from this background show dependence and lack of self-control are more likely to encourage irresponsible behavior. They perform fairly well in school, have relatively high self-esteem, and are less likely to suffer from depression. Gonye (2011) also observes that in permissive parenting, parent tends to be very loving and supportive to the child but lacks ability to set and enforce guidelines and limitations. He confuses his responsibility as a disciplinarian with the desire to be loved by the child. Children when left to their own desire is likely to make wrong choices, which could be injurious to their well being.

On the other hand, an uninvolved parenting style is characterized by few demands, low responsiveness and little communication. While these parents fulfill the child's basic needs, they are generally detached from their child's life. In extreme cases, these parents may even reject or neglect the needs of their children. Kabiru & Njenga (2007) notes that, uninvolved in this case means the parents do not demand obedience nor conformity. In some extreme cases, the parents may even neglect or reject their own children. Such kids tend to perform poorly in all aspects of life. The children lack love, care and guidance. Neglectful parent sees his child as a nuisance, does not demonstrate the loving support a child needs. This type of parent may be physically present with the child but the child cannot access him. This situation has been made worse now because many women are engaged in full time jobs thus children are left alone (Gonye, 2011).

The family structure and parenting styles affect children in all stages of life from childhood to adulthood. Omondi (2006) points out that many families today are suffering disintegration, stress, pressure and conflict due to rapid changes, which are eroding the institution of marriage and the family. A child needs to feel safe both physically and emotionally, to learn that the world and people in it are worthy of trust thus grow to be a trustworthy and dependable individual. Therefore, it is very crucial that the family provides a basis for their children since it is in the home that they get love, acceptance, care and attention. The family structure and parenting styles will either lay a positive or negative impact on the child outcomes.

The Impact of Family Structure and Parenting Styles on Child Outcomes

Family structure and family change as well as parenting styles impacts on the life of a child either positively or negatively. Children are the products of the environment. The child forms strong emotional bonds with primary caregivers. Researchers have conducted numerous studies that have led to a number of conclusions about the impact of family structure, family change and parenting styles on children. Bowlby developed a theory of attachment in which he argues that the maternal bond a child has with his mother is an important prerequisite for positive emotional development. This relationship forms the basis for the child's ability to develop a healthy relationship with others through out life. It is a launching pad from which the young person can take off life into other relationships and into the social environment (Omondi, 2006). Authoritarian parenting styles generally lead to children who are obedient and proficient, but they rank lower in happiness, social competence and self-esteem. Authoritative parenting styles tend to result in children who are happy, capable and successful (Maccoby, 1992). Permissive parenting often results in children who rank low in happiness and self-regulation. These children are more likely to experience problems with authority and tend to perform poorly in school. Uninvolved parenting styles rank lowest across all life domains. These children tend to lack self-control, have low self-esteem and are less competent than that of their peers (Hockenbury & Hockenbury, 2003).

Brown (2003) points out that the early years of a child are special thus parents ought to pay special attention. There are many things taking place in the life of the child which may go unnoticed but the truth is character is being formed. From Brown's point, it is crucial to understand how parents interact with their kids, parents' roles and the types of family affects the children. Research shows that families have a duty to promote self-esteem; the family gives emotional support to children which leads to good feelings. Children who develop high self-esteem grow up believing they can be successful. The children take risk since they are willing

and eager to try knowing that they have a secure base, incase they fail, the children will not be condemned.

For children to have self-esteem, the family structure, family change and parenting styles play a critical role. Many researchers point out those children who came from home where two biological parents are more likely to be well adjusted. Clapp (1992) notes that parents are like a reserve bank account to children of all the ages. When all things are well with the world, the reserve bank account may go unnoticed and have no apparent influence of day-to-day activities. However, this bank reserve provides a safety that allows the owner to explore and enjoy new horizon without the threat of peril hanging overhead. Incase of a problem the reserve account will make the difference between the survival and death of the person's way of life. This applies to children if the family environment is conducive; the children will explore the world freely and become well adjusted.

Laver (2000) points out that, children who have been raised by authoritative parents tend to be more responsible and well adjusted, have higher quality of family life, they perform better academically, more self reliant, have less anxiety and depression. On the other hand, children who have been raised by parents who use authoritarian parenting style tend to be less adjusted. Rice (1999) highlights that child's self-concept is strongly influenced by parents. Children who receive encouragement and affirmation from parents are more likely to develop into self-assured adults who feel good about themselves while children who are constantly criticized or rejected by parent are likely to be insecure self-doubting adults.

It is clear therefore, that each child needs approval, acceptance, warmth and love in order to thrive well and become a well-rounded individual. Criticism, disapproval, rejection and lack of affection have negative influence on children. The family, being the socializing agent plays a key role in child's development. Kabiru & Njenga (2007) points out that, behavior problems come because of many issues which include insecurity, which occurs when there is conflict and quarrels in the family, or when they are disciplined harshly or neglected. Parents are sometimes inconsistent in their styles thus confuse the children; some parents set too high and rigid standards of behavior and the child fails to achieve and is criticized leads to low self esteem. Apart from parenting styles being a factor influencing child outcome today, the change in family structure is the most fundamental aspect, which determines child outcomes. As highlighted earlier, the family structure has changed significantly, the traditional nuclear family is no longer esteemed, and there are several forms of family, Common families that seem to affect children so because of divorce or separation and sometimes because of death. When this occurs, children are affected.

The researcher focuses on the short-term effects of separation and divorce on children outcome. Divorce leads to step families (blended families) and single parent family. When divorce occurs, couple part ways and child remain with one parent, which in most cases is the mother. Brown (2003) argues that fathers' unique interaction is critical to balanced social and emotional development of child. Male child needs fathers to model manhood while female child needs fathers to facilitate woman hood. Rice (1999) observes that children from single parent or high stress level families demonstrate the highest incidences of behavior problems, the lowest social competence and low academic performance. Rice further observes that boys who lack fathers'

presence have psychological maladjustments and difficulty in the development of their masculinity. Wanyoike (2003) concurs that, fathers' absence at home, for a longtime seems to affect boys more than girls in terms of gender identity. Boys raised without father figure tend to veer towards femininity and female cognitive style. Clapp (1992) observes that, separation and divorce affects the children so much in that there is loss of lifestyle, plans, a big part of a child's identity at home, financial security, free access to children and shared friendship. This creates a feeling of root-lessness and a need to feel connected. In addition, there is a sense of failure and dwindling feelings of self-worth.

Children will respond to separation and divorce in different ways. Some feel rage and frustration; others grieve for the loss of their intact family, some feel guilty, rejected, lonely and helpless. The children go through loyalty struggle, others feel they are the cause of the separation and divorce (Sasse, 1997). Rice concurs with Sasse that divorce affects the child's psychological balance and it takes one year to regain it and resume a normal curve of growth and development. Children usually will have heightened insecurity, "if you loved me really you wouldn't go away or leave me." Other children will try to reconcile their parents. Once they have gone over the initial upset of divorce the one common reaction is anger and resentment (Rice, 1999).

Children whose parents have divorced are exposed to many challenges as pointed out above. Clapp (1992) notes that children feel betrayed by the very people they have trusted to protect and care for them. The children feel no one is considering their needs and feels powerless to alter the situation that is completely disrupting their world. Clapp points out some children may hide their anger while others may have explosive outbursts, which can be in form of temper tantrums, non-compliance, aggressiveness, destructiveness, rebelliousness and sexual promiscuity.

Children also suffer when their parents fight they are torn between because they love their parents thus are caught in the parental cross fire which makes them frightened and angry thus may struggle with choices of sides or may withdraw from both parents. All these affects the child's development all his aspects of life and even later in adult life. Omondi (2006) notes that, a troubled child is likely, to become a troubled parent or abused child is likely to be abusive parent. When parents divorce they are separated with their children, some parent tend to become overly protective and possessive while others use the children to get back on the ex-spouse which affects the child. In some cases, parents turn to the children for their own emotional survival and fulfillment. Children are also forced to assume the responsibility of the parent who has gone. This makes the child to be emotionally overburdened thus may develop serious problem.

Separation and divorce has also long-term effect on children in that they tend to have lower levels of psychological well being (depression and lower life satisfaction). The child's family well being is lower in that when they get married in future the marriage may not be stable and high chance of divorce to occur. These children also are affected in their socio-economic well being, with the challenge they face, their academic are interfered with thus low educational achievements, low income and low occupational prestige. The children are also affected in their physical health (Laver, 2000). Children whose parents divorced when in college still exhibit behavioral challenges as if they tend to have many sexual partners and are more negative towards marriage. For girls they may not get married, some may develop anxiety; fear that they

may be betrayed in intimate relationship thus they have challenges in establishing a committed relationship. Lavers (2000) further observe that men who come from such homes have no set goals and a sense of having limited control over their lives. After divorce, some parents may choose to remarry or remain as single parents.

Research shows that children who are raised by mother only household shows more adolescence deviance, higher susceptibility to peer pressure and increased substance abuse. Rice (1999) argues that single parenting face the following variables: less effective parenting, less affection, reduced finances, excessive levels of stress, poorer control of children and, less consistency in discipline. Single mothers face many challenges such as scarce resources, in adequate childcare, role strain, and little time on how to handle the children coupled with her own emotional needs for affections and adults' companionship. The blended families or step-parent families also pose as a challenge to the children in that they have to adjust to the new members in this family structure i.e. jealousy and competition for attention are common. Favoritism also comes in such a kind of family. The roles for the new family are different from the previous one thus how to discipline and who is to discipline becomes an issue. The values system will also be different so the children must learn to tolerate and understand each other's viewpoint.

The current view of family structure has gone through changes from the traditional form of family to more diverse structure, which has impact on children. Each family structure has its own way of dealing with issues as arises thus different parenting styles. This paper points out that the family structure and parenting style is crucial, in determining the kind of adult a child grows to be. The family being the key socializing agent plays a key role in ensuring that children grow to be well-adjusted individuals. It is clear that both parents have a key role in the child's development thus the need to put the child's need first. With the growing number of single-parent families and stepparent families, parents are to be exposed to the challenges that their children might be going through silently than later. It is manifested in adolescents so that they may try to provide a warm affection, secure loving environment for the children to grow and develop in all aspects. Parents are key in shaping their children's personality.

Social Learning Theory

The study was guided by social learning theory advocated by Albert Bandura (1973-1983) with its principle of modeling. This theory assisted the researcher to understand and explain about the impact of family structure and family change in child comes: a case study of Kabarak University. Bandura is credited with the great contribution to the study of observational learning. Social learning theory is a theory of learning and social behavior, which proposes that new behaviors can be acquired by observing and imitating others. It states that learning is a cognitive process that takes place in a social context and can occur purely through observation or direct instruction, even in the absence of motor reproduction or direct reinforcement. In addition to the observation of behavior, learning also occurs through the observation of rewards and punishments, a process known as vicarious reinforcement. When a particular behavior is rewarded regularly, it will most likely persist; conversely, if a particular behavior is constantly punished, it will most likely desist. The theory expands on traditional behavioral theories in which behavior is governed solely by reinforcements, by placing emphasis on the important roles of various internal processes in the learning individual (Wheeler, 2017).

Wheeler, in the article: bridging behaviorism and cognitive: Bandura's 4 principles of social learning observes that, social learning theory incorporates the idea of behavior reinforcement and cognitive processes such as attention, motivation and memory. Social learning is essentially an explanation of how people learn when they are in social contexts. The researcher further notes that Bandura's intention was to explain how children learn in social environments by observing and then imitating the behavior of others. Through a series of experiments, Bandura watched children as they observed adults attacking Bobo Dolls. When hit, the dolls fell over and they bounced back up again, the children were then let loose, and imitated the aggressive behavior of the adults. However, when they observed adults acting aggressively and then being punished, Bandura noted that the children were less willing to imitate the aggressive behavior themselves (Bandura, 1973). So the same thing applies to unhealthy behavior among the young people. The children learn and imitate parents and siblings depending on how they have been raised.

From the research, Bandura formulated four principles of social learning: first, attention. People cannot learn if not focused on the task. If people see something as being new or different in some way, people are more likely to make it the focus of their attention. Social contexts help to reinforce these perceptions, secondly, Retention-people learn by internalizing information in their memories. People recall that information later when they are required to respond to a situation that is similar the attention within which they first learned the information, thirdly, reproduction, people reproduce previously learned information (behavior, skills, knowledge) when required, including learned sexual behaviors. However, practice through mental and physical rehearsal often improves their responses, and fourthly, motivation; people need to be motivated to do anything. Often that motivation originates from observation of someone else being rewarded or punished for something done or said. This often motivates people later to do, or avoid doing, the same thing (Wheeler, 2017).

Social modeling is a very powerful method of learning. If the undergraduate students see positive consequences from a particular type of behavior, they are more likely to repeat that behavior themselves. Conversely, if negative consequences are the result, the children are less likely to perform that behavior. New and unique contexts often capture the youth's attention and can stand out in the memory. The undergraduate students are more motivated to pay attention if they see others around them also paying attention. This theory also encourages the young people to develop individual self-efficacy through confidence building and constructive feedback, a concept that is well rooted in social learning theory (Bandura, 1973).

It is against this background, therefore, that the researcher recognizes that Bandura's theory of social learning is critical for the comprehension of the impact of family structure and family change in child outcomes. In this study, contributing factors (family background, socio-cultural factor, religious background, socioeconomic factor, peer pressure, media, and alcohol and drug abuse) that Bandura is addressing, talks about general models for young people. The present study fills this knowledge gap created by specifically investigating the impact of family structure and family change in child outcomes: a case study of Kabarak University. In this study, the theory is applied to demonstrate how the undergraduate students who are constantly exposed to family structure and family change, socio-economic status, and socio-cultural influences as the primary psychosocial factors (models) are likely to emulate the behavior of those they perceive as the role models. Thus, necessitates the need to offer counseling services to counteract the

learned changing trends in unhealthy behavior among the young people. The theory therefore supports this study.

This paper advocates that parents should re-evaluate their parenting styles, the time they give to their children, the way they provide for their basic needs because the family structure and parenting styles affects child outcomes. This study therefore, seeks to examine the influence of family structure and family change in child outcomes: a case study of undergraduate students in Kabarak University, Nakuru County. Specifically, the objectives of the study are to examine (1) various types of family structure; and (2) the impact of family structure and family change in child outcomes.

Research Methodology

The researcher applied descriptive survey research design. This is useful in a research that involves describing the nature of existing conditions or identifying areas in which existing conditions can be compared. According to Kathuri and Pals (1993), surveys assess opinions and beliefs about individuals, events and procedures. The design is relevant to the study because the researcher investigated the opinions of the respondents on the impact of family structure and family change in child outcomes: a case study of undergraduate students of Kabarak University. In addition, as explained by Gall, Borg & Gall (1996), in this approach the researcher did not manipulate the variables under study but instead examined the variables in their existing condition. Therefore, the researcher conducted the study within the existing undergraduate students' family background experience and the impact on their psychosocial well-being.

This is the arrangement of conditions for collection and analysis of data in a way that combines their relationship with the purpose of the research to the economy of procedures. The study was carried out in Kabarak university- Main Campus. The target population of this study was the first year September 2016 intake undergraduate students of Kabarak University in Nakuru County. The researcher focused on first year students who were admitted in September 2016 thus constituting the accessible population. The September 2016 first year students were free and open to share about their family background and experience on the impact of family structure and family change in child outcomes including academic, social and personal problems. This made them suitable respondents for this study.

A sample method is a way of selecting a portion of the population such that the selected portion of the population represents the population adequately (Emil, 2004). The first year September 2016 intake undergraduate students were selected using purposive sampling technique for the actual study. According to Mugenda & Mugenda (1999), the sample size depends upon the purpose of the study and the nature of the population under scrutiny. The population of the first year September 2016 intake undergraduate students of Kabarak University- main campus in Nakuru County was 1222 students. According to Kathuri & Pals (1993), the sample size for a population of 1222 is 301. The sample size is three hundred and one undergraduate first year students aged 17-24 years. The selection of the undergraduate students who participated in the study was done using stratified random sampling technique based on the records of those first year students admitted in September 2016 at the Registrar (AA) office of Kabarak University. The sample size for the first year undergraduate students in the study was determined using the formula developed by Yamane (1967:886). The formula assumes the following form:

$$n = \frac{N}{1 + N(e)^2}$$

Where n= Sample size, N= Population, e= Standard error. Standard error in the range $2\% \leq e \leq 5\%$ is usually acceptable. The higher standard error will be selected the lower the variability in the sample and also minimizes the error.

Table 1: Study Population and Sample Distribution

Category	Population	Sample	Percentage
Undergraduate Students (Sept. 2016 Intake 1 st years Group)	1222	301	24.6%

The minimum sample size therefore is 301 undergraduate September 2016 first year intake students group.

The researcher used two instruments (questionnaire and interview) to solicit data from the respondents who were first year undergraduate students. The instruments were developed by examining research objectives and related literature. The study used triangulation method of data collection (John & James, 2006). This method involves the use of two or more research instruments to collect the necessary data (Ogula, 1998). The questionnaire included both close and open-ended questions. Qualitative data was necessary in a study to supplement the quantitative data (Cohen & Swerdlik, 2005). Both qualitative and quantitative data was collected. Qualitative data was analyzed by obtaining detailed information about phenomenon being studied and establishing patterns and trends from the information to be gathered (Frankfort-Nachmias, 2006). This involved giving meaning the mass information collected by organizing the data and creating categories and themes. Both descriptive and inferential statistics was used in data analysis. Descriptive statistics such as of means and percentages was used to describe data collected. The analyzed data was presented in Bar Charts, Pie Charts, Columns and Tables in relation to research hypotheses and purpose as stated in chapter one.

Findings and Discussion

The goal of this study was to investigate the impact of family structure and family change in child outcome: a case study of undergraduate students of Kabarak University. The study findings are discussed under the subsequent subheadings.

Table 2: Distribution of respondents based on their gender

	SEX	FREQUENCY	PERCENTAGE
1	Male	155	51.5%
2	Female	146	48.5%
	Total	301	100%

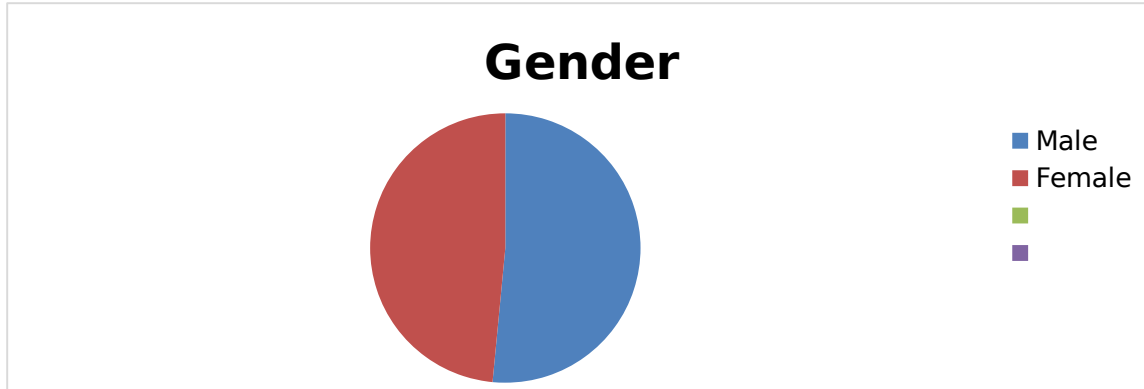


Figure 1: Gender differences

According to the table 2.0 and the pie chart above, the male respondents were 155 equivalent to 51.5% where as the female respondents were slightly fewer by 1.5%. The female respondents were actually 146 equivalents to 48.5%. The sample was picked randomly.

Table 3: Distribution of personality types of the respondents

	Personality Type	Frequency	Percentage
1	Social	156	51.8%
2	Introvert	124	41.2%
3	Ambivalent	21	7%
	Total	301	100%

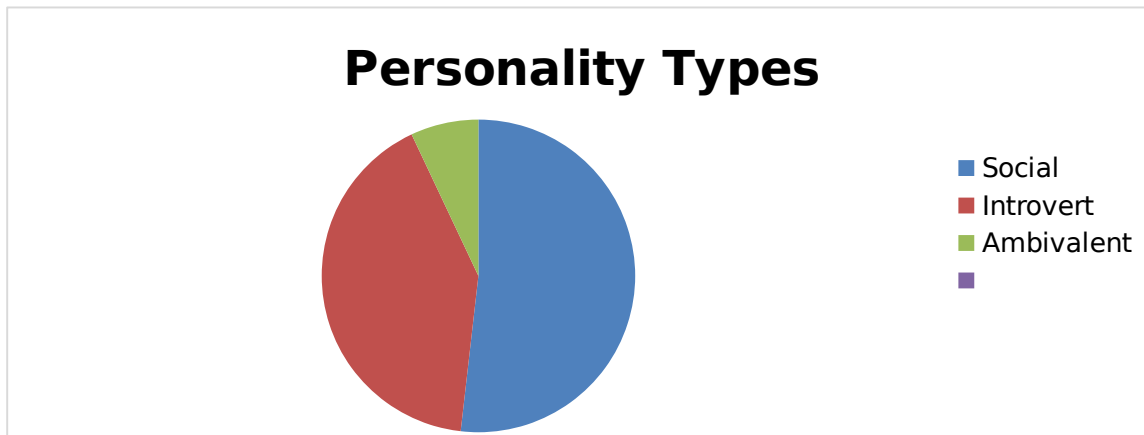


Figure 2: Personality types

The personalities of the respondents as shown on table 3 and pie chart consecutively indicates that 51.8% of the respondents were social, 41.2% were introverts where as 7% of the respondents were ambivalent i.e. they were neither social nor introverts. The respondents' personality depended majorly on the family structure and family change. The children brought up by single parents, brought up by guardians, or brought up by authoritarian parents end up being introverts whereas children who were brought up by parents with balanced family structure developed social personality as a result. The ambivalent respondents were a small percentage because they were neither extroverts nor introverts because of a dysfunctional family background as well.

4: Types of family structure and the distribution of the respondents

	Type of Family Structure	Frequency	Percentage
1	Monogamous Family	204	67.8%
2	Polygamous Family	21	7%
3	Single Parent Family	52	17.2%
4	Orphaned Family	24	8%
	Total	301	100%

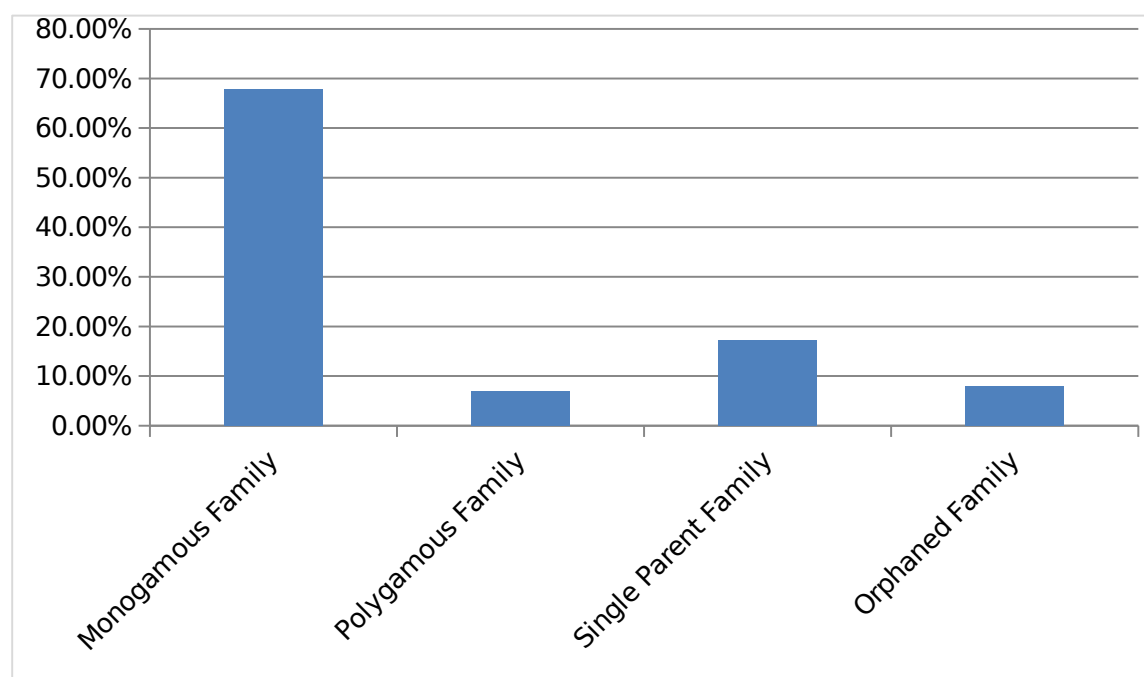


Figure 3: Family types of structure

Table 4 and the bar chart above show the types of family structure and the distribution of the respondents. 204 respondents (67.8%) are from monogamous family background, 21 respondents (7%) are from a polygamous family, 52 respondents (17.2%) are from single parent family background, whereas 24 respondents (8%) are from orphaned family background i.e. respondents whose parents have died. Majority of the respondents from either the polygamous, parentless, or single parent background manifested the unhealthy behavior of alcohol and drug abuse, financial constraints leading to theft or engaging in prostitution and even developing low self-esteem as a result.

5: Impact of Family Structure and Family Change

	Consequences of Family Structure and Family Change	Frequency	Percentage
1	Fees issues	76	25.2%
2	Alcohol & Drugs issues	30	10%
3	Emotional issues	88	29.2%
4	Medical related issues	36	12%
5	Academic & Career related issues	30	10%
6	Non issues	41	13.6%
	Total	301	100%

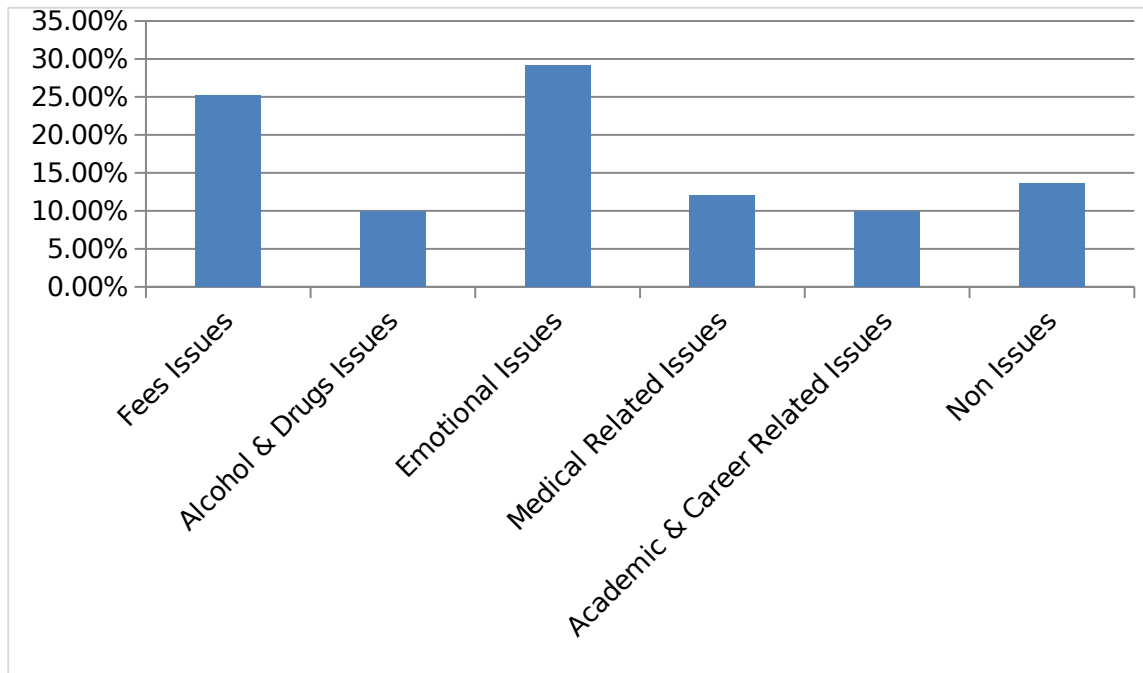


Figure 4: Impact of family structure and family change

Table 5 and the consequent bar chart above shows the impact of family structure and family change in child outcome. The respondents with fee problems were 76 (25.2%), those who were struggling with alcohol and drugs were 30 respondents (10%), and those who were experiencing emotional issues were 88 respondents (29.2%), those with medical issues were 36 respondents (12%), those facing academic and career challenges were 30 respondents (10%), whereas those with no issues at all were only 41 respondents (13.6%). The majority of respondents with a dysfunctional family background developed emotional issues like social phobia due to low self esteem and some experienced financial challenges which led them to develop medical issues like ulcers and blood pressure because of worries of where to get fees and pocket money for personal use.

Conclusion and Recommendations

In conclusion, there was truly a need to research on the impact of family structure and family change in child outcomes. The findings will help parents, teachers, administrators, counselors and all the stake holders to understand what causes young people to engage in alcohol, drugs and substance abuse, illicit sexual relationship, homosexuality, as well as rebellion to authority so that they can embrace proper nuclear family structure and apply the best parenting style in raising up children and counsel those already affected by dysfunctional family structure and family change in child outcome to be better citizens with good morals. The young parents are definitely beneficiaries from the outcome of this research.

The researcher recommends the following: first, its good to investigate the family background of a student who may be misbehaving in order to be given counseling help, secondly, parents should be involved in their children disciplinary process, and thirdly, it is crucial to psycho

educate students, parents and administrators on the impact of family structure and family change on the lives of children and how they can manage the consequences as a result of the dysfunctional family structure by offering counseling services to the children affected. Also young parents should be psycho educated on how to engage their children as they grow up.

Areas for Further Research

- The relationship of children brought up in a wealthy & urban family background and the development of phobias i.e. fear of heights and pets
- Family structure and gender confusion

References

- Adams, Dan. (1990). *The Child Influencers: Restoring the Lost Art of Parenting*. Cuyahoga Falls, Ohio: Home Team Press.
- Bandura, A. (1973). *Social Learning Analysis*. Englewood Cliffs, New Jersey: Printers- Hall.
- Baumrind, D. (1967). Child-care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75, 43-88.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11(1), 56-95.
- Bernstein, D. A. (2011). *Essentials of psychology*. Belmont, CA: Wadsworth.
- Brown, J., & Brown, P. (2003). *A Guide to Parenting*. The Stanbrough Press, Grantham, England (pp. 4-6).
- Clapp, G. (1992). *Divorce and New Beginnings: An Authoritative Guide Recovery and Growth, Solo Parenting and Step Families*. Canada: John Wiley & Sons Incl. (p.91, 6, 93).
- Collins, G. R. (2007). *Christian Counseling, 3rd Ed.: A Comprehensive Guide*. USA: Thomas Nelson Publishers.
- Dunson, Hoose & Marshall, (1988). p.4
- Family Connection, (2004). *World Book Encyclopedia* (P.20).
- Gonye, P.M. (2011). *Quit on a Child?* Asaph Office Publications, Nairobi, (pp. 19-25, 67, 68, 71)
- Haralambos, & Holborn. (2004). (p.465-466)
- Hockenbury, D. H., & Hockenbury, S. E. (2003). *Psychology*. NY: Worth Publishers.
- Kabiru, M., & Njenga. A. (2007). *Child Development*. Focus Publishers, Nairobi. (pp 6-7, 8, 309-310).
- Laver, R. H., & Laver, J.C. (2000). *Marriage and Family: The Quest for Intimacy*, 4th Ed. USA: McGraw-Hill Educ. (p. 331, 332, 428).
- Maccoby, E. E., & Martin, J. A. (1983). *Socialization in the context of the family: Parent-child interaction*. Incl.
- Maccoby, E.E. (1992). The role of parents in the socialization of children: An historical overview. *Developmental Psychology*, 28, 1006-1017.
- Mussen, P. H., & Hetherington, E. M., *Handbook of child psychology: Vol. 4. Socialization, personality, and social development (4th ed)*. NY: Wiley
- Omondi D. (2006). *Responsible Parenting*. Uzima Publishing House: Nairobi. (p. 41).
- Oxford Advanced Learners Dictionary. (2010). (pp. 532, 1482- 1041)
- Rice, F. P. (1999). *Intimate Relationships in Marriage and Families*. Mountain View, California: Mayfield Publishing Company. (pp.3-5, 61, 440, 545).
- Sasse, C. R., & Glencoe, C. (1997). *Families Today*, 2nd Ed. NY: McGraw Hill, (p.241)

- Wanyoike, W. (2003). *Understanding Youth and Family Issues from a Christian Perspective*. (p.111).
- Wheeler, S. (2010). Effects of Self-esteem and academic performance on adolescent decision-making: an examination of early sexual intercourse and illegal substance use. *Journal of Adolescent Health*- jahonline.org: 582-590.

Can Church Conflict Inhibit Moral Development and Christian Formation? A Study of Emmanuel Kengeleni Parish of Mombasa Diocese in the Anglican Church of Kenya (2000-2010)

Judah KAPANGA¹, Stephen MUOKI², Tsawe –Munga wa CHIDONGO³,

¹Pwani University Kilifi P.O Box 195-80108, Kilifi
Tel: +254 724 559 920, Email mtumishi2012@gmail.com

²Pwani University Kilifi P.O Box 195-80108, Kilifi;
Tel: +254 729 151 521, Email: s.muoki@pu.ac.ke

³Pwani University Kilifi P.O Box 195-80108, Kilifi
Tel: +254 786 812 250, Email: t.chidongo@pu.ac.ke

Abstract

The study set out to examine the impact of church conflict on moral development and Christian formation with a special reference to Emmanuel Kengeleni Parish of Mombasa Diocese in the Anglican Church of Kenya (ACK) between 2000 -2010. For acquisition of data, the study used qualitative methodology. The study found that the conflict had enormous effects on the church and society both spiritually and socio-economically. As an opportunity, the conflict became a source of church growth, expansion and Christian maturity whereas on the other hand it became associated with retarded development, rivalry, strained relations and negative publicity. The study recommends that church leaders be trained on conflict resolution and that churches ought to provide avenues and structures of proactive conflict resolution mechanism in order to remain the beckon of moral development and Christian formation in the society.

Key words: Conflict, Moral development, Christian formation, Freretown

Introduction

It is a global assertion that the church should be characterized by cohesion and peace among Christians with an aim of guiding them to live a holistic life (Rubin, 2006). Peaceful co-existence of all Christians regardless of origins and background is a core value of the church. This calls for total peace, which is only achievable in the absence of all types of conflicts (Rubin, 2006). Major changes and continued turbulence in the religious, social, political, technological and economic environments from local to global level, are continuously creating an uncertain and complex environment in which organizations have to operate (Van Tonder, 2008). Increasing uncertainty and complexity in the operating environment of organizations provide fertile ground for the onset of conflicts in the work place. The Anglican Church has not been spared either.

African countries continue to be devoured by various types of conflicts. According to Deng, 20% of sub-Saharan population lives in countries that are at war within themselves (Deng, 2005). Because of poor leadership, Africa accounts for more war-related deaths than the rest of the world. It is evident that leadership remains a big challenge to many people from virtually all occupations and organizations including the churches. The Anglican Church is a product of the conflict based subdivisions and has experienced complex conflicts that have led to further split or subdivisions. Instructional, administrative, and mission efforts are lost because churches are filled with conflicts that dioceses and parishes manage poorly. The frequency and severity of conflicts seems to be increasing (Odhiambo, 2017).

According to Fredrick Uledi (retired lay leader and long time church elder from Freretown), Emmanuel Kengeleni was initially built to serve the spiritual needs of the freed slaves at Freretown freed slaves settlement (Uledi, OI 9-92016). However, as time went by and with the coming of independence from the colonialist, the church was opened up for all people to worship. The church leadership, which was solely in the hands of the descendants of the freed slaves, slowly changed hands as other communities, came in and outnumbered the Freretown community.

Historical issues such as identity crisis, church ownership, and management of church resources, struggle for leadership and misappropriation of church funds may be some of the triggers of these conflicts. There has been also perceived stigma directed to Freretown community by other communities and the locals who at times looked down at them as “foreigners” because most of them were settled after slave trade was abolished. There is evidence of conflict and wrangles in the church as depicted in an article in the local newspapers on 26th November 2007 (Maundu, 2007). Arguably, the relationship between the leadership of Emmanuel Kengeleni and the Freretown Community has been of co-operation, suspicion and/or accusations and even conflict (Kenya Law Civil Suit, 2007). This has a significant impact on the moral development and Christian formation of the society involved.

Statement of the Problem

The relationship between the leadership of Kengeleni church and the Freretown Community has changed a lot over the years. There has been conflict in the church between the Freretown community (whose majority are Christians and members of the Anglican Church) and the leadership of the church. This contestation has manifested in both internal leadership wrangles as well as in public media. From 2000 to 2010, the leadership of Kengeleni church experienced a very hostile relationship with the Freretown community. What was the impact of the church conflict on the moral development and Christian formation? The study intended to analyse the impact of the conflict on the moral development and Christian formation between the years 2000 to 2010.

Research Objective

The objective of this study was to analyse the impact of church conflict on Moral development and Christian formation with special reference to Emmanuel Kengeleni Parish of the diocese of Mombasa.

Literature Review

Moral development is extremely important in the life of every human being. It is a concern for every parent. Teaching a child to distinguish right from wrong and to behave accordingly is a goal of parenting. As in all aspects of growth, the development of concepts of good and bad, right and wrong, is gradual and depends much on the help of others (Garrett, 1995). According to Kohlberg, a religious person who has experienced the power and love of the indwelling spirit of Jesus and has surrendered to it, no longer behaves in terms of laws or principles, but is moved constantly by the great love for God, for creation, and for people (Garrett, 1995).

Meier, Minirth and Wichern (1982), in their book, *Introduction to Psychology and Counseling: Christian Perspectives and Application* state that Psychological development will enable children to live in society and earn a living, but spiritual development will enable them to understand the meaning of life. Young Children are lovingly guided in spiritual development when their parents follow Gods commandments to teach them (Deut. 6:6-7), train them (Prov. 22:6), and bring them up (Eph. 6:4) so they will be able to experience the abundant life (John 10:10). In these obligations, Christian Parents often fall short. Fathers especially may become so wrapped up in their own world that they neglect their highest calling, the spiritual development of their children (Meier, Minirth and Wichern, 1982). Some foundations for spiritual development can be laid during infancy. An infant certainly does not understand religious beliefs and concepts, but parental religious beliefs strongly influence the attitudes they will have toward that infant. The child, sensing the overall home atmosphere, begins to respond to parental behavior and attitudes (Ibid, 1982).

According to Powers, spiritual formation is the process of committing one's life to Jesus Christ. It occurs through reading, classes, and study, as well as through relationships with other believers. Modeling, classroom instruction, mentoring, befriending, and personal devotion in prayer and study are all part of spiritual formation (Powers, 1996). Spiritual formation entails Christian life style, personal piety, prayer and spiritual gifts. The program core contains basic teachings considered critical to the life of the church and common to the churches' denominational identity (Powers, 1996). Each program has responsibility for tasks that give shape to some aspects of Christian growth and development. This clearly demonstrates the importance of the church in moral development and Christian formation.

Research Methodology

This study adopted the qualitative research design, which aimed at gathering an in-depth understanding of human behavior and the reasons that govern such behavior (Yates and Leggett, 2016). Data was collected using in-depth interviews, Focus Group Discussions (FGD's) and archival resources. Secondary data was obtained from various libraries (physical and virtual) and from the internet.

The area of study was Emmanuel Kengeleni situated within Freretown, Kisauni sub-county of the larger Mombasa County in Kenya. The choice of this area of study was influenced by the rich old history that goes to around 130 years ago. According to the church register, it was observed that the church had at least 850 registered members before the conflict erupted (ACK Kengeleni, 2003). The study involved 56 respondents, who included both former and present church leaders represented the larger population. Of the 56 respondents, 40 took part in the interview, while 16 took part in the 2 FGDs. The study applied purposive and snow balling techniques to select the

respondent. These techniques helped the researcher to select a sample that had vast knowledge on the research topic and reduced the chances of biasness. The table 1 below is a summary of the target population and percentage interviewed.

Categories of Respondents	Target size	Sampled Size	Percentage
Clergy	12	7	58.3%
KAMA	14	9	64.3%
Mothers Union	11	6	54.5%
KAYO	9	5	55.6%
Church Elders	20	13	65%
Total	66	40	60.6%

Table 1: Configuration of Sample Size

Source: *Field Research 2017*

The study utilized contextual thematic analysis of data to identify common themes in the data. Data generated was presented in descriptive prose. Data analysis was done through differentiating themes, scrutinizing, comparing, contrasting and finally interpreting them on the basis of emergent meaningful patterns that were observed from the data as the evidence from which the research findings was used to draw conclusions and make generalizations guided by the study objectives.

Study findings

The Conflict led to the Spread of the Christian Faith

According to FGD (1), the Christian Community from Kengeleni who moved out due to the conflict carried with them the gospel and established churches wherever they went (FGD 12-08-2016). Tertullian, an early church Father, asserted that, “The blood of the martyrs is the seed of the church” (Kendal, 2016). This meant that the martyrdom of the early Christians led to a great desire, passion and zeal for evangelism, and therefore, had a great impact in the spread of Christianity in the early church. This situation was not different with the case of Kengeleni. According to Murutu, the church conflict became a catalyst for church growth (Murutu OI, 14-09-2016). Those who left became active in evangelism and church leadership. Kalama (OI, 17-9-2016), Ofundi (OI, 15-8-2017) and Mwambila (OI, 15-8-2017) share same sentiments.

Conflict contributed to the spread of Christian faith and this then contributed positively to the moral development and Christian formation as reflected on table 2 below. A discussion with FGD 1 and 2 indicate that the conflict contributed to the spread of Christian faith through establishment of daughter churches.

Table 2: Spread of Christian Faith as an Impact of conflict at Kengeleni

Category	Number Interviewed	Respondents who viewed Spread of Christian Faith as an Impact	Percentage
Clergy	7	7	100%
KAMA	9	3	33%
MU	6	1	17%
KAYO	5	1	20%
Elders	13	3	23%

Conflict Contributed to the Development of Christian Maturity

According to Bishop Kalu, conflict provides Christians with an opportunity to develop virtues that lead to maturity (Kalu OI, 12-08-2017). These include patience, humility, forgiveness, tolerance, love, gentleness, self-control among others. It is in such a situation that they develop spiritual characteristics and it deepens their faith, trust and dependence on God. They become more prayerful, as they seek divine intervention. Reverend Mwaro Baya observes that when a church is involved in a conflict, its congregants get an opportunity to reflect on their relationship with God and their fellow human beings (Baya OI, 12-8-2017). According to the study findings, majorities are in agreement on the effects of conflict on Christian maturity (see table 3 below). A discussion with FGDs 1 and 2 are of the opinion that no Christian maturity was attained because of the conflict.

Table 3: Christian Maturity as an Impact of conflicts at Kengeleni

Category	Number Interviewed	Respondents who Viewed Christian Maturity as an Impact	Percentage
Clergy	7	5	71%
KAMA	9	5	56%
MU	6	3	50%
KAYO	5	0	0%
Elders	13	2	15%

The Conflict Hindered Development

The conflict hampered the growth and development of Emmanuel church Kengeleni. Ndumbi noted that, “The Court cases were cumbersome, expensive and demanding. This left no time for pastoral duties and evangelism; as a result there was no congregational growth” (Ndumbi OI, 11-8-2017). A large number of participants in the study reported that the conflict hindered development in the church. All of the Mothers Union (MU) 100% , 92% of the elders, 80% of youth (KAYO), 78% of men (KAMA) and 57% of the clergy were of this opinion (see table 4 below). Both FGD 1 and 2 strongly agree that there was slow or retarded development during the conflict.

Table 4: Slowed Development as an Impact of conflict at Kengeleni

Category	Number Interviewed	Respondents Who Viewed Slowed Development As An Impact	Percentage
Clergy	7	4	57%
KAMA	9	7	78%
MU	6	6	100%
KAYO	5	4	80%
Elders	13	12	92%

Rivalry and Strained Relations

Rivalry groups were formed because of the conflict at Kengeleni. The rivalry was characterized by ill talk, defamation and counter accusation and even demonstration. Otieno observed that, “The conflict took a different twist when it became an issue between the Freretown community against the non-Freretown members (Otieno OI, 12-9-2016). A considerable number of participants in this study reported that the conflict at Kengeleni had led to rivalry and strained relationship among the leaders and congregants. The table below gives a summary. From the discussion with FGD 1 and 2 the conflict resulted into strained relationships among church members.

Table 5: Strained Relationships as an Impact of Conflict at Kengeleni

Category	Number Interviewed	Respondents who viewed Strained Relationship as an Impact	Percentage
Clergy	7	5	71%
KAMA	9	8	89%
MU	6	3	50%
KAYO	5	3	60%
Elders	13	10	77%

Negative Publicity by the Media

The conflict in the church took a different twist when it attracted the attention of both print and electronic media, observed Mbui (Mbui OI, 9-9-2016). In the Daily Nation on Thursday August 23 2007, a whole page was dedicated to the conflict at Kengeleni. The article entitled ‘Spirit of Controversy: Property dispute mars rich history of the second oldest church in Kenya’ (Nation Media 2007). Another article by Mathias Ringa published in the Taifa Leo November 27 2007 carried the title ‘*Mizozo: Kasisi ahamishwa-Kanisa lake limekuwa likikumbwa na migogoro*’ (Controversy in church, the priest whose church was in controversy has been transferred). Another one “*Mwenye Nguvu Mpishe*”, (Give way to the strong ones) which appeared on Taifa Leo November 26 2007 and many others in both radio and local Television and the persistent

protests and closure of the church painted a very negative image of the church. Most of the participants in the study reported that conflict at the church put the church in bad light due to negative publicity in the media (see table 6 below). The discussion with FGD 1 and 2 revealed that there was indeed negative publicity by the media.

Table 6: Negative Publicity as an Impact of Conflict at Kengeleni

Category	Number Interviewed	Respondents who viewed Negative Publicity as an Impact	Percentage
Clergy	7	5	71%
KAMA	9	6	67%
MU	6	6	100%
KAYO	5	3	60%
Elders	13	9	69%

This painted a negative image of the Church as the body of Christ and therefore, affected the moral development and Christian formation.

Recommendations and Areas for further study

The conflict at Kengeleni had spiritual and socio-economic impact, which had a direct effect on the moral development and Christian formation on the congregation and the community at large. On the spiritual aspect, it aided the spread of Christianity. Those who could not contend with the situation moved to other churches and took up leadership and positions in ministry. In addition, those who remained behind became more mature in Christian values and virtues. The endurance and perseverance made them strong in the Lord and grew resilience in their character. They became strong in faith and dedicated to God having gone through the refiner’s fire. The experience gained helped them to be more effective and cautious in handling conflict.

The conflict had also socio-economic effects to the Kengeleni church. Because of the conflict the church attendance decreased. There was also low income in terms of Sunday offertories. In addition, the church bank accounts were frozen, making it impossible for the church to access her money for development. The environment was very hostile, congregation so much divided, and this made development practically difficult. No development project was undertaken during this period in time.

The conflict resulted in rivalry and strained relations among the leadership as well as the members of the congregation. There was a lot of hostility among them which resulted into demonstrations and physical fighting. The conflict had a negative publicity on the ACK church in both print and electronic media. The chaos, protests, court cases and physical confrontations were in the headlines in the media. This was a very unfortunate situation for the Kengeleni church and the church of Christ at large. It portrayed moral decay and the church lost its prophetic and moral power to challenge the society in such related issues. This affected the moral development and Christian formation of the members and the society. Therefore, church lost its moral authority as the salt and the light of the world.

This study draws its conclusion based on the findings as analyzed using the Conflict Theory advanced by Karl Marx. As expounded by the theorist so was the case at Kengeleni that tension and conflict arise when resources, status, and power are unevenly distributed between groups in society, and that these conflicts become the engine for social change. In this context, power can be understood as control of material resources and accumulated wealth, control of politics and the institutions that make up society (determined not just by class but by race, gender, sexuality, culture, and religion, among other things). The outcome of social negligence or dissatisfaction was that affected individuals and communities were prevented from participating fully in the economic, social and political life of the society in which they live. This finally created tension, which led to conflict.

In summary, the study noted that the conflict at Emmanuel Kengeleni was due to differences between the leadership. The differences could have been as a result of identity crisis, struggle for leadership, scramble for resources and misappropriation of church funds. According to the theory insufficient access to social rights, material deprivation, limited social participation and lack of normative integration will lead to disagreements and even conflict. Using the Conflict Theory, the study established that the differences between the leadership of the church and the Freretown community formed the base for the conflict that occurred.

Recommendations

In view of the findings, this study therefore makes the following recommendations. The administrative structures of the church should be strengthened and authority vested in the various committees should be allowed to operate. The church should stick to the constitution in the process of elections and forming any committees. Church conflicts should be handled proactively and not reactively. Proper mechanism (structures of handling conflict) should be developed and enshrined in the constitution that will enable efficient and effective modalities of conflict resolution. Priests and church leaders must be trained and equipped well in matters of conflict management and resolution.

Suggestions for further studies

Taking into considerations the limitation of the study, the following suggestions were made for further research. It would have been of paramount value if such studies are done in another ACK Church with the same challenges but different locality. The findings could help establish the trend of conflict in the ACK Churches and its impact on the moral development and spiritual formation. This is because the findings of this study might not be expressly applicable to other mainstream churches. It should also be noted that, the extent to which a given factor contributes to conflict in one church varies with the context and set up. It is from such studies that key factors causing conflict in the ACK churches can be established. Study should also be carried out to find out the structures and mechanism that other ACK Churches have put in place for handling conflicts. With the increase in the rate of conflicts in the church, it can help the ACK Churches to put in place the right mechanism for conflict mitigation.

References

ACK Kengeleni, (2003). *Register of Services-Church Records* (unpublished).

A Letter written by Members of Frere Town addressed to the Lord Bishop J.R.K Kalu dated 29th March 2011. (Source: ACK Achieves Mombasa).

Adeyemo, T. ed. (2006). *Africa Bible Commentary*. Nairobi: Word Alive publishers.

Chandran, E. (2004). *Research Methods: A qualitative approach*. Nairobi: Starbright Service

Cooper, D. R., & Schindler, P.M. (2003). *Business Research Methods*. Boston: McGrill.

Deng, L. B. (2005). The challenge of cultural, ethnic and religious diversity in peace building and constitution-making in post - conflict Sudan. *Civil Wars*.7 (3)

Frere Town Community Association Letter addressed to The Rt. Rev Julius R. K. Kalu dated 18th September 2008.

Kendal, E. (2016). "The Blood of the Martyrs. Retrieved from <http://www.elizabethkendal.com/wp-content/uploads/THE-BLOOD-OF-T>

Kombo, D.K., & Tromp, D.L.A. (2006). *Proposal and Thesis Writings: An Introduction*. Nairobi: Paulines Publications Africa.

Kothari, C. K. (2005). *Research Methodology: methods and techniques*. India: New Age Publishers.

Maundu, G. (November 26th 2007). "Mwenye Nguvu Mpishe," Taifa Leo. p,1-2.

Meier, P.D., Minirth, F.B., & Wichern, F.B. (1982). *Introduction to Psychology and Counseling: Christian Perspective and Application*. Michigan, Baker Books.

Mugenda, O. M., & Mugenda A. G. (2003). *Research methods: quantitative and qualitative approaches*. Nairobi: African Centre for Technology Studies.

Mwambila, D. (1998). Letter, Re: Renovation of Emmanuel church Frere Town and its Compound dated 23-09, 1998 (Unpublished).

Nation Newspaper (May 2nd 1990). Daily Nation. Nairobi: Nation Media Group.

Nation Correspondent, (August 23rd 2007). Daily Nation. Nairobi. Nation Media Group.

Ngumbao, K. (2010). Freretown: A town without a tribe. *Standard Media*, 25th March 2010.

(Digital newspaper). Retrieved from <https://www.standardmedia.co.ke/business/article/2000006362/freretown-a-town-without-a-tribe>.

Oberg, J. (2017). Conflict Mitigation in Reconstruction and Development. Retrieved from <http://www.gmu.edu/programs/icar/pes/oberg.htm>.

Odhiambo, E. O. S., Kassily, & Onkware. (2013). The Paradigm shift from Theocratic to Autocratic Leadership. *Journal of Global Peace and Conflict*. 1(1), 14-27

Odhiambo, E.O. S. (2016). Church Resilient in Conflict. *Asian Journal of Social Sciences, Arts and Humanities*, 4(1), 21-23.

Peters, K. L. (2010). Conflict Management in the Christian Church. (A Thesis). Retrieved from <http://alfredadler.edu/sites/default/files/Peters%20MP%202010.pdf>.

Republic of Kenya in the High Court of Kenya at Mombasa, Civil Suit No. 141 of 2007. Retrieved from kenyalwa.org/caselaw/cases/view/80779.

Republic of Kenya in the High Court of Kenya at Mombasa, Civil Suit No. 173 of 2006.

Ringa, M. (2007). Taifa Leo 27th November 2007.

Rubin, B. R. (2006). Central Asia and Central Africa: Transnational wars and ethnic conflicts. *Journal of Human Development*, 7 (1) ,5-22.

Van, T. C. L (2008). Contemporary Challenges and Emerging Issues. *In Organization Development: Theory and Practice*. Pretoria: Van Schaik.

Yates, J., & Leggett, L. (2016). Qualitative Research: An Introduction, *Radiologic Technology*. Nov/Dec2016, Volume 88(2),225-231.

Gender Inequality in Enrolment for Accountancy Programme in Nigeria Federal Polytechnics: Emerging Issues in Education

Abiola Abosede SOLANKE

The Federal Polytechnic Bida, P.M.B. 55, Bida, Niger State, 912101 Nigeria

Tel: +23408065935637, Email: mosunmolal1974@gmail.com

Abstract

Gender inequality exists all over the world, in access to and control of vital resources, in educational, economic and political opportunities. This paper investigates gender differences in enrollment pattern for Accountancy programme in Nigeria Federal polytechnics. The National Bureau of Statistics (NBS) obtained data from the 2011, and 2012 editions of Annual Abstract of Statistics Published. Data were analyzed using descriptive statistical methods. Percentages were used to describe annual changes in enrolment. Sex ratio was used to quantify the gender dimension of enrolment. Result show that in all academic sessions examined, males are consistently more in enrolment than females: more females are consistently enrolled at the ND level than the HND level. This paper suggested that current efforts to-rebrand the Nigeria education system must take cognizance of the level of disparities between males and females for all programmes at the tertiary education level; and devise means of bridging the gender gap

Keywords: Gender; Enrolment; Accountancy; Education; Inequality

Introduction

Gender inequality is a contemporary worldwide concern. It exists in all spheres of life and in virtually all countries. Gender inequalities exist in access to and control of vital resources, in educational, economic and political opportunities. Gender refers to societal norms and practices about appropriate male and female behaviour, attributes and roles. It is a social and cultural construct that differentiate men from women and prescribes the ways in which men and women interact with each other in the society (Gupta, 2000). Gender is the word used to describe social and personality differences between women and men; it refers to that which society defines as masculine and feminine (Sani & Baba, 2013) Gender disparity therefore connotes the inequality that exists between men and women in relation to access to and utilisation of resources for a better life (Idyorough, 2005). Numerous studies have identified gender as one of the factors that explain academic performance (Bagamery, Lasik,& Nixon, 2005; Black,& Duhon, 2003; Gracia,& Jenkins, 2002).

(Neimanis,& Tortisyn 2003) highlighted key manifestation of worldwide gender inequalities as follows: two thirds of the world's 876 million illiterates are females; of the world's one billion poorest people, an estimated three-fifths are women and girls; despite the fact that the majority of the world's poor are women and girls, poverty reduction strategies insufficiently address the differential impact of poverty by gender and inadequately target gender equality as a core objective; women represent a growing proportion of people living with HIV/AIDS. In countries with high HIV prevalence, young women and girls with little or no education are at much higher risk of contracting HIV than their male counterparts; in only 16 countries in the world is women's representation in national parliaments above 25 per cent. On average, they accounted for 11 per cent of parliamentarians worldwide in 1999, compared with 9 per cent in 1987; whereas women's contributions to the global economy are growing rapidly, women's labour remains undervalued and under counted in national accounts, data disaggregated by sex are still poorly developed; an estimated one-quarter to one half of all women has suffered physical abuse; and women and children comprise about 80 per cent of the world's 35 million refugees and displaced people, and they are particularly vulnerable to sexual violence while in flight, in refugee camps and/or during resettlement.

According to (Randell,& Gergel, 2009), striking differences have been observed between female and male enrolment, with a wider gap at tertiary level. This situation leads to questionable continuity in female education at tertiary level. The World Bank (2003) buttressed the view of (Neimanis,& Tortisyn (2003). According to the organisation: in most countries, women continue to have less access to social services and productive resources than men; women remain vastly under-represented in national and local assemblies, accounting for less than 10 per cent of the seats in national parliaments on average; In most low-income countries, girls are less likely to attend school than boys. Even when girls start school at the same rate as boys, they are more likely to drop out (in many cases after getting pregnant, often due to lack of access to reproductive health services; and in industrial countries, women in the wage sector earn an average of 77 per cent of what men earn; in developing countries, they earn 73 per cent. In contemporary Nigeria, women continue to be politically marginalised in the National Assembly and all the States House of Assemblies. The proportion of women among federal minister is usually less than 25%. There is yet no executive governor among the 36 governors who is a woman (National Bureau of Statistics [NBS], 2011). A recent assessment of women's lives and challenges across the world by (Head, Zweimuller, Marchena and Hoel, 2014), indicates that

gender disparity remain a global social concern. The authors stressed that resources for empowerment are still significantly distributed unequally between men and women. Gender continues to play a major role in determining who goes to school, how well they do, and how far they progress. Being female is negatively associated with enrolment, attainment and performance in the educational system. According to (Akinbi, & Akinbi, 2015) in all low-income countries, male exceed female in their participation in formal education, in terms of access, persistence and achievement.

Statement of problem

Several studies have shown that there is no gender equity in tertiary institutions in Africa, and there is need to ensure adequate representation of women in higher education (Assie-Lumumba, 2006). To enhance women's contribution to human progress, the millennium declaration adopted in September 2000 at the United Nations Millennium Summit committed member nations to promote gender equality and women empowerment as integral aspects of genuine sustainable development. The millennium declaration was reflected in the Millennium Development Goals (MDGs), which are a set of 8 goals, 18 targets and 48 indicators. The MDG 3 specifically addresses gender equality. One fundamental resource to eradicating gender disparity in education, Education is crucial to improving women's lives because it is the foundation of several other opportunities. In assessing progress towards the attainment of MDG 3, it is important to examine current state of gender disparity at all levels of the educational sector in Nigeria.

In consonance with the Federal Government project of re – branding the country, the educational system in the country must be re – branded to conform to global yearnings for gender equality. According to Professor Dora Akunyili, the onetime minister of information and communication as cited in (Amaefule,&Abioye, 2009) re – branding Nigeria is fundamental to our national development. In cognizance of the importance of education to tackling gender disparity, studies in Nigeria have paid research attention to disparity in enrolment and out-turn for different educational programmes (Okojie, 1998; Solanke, 2004a; Solanke, 2004b; Igbinedion, 2011), however, gender disparity in the enrolment for the Accountancy programme has been insufficiently studied. This study addresses the limitation by focusing on the Accountancy programme in Nigerian Federal Polytechnics. It is against this backdrop; the objective of this paper is therefore to examine gender inequality in enrolment for Accountancy programme in Nigerian Federal polytechnics and to discuss its implications for MDG 3 and the re – branding of the Nigerian educational system.

Literature Review

The study by Gracia and Jenkins (2003) examined the second and final year accounting and finance students' performance at a Welsh university. The authors found that at second year level, gender was positively associated with performance whilst age was negatively associated. In Nigeria, gender disparity in adult literacy remains significant. As observed by the NBS (2011), while the country has made outstanding gains on enrolment of girls and boys in primary schools, the country is still far from attaining universal primary education, while there is still a wide gap at the secondary and tertiary levels of education.

Okafor and Egbon (2011) examined two accounting courses’ grades of first year university students in Nigeria and concluded that there was no significant difference between academic performance of male and female. They however found that males’ mean performance in both courses was higher than that of their female counterparts. Deepak et al. (2011) study shows that female medical students outperform male students in overall test assessment. Although Deepak et al.’s study suggests an evidence of male dominance in enrolment proportion, but female students were dominant in performance. Similar evidence of female students outperforming male students was also found in the field of agricultural science (Hedjazi, & Omidi, 2008). These evidences do suggest that females are not intellectually dwarf and are likely to encourage female enrolling on courses that have over time enjoyed masculine dominance

Onokala and Onwurah (2001) found that gender inequity is an issue in all faculties in Nigerian universities, implying that undergraduate student enrolment in Nigerian universities is not equally distributed between the sexes. They noted that in Nigerian universities, the highest percentages of female enrolments were in the faculties of Science, Arts, Education and Social Science. However, their study found that males dominated in scientific and technical fields, which were most likely to lead to high paying and powerful positions.

Methodology

This study is based on the analysis of secondary data. The statistics of students’ enrolment for Accountancy programme in Nigerian Federal polytechnics for six academic sessions were extracted from 2011 and 2012 editions of the Annual Abstract of Statistics published by the National Bureau of Statistics (NBS). The validity of the data from the NBS is not in doubt since the organization is not only the apex statistical body in the country, but also the custodian of all national and official statistics in the country. The data obtained for the study are as presented in Tables 1 and 2. Descriptive and inferential statistical methods were applied in the study and regression was use to run the analyses. Sex ratio computed as males/females X 100 was calculated for each session to quantify and assess the gender dimension of enrolment. The chi-square statistic was used to examine associations between gender and enrolment trends. However, data for 1994/1995 and 1999/2000 sessions were not available and therefore not part of the analysis. These analytical tools are appropriate for the study and have been applied in previous gender and enrolment studies (Solanke, 2004a; 2004b; Igbinedion, 2011).

Results

Table 1: Enrolment for Accountancy Programme in Nigerian Polytechnics by gender and level of study

Session	National Diploma			Higher National Diploma			All (Both Sexes)		
	Male	female	total	Male	Female	Total	Male	Female	Total
1990/1991	4203	1970	6173	1481	582	2063	5684	2552	8236
1991/1992	4220	2204	6424	1873	882	2755	6093	3086	9179
1992/1993	5313	2724	8037	3278	1573	4851	8591	4297	12888
1993/1994	7258	3548	10801	4638	2076	6714	11896	5619	17515
1995/1996	5756	3130	8886	4773	2061	6834	10529	5191	15720
1996/1997	7642	3613	11255	6510	2480	8990	14152	6093	20245

1997/1998	10846	4597	15443	7079	3853	10932	17925	8450	26375
1998/1999	9891	6797	16688	5583	3634	9217	15474	10431	25905
2000/2001	11095	9214	20309	6505	4417	10922	17600	13631	31231
2001/2002	16163	12245	28408	8589	6035	14624	24752	18280	43032
2002/2003	11253	9443	20696	5938	4594	10532	17191	14037	31228
2003/2004	12339	8967	21306	6198	4197	10395	18537	13164	31701
2005/2006	14297	8653	22950	5544	4155	9699	19841	12808	32649
2006/2007	7364	5967	13333	5807	4298	10105	13171	10265	23438
2007/2008	5902	4466	10368	4292	3108	7400	10194	7574	17768
2008/2009	4872	3696	8568	3893	2654	6547	8765	6350	15115
2009/2010	4961	4236	9197	1718	1427	3145	6679	5663	12342
2010/2011	6897	5757	12654	6767	5185	11952	13664	10942	24606

Source: Annual Abstract of Statistics, 2011, 2012, National Bureau of Statistics

Results as shown in Table 2, the sex ratios show an inconsistent pattern in general enrolment for Accountancy programme. In all the sessions examined, males are consistently more than females. The sex ratio has however declined from 223 in the 1990/91 session to 141 in the 2003/2004 session.

Table 2

Session	National Diploma			Higher National Diploma			All (Both Sexes)		
	Male % Increase	Female % increase	Sex ratio	Male % Increase	Female % increase	Sex ratio	Male % Increase	Female % increase	Sex ratio
1990/1991			213.4			254.5			222.7
1991/1992	0.4	-88.8	191.5	26.5	51.5	212.4	7.2	20.9	197.4
1992/1993	25.9	23.6	195.0	75.0	78.3	208.4	41.0	39.3	199.9
1993/1994	36.6	30.2	204.6	41.5	32.0	223.4	38.5	30.8	211.7
1995/1996	-26.0	-11.8	183.9	3.0	-0.7	231.6	-11.5	-8.2	202.8
1996/1997	32.8	15.4	211.5	36.4	20.3	262.5	34.4	17.4	232.3
1997/1998	42.0	27.2	235.9	8.8	0.6	183.7	26.7	38.7	212.1
1998/1999	-8.81	47.9	145.5	-21.1	-5.7	153.6	-13.7	23.4	148.3
2000/2001	12.8	35.6	120.4	16.5	21.5	147.3	13.7	30.7	129.1

2001/2002	45.7	32.9	131.9	32.0	36.6	142.3	41.0	34.1	135.4
2002/2003	-30.4	-22.9	119.2	-30.9	-23.9	129.3	30.5	-23.2	122.5
2003/2004	9.7	-5.0	137.6	4.4	-8.7	147.7	7.8	-6.2	140.8
2005/2006	15.9	-3.5	165.1	-10.6	-1.0	133.4	7.0	-2.7	154.9
2006/2007	0.5	-31.0	123.4	4.7	3.4	135.1	-33.6	-19.9	128.3
2007/2008	-19.9	-25.2	132.3	-26.1	-27.7	138.1	-22.6	-26.2	134.6
2008/2009	-17.5	-17.2	131.8	-9.3	-14.6	146.7	-14.0	16.2	138.0
2009/2010	1.8	14.7	117.1	-55.9	-46.2	120.4	-23.8	-10.8	117.9
2010/2011	39.0	36.0	119.8	293.9	263.3	130.5	104.6	93.2	124.9

More females are consistently enrolled at the National Diploma level than the Higher National Diploma level. Results further show that the pattern of annual changes in overall enrolment is inconsistent. There were declines in total enrolment in some sessions such as 1995/96, 1998/99 and 2002/2003 sessions.

Cross tabulation of gender and enrolment at ND Level

Enrolment by academic sessions for National development											
Gender	05/06	06/07	07/08	08/09	09/10	10/11	Total	Df	χ^2	Critical value	conclusion
Male	14297	7364	5902	4872	4961	6897	44293	5	342	11.07	Significant association
Female	8653	5967	4872	3696	4236	5757	32775				
Total	22950	13331	3696	8568	9197	12654	77068				

Cross tabulation of gender and enrolment at HND Level

Enrolment by academic sessions for Higher National development											
Gender	05/06	06/07	07/08	08/09	09/10	10/11	Total	Df	χ^2	Critical value	conclusion
Male	5544	5807	4292	3893	1718	6767	2801	5	27	11.07	Significant association
Female	4155	4298	3108	2654	1427	5185	20827				
Total	9699	10105	7400	6547	3145	1195	48848				

Findings show that in all academic sessions examined, males are consistently more in enrolment than females; at the ND level, significant association exists between gender and enrolment ($\chi^2=343$, $p<0.05$); at the HND level, gender and enrolment are significantly associated ($\chi^2=27$, $p<0.05$); at the HND level.

Discussion

With consistent enrolment of more males than females in the Accountancy programme, the prospects of MDG of eliminating gender disparity in all levels of education needs additional efforts to quicken the process. With enrolment already in favour of males, deliberate efforts are needed to boost female enrolment. The findings of this study concur with findings of previous studies, such as (Bagamery, Lasik,& Nixon, 2005; Black,& Duhon, 2003; Gracia,& Jenkins, 2002) on gender differences in enrolment for accounting programme in tertiary institutions.

Greater enrolment of females will lead to growth in future share of women in wage employment in the non-agricultural sector in addition to increasing the future size of women accountants. There is now increasing understanding that educational programmes that fail to consider gender inequality and fail to address disparities between males and females will have limited effectiveness and cost implications. The enrolment of more females at the ND level than the HND level implies that many of the female students may have faced obstacles in continuing studies at the HND level. This may be because of early marriage, unwanted pregnancies and childbearing. This has contributed to the under representation of women at top managerial level. Appropriate interventions must be developed to enhance the access of women to higher education. As noted by the World Bank (2003), evidence from around the world shows that eliminating gender disparities in education is one of the most effective development actions a country can take.

The federal government of Nigeria through the National Policy on Education (2004) also noted that education is an instrument for national development. It is therefore important that efforts to rebrand the Nigerian educational system must bring a gender perspective across the whole range of the rebranding process. This will further enhance the ability of the educational system to achieve its set goals. For instance, according to the National Board for Technical Education (NBTE) in 1990, the ND and HND Accountancy programmes should contribute adequately to the production of good quality and dedicated business manpower for commerce, industry, private and public enterprise. The more women that are highly educated and opportune to fill such skilled manpower positions, the greater are the benefit to the nation and the contribution of womenfolk to sustainable development of the nation.

Conclusion

This paper has examined gender disparity in enrolment for Accountancy programme in Nigerian federal polytechnics. Results of the analysis show that at both the ND and HND levels more males are enrolled than females. In order to minimize the serious implication this trend portends for women status in the country, it is important that efforts to transform the Nigerian educational system must bring a gender perspective across the whole range of the transformation process. This will further enhance the ability of the educational system to achieve its set goals. The more women that are highly educated and opportune to fill skilled manpower positions, the greater are

the benefits to the nation and the contribution of womenfolk to sustainable development of the nation. It is therefore important that contemporary initiatives to close gender gaps in all spheres of the national life must take note of the level of gender disparity in enrolment for programmes in the tertiary institutions in the country and take concrete steps to eliminate the disparity.

Recommendation

It is important that current efforts to rebrand the educational sector must take cognizance of the level of disparities between males and females for all programmes at the tertiary education level, and devise means of bridging the gender gap. This is the only way by which the millennium goal for eliminating gender disparity at all levels of the educational sector can be achieved in the country. Further studies may focus on student enrolment in Accountancy programme in state and private institutions respectively as these areas have not been exploit

References

- Akinbi, J.O., & Akinbi, Y.O (2015). Gender disparity in enrollment into basic formal education in Nigeria: Implication for national development. *African Research Review, an International Multidisciplinary Journal, Ethiopia*, 9(3), 11-23.
- Amaefule, E., & Abioye, O. (2009). FG dumps Obasanjo's heart of Africa project". *The Punch*, 17(20,325): 2.
- Assie-Lumumba, N. (2006a). *HIGHER EDUCATION IN AFRICA: Crises, reforms and Transformation. Codesria working. Paper series. Retrieved 5/1/2018, from http://www.codesria.org/IMG/pdf/Ndri_lumumba.pdf*.
- Bagamery, B. D., Lasik, J. J., & Nixon, D. R. (2005). Determinants of success on the ETS business major field exam for students in an undergraduate multisite regional university business programme. *Journal of Education for Business*, 81(1), 55-63.
- Black, H. T., & Duhon, D. L. (2003). Evaluating and improving student achievement in business programmes; the effective use of standardised assessment tests. *Journal of Education for Business*, 79(2), 90-98.
- Deble, I. (1980). *The school education of girls. Paris: UNESCO*.
- Gracia, L., & Jenkins, E. (2003). A quantitative exploration of student performance on an undergraduate accounting programme of study. *Accounting Education*, 12(1), 15-32.
- Head, S. K., Zweimueller, S., Marchena, C., & Hoel, E. (2014). *Women's lives and challenges: equality and empowerment since 2000. Rockville, Maryland, USA: ICF International*.
- Hedjazi, Y., & Omid, M. (2008). Factors affecting the academic success of agricultural students at University of Tehran, Iran. *Journal of Agricultural Science and Technology*. 10(3), 205-214
- Idoyorogh, A. E. (2005). *Gender: Concepts and issues in Nigeria*. Markudi, Nigeria: Aboki Publishers
- Igbinedion, V. I. (2011). Analysis of gender enrolment patterns into secretariat studies programmes in tertiary institutions in EDO state of Nigeria. *European Journal of Educational Studies*, 3(2), 339-352.
- National Bureau of Statistics (2011). Women in a transforming Nigeria. Gender statistics newsletter. 2(4).
- National Bureau of Statistics (2012). *2011 Annual abstract of statistics. Abuja: NBS*
- National Bureau of Statistics (2013). *2012 annual abstract of statistics. Abuja: NBS*

- Neimanis, A., & Tortisyn, A. (2003). *Gender thematic guidance note*. <http://hdr.undp.org/docs/Gender-GN.pdf>, accessed February 2, 2018.
- Omoike, D. (2010). Sensitizing the female in university admission in south-south Geo-political zone for assurance of sustainable development in Nigeria. *International Journal of Educational Administration and Policy Studies*, 2(8).
- Onokala, P. C., & Onwurah, C.U. (2001). Gender equity in students' enrolment in the universities in Nigeria. *Report submitted to the Association of African Universities (AAU), August*. Retrieved from <http://www.aaau.org/studyprogram/reports/onokala.pdf>.
- Okafor C. A., & Egbon, O. (2011). Academic performance of male versus female accounting undergraduate students: *Evidence from Nigeria*. *Higher Education Studies*, 1(1), 9-19.
- Randell, S.K., & Gergel, D.R (2009). The education of girls in Africa. *Opening address presented at the Federation of University Women of Africa Conference, Lagos, Nigeria*.
- Solanke, B. L. (2004a). Enrolment pattern in Nigerian polytechnics: implications for gender equality and manpower development. *Nigeria Journal of Arts, Science and Technology* 2 (2), 257–263.
- Solanke, B. L. (2004b). Analysis of enrolment for statistics programme in Nigerian polytechnics: Implications for statistical education and manpower development. *Knowledge Review*, 9(6), 77-81.
- World Bank (2003). Gender equality and the millennium development goals. <http://sitesources.worldbank.org/INTGENDER/Publications/207061/genderm dg.pdf>.

Can't Pay. Won't Pay; Discourse of Kenyan Teachers in their Quest for Better Terms and Remuneration

June Chebet CHELULE
Laikipia University

Abstract

Kenyan teachers' strikes and struggle for better pay and terms of service stretches back a long time. Teachers have formed groups on Facebook and WhatsApp where they share issues touching on their profession. These are most active during strikes. They are also active on Twitter. Data was collected from these social media platforms. Can't pay won't pay; Discourse of Kenyan Teachers in their Quest for Better Remunerations discusses the manner in which teachers discuss issues touching on them. They have a unique language with coded words, phrases and sentences. This jargon that the teachers use reveals their attitude towards their job and towards the insistence of the governments not to pay them. Critical discourse analysis provides the theoretical framework for the study. It is used both as a theory and a method. Descriptive survey research design was employed. It is hoped that the study will assist in understanding the strikes and general malaise in the education sector in a bid to reach out to the major stakeholders and bring back sanity to education.

INTRODUCTION

Background to the Study

Kenya has been led by Presidents Jomo Kenyatta (1963-78), Daniel arapMoi (1978-2002), MwaiKibaki (2002-2013). His Excellency Uhuru Kenyatta was sworn in as President of Kenya on 9 April 2013. William Ruto is the Deputy President. Teaching has continued to lose popularity with each government. With a population of 42 million, Kenya has a population of approximately 280000 teachers employed in public schools. Kenyan teachers are represented by two unions; KNUT, Kenya National Union of Teachers and KUPPET, Kenya Union of Post Primary Teachers.

Kenya is a multilingual country. English is the official language in Kenya. It is the medium of instruction in schools as well as the language of trade and diplomacy. Most Kenyan are also fluent speakers of Kiswahili and mother tongue languages; L1. English functions as the language of education, international commerce, the judiciary, parliament debates and administration. *Swahili* is also another of Kenya's official language, however, spoken by the majority of the Kenyans after their 'mother tongue'. Social media has made it easier for people to share and discuss oral literature forms. Facebook, Twitter, blogs, YouTube—all of these are now common ways of global sharing of diverse cultural compositions. This ties in with the idea of the Internet breaking down boundaries and space.

The Information Technology (IT) era has put to use the computer and applied the internet to create a platform for communication. Kenyan teachers are disillusioned and many teacher trainees are not enthusiastic about their future prospects as teachers. Some believe that it is a last resort job and when they get other job offers, they quit. The conflict begun in 1997 after the government failed to honour a collective bargaining agreement (CBA) signed with the union. There have been improved terms over time as teacher unions like Kenya National Union of Teachers (KNUT) have not relented in representing teachers. The government argued that Kenyan teachers are well paid compared to others in the region. However, the teachers feel they are underpaid.

Statement of the Problem

Teachers discuss issues touching on them online. They have a unique language with coded words, phrases and sentences. This jargon that the teachers use reveals their attitude towards their job and towards the insistence of the governments not to pay them well. They are also unhappy about their inability to control students after corporal punishment was banned as well as stagnation due to slow promotion policy. Delocalization also affects teachers in management level. The manner might be jocular but the recent hash tags like Teach and Go Home reveal the genesis of all the major problems facing the education sector today.

Aims and Objectives of the Study

The main aim of the study was to discuss the language that Kenyan Teachers use in their online discussions in their quest for better terms and remuneration. The specific objectives are as follows:

1. To discuss some common topics the Kenyan teachers, discuss and what they reveal about their perception towards their career.
2. To identify unique linguistic strategies, words, phrases and sentences used by Kenyan teachers in their online discussions that reveal their attitude towards the challenges they face.

3. To investigate ways that can be used to improve the welfare of teachers and by extension the quality of education in Kenya.

Research Questions

This study was guided by the following questions:

1. What are some of the topics the Kenyan teachers discuss and what do they reveal about their perception towards their career?
2. What unique linguistic strategies, words, phrases and sentences do Kenyan teachers use in their online discussions that reveal their attitude towards the challenges they face?
3. What can be done to improve their welfare and the quality of education in Kenya?

Significance of the Study

There is need for action to improve teachers' welfare and by extension the overall performance in the education sector. It is hoped that the study will assist in understanding the strikes and general malaise in the education sector in a bid to reach out to the major stakeholders and bring back sanity to education. The study will provide valuable data for further study.

LITERATURE REVIEW

Introduction

This chapter presents a review of literature related to this study and the theoretical Framework. The aim of this review is to identify knowledge gaps this study seeks to fill.

Kenyan Challenges

There is poor distribution of qualified teachers which denies a portion of our public-school students' access to a high and quality education. Sometimes a teacher may have a great work load that denies him or her chance to even prepare well for teaching a lesson. Teachers continue to have little voice in creating the policies and programmes needed to ensure that every student has a good teacher. Most of this work is decided upon by other bodies and teachers are only to follow these guidelines when teaching. There is a large number of entrants of teachers in the profession. There is so little consensus about how to recruit and in some areas especially in rural set up, recruitment of untrained teachers has been high. The ignorant belief that anybody can teach has left the profession to be thought of as low. In reality, you can only know what to teach and how to teach after being trained.

Lack of commitment to the teaching profession, for example a number of teachers is likely to leave teaching due to poor pay, too little respect and time factor. However, with the current salary talks and agreements set to level teachers' salaries with other civil servants, the problem is set to be solved soon. Poor remuneration, compared to other professionals has always been a challenging factor for teachers. Maintaining energy and enthusiasm is a challenge for even the most experienced teachers. It is said that many teachers do not voluntarily choose teaching as a profession. Most of the teachers at the lowest levels choose teaching profession as a last resort and therefore give in just bare enthusiasm in teaching. Students with bad behavior have always been hard to cope with. Teachers have therefore been discouraged to help such students and even teach them with interest.

Factors affecting status of the teaching profession in Kenya

The status of teachers has always been seen as low even after several attempts to improve it. Teaching profession engages untrained teachers. It is only in teaching where you find untrained teachers as compared to other professions where only qualified individuals perform their duties. Remuneration is poor compared to other profession. Even after trying to level the teachers' salaries with others, professionally, teaching is not at the same level with other professions.

Teachers have no autonomy; they teach syllabus made by other bodies. They operate with a code of ethics made for them by other bodies. Teaching profession lacks unity, it is fragmented for teachers and this has been a factor affecting the status of teaching. Manning different levels of education have different academic and professional training. This results in different remuneration packages and the associated status and prestige. For instance, University lecturers have high status almost comparable to status of other professions. Nursery and primary teachers have low status. Teachers do not generate money like profit making industries.

Teachers are not perceived to deal with life threatening issues, like doctors, lawyers and others. Some people believe that they can still survive without school education. Women dominate the teaching profession. Overall women are placed low in the occupational ladder. Hence teaching has acquired low status because it is occupied by people who are disadvantaged in the society as perceived by other people in general. Working conditions of teachers are very poor particularly in rural areas compared to other professions.

Linguistic Strategies

Linguistic Strategies refer to the manner in which language is used to bring out meaning. Teachers use a number of strategies including euphemism. A euphemism is a word or expression which is used to respond to a particular style of speech prompted by a specific context of situation that requires decency and politeness. The euphemized items are said to be tabooed, that is, the corresponding lexical items are avoided or prohibited in formal speech (O'Grady et al. 1996). The function of euphemism is to protect the speaker/writer, hearer/reader, or all of the above from possible effrontery and offence. This offence may occur in the broaching of a taboo topic, e.g. religion or death, or by mentioning subject matter to which one party involved may be sensitive, such as politics or social issues. In order for communication to progress smoothly and without conflict, accommodations are continually, and often subconsciously, made. Interpretation varies according to context, i.e. whether the speaker means the term to be euphemistic, and the hearer interprets it in that light (Warren, 1992). With euphemism being so entwined with context, however, classification of a term as 'euphemistic' becomes difficult. This study aimed to analyse euphemism among other linguistic strategies used in the Kenyan teachers discourse in their discussions of topics touching on them. They are discussed in the study

Theoretical Framework

Critical Discourse Analysis Theory provided the theoretical underpinning for this study. Critical discourse analysis (CDA) is an interdisciplinary approach to the study of discourse that views language as a form of social practice and focuses on the ways social and political domination are reproduced in text and talk. It is relevant to this research because it is a study of language used in interaction. CDA was first developed by the Lancaster school of linguists of which Norman Fairclough was the most prominent figure. Ruth Wodak has also made a remarkable contribution

to this field of study. The approach draws from several disciplines in the humanities and social sciences, such as critical linguistics. Fairclough developed a three-dimensional framework for studying discourse, where the aim is to map three separate forms of analysis onto one another: analysis of (spoken or written) language texts, analysis of discourse practice (processes of text production, distribution and consumption) and analysis of discursive events as instances of sociocultural practice.

These three approaches are important as per the objectives of the study. Particularly, the theory combines micro, meso and macro-level interpretation. At the micro-level, the analyst considers the text's syntax, metaphoric structure and certain rhetorical devices. The meso-level involves studying the text's production and consumption, focusing on how power relations are enacted. At the macro-level, the analyst is concerned with inter-textual understanding, trying to understand the broad, societal currents that are affecting the text being studied.

In order to examine ideologies and power relations involved in discourse. Language connects with the social through being the primary domain of ideology, and through being both a site of, and a stake in, struggles for power. Ideology has been called the basis of the social representations of groups, and, in psychological versions of CDA developed by Teun A. van Dijk and Ruth Wodak, there is assumed to be a sociocognitive interface between social structures and discourse structures. The historical dimension in critical discourse studies also plays an important role.

RESEARCH METHODOLOGY

Research Design

Descriptive survey research design was used in this study. This design was chosen because it describes more appropriately the nature of the phenomenon as they are or as they happen rather than manipulation of variables (Orodho, 2005). Mugenda and Mugenda (1999) observe that descriptive survey research design enables the researcher to explain as well as explore the existing status of two or more variables of a phenomenon or population.

Location of the Study

The study was carried out in Kenya. The researcher is a nationality of the country and can easily interact and collect data. Moreover, there are few studies similar to the one under investigation that has been done in the research area in the recent past.

Target Population of the Study

This study targeted teachers' speech.

Sample and Sampling Procedures

Purposive sampling technique guided sample selection for this study. This is because with this method the researcher was able to obtain the expected data.

Sampling Location

The study was carried out in Kenya using information from teachers' online discussions.

Sampling Speech

Nine teachers' discourses have been analysed. They were selected based on the frequency in their use.

Instruments for Data Collection

This study was carried out using text analysis as per the objectives of the study.

Data Analysis

The data was collected from electronic data searches and written in a separate file for analysis. Selected discourse was analysed as per the objectives. The linguistic strategies were identified based on the researchers own understanding. The interpretations were analysed and compiled for its implications and suggested solutions compiled

RESULTS AND DISCUSSION

Introduction

Kenyan teachers have formed groups on Facebook and WhatsApp social media platforms where they share issues touching on their profession. These are most active during strikes. Can't pay won't pay is a phrase that was coined by the Kenyan media after President Kenyatta gave a speech insisting there is no pay in the 2015 strike which saw teachers go unpaid for one month. This dealt a blow on the Kenyan Teachers in their activism for better remunerations. A unique code emerged of words, phrases and sentences the teachers used to reveal their attitude towards their job. In this chapter, a number of words and phrases have been identified and discussed. The researcher identified the linguistic strategies employed in the discussion. This section discusses the findings too. The teachers combine words, phrases, sentences, and paragraphs in several strategies that captivate the listeners. Lexical borrowing, implicature, coinage, idioms, code switching, hyperbole, and symbolism are the major linguistic strategies that have been identified from the discourse. The findings also include the interpretation of the utterances and the challenges portrayed. There are suggestions on how the negativity can be reversed.

Teachers Common Topics

1. Teachers are concerned about:
2. Upward mobility
3. Transfers
4. Corruption
5. Inflation
6. Study Leave and School based learning
7. Promotion
8. Salary
9. House and Medical allowance
10. Indiscipline
11. Delocalization
12. Performance

Teachers' Jargon

EXPRESSION	SOURCE	MEANING	LINGUISTIC STRATEGY
1 Peanuts	Union	little pay.	Symbolism
2.Simsim	Union	Improved pay	Symbolism and lexical

			borrowing
3. Smoke	Vatican	Black smoke to mean the pay is not yet in the account. Grey smoke to mean the pay will be released to the account anytime because the payroll is ready. White smoke to mean the salary is in the account	Allusion and symbolism
4. MPIGS	Kenyans	Referred to the Members of parliament at the time they increased their salaries at a time Kenyans were suffering from high cost of living.	Metaphorical
5. Kitchen cabinet	Politicians	A group of teachers who are close to the principal and are used to report any opposition from other members of staff.	Coinage
6. Can't pay Won't pay	Media	Can't pay, won't pay. Can't teach, won't teach was a slogan used during the strike after the government declaration that they will not pay and the teachers' decision not to go back to work.	Allusion to a famous Italian Marxist play.
7. Teach and go home. (TAGH)	Teachers	After corporal punishment and remedial teaching was banned teachers created the phrase to advice others not to get into trouble	
8. Watuwa a e i o u	Deputy president	Refers to teachers as people who teach vowels.	Nickname
9. TPAD.	Employer	TPAD is an acronym for Teachers Appraisal and Development tool.	

4.4. Linguistic Strategies

1. Peanuts is symbolic for little pay.
2. Simsimsymbolised improved pay.
3. Smoke alluded to the manner in which the pope is elected.
4. Black smoke to mean the pay is not yet in the account.
5. Grey smoke to mean the pay will be released to the account anytime because the payroll is ready.
6. White smoke to mean the salary is in the account

7. Watuwaa.e.i.o.u; People of aeiou to mean teachers from a quote of the deputy president's speech in reference to striking teachers. This trivialized the profession to show that it was just a simple task of teaching vowels.
8. Nicknames are commonly used for example Kitchen Cabinet is a group of teachers who are close to the principal.
9. Can't pay, won't pay. Can't teach, won't teach was a slogan used during the strike after the government declaration that they will not pay and the teachers' decision not to go back to work. Will pay, might pay was coined after the union-initiated talks with the employer which led to a new Collective Bargaining Agreement.
10. Can't vote, won't Vote was the teachers' ultimatum that they will revenge by not voting in the current government because of their withheld salary and denied increment.
11. Teach and Go Home has been trending as an act of self-preservation. After corporal punishment and remedial teaching was banned teachers created the phrase to advice others not to get into trouble by engaging in the acts which would lead to their arrest.

4.5. Challenges and Perception

At the time it was reported that the teachers were highly paid in comparison with other African countries, the media begun to portray teachers in bad light. Everyone went on a rampage castigating the teacher. They claimed they should all be fired and new ones employed. The teachers still remained on strike until relief teachers were given contracts by Teachers Service Commission (TSC) the employing body. There was a lot of self-expression on the topic. Kenyans claimed that anyone could teach. They said it was not compulsory for one to be trained to be a teacher.

It was a dark September in the year 2015. Teachers' salary was frozen and their pay slips read 000 that month. Incidences of teachers' suicide were reported. Terms were coined to describe the teachers including calling them 'watuwaa, e, i, o, u' People of a 'a,e,i,o,u' to trivialize their work. Lessons were learnt. Teachers were very active on social media. Some had plans to quit, others advised that there should be other sources of income to cushion them from such ugly scenarios. The unions called off the strikes when the pressure become unbearable. No money was released from the treasury. Teachers knew that there was money. It was now the turn of the students to self-express. They swore they would never become teachers, they asked question like how the teachers had performed poorly in school and ended up in that situation. Therefore, the teachers lost face.

In Kenya, teachers are placed in hierarchy the highest being the principal followed by the headmaster then the head of department In Kenyan schools, there is equal school life and politics and the structure puts the principal or headmaster at the top with a deputy principal or headmaster followed by senior teachers, head of departments and subject teachers at the lowest. In the new scheme of service, the management are paid higher salaries and allowances. However, the majority of teachers are in lower job groups.

Most learners lack exposure to the outside world as they have never gone out of the villages. Teachers who come from a foreign country or even the town find a problem fitting in. A teacher's life becomes public life in the place they teach in. They should be good role models. Teachers get a challenge from wrong attitudes. The impact of positive or negative attitudes is

critical. Attitude of parents, peers, and community towards education, the school or the teachers, has an impact on learning. It eventually affects the learners' choices and behavior. If negative, then the results will be negative. Students' indiscipline, school fights and pranks are common in Kenya. School strikes are common in the Kenyan education sector. They often lead to destruction of life and property. Bullying is another vice that needs to be addressed.

4.6. Suggested Solutions

In Kenya, we attach a lot of importance to education. Academic becomes the center of life once schooling begins. It seems like everything else stops. If a child performs well then, they are very confident in all other areas. The parents are very proud. The children who cannot fit in become frustrated. The parents are disappointed and the pressure is felt. Teachers are told to put more effort. It is a paradox that we love good performance but we don't treasure the teachers. I agree that some contemporary teachers are a shame. They have been accused of being chronic absentees, of negligence of duty, of insubordination and incitement and of all other evils. We also have another group that is doing the right thing at the right time. Unfortunately, they are rarely rewarded. This should be revisited.

It is time for a national discourse. For a long time, the government has been treating the symptoms while ignoring the disease. Teachers are a group of unhappy individuals in charge of our country's future generation. We have issues in our schools for example drug and alcohol abuse is a problem among youth. The gap between the rich who take their children to elite schools and the poor of public schools is wide in my opinion, we should restore the dignity of the teacher. We should listen to the teachers' grievances. Promotion to administrative positions takes long. Teachers with higher qualifications are rarely considered. This makes it appear like a teaching degree has lesser value than other degrees.

Cheating has also been an issue in Kenyan schools. Apart from some teachers that encourage the vice, some parents are also to blame. The students want to please their parents by performing through all means. Some parents place too much pressure on their children. All these are sources of pressure that end in blame being shifted to teachers.

Conclusion

A child can only be as happy as the mother. When the mother is unhappy, the child will know. The children will tuck in hushed tone, their faces creased and the play subdued. They will peer at the mother's face to see how safe it is to ask for a favor. They will live in fear and doubt. When mummy is happy there is laughter in the house. Children will play hide and seek, they will tag at her skirt, they will ask endless questions and she will smother them with hugs and kisses. The children will be brave and confident.

The purpose for the analogy above is to relate a mother's relationship to their child with a teacher's relationship to their child with a teacher's relationship with his/her students. A student can only be as happy as the teacher. We owe our children happy mother's. We also owe them happy teachers. Whether at the crèche or at the nursery or at the primary, or at the secondary level; whether at the middle level colleges or at the polytechnics or at the universities; one thing is clear- our children can only achieve their maximum potential when they have contented teachers, tutors or lecturers nobody loves to fail. However, a comparison between a number of

public and private schools shows private schools do better probably because of better terms, conditions and management.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

This chapter provides a summary of findings, conclusions, recommendations and recommendations for further research.

Summary

The main aim of the study was to discuss the language that Kenyan Teachers use in their online discussions in their quest for better terms and remuneration. The specific objectives are as follows:

1. To discuss some common topics the Kenyan teachers, discuss and what they reveal about their perception towards their career.
2. To identify unique linguistic strategies, words, phrases and sentences used by Kenyan teachers in their online discussions that reveal their attitude towards the challenges they face.
3. To investigate ways that can be used to improve the welfare of teachers and by extension the quality of education in Kenya.

In this study, utterances and their sources were analysed and interpreted. Emerging education trends were discussed under topics and linguistics strategies employed identified. Finally, suggestions were given for the improvement of teachers' welfare as suggested by the teachers themselves.

Conclusion

The findings reveal the following:

1. There exist a number of teachers' jargon. Some are direct and others indirect references.
2. The teachers use symbolism, implicature, code switching, code mixing, lexical borrowing, allusion, idioms, hyperbole, dialogue and coinage. There are many ways in which they are used to communicate amongst themselves.
3. The utterances portray teachers' perception towards their career and have also influenced the learners and overall performance.

Recommendations

This study focused on: Can't pay won't pay; Discourse of Kenyan Teachers in their Quest for Better Terms and Remuneration. The objectives were met based on the findings. There exists several direct and indirect and a number of linguistic strategies that were identified and discussed. The study also highlighted major challenges of teachers revealed in their discussions and recommends dialogue and intervention to improve teachers' welfare and education in Kenya.

References

Fairclough, N. (1992). *Discourse and Social Change*. Cambridge: Polity Press.

Fairclough, N. (1995) *Critical discourse analysis: The critical study of language*. London: Longman.

- Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, NY: Doubleday Anchor
- Kothari, C.R. (2004). *Research methodology*. New Delhi: Willy Eastern Limited.
- Koul, L. (1992). *Methodology of educational research* Delhi: Wiley East Ltd.
- Nwafor, J. C., & Madu, I.A. (2002). *Issues in population and rural development*. Enugu: Fulladu, Publishing Company.
- Omondi, L.N. (1999). *Language and Life: a linguistic glance at Kenya. An inaugural lecture delivered to the University of Nairobi on 30th September*.
- Orodho, J. (2005). *Techniques of writing research proposals and reports in education and social sciences*. Nairobi: Reata Printers.
- Osadebey, D.C (1949). African Voices, *Afr. Affairs*, 48: 1
- Tannen, D. (2006). Language and culture. In Ralph W. Fasold and Jeff Connor-Linton. *An Introduction to Language and Linguistics*. Cambridge University Press.

Prevalence, Perception and Consequences of Sexual Harassment in Kenyan Institutions of Higher Learning

James Kay
Kabarak University
kaykaytar@gmail.com

Abstract

The issue of sexual harassment in academia is increasingly becoming the centre of discussion. Indeed, in most educational institutions, sexual harassment and gender-based violence have become an issue of research and discussion. More and more students are currently joining institutions of higher learning, many of which are not sufficiently equipped to handle sexual harassment on campus. Kenyan universities are a good sample representative of the larger society because their students are drawn from a cross-section of all communities. Exploring their pedagogical practices may, therefore, offer valuable insights into the broader understanding of how they play a meaningful role in empowering young Kenyans by promoting a harassment-free environment. However, the bulk of existing research has examined sexual harassment in non-academic settings, and only recently have social scientists begun treating sexual harassment in the academic setting as an important area of inquiry. Although several recent studies have established sexual harassment to be pervasive in learning institutions, little is known about the frequency, severity and types of sexual harassment occurring in specific educational institutions. This paper explores students' attitude and consequences of sexual harassment on campus. It also looks into the general perception that students have concerning harassment. In a cross-sectional survey, 389 respondents filled a questionnaire on sexual harassment. Quantitative statistical analysis revealed that sexual harassment was significantly prevalent in academia. Two-thirds of university students are subjected to sexual harassment before they join campus. Many of the

respondents acceded to have been subjected to sexually harassing behaviours but were resistant to label themselves as survivors of harassment. The perception was high among undergraduate students. Recommendations for the improvement of the situation to create a freer and safer campus environment as well as suggestions for further research are made.

Introduction

In 2006, a male student was allegedly raped by two female colleagues when he had gone to pick some notes in a Ladies Hostel in one of the leading universities in Kenya. In 2007 – 2008 while working at the same university, I noticed a consistency in complaints regarding peer-to-peer sexual harassment cases among the students. Several of the socially interactive forum for gender advocacy sessions majorly featured issues related to sexual harassment among students. It was noted that although female students were more vocal in protesting harassment from their male colleagues, male students were also being sexually harassed by their female counterparts. A gender harassment questionnaire administered during the gender awareness week in 2007 established that 75% of the female and 47% of male students had experienced sexual harassment on campus. In the same period, I documented an average of one case per week of peer-to-peer sexual harassment among students. In addition, one acquaintance and two date rape cases were reported and documented in one semester. Being one of the largest public universities, this trend could not be contrived as an isolated case. This paper therefore explores the forms, prevalence and perception of sexual harassment in higher learning.

Literature Review

The issue of sexual harassment in academia is increasingly becoming the centre of discussion (Kayuni, 2009). Indeed, in most educational institutions, sexual harassment and gender-based violence has become an issue of research and discussion (Mohipp, & Senn, 2008; Martin, 2008). More and more female students are currently joining institutions of higher learning, many of which are not sufficiently equipped to handle sexual harassment on campus. Kenyan universities are a good sample representative of the larger society because their students are drawn from a cross section of all communities. Exploring their pedagogical practices may therefore offer valuable insights into the broader understanding of how they play meaningful role in empowering young Kenyans by promoting harassment-free environment (Chege, 2006). However, majority of existing research has examined sexual harassment in non-academic settings, and only recently have social scientists begun treating sexual harassment in academic setting as an important area of inquiry (Amanda, & Ashley, 2006). Although several recent studies have established sexual harassment to be pervasive in learning institutions, little is known about the frequency, severity and types of sexual harassment occurring in specific educational institutions (Young, Allen, & Ashbaker, 2004).

Sexual harassment as fundamentally a matter of misuse of power deeply linked in gender attitudes (Anderson, 2000). It generally constitutes unwelcome sexual advances, requests for sexual favours, and other verbal or physical contact of sexual nature. As a gender-based socio-cultural, economic, political and legal problem, it dehumanises people by infringing on their human rights (Wanjala, 2002). Virtually everyone can be a victim of sexual harassment, although students are especially vulnerable because they are still developing their social, moral and psychological competencies.

Kastl and Kleiner (2001) argue that since the definition of sexual harassment entails description of behaviours, it has inherent challenges. Firstly, these behaviours have to be interpreted by an individual through his or her eyes and experience. Secondly, individuals have different sensitivity levels and interpret the same behaviour in various ways. Lastly, due to this individual interpretation of behaviour, subtle forms of sexual harassment are often hard to define

Definition

The term sexual harassment emerged in the 1970's in the US, presumably established by the Working Women United Institute in 1976 (Thomas,& Kitzinger, 1997). Still, even now, for researchers as well as educational and health practitioners, sexual harassment is proving to be an unclear concept (Stockdale,& Vaux, 1993). Many who write about the issue assert with conviction that it is not 'about sex' at all, but 'about power', echoing equivalent claims often made about the motivations of rapists (Palmer,& Thornhill, 2003) although they seldom explain why it is important to view it that way (Brown, 2006).

At first glance, definitions of sexual harassment may appear straightforward. However, applying these definitions to real-life situations can be quite complex, especially for those students who struggle with processing social information and understanding the subtleties of sexual harassment. Additionally, adults are often challenged when identifying sexual harassment and understanding how these behaviours may be related to a student's disability (Young, et al., 2004). Defining sexual harassment is, therefore, both simple and complex. It is simple because it is defined as unwelcome sexual behaviour; if it is unwelcome then it is harassment. It is complex because it can involve behaviours that in other contexts are considered positive and reaffirming (Skaine, 2001).

Ambiguity regarding what actually comprises sexual harassment is reflected in the various definitions of the term (Brant,& Too, 1994). Indeed, researchers in the area warn that the greatest difficulty is the lack of consensus regarding both the behaviours comprising sexual harassment together with the circumstances in which it occurs (Fitzgerald, 1993). Moreover, the confusion about what is meant by sexual harassment comes from those sympathetic to the issue as well as those hostile to it (Brant,& Too, 1994). Feminists who find the available discourse not always helpful in describing experiences of sexual harassment can make charges of exaggeration, oversimplification, inadequacy or inflexibility.

Harassment is usually made possible by a power imbalance between groups since it is a threatening restatement of the status quo (Bhattacharyya, 1994). Determining if sexual harassment has occurred in a school setting, therefore, requires an evaluation of (a) the context of the behaviour, (b) the power differential between the target and the harasser, (c) how the behaviour was perceived by the target, and (d) the behaviour's impact on the learning environment (Young, Allen, Ashbaker, & Smith, 2008). One's gender is not necessarily a factor in the perpetuation or mitigation of sexual harassment in academic institutions since both male and female students are likely to be victims in these settings (Amanda,& Ashley, 2006). Consequently, although these institutions should be a safe haven for young people, many students are sexually harassed and coerced there (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2003).

Sexual Harassment in Academic Setting

As students transition out of secondary school, they begin to expand their social relationships, especially with the opposite gender; romantic relationships tend to increase in importance (Berk, 2006). Some of the difficulty in identifying sexual harassment may be due to the blurred boundaries between sexual harassment and good-natured teasing and flirting. Flirting tends to be mutually acceptable, enjoyable, and pleasant when both parties willingly participate (Young, et al., 2004). In addition to identifying specific behaviours as sexual harassment, other factors such as the student's age, maturity, and cognitive ability influence the perception of and response to sexual behaviour must also be considered (Murnen, & Smolak, 2000).

According to Amanda and Ashley (2006), sexual harassment is widespread in universities the world over. Estimates of the frequency of sexual harassment of undergraduate and graduate students vary widely across studies, from 7% to 27% of men and from 12% to 65% of women (Rathus, Nevid, & Fichner-Rathus, 2000). Nearly two thirds (62 percent) of undergraduate students in US claim to have encountered some type of sexual harassment and nearly one third (35% of female and 29% of male students) say the harassment is physical (Whatley, & Wasieleski, 2001). A 2006 study on sexual harassment at colleges and universities revealed that 62% of female and 61% of male college students reported having been sexually harassed at their university, with 80% of the reported harassment being peer-to-peer (AAUW, 2007). In the same study, 51% of male students admitted to have sexually harassed someone in college, with 22% admitting to harassing someone often or occasionally. In addition, 31% of female students admitted to having harassed someone in college.

According to National Coalition for Women and Girls in Education (NCWGE, 1997), most sexually harassing behaviour in learning institutions is student-to-student. One of the most common reasons reported for sexually harassing behaviour is because the harasser thinks it is funny to do so (AAUW, 2007). However, the true reasons for harassment align more with that of need to assert power and induce fear in others; more in line with bullying (Dzeich, 1990). These hazing behaviours develop in primary school; continue in high school and college, eventually moving into the work place (Boland, 2002).

The power structures and our cultural biases in academia predispose women to being overwhelmingly targeted for sexual harassment (Chamberlain, et al., 2008). As such, it is assumed that majority of perpetrators are male. This is echoed in Jones (1996) who avers that women are still subjected to violence, intimidation, discrimination, hostility and more subtle forms of control from men on university campuses. Several studies reinforce Paludi and Barickman's findings by showing that men rarely suffer from sexual harassment (Hurley, & Fagenson-Eland, 1996; Kastl and Kleiner, 2001; Whaley and Tucker, 1998). However, sexual harassment is not always unidirectional as males are also subjected to harassment (Kayuni, 2009). The problem with most studies is that they have been only focusing on the experience of women and in the process the harassment of males has not been discussed in the wider literature.

Vulnerability of University campuses

Howard-Hamilton, et al., (1998, p.56) point out that although there is now more public awareness of sexual harassment than in the past, "studies show that higher education institutions continue to provide a fertile environment for this type of behaviour". The major problem is that students and

lecturers are not fully oriented on the vulnerability of university campuses to this type of behaviour. The potentiality of increased peer sexual harassment in college campuses is mainly due to the residential nature of many college campuses that tends to assume that the social interaction between male and female students will be transparent and mature. However, this is not the reality at all since there is often much more unsupervised social interaction between students. Thus, students are more vulnerable to unwanted sexual advances. In addition, peers do not often communicate clearly the desire to be left alone. Any communication to be left alone is often misinterpreted as a sign of being interested in the opposite sex. Students may not perceive themselves to have behaved in a sexually harassing manner unless the behaviour is extreme in nature (Kastl, & Kleiner, 2001).

According to Kayuni (2009), student-to-student (peer) sexual harassment has great potential of creating a very hostile environment for the harassed student to the extent that she can seriously be affected academically as well as socially. The main danger with this form of harassment is that the interaction amongst peers is higher as compared to that of any other parties. Consequently, the peer harassment has a geometric multiplier effect on the victim through this unavoidable constant social interaction.

Coping Strategies Used on Campus

Individuals use a number of different coping strategies to deal with sexual harassment. An example of coping mechanisms is 'The Typology of Target Responses to Sexual Harassment' by Knapp, et al., (1997). It illustrates various responses to sexual harassment following a thorough analysis of the existing literature. This combines a number of Gruber's (1989) categorizations based on the view that responses will vary in respect of two elements: focus and mode or type of response, to formulate a two-by-two typology of responses, illustrated by the four quadrants in Figure 1.

Responses to sexual harassment may be either self-focused or initiator-focused (vertical axis). Self-focused responses do not involve the perpetrator of the harassment, whilst initiator-focused coping responses address the perpetrator directly. The type or mode of response (horizontal axis) varies from self-response, where the person facing sexual harassment uses no outside resources to deal with it, to supported response, where they use other individuals, organizational resources and/or extra institutional resources (Hunt, Davidson, Fielden, & Hoel, 2007). According to their analysis, Quadrant 1 represents the least effective method of dealing with sexual harassment. Quadrant 2 responses are also generally ineffective, although they may, in time, encourage the individual to take more effective action. Quadrants 3 and 4 represent responses which have been shown to be the most effective. Sigal, et al., (2003) supported this typology by investigating students' reactions to sexual harassment scenarios; it was found that active coping strategies were seen to be the most effective method of dealing with sexual harassment.

Mode of response	
Self-response	Supported response

<p>Self-focus</p>	<p>Quadrant 1 Avoidance/denial Most frequently used, yet least effective for ending harassment: <ul style="list-style-type: none"> • Avoiding the harasser. • Altering the job situation by transferring/quitting. • Ignoring the behaviour. • Going along with the behaviour. • Treating the behaviour as a joke. • Self-blame. </p>	<p>Quadrant 2 Social coping Not effective for ending harassment, but may assist target in coping with negative consequences resulting from harassment: <ul style="list-style-type: none"> • Bringing along a friend when harasser will be present. • Discussing situation with sympathetic others. • Medical and/or emotional counselling. </p>
<p>Initiator-focus</p>	<p>Quadrant 3 Confrontation/negotiation Not frequently used, but very effective for ending harassment: <ul style="list-style-type: none"> • Asking or telling harasser to stop. • Threatening the harasser. • Disciplining the harasser (if in a position to do so). </p>	<p>Quadrant 4 Advocacy seeking Not frequently used but very effective for ending harassment: <ul style="list-style-type: none"> • Reporting the behaviour to a supervisor, other internal official body or outside agency. • Asking another person (e.g. friend) to intervene. • Seeking legal remedies through the court system. </p>

Figure 1: Typology of Target Responses to Sexual Harassment

Source: Knapp, et al., (1997). Determinants of Target Responses to Sexual Harassment: A Conceptual Framework

Sexual Harassment Interventions

Clearly, the hidden costs of harassment are enormous. It is in every institution’s stakeholders’ interest to be proactive and prevent the problem, rather than having to redress it after damages have been suffered (Ritchie, 2006). Aware individuals can play a major role by bringing the seriousness of harassment to the attention of administration, staff and students, by helping to formulate and implement appropriate policies, and by helping victims to deal with the consequences of harassment (Prekel, 2001).

Hunt, et al., (2007) proposes three basic types of intervention that can be implemented by institutions to prevent or deal with sexual harassment: preventative, responding to sexual harassment, and follow-up.

Preventative actions include a range of initiatives. First, policy formation is crucial. There are two distinct approaches to this: a 'top-down' and a 'consultative' approach. The consultative approach is advocated by researchers, who emphasize the importance of involving multiple stakeholders. Similarly, a bottom-up approach is the most successful, where students and student representatives are fully involved with management in developing and owning relevant policies and programmes. This should aim to develop a culture of respect and focus on the beliefs, behaviour and norms within an institution. Linked to this is the importance of a strong zero

tolerance policy towards sexual harassment, although this may prove unpopular in some situations. Second, training can be used to raise awareness and understanding of sexual harassment and to help equip students with the necessary skills to deal with it. Few studies have looked at the effectiveness of training but those that exist suggest that it is particularly effective for changing students' attitudes.

Responses to sexual harassment include ways in which complaints are made and dealt with within an institution. It can be very difficult to make a complaint, especially if the institution does not have clear policies and procedures in place (Witkowska, 2007). For a complaints procedure to be effective it must be clear and well-communicated, students must have confidence that their complaints will be taken seriously and treated confidentially, feel reassured that they will not be victimized and that the whole process will be handled reasonably quickly. Follow-up interventions in the aftermath of a complaint of sexual harassment include rehabilitation of the person who has suffered sexual harassment, the perpetrator and others involved. It is vital that procedures are in place to prevent victimization or a backlash against the student who complained of harassment. A number of universities have published good practice guides covering sexual harassment. These include: changing the institutional culture to one where harassment is not tolerated; establishing effective policies and procedures; training for all employees; commitment and support from senior staff; providing those who experience harassment with independent support and effective monitoring systems (Hunt, et al., 2007).

As Milne (2003) claims, the person who has been sexually harassed is likely to have reservations about trusting those whom they regard as in a role of authority – including a therapist. The counsellor thus may be experienced in the transference as a potential harasser. In working with the client, assertiveness training may come in handy (Bayne, 2006). A client who has been sexually harassed brings with him/her a lack of faith in justice, a feeling that he/she has been blamed and not heard or believed (Ritchie, 2006). Ritchie further claims that regardless of the therapist orientation, the dynamics of sexual harassment will be central to the therapist-client relationship. Unfortunately, as Sands (2000) asserts, for a significant number of clients, therapy has turned out to be – in spite of the therapists' duty to care – a negative and damaging experience. Issues such as abuse of power, one person controlling another, sexualisation of contact, humiliation or force are always close to the surface in any exchange (Ritchie, 2006).

Both the harasser and victim need counselling (Prekel, 2001). The harasser has needs which he/she meets and the victim has acquired a lot of symptoms from the ensuing trauma of sexual harassment. The best theory for both cases is the behavioural model, which provides techniques that can be applied in coping with specific problems. Individual psychotherapy, anxiety management training, behavioural change, communication training, relaxation training, social skills and assertive training are some of the skills the victim will need to learn (Lazarus, 1995).

Methodology

Measures

The survey was exploratory by nature, and the questionnaire employed had not been psychometrically validated. Thus, it may not fully have represented the higher order construct in which sexual harassment actually consists. In this study the researcher did not, at any point, use the behavioural scales as forming an additive representation of sexual harassment as a construct.

However, the most important validity in this study was content validity, which was assured through doing collation of the structure of questionnaire with the research objectives and literature review. This was done with close consultation with research experts in the Department of Psychology, Counselling and Educational Foundations. Reliability for this research was enhanced through internal consistency of the questionnaire items. The instrument was piloted using 30 undergraduate students who were selected from campus purported to have similar characteristics as the actual population of study. Cronbach's alpha coefficient was used to determine the reliability of the instrument. The research yielded a reliability coefficient of 0.79 which is greater than the critical value (Cronbach's alpha) of ≥ 0.7 and therefore, the research was considered reliable as suggested

Sampling Procedure and Samples

Respondents were purposively sampled from the Njoro Campus of Egerton University which has a population of over 7,000 undergraduate students. Stratified random sampling was then done at Faculty level to choose three out of the seven established Faculties. Further stratification was done by Year of Study where the researcher purposively sampled second, third- and fourth-year strata. Simple random sampling was then applied within each population stratum to generate the study sample ($n = 389$). The sampled respondents completed a sexual harassment questionnaire that factored in forms, prevalence and perception. The questionnaire was distributed to respondents during the lecture time and collected at the end of the lesson.

Data Analysis

Data generated by this study was mostly quantitative and therefore descriptive statistics were used in the data analyses in this study. Forms of sexual harassment were derived from sexually harassing behaviours witnessed, experienced and perpetrated on campus. Prevalence was derived from the mean frequency of sexually harassing behaviours witnessed, experienced and a general opinion rated from respondent's rating. Perception of sexual harassment was codified into two artificial categories, that is low and high perception based on students' percentage scores on a contingency table that comprised items scored on a 1 to 5-point Likert scale from 1 = Strongly Disagree (SD) to 5 = Strongly Agree (SA). Negative statements were scored in the reverse order and a mean score of 2.5 out of the maximum 5 points on the Likert scale was taken as the transition point for low and high perception. Data analysis was done using descriptive statistics (percentages, frequencies, and tables). This was done using SPSS - 15.

Results

In a cross-sectional descriptive survey, a sample of 389 undergraduate students, 258 males (66.3%) and 131 females (33.7%) who were aged between 18 to 29 years filled a sexual harassment questionnaire. It was established that two thirds of these (65.3%) had been subjected to sexual harassment prior to campus life. These were composed of 65.5% males and 64.9% female. To objectively identify the major forms of sexual harassment experienced on campus, three items were factored into the questionnaire.

Forms

Forms of sexual harassment were generated by examining the sexually harassing behaviours witnessed and/or experienced by respondents on campus. The general opinion of the prevalence

of these sexually harassing behaviours on campus was also examined to confirm the major forms of sexual harassment in academia.

The major sexually harassing behaviours based on respondents' eye witness were: forced fondling 34%; unwarranted pressure for sex 25%; indecent exposure of sexual body parts in public 24%; Sexual insults 24%.

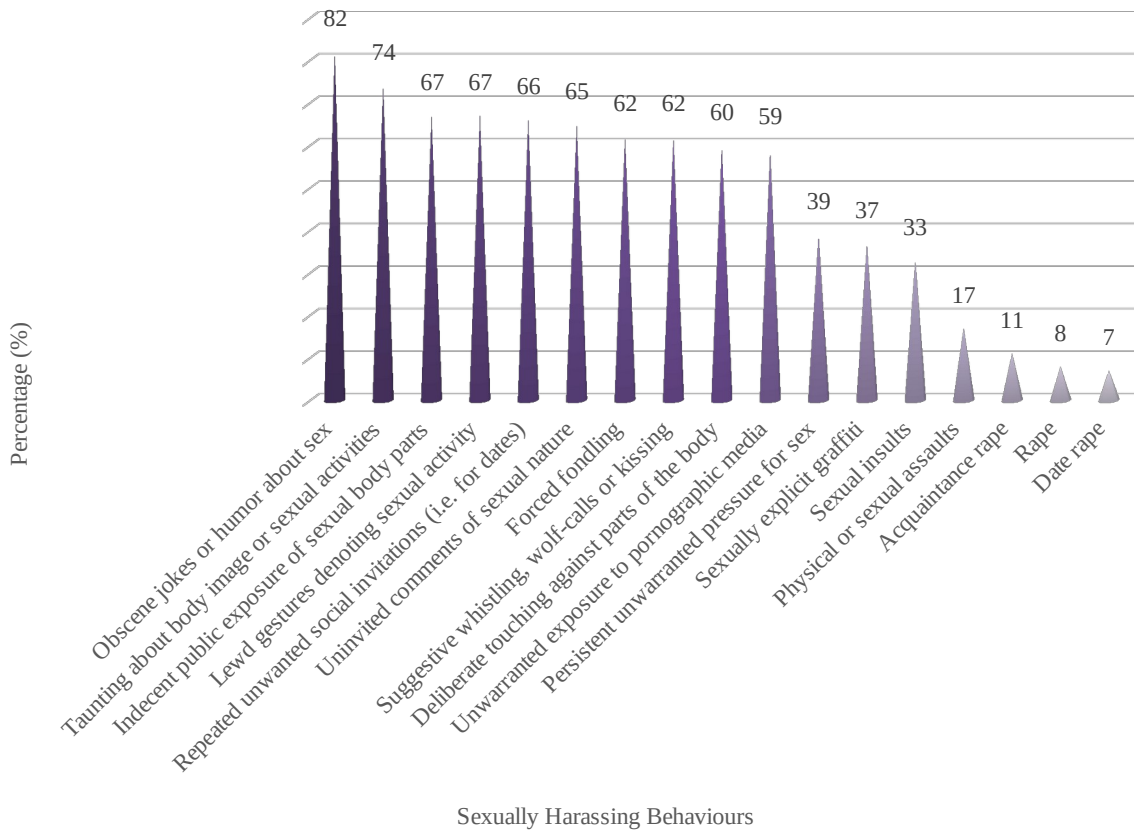


Figure 2: Sexually Harassing Behaviours Experienced by Respondents on Campus

As shown in Figure 1, the most prevalent forms of sexual harassment were derived from those whose experienced rating exceeded 50% threshold. These are:

1. Obscene jokes or humour about sex (82%)
2. Taunting comments about body image or sexual activities (74%)
3. Indecent public exposure of sexual body parts (67%)
4. Lewd gestures denoting sexual activity (67%)
5. Repeated unwanted invitations to social activities (66%)
6. Uninvited comments of sexual nature (65%)
7. Forced fondling (62%)
8. Suggestive whistling, wolf calls or kissing sounds (62%)
9. Deliberate unwanted touching of parts of body (60%)
10. Unwarranted exposure to pornographic media (59%)

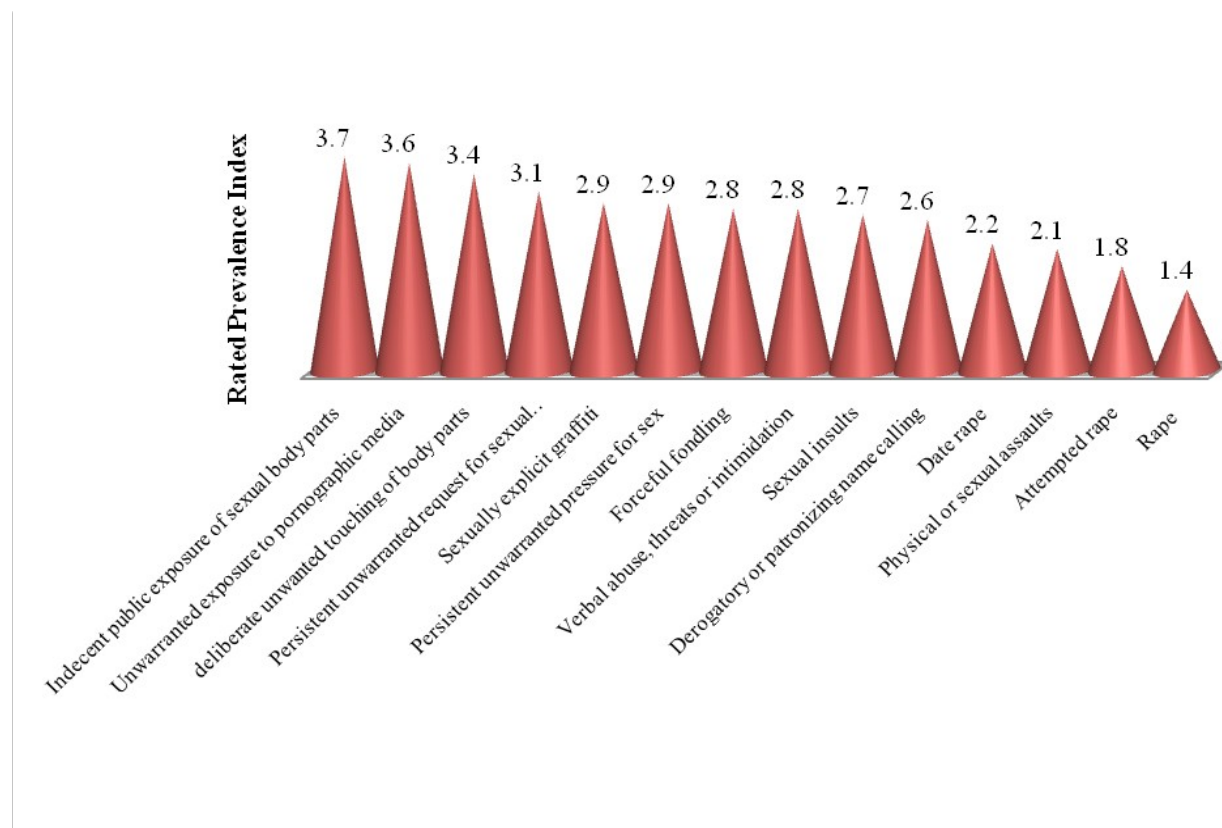


Figure 3: Rated Prevalence Index for Sexually Harassing Behaviours on Campus

From the prevalence indexing of sexually harassing behaviours presented in Figure 2, the major forms can be derived. The most common was indecent exposure of sexual body parts in public (3.7) followed by unwarranted exposure to pornographic media (3.6) and deliberate unwanted touching of body parts of another student. Others are persistent unwanted requests for sexual favours (3.1) exposure to sexually explicit graffiti (2.9) and persistent unwanted pressure for sex (2.9).

Prevalence

Operationally, prevalence of sexual harassment was defined as a composite variable derived from the mean score of non-missing students' responses based on frequency of perpetration, personal experiences and general opinion. A percentage of respondents who had witnessed their colleagues being subjected to sexually harassing behaviours was also generated.

Respondents admitted on a scale of 1 'never' 2 'once or twice' and 3 'often', the frequency with which they had sexually harassed a colleague on campus. The transition point for low, moderate and high prevalence based on perpetration index was therefore ≤ 1 ; ≤ 2 and ≥ 2 respectively. An overall index of 1.37 which ≤ 2 was generated to imply that based on this parameter sexual harassment was moderately prevalent.

Prevalence based on personal experience was derived from a composite variable derived from the mean score of non-missing students' response on 18 closed-ended question items on a YES = 1 and NO = 0 scale where the transition point low, moderate and high prevalence was ≥ 0.33 ,

≤ 0.67 and ≤ 0.67 respectively. The study yielded an overall mean index of 0.46 which implies a moderate prevalence level.

On 14 closed-ended question items on a 5-point Likert scale, namely: least frequent = 1; less frequent = 2; moderately frequent = 3; frequent = 4 and very frequent = 5, respondents rated their general opinion on the prevalence of sexually harassing behaviours within the campus. A transition point of ≤ 1.7 ; ≤ 3.3 and ≥ 3.3 was taken to constitute low, moderate and high prevalence respectively. The study yielded an overall prevalence index of 2.7 which is ≤ 3.3 and therefore moderate.

This was apparently contradicted by the fact that 75% of the respondents comprising 74% of male and 76% of female respondents claimed to have witnessed a colleague being sexually harassed on campus. If prevalence rating was to be based on these findings, it would have been concluded that harassment was highly prevalent. It was not established why respondents felt that sexual harassment was moderately prevalent when they had witnessed high incidence of perpetration.

Perception

To judge the perception of sexual harassment among students, a contingency table was generated from the questionnaire items that were designed to measure this variable. The mean perception index was 3.83 which imply that university students are perceptive of sexual harassment on campus. However, when respondents were required to indicate whether in their opinion they had been subjected to sexual harassment on campus, only 43% of the total sample which comprised 37% male and 54% female students perceived themselves as victims. this implies that though there is high perception of sexual harassment on campus, there was also an observed strong resistance to label sexually harassing behaviours appropriately.

Conclusion

The study established that two thirds of university undergraduates are subjected to sexual harassment before they join campus. Sexual harassment is highly prevalent on campus. Many students are subjected to many of the potentially offensive behaviours without labelling them as sexual harassment, despite the fact that they see the behaviours as problematic. Even though many people stereotype male students as the social aggressors and female students as the most likely recipients of sexual harassment, there is no gender difference in the perpetration of sexual harassment. Both male and female university students of are highly perceptive of sexually harassing behaviours within the university.

According to Prekel (2001), many practical steps can be taken as part of an integrated programme to counter harassment. First, a clear policy from the administration should be put in place. Awareness of the problem, one's own, and others' rights should be promoted through appropriate measures. The university should also set up clear complaints and disciplinary procedures. Although no policy can be expected to eliminate the problem, awareness of the problem and ways to deal with it will help to reduce its prevalence dramatically. The appropriate professionals must also assist victims of past and present harassment to overcome the negative effects of that experience (EEOC, 2001).

This study employed a very broad theoretical and operational definition of sexual harassment. However, there is no indication that this unreasonably inflated the results. Lack of questions establishing contextual factors of the incidents may be considered a weakness of the data collection tool. Nevertheless, this study asked about specific behaviours so that sexual harassment was operationalized and very specific. Therefore, from the study, there are several recommendations that can be put forth: Generally, greater efforts are needed to analyze and effectively counteract sexual harassment in academia. They need to employ more sophisticated measurements and adopt education and prevention strategies that incorporate an understanding of the complex nature of the phenomenon and perceptions of it. Aggressive awareness campaigns should be conducted in universities to raise the awareness of sexual harassment on campus. Awareness of the problem, one's own, and others' rights should be promoted through the appropriate measures. The university students counselling departments should organize a programme for psychological debriefing and trauma counselling for the students whose entry into the university is preceded by experiences of sexual harassment. Both perpetrators and survivors of sexual harassment should be accorded the necessary mental health assistance to help them cope with their experiences. Clear sexual harassment policy should be put in place adopting the consultative and participatory approaches to policy formulation and implementation to enhance the success index in combating the phenomena within campus premises. The universities should set up clear complaints and disciplinary procedures that should be well-communicated, so that students have confidence that their complaints will be taken seriously, treated confidentially with assurance that they will not be victimized, and that the whole process will be handled reasonably quickly. Training of all students' leaders (not just peer-counsellors and students union leaders) should be used to raise the awareness and understanding of sexual harassment and to help equip individual with the necessary skills to deal with it

There are some areas, which require further investigations in order to have more insight into sexual harassment in academia as well as enrich the present knowledge. First, an investigation into the factors that contributes to the perceived strong resistance of respondents to labelling oneself as a victim of sexual harassment. A survey on university student's harassment awareness training and its effectiveness in influencing their perception of sexual harassment could also be conducted with view to training needs assessment.

References

- Amanda, M., & Ashley, C. (2006), *Drawing the Line: Sexual Harassment on Campus*. Retrieved from <www.aauw.org/dtl>
- American Association of University Women (AAUW), (2006). *Drawing the Line: Sexual Harassment on Campus*. Retrieved from <www.aauw.org/dtl>
- Andersen, M. L. (2000). *Thinking about Women: Sociological Perspectives on Sex and Gender*. Boston: Allyn and Bacon
- Bayne, R., (2006). Psychological Type Theory. In Feltham, C. and Horton, I. E. (Eds), (2006). *The Handbook of Counselling and Psychotherapy*. (2nd Edition). London: Sage Publications.
- Berk, L. (2006). *Child Development* (7th Edition) Boston: Allyn & Bacon.
- Bhattacharyya, G., (1994). "Offence is the Best Defence? – Pornography and Racial Violence", in Brant, C. and Too, Y. L. (eds), (1994) *Rethinking Sexual Harassment*. London: Pluto Press.

- Boland, M. L., (2002), *Sexual Harassment: Your Guide to Legal Action*. Naperville, Illinois: Sphinx Publishing.
- Brant, C., & Too, Y. L. (1994). *Rethinking Sexual Harassment*. London: Pluto Press.
- Brown, K. R. (2006). Sex, Power and Dominance: The Evolutionary Psychology of Sexual Harassment. *Manage. Decis. Econ.* 27, 145–158 (2006). Retrieved from www.interscience.wiley.com
- Chamberlain, L., Crowley, M., Tope, D., & Hodson, R. (2008). Sexual Harassment in Organizational Context. *Work and Occupations*, 35(3), 262-295.
- Chege, F. (2006). *Teacher Identities and Empowerment of Girls against Sexual Violence*. A UNICEF Publication
- Dziech, B. W., & Weiner, L. (1990). *The Lecherous Professor: Sexual Harassment on Campus*. Chicago Illinois: University of Illinois Press.
- Equal opportunities commission (EOC). (2001). *News Release: Sexual Harassment is no Joke*. Retrieved from: <http://www.eoc.org.uk/cseng/news>
- Fitzgerald, L. F. (1993). Sexual Harassment: Violence against Women in the Workplace. *American Psychologist*, 48, 1070 – 1076.
- Gruber, J. E., & Fineran, S. (2007). The Impact of Bullying and Sexual Harassment on Middle and High School Girls. *Violence against Women*, 13(6), 627-643.
- Howard-Hamilton, M., Phelps, R., & Torres, V. (1998). Meeting the Needs of All Students and Staff Members: The Challenge of Diversity. *New Directions for Student Services*, 82, 49-65.
- Hunt, C., Davidson, M., Fielden, S., & Hoel, H. (2007). Sexual Harassment in the Workplace: A Literature Review. *EOC Working Paper Series No. 59*. Retrieved from: www.eoc.org.uk/research.
- Hurley, A., & Fagenson-Eland, E. (1996). Challenges in cross-gender mentoring relationships: psychological intimacy, myths, rumours, innuendoes and sexual harassment. *Leadership & Organization Development Journal*, 17(3), 42–49.
- Jones, A. (1996). Desire, Sexual Harassment, and Pedagogy in the University Classroom. *Theory into Practice*, 35 (2), 102-109.
- Kastl, M., & Kleiner, B. (2001). New Developments Concerning Discrimination and Harassment in Universities. *International Journal of Sociology and Social Policy*, 21(8/9/10), 156-164
- Kayuni, H. M., (2009). The Challenge of Studying Sexual Harassment in Higher Education: An Experience from the University of Malawi's Chancellor College. *Journal of International Women's Studies*, 11(2), 83-99.
- Knapp, D. E., Faley, R. H., Ekeberg, S. E., & Dubois, C. L. Z. (1997), Determinants of Target Responses to Sexual Harassment. A conceptual framework. *Academy of Management Review*. 22, 687-729.
- Krug, E. G. et al (2003). The Way Forward: Recommendations for Action. In: Krug E., Dahlberg, L., Mercy, J.A., Zwi, A.B., Lozano, R. (2003). *World Report of Violence and Health*. Geneva, Switzerland: The World Health Organization. 2003, 241-254.
- Lazarus, A. A. (1995). Multimodal Therapy. In Corsini, R., & Wedding, D. (eds.) *Current Psychotherapies* (5th Edition) (pp. 322-355). Hasca: F.E- Peacock.
- Martin, J. (2008). Peer Sexual Harassment Finding Voice, Changing Culture-An Intervention Strategy for Adolescent Females. *Violence against Women*, 14(1), 100-124.

- Milne, A. (2003). *Teach Yourself Counselling*. Ontario: McGraw-Hill.
- Mohipp, C., & Senn, C. (2008). Graduate Students' Perceptions of Contra-power Sexual Harassment. *Journal of Interpersonal Violence*, 23 (9). 1258-1276.
- Murnen, S. K., & Smolak, L. (2000). The Experience of Sexual Harassment among Grade-School Students: Early Socialization or Female Subordination? *Sex Roles*, 43(1/2), 1-17.
- National Coalition for Women and Girls in Education (NCWGE), (1997). Title IX at 30: Report Card on Gender Equity. *Title IX Report Card*. Washington D.C: National Women's Law Centre.
- Palmer, C. T., & Thornhill, R. (2003). Straw Men and Fairy Tales: Evaluating Reactions to a Natural History of Rape. *Journal of Sex Research* 40, 249–255.
- Prekel, T., (2001). *Sexual Harassment: Causes, Consequences and Cures*. Retrieved from <http://www.capecgateway.gov.za/eng/guides/s/63925>.
- Rathus, S. A., Nevid, J. S., & Fichner-Rathus, R. (2000). *Human Sexuality in a World of Diversity* (4th edition). Boston: Allyn and Bacon.
- Ritchie, S. (2006). Rape and Sexual Harassment towards Women: in Feltham, C. and Horton, I. E. (Eds), (2006). *The Handbook of Counselling and Psychotherapy*. 2nd Edition. London: Sage Publications.
- Sands, A., (2000). *Falling for Therapy: Psychotherapy from a Client's Point of View*. Basingstoke: Palgrave Macmillan.
- Sigal, J., Braden-Maguire, J., Patt, I., Goodrich, C., & Perrino, C. S. (2003) 'Effects of type of coping responses, setting, and social context on reactions to sexual harassment'. *Sex Roles*. February: (157- 167).
- Skaine, R. (2001). Defining Sexual Harassment. In Satow, R. (Ed.) *Gender and Social Life*. Boston: Allyn and Bacon
- Stockdale, M. S., & Vaux, A. (1993). What Sexual Harassment Experiences Lead Respondents to Acknowledge Being Sexually Harassed? A Secondary Analysis of a University Survey. *Journal of Vocational Behaviour*, 43, 221-234.
- Thomas, A. M., & Kitzinger, C. (Eds.). (1997). *Sexual Harassment: Contemporary Feminist Perspectives*. Buckingham: Open University Press.
- Wanjala, S. (2000). Sexual Harassment in Education and Employment Institutions. In Kibwana, K., and Mute, L. (Eds), *Law and the Quest for Gender Equality in Kenya* (pp. 39-51). Nairobi. Claripress ltd.
- Whatley M. A., & Wasieleski, D. T., (2001). *The Incidence of Sexual Harassment in Academia: A Pilot Study*. In *Radical Pedagogy*. Available on www.03watley.org
- Witkowska, E., & Gillander Gådin, K., (2005). Have you Been Sexually Harassed in school? What Female High School Students Regard as Harassment. *International Journal of Adolescent Medicine and Health*, 17(4).
- Young, E. L., Allen, M., & Ashbaker, B. Y. (2004). Responding to Sexual Harassment in Special Education Settings. *Journal of Teaching Exceptional Children*, 36(4), 62-67.
- Young, E. L., Allen, M., Ashbaker, B. Y., & Smith, B. (2008). *Sexual Harassment among Students with Educational Disabilities: Perspectives of Special Educators*. Remedial and Special Education; RASE

Students' Perception of the Teaching Profession as Antecedents of Sustainability in Teacher Education

Henry K. Kiplangat and James Kay
Kabarak University

Abstract

Sustainability and sustainable development have increasingly become critical issues in teacher education and development. Since sustainable development in education is impossible without the professional competence of teachers, there has been a growing pressure for the reorientation of teacher education all over the world and Kenya in particular. However, the transformations in higher learning in Kenya have not been examined to establish the extent to which sustainability have been integrated. This paper explores students' perception of the teaching profession as an antecedent of sustainability in teacher education in Kenya. The present research was based on the socio-psychological model of sustainable behavior. Ex post facto cross-sectional design was used and purposive sampling methods was used to select four institutions of higher learning in Kenya. A structured self-response questionnaire and interview schedule. Quantitative data was analyzed by use of descriptive and inferential statistics using statistical tools with the aid of the Statistical Package for Social Sciences (SPSS) version 24.0. A sample of 376 respondents filled the questionnaire, resulting in a response rate of 94%. The observed mean age was 22 years with standard deviation of 2.23. Among respondents 216(57.4%) were male while 160(42.6%) were female. Research findings indicate that high 220(59%) percentages of respondents perceived sustainability in teacher education followed by moderate 148(39%) with a combined perception levels of 98%. This presents an implication that the idea of sustainability in teacher education has great potential for future developments in the programme. These study findings present significant implications for teacher preparation strategies for sustainable development in education. The study findings also shed light on the state of preparedness as well as advances made in Kenyan higher education in compliance with global trends in best practices for teacher education in face of sustainable development.

Key words

Sustainable education; teacher preparation; higher learning; 21st century skills; transformative pedagogy

Introduction

According to Barth, Michelsen, Rieckmann, and Thomas (2016), teacher education features prominently in recent academic research and publications on Education for Sustainable Development (ESD) in relation to the themes covered in Sustainable Development Goals (SDG) 4.7. In addition, teacher education has increasingly recognized the need to respond to the economic, social, cultural and political challenges taking place globally. For example, the changing cultural composition of many societies has led to many countries including intercultural competencies within their training of teachers (Cushner, 2011, 2012, 2014; Grant, & Portera, 2011). Increased interest in global citizenship and development education has come about as a result of a number of factors, such as, for example, the increasing multicultural nature of societies and the work of international development organisations (Baily, O'Flaherty, & Hogan, 2017; O'Flaherty et al., 2017). Greater importance has been placed on highlighting the

inequalities that exist in the world and the role we all play in causing or preventing such inequalities (Liddy, & Parker Jenkins, 2013). The Sustainable Development Goals decided by the United Nations include a goal centred on learners gaining the necessary knowledge and skills to promote sustainable development (UNESCO, 2015).

Studies from European and US scholars present extrinsic, intrinsic, and altruistic motives for choosing a teaching career (cf. Balyer, & Özcan, 2014; Kyriacou, & Coulthard, 2000; Thomson, Turner, & Nietfeld, 2012; Yüce et al., 2013). Extrinsic motives involve aspects not inherent in the immediate work, such as salary, status, and working conditions. Intrinsic motives encompass inherent aspects, relating to the meaning of teaching and the passion for teaching, subject knowledge and expertise. Altruistic motives entail perceptions of teaching as a valuable and important profession and the desires to support children's development and to make a difference in society. Intrinsic and altruistic reasons seem to be more frequent in what are termed 'developed countries' than in developing countries, where extrinsic reasons are more prominent (Azman, 2013; Watt et al., 2012). Likewise, Klassen et al. (2011), claim that motives for entering teacher education differ based on cultural background and accordingly there is no universal pattern of motives.

Objectives

The research sets out to achieve the following objectives:

1. To assess the perception of the teaching profession across universities in Kenya
2. To establish the influence of demographic characteristics on the perception of the teaching profession across universities in Kenya

Literature Review

Alkhalwaldeh (2017) argued that teacher education for sustainable development is an educational paradigm that considers life-long professional development and learning of teachers as the main hub of teaching practice. Sustainability and sustainable development have recently become widely discussed in the educational arena, in general, and in teacher education and development, in particular. For example, Salite (2015) called for the reorientation of teacher education towards sustainable development. At the heart of the debate on sustainable professional development of teachers, there is the shift from traditional one to more school-based teacher professional development, which the present study attempts to address. Recently, sustainable education and teacher education integration into the wider system of higher education and teacher education milieu have attracted the attention of policy makers, educationists and researchers. Teachers are urged to equip themselves with new skills and high standard professional knowledge to assume new roles and responsibilities in sustainable education in their societies (Kabaday, 2016). Teacher education in the context of sustainable education should abandon conventional teaching models and shift to a transformative model of education to account for the twenty-first-century humanity demands for living sustainably in a globalized world (Bell, 2016). With this new trend in teacher education, teachers are essentially required to exhibit teacher renewal and professionalism.

According to Williamson and McDiarmid (2008), the continuum of teacher learning as well as teacher education turns out to be indispensable in a lifelong learning process, which implies the demand for extended teacher professionalism. This implies that teacher education and learning,

which the present study is premised on, should continue through the whole teacher development and should feature all teacher experiences during career long learning.

Eslamian, Jafari, and Neyestani (2017) claim nowadays-educational systems have an important mission for responding to the needs of different communities. The complex organizational nature of educational centers, accompanied by evolving pedagogies, requires multiple professional development strategies to effectively address needs, respond to emerging trends in teaching and learning and facilitate improvements (Mohammadi,& Moradi, 2017). Sustainable development of education is impossible without the professional competence of teachers. Special attention should also be paid to the training of teachers, youth leaders and other educators (UNESCO, 2005). In this way, the problem of improving the teachers' professional competence is relevant in terms of sustainable development of education (Korsun, 2017), and for educational improvement, teacher professionalism is essential (Reid,& Horváthová, 2016). Yoo (2016) has argued that to ensure sustainable development, educators should focus on studies related to teacher programmes.

Continuous professional development can help teachers not only understand sustainable development concepts and issues but also experience life-long learning, thus becoming responsible mentors for sustainable education. It requires teachers to be learners, researchers, and collaborators, to reflect on their teaching practices and improve professional proficiency (Mohammadi,& Moradi, 2017). Understanding teachers' professional proficiency and their training needs, government and university level policies and directives can provide more targeted in-service courses or workplace learning support for teachers to attain their goals for sustainable development (Kabadayi, 2016).

The Concept of Sustainability

According to Gaudiano, Meira-Carteia and Martínez-Fernández (2015), the incorporation of sustainability into Higher Education institutions is a relatively new process. Its history can be traced back to the foundation of the Environmental Sciences Formation International Center in 1975. Then in 1985, the University and Environment in Latin America and Caribbean Seminary was founded in Bogotá, Colombia. However, despite progress, sustainable development is not yet a finished concept. In the literature, the definition of sustainable development, proposed in 1987 by the Brundtland Report (UNESCO, 2017), is widely accepted: The development that satisfies the needs of the present generation, without compromising the capacity of the future generations to satisfy their own needs. It is a paradigm to think in a future where the environmental, social and economic considerations are balanced in the search of a better life quality.

The sustainable development concept initially had a political connotation. Later, "sustainability" was used in a more critical sense that had been lost over time. Some IES conventionally used either concept, without considering the implications (Gaudiano, Meira-Carteia, & Martínez-Fernández, 2015; Martínez-Fernández,& Gaudiano, 2015). According to Gutiérrez and Martínez (2010), the emphasis was first on the environment, but sustainable development now emphasizes social, economic, political and religious dimensions. As these polysemic concepts of sustainable development and sustainability developed, environmental education emerged as a strategy to understand and address the growing environmental problems.

Methodology

Research Design of the Study

This mixed method study included qualitative and quantitative data. The study was quantitative and utilized an *ex post facto* cross-sectional survey design. The purpose of the inferential approach was to provide data from which correlations were computed and the relationship between variables examined. Kothari (2014) suggests the use of *ex post facto* design in studies which the researcher does not manipulate the variables under study which was the case in the present study. The cross-sectional survey design was appropriate for this study because data was collected from a cross section of sampled universities. The study was conducted in selected institutions of higher learning in Nakuru, Laikipia and Kericho Counties in, Kenya. Each county consists of urban and rural regions where a cross-section of both private and public university campuses have been established. With the establishment of a centralized university placement, the population in these institutions are not only cosmopolitan but also represent a cross-section of all communities in Kenya. This significantly enhances the external validity of the study findings. Multi-stage sampling procedure was used to generate a sample of 400 respondents. First, stratified sampling procedure was used to group the target population into two strata based on university ownership. One stratum was public universities (4) and the other private universities (3). Stratification ensured heterogeneity in the final sample since university ownership may present unique characteristics that might have implications on the research findings. In this study the designed the demographic items, sustainable teacher education scale and the sustainable distance learning scale. The reliability of the instrument was measured by Cronbach's alpha, which was found to be .86. This value is above .7, so the questions used in this test can be considered reliable with the sample. The required research authorizations were sought before data collection commences. Data collection in each university took place in the same location to help improve on the rate of return. After the sampling exercise, the data collection exercise began with a brief explanation on the aim of the study followed by distribution of questionnaire. Questionnaires then were distributed to those willing to participate. The exercise was deemed over when all the respondents returned the questionnaires to the researcher.

Data Analysis

Collected data was quantitative and therefore data will be analysed in both descriptive and inferential statistics. Data analysis was done by means of statistical tools with the aid of computer software, the Statistical Package for Social Sciences (SPSS) version 25.0.

Ethical Consideration

Ethical principles are concerned with protecting the rights, dignity, and welfare of research participants (Baker, Pistrang, & Elliott, 2002). The key areas for consideration within this study centred on anonymity, confidentiality, and informed consent, voluntary participation of respondents and data handling and storage. The respondents were required to read the consent forms and acknowledge that they had understand what was involved in the study and that they were willing to participate. The respondents were assured of confidentiality through writing, indicating that the responses or data collected would not be presented in a way that would be identified with any respondent or university.

Results

A sample of 376 respondents filled the questionnaire, resulting in a response rate of 94%, which was considered good for survey research not only according to Babbie (1995, but also according to the findings of Asch and Colleagues (1997). The observed mean age was 22 years with standard deviation of 2.23. Among respondents 216(57.4%) were male while 160(42.6%) were female. It was also observed that 16(4.3%) of respondents were married, 356(94.7%) ‘Single’, 4(1.1%) neither ‘married’ nor ‘single’, a category designated ‘other’. Data revealed that 118(31.4%) of respondents were public while 258(68.6%) were from private universities. It was observed that 297(79%) were full time mode of study compared to 79(21%) who were enrolled on online and distance learning. Data revealed that 250(66.5%) of the respondents were in second year compared to 67(17.8%) who were in fourth, 35(9.3%) third, 19(5.1%) first while 5(1.3%) belonged to other years of study.

Perception of Teacher Education

Sustainability in teacher education was made operational by means of 11 items measuring the perceptions of respondents. Each was required to respond to a 5-point Likert scale measuring the level of agreement. The findings are presented in Table 1

Table 1
 Respondents Perception of Teacher Education

	Level of agreement									
	1		2		3		4		5	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Item 1	72	19.1	32	8.5	32	8.5	20	5.3	220	58.5
Item 2	100	26.6	16	4.3	36	9.6	32	8.5	192	51.1
Item 3	192	51.1	16	4.3	32	8.5	24	6.4	112	29.8
Item 4	68	18.1	16	4.3	24	6.4	24	6.4	244	64.9
Item 5	60	16	28	7.4	52	13.8	28	7.4	208	55.3
Item 6	128	34	52	13.8	36	9.6	32	8.5	128	34
Item 7	68	18.1	32	8.5	32	8.5	32	8.5	212	56.4
Item 8	40	10.6	56	14.9	40	10.6	28	7.4	212	56.4
Item 9	52	13.8	20	5.3	40	10.6	32	8.5	232	61.7
Item 10	56	14.9	8	2.1	44	11.7	40	10.6	228	60.6
Item 11	16	4.3	24	6.4	24	6.4	68	18.1	244	64.9

The study findings presented a positive implication for the perception of teacher education as currently constituted in Kenyan teacher preparation institutions. It was observed that high perception index was observed for many items measuring the perception of teacher education. Among sampled respondents, a 220(58.5%) presented an observed agreement level of 5 and 20(5.3%) at level 4 for item 1 which stated that *a career in education was my first choice for university degree*. This is reflective of the findings by Ulrika, Stefan, Lena, and Annbritt (2018) who observed that among students, intrinsic and altruistic motives for choosing a career in education are frequent.

Respondents whose level of agreement with item 2 of the tool (*Given another chance I would still choose a career in education*) ranged above 4 accounted for a total of 151(59.6%) of the total sample. This observation can be linked to the assertion by Ulrika, Stefan, Lena, and Annbritt (2018) as well as Pop and Turner (2009) who observed that the students' own experiences at school form the basis for the expressed feelings concerning teaching and teacher education. This in turn play significant role for the construction of pedagogic identities. A reasonable consequence of the difference between the teacher programmes is that the future upper secondary school teachers will try to recreate their positive experiences to a greater degree while compulsory school student teachers will seek to create a somewhat different school than the one they experienced. Thus, the pedagogic identities of the former group will function retrospectively and conservatively, and the pedagogic identities of the latter group will function progressively and autonomously, in a de-centred manner (Bernstein 2000). This explains the feeling that respondents would still choose the teaching programme had they been given another chance.

Respondents who felt that *teachers should be more appreciated in society* accounted for 24(6.4%) and 244(64.9%) at level 4 and 5 respectively, thus giving a total 71.3% of high level of agreement. Environmental education is an important element of sustainability and a core component in teacher preparation. Respondents who perceived that importance accounted for 236(62.7%) comprising 28(7.4%) and 208(55.3%) at level 4 and 5 respectively, that *environmental education is an essential part of teacher training in our university*. An observed 64.9% of the sample scored high on the perception level of the fact that *all students can succeed in education*. In addition, an observed 63.8% of selected respondents highly agreed with the statement: *I am satisfied with the assessment strategies for educational course at the university*. High perceptions were observed among respondents who felt that *it is easier to get a job with a degree in education* 70.2% at level 4 and 5 respectively. Respondents who registered high levels of agreement with the statement that *Teacher education is relevant for national development* accounted for 71.2%.

Finally, the highest scores were observed for respondents who felt that '*Teaching is a comfortable job*' where 68(18.1%) presented agreement level 4 and 244(64.9%) were at level 5 giving a combined agreement of 83%. The perception of "comfortable" in the career of teaching was viewed in this study to imply a profession that was comparatively less stressful compared to other prospective careers. This could be attributed in part to school holidays, ample family time, perceived job security, and 'break' times that characterise daily routine. This is supported in research carried out among 157 teacher candidates in Turkey where it was observed that a significant proportion of respondents chose teaching because of the long holidays and comfortable working conditions (Cermik et al. 2010). The findings are also congruent with a study by Gao and Trent (2009) on the motivations of students from Mainland China enrolled in teacher education programs in Hong Kong, where it was established that students' choice of teaching career was based on the perception of the profession as pleasant and devoid of the complexities involved in other disciplines. However, the findings were at variance with the findings in a study by Foley and Murphy (2015) as well as Hassan, Jani, Som, Hamid, and Azzizam (2015) who reported that teaching is a stressful career.

Overall Perception of Teacher Education

A dummy variable that grouped the perception index to *low*, *moderate* and *high* was generated to explore the distribution of overall perception of sustainability in teacher education. Out of the 55 possible points comprising 11 items where each had 5 possible point, the transition points were <18 and >36 for *low* and *high* perception index respectively and *moderate* perception at >18<37. The frequencies for each category were run and the results are presented in Figure 1

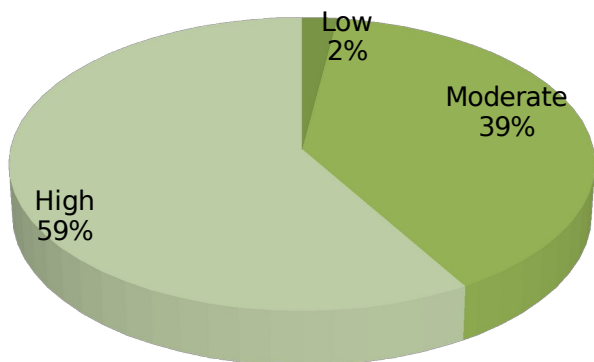


Figure 1: Overall Respondents Perception of Sustainability in Teacher Education (N = 376)

Data presented in Figure 1 indicates that high percentages of respondents perceived sustainability in teacher education clustered around the *high* zone 220(59%) followed by *moderate* 148(39%) and then *low* 8(2%). Combining the *moderate* and *high* perception levels gives a total of 98% of respondents who felt that the mode was viable. This presents an implication that the idea of sustainability in teacher education has great potential for future developments in the programme.

The Gender Factor in Perception of Teacher Education

In this study, gender was considered as an important factor in the perception of teacher education. Analyses were therefore grouped according to gender and the findings presented in Table 2.

Table 2

Distribution of Respondents Perception of Teacher Education by Gender

	Male (n = 216)			Female (n = 160)		
	Low	Moderate	High	Low	Moderate	High
Item 1	56(26%)	16(7.4%)	144(76.7%)	48(30%)	16(10%)	96(60%)
Item 2	56(26%)	20(9.3%)	140(64.9%)	60(37.5%)	16(10%)	84(52.5%)
Item 3	104(48.1%)	20(9.3%)	92(42.6%)	104(65%)	12(7.5%)	44(27.5%)
Item 4	48(22.3%)	12(5.6%)	156(72.2%)	36(22.5%)	12(7.5%)	112(70%)
Item 5	44(20.4%)	36(16.7%)	136(63%)	44(27.5%)	16(10%)	100(62.5%)
Item 6	96(44.4%)	20(9.3%)	100(46.3%)	84(52.5%)	16(10%)	60(37.5%)
Item 7	48(22.2%)	28(13%)	140(64.9%)	52(32.5%)	4(2.5%)	104(65%)
Item 8	44(20.4%)	24(11.1%)	148(68.6%)	52(32.5%)	16(10%)	92(57.5%)
Item 9	32(14.8%)	20(9.3%)	164(76%)	40(25%)	20(12.5%)	100(62.5%)
Item 10	28(13%)	12(5.6%)	176(81.5%)	36(22.5%)	32(20%)	92(57.5%)
Item 11	16(7.5%)	16(7.4%)	184(85.2%)	36(22.5%)	12(7.5%)	112(70%)

Data presented on Table 2

6.3 Perception of Teacher Education in Relation to Type of University

The researcher set out to explore how respondents' placement influences their perception of teacher education. Placement was operationalized as either public or private universities. Analyses were therefore grouped according to category of university and the findings presented in Table 3.

Table 3
 Distribution of Respondents Perception of Teacher Education by Type of University

	Public (n = 118)			Private (n = 258)		
	Low	Moderate	High	Low	Moderate	High
Item 1	36(30.5%)	15(13%)	67(56.7%)	68(26.3%)	17(6.6%)	173(67.1%)
Item 2	40(33.9%)	11(9.3%)	67(56.8%)	76(29.5%)	25(9.7%)	157(60.9%)
Item 3	62(52.6%)	13(11%)	43(36.4%)	146(56.6%)	19(7.4%)	93(36.1%)
Item 4	28(23.7%)	6(5.1%)	84(71.2%)	56(21.7%)	18(7%)	184(71.3%)
Item 5	28(23.8%)	17(14%)	73(61.8%)	60(23.2%)	35(14%)	163(63.1%)
Item 6	56(47.4%)	11(9.3%)	51(43.2%)	124(48.1%)	25(9.7%)	109(42.3%)
Item 7	34(28.8%)	12(10%)	72(61%)	66(25.5%)	20(7.8%)	172(66.7%)
Item 8	29(24.6%)	16(14%)	73(61.9%)	67(26%)	24(9.3%)	167(64.7%)
Item 9	16(13.6%)	14(12%)	88(74.6%)	56(21.7%)	26(10%)	176(68.2%)
Item 10	23(19.5%)	12(10%)	83(70.4%)	41(15.9%)	32(12%)	185(71.7%)
Item 11	28(23.7%)	6(5.1%)	84(71.2%)	56(21.7%)	18(7%)	184(71.3%)

Correlation Matrix for Teacher Education by Demographic Characteristics

A correlation analysis was done for the various demographic variables taken to be key factors in the perception of teacher education. The findings are presented in Table 4

Table 4
 Correlation Matrix for Teacher Education by Demographic Characteristics

		1	2	3	4	5
Gender	Coefficient					
	Sig. (2-tailed)					
Marital Status	Coefficient	-.165**				
	Sig. (2-tailed)	0.001				
Type of University	Coefficient	-0.067	0.007			
	Sig. (2-tailed)	0.194	0.887			
Academic Status	Coefficient	0.058	-.157**	-0.017		
	Sig. (2-tailed)	0.263	0.002	0.743		
Year of Study	Coefficient	-0.1	0.054	-0.079	.110*	
	Sig. (2-tailed)	0.053	0.297	0.125	0.034	
Perception of Teacher Education	Coefficient	-.190**	-.116*	-0.012	-0.064	-0.004
	Sig. (2-tailed)	0	0.025	0.823	0.219	0.939

Chi-square test of significance for age2 factor in the perception of teacher education yielded $\chi^2=29.58(df=20)$ $p=0.77$ which was not statistically significant. It was therefore concluded that age does not influence the perception of teacher education and therefore is not an antecedent to sustainability teacher education. However, gender factor yielded $\chi^2=13.96(df=2)$ $p=0.001$ which was statistically significant. This implied that there was observed significant difference in the perception of teacher education based on gender. Based on these findings, it was inferred that gender was a strong antecedent to sustainability teacher education. Similarly, respondents' year of study yielded $\chi^2=23.642(df=8)$ $p=0.003$ which was statistically significant, implying that academic level influenced perception making it a strong antecedent to sustainability teacher education. It was observed that, respondents' mode of study (conceptualized as Part-time and Full-time) yielded $\chi^2=2.156(df=2)$ $p=0.284$ which was not statistically significant, leading to the conclusion that academic mode of study was not an antecedent to sustainability teacher education. Finally, it was observed that type of university yielded $\chi^2=3.863(df=2)$ $p=0.15$ which was not statistically significant. It was therefore concluded that university placement does not significantly influence the perception of teacher education and therefore is not an antecedent to sustainability teacher education.

Conclusion

The sustainability of teacher education is largely dependent on the social and professional perception of the discipline. These render impetus for choosing the teaching career and preconceptions of profession related to education. This in turn presents significant implications for the sustainability of the profession of teaching. The most important implication of this study is that institutions of higher learning draw their clientele from a cross section of Kenyan society. With a large sample coming from different regions of Kenya, the research findings provide useful insights into the students' perception of teaching as a career which was viewed in this study as a motivation acts as an antecedent of sustainability of teacher education. Second, the study draws attention to variations in the perception of aspects of the teaching profession through a socio-cultural value, which is a key component in career choice and factor in sustainability of education discipline. These values include the social perception of the teaching profession, its conditions as a profession, and the ease of securing a job for graduates of education programme. Understanding these antecedents presents significant implications for teacher educators and curriculum planners to grasp more clearly how public perceptions affect teachers' and prospective teachers' attitudes, and thereby to make teacher training programs more attractive. This would ultimately ensure continuity and sustainability in teacher education, whose consequence would be the achievement of sustainable development in other foci of the SDGs.

Recommendations and Areas for Further Study

First, this was a cross-sectional descriptive survey where the data collection tool was administered at only one point in time. Taking cognizance of the effect of time in shaping of attitudes towards phenomena it is reasonable to suppose that perceptions of teacher education might change during a student's academic progression, and this possibility (along with reasons for any changes) would be worth investigating.

References

- Babbie, E. (1995). *The practice of social research*(7th Ed). Belmont, CA: Wordsworth Publishing Company
- Bell, D. (2016). Twenty first century education: Transformative education for sustainability and responsible citizenship. *Journal of Teacher Education for Sustainability*.18(1), 48-56.
- Cermik, H., Dogan, B., & Sahin, A. (2010). Prospective elementary classroom teachers' motives for choosing the teaching profession. *Pamukkale Universitesi Egitim Fakultesi Dergisi*, 28(2): 201-212.
- Foley, C., & Murphy, M. (2015). Burnout in Irish teachers: investigating the role of individual differences, work environment and coping factors. *Teaching and Teacher Education*, 50, 46-55.
- Gao, X., & Trent, J. (2009). understanding mainland Chinese students' motivations for choosing teacher education programmes in Hong Kong. *Journal of Education for Teaching*, 35, 145-159.
- Gaudiano, E. J. G., Meira-Carrea, P. Á., & Martínez-Fernández, C. N. (2015). Sustentabilidad y universidad: retos, ritosy posibles rutas*. *Rev. de l Educación Suior*,44, 69–93.
- Gutiérrez, B. E., & Martínez, M. A. (2010). El plan de acción para el desarrollo sustentable en las instituciones de educación superior. Escenarios posibles. *Revista de la Educación Superior*, 154, 111–132.
- Hassan, N., Jani, S. H. M., Som, R. M., Hamid, N. Z. A., & Azzizam, N. A. (2015). The relationship between emotional intelligence and teaching effectiveness among lecturers atUniversiti Teknologi Mara, Puncak Alam, Malaysia. *International Journal of Social Science and Humanity*, 5(1): 1-5.
- Martínez-Fernández, C. N., & Gaudiano, E. J. G. (2015). Las políticas para la sustentabilidad de las instituciones de educación superior en méxico: Entre EL debate y la acción.*Rev. de l Educación Suior*,44, 61–74.
- Ulrika, B., Stefan, L., Lena, M., & Annbritt, P. (2018). Why become a teacher? student teachers' perceptions of the teaching profession and motives for career choice, *European Journal of Teacher Education*.
- UNESCO. (2017). Desarrollo sostenible.Retrieved from: <http://www.unesco.org/new/es/education/themes/leading-the-international-agenda/education-for-sustainable-development/sustainabledevelopment/>.
- UNESCO. (2005). Decenio de las naciones unidas de la educación para el desarrollo sustentable. Retrieved from: www.unesco.org/education/desd (accessed on 20 October 2017).

Social Media Neologisms; Made in Kenya for Kenyans: A case Study of Facebook

Vitalis Kandie
Kabarak University

ABSTRACT.

This study investigated the use of Kenyan generated neologisms in the social media. This study was informed by the fact that human language is a dynamic and an ever-changing phenomenon only stable in performing its communicative function. The researcher conducted a survey of Facebook, one of the most common social networking sites in Kenya, where people from all walks of life engage one another on a litany of issues touching on their lives be they personal, social, economic or even political. Facebook was chosen specifically as it has a wider outreach than all the other social networking channels. The researcher purposely sampled 50 neologisms of Kenyan origin in Facebook and thereafter using a descriptive qualitative data analysis approach made a description of the word formation processes involved in their generation. This study was able to identify and document a large number of neologisms on Facebook of Kenyan origin and laced with a local flavor. The study also made an analysis of the word formation processes involved in their creation. This study will go a long way in illustrating the universal feature of language as a dynamic and a productive artifact at human disposal and in addition this study will highlight the critical role played by social media as huge contributor to the evolution of language.

KEYWORDS: Neologisms, Speech community, Social media, Idiosyncrasies, Word formation processes

INTRODUCTION

The vastness of language in terms of resources and its openness to manipulation has allowed humanity to speak differently and over time create new words and new senses, which are known as neologisms. A neologism is a new way to express an idea or a concept, which was previously expressed by other words or in some cases nonexistent at all. Neologisms allow for the succinct expression of the speaker's intended meaning; it is also a refreshing way of looking at what life has to offer and more so it gives people the opportunity to curry meaning in a flavour befitting the situational context of the communicative act.

This study was based on the dynamic property of human language, which allows it to change its form to reflect a speech community's communicative needs in an everchanging social, political, economic and technological environment. The dynamic and the malleable nature of human language has allowed humanity to give a fresher outlook to everyday concerns to meet the insatiable human desire for novelty, the malleability of language also gives chance for people to exploit their creativity in self-expression.

The social media in Kenya is the new front of communication where people can instantly exchange information with a swipe of the screen. The five biggest social media platforms in Kenya include WhatsApp, Snapchat, Instagram, Linked-in, Twitter and Facebook. It is from the point of departure that Facebook is the most popular and accessible social networking site that this study chose to make a study of it in order to discover and document neologisms of Kenyan origin and given this popularity, Facebook is the melting pot of diverse speech peculiarities existing among members of the Kenyan speech community who commune online every day to shape ,reshape and share their experiences using a language best modified to capture their feelings, events, experiences and their environment. From Facebook interactions among Kenyans it was noted that language being a vehicle of expressing thought was remoulded in a manner fit

to express the Kenyan mind and the ultimate effect of this was a variety of neologisms created out neologisms.

This study focused on Facebook with the intent of revealing new words and senses that are uniquely Kenyan in origin and flavour. It also went ahead to foreground Kenya as a unique speech community with own peculiar interests all imprinted in their language.

The Study Problem

The media and especially the social media has grown tremendously worldwide as a fast and a reliable means of communication for sharing pertinent and urgent information on all aspects of life across the wide spectrum of members in society. The influence of social media interaction on language use cannot be down looked and this study chose to make an analysis of Facebook interactions among Kenyans in order to document linguistic peculiarities in the form of Kenyan generated neologisms which mark Kenya as a unique speech community, this study also was interested in the word formation processes employed in the creation of the new linguistic artefacts with a Kenyan flavour witnessed in Facebook interactions among Kenyans.

Research Objectives

This study was guided by the following objectives:

To identify neologisms of Kenyan origin with Kenyan flavour employed in the social media.

To document the word formation processes employed in the creation of the social media neologisms.

LITERATURE REVIEW

Facebook use in Kenya is so pervasive especially in an era where a large proportion of the populace own smart phones. Many Kenyans confess to logging to Facebook site in order to be updated and to understand what is going on in the world. In the words of Wyche, S (2015), “You get on Facebook you feel advanced, you have friends, you can send them snaps and they can exchange.” She also adds that almost all Kenyans have a Facebook account. According to Dotsavvy.com, Facebook is the biggest social media platform of all in Kenya with over six million active users; it further goes on to state that this figure is increasing, it further adds, “Facebook has gone so mainstream that even Kenyan grandparents use the platform to stay in touch. Therefore, from this perspective, it’s no brainer that you need to use Facebook to make any kind of decent impact via social media in Kenya.”

According to blog.oxforddictionaries.com (2014), the words that surround us every day influence the words we use. Since so much of the written language we see is now on the screens of our computers, tablets, and smartphones, human language now evolves partly through our interaction with technology and because the language we use to communicate with each other tends to be more malleable than formal writing, the combination of informal, personal communication and the mass audience afforded by social media is a recipe for rapid language change. According to Crystal, (2005) quoted in Onyedum, (2012), the internet will bear the biggest impact on English language in the 21st century and this by no means is applicable to all human languages. Katamba 2005; in Schulein, (2017), states that one of the external sociolinguistic factors for language change is the influence of technology and the related digitization, it further states that the

internet-based platforms have gone a long way in the introduction and propagation of new linguistic items and terminologies.

According to the Wikipedia – free encyclopedia, a neologism is a terminology derived from Greek *neo* – “new” and *logos* – “speech/utterance”. This term is used in reference for a relatively recent or isolated term, word or phrase that may be in the process of entering common use but has not yet been fully accepted into common language. Neologisms are often directly attributable to a specific person, publication, period or event.

According to *Encyclopedia of Autism Spectrum Disorders* (2013), neologisms are words that have been created by a speaker and are not considered to be part of the lexicon of a given at a given point in time. It further goes on to link neologisms with linguistic idiosyncrasies. In Kandie’s dissertation (2010), the term neologism has a broader meaning that includes not only an entirely new lexical item but also an existing word whose meaning has been altered in what is called semantic shifting or semantic extension, he further states that neologisms are usually introduced when an individual or individuals find lack of equivalence in existent lexemes to express the desired meaning.

Neologisms with a local flavor and Kenyan origin are used by Facebook users in Kenya not only to express new concepts but to also give a local interpretation of issues and to anchor them in a Kenyan perspective which otherwise would not be interpreted nor understood in a much succinct manner than when expressed with a local taste.

From research, it was established that there exist a number of mechanisms involved in the generation of neologisms; Facebook users in Kenya to generate neologisms laced with a Kenyan touch used some of the mechanisms discussed here. It is also worth noting that “*boda boda*”, a neologism of East African descent has entered the English dictionary and is now in mainstream usage as an English language lexeme, this is according to the *Star Newspaper, Kenya* (2017). It is also the presumption of this study that many more of the neologisms encountered in this study are likely to filter into mainstream usage of world languages like English, Swahili and even Kenyan native languages.

In *Neologisms in Mass Media* uploaded by Andrew Druta, neologisms tend to occur more often in cultures which are rapidly changing and also in situations where there is easy and fast propagation of information just like in the case of Facebook. Reed, (2014) states that the social media plays a very big role in contributing to language evolution, he further states that the social media can be a tool in gauging trends in language and furthermore he asks people who like make new inventions in language to employ the social media.

From research, it was established that there exist a number of mechanisms involved in the generation of neologisms; Facebook users in Kenya to generate neologisms laced with a Kenyan touch used some of the mechanisms discussed here. It is also worth noting that “*boda boda*”, a neologism of East African descent has entered the English dictionary and is now in mainstream usage as an English language lexeme, this is according to the *Star Newspaper, Kenya* (2017). It is also the presumption of this study that many more of the neologisms encountered in this study are likely to filter into mainstream usage of world languages like English, Swahili and even

Kenyan native languages. According to Andy Bodle (2016.), the following are some of the techniques available to the users of a language in the process of new word formation.

Derivation: This is the commonest method of creating neologisms by adding affixes to existing words.

Back formation: This is the creation of a new root word by removal of a phantom suffix.

Compounding: This is the juxtaposition of two existing words to create a word with a new sense.

Repurposing: This is the taking of a word from one context and applying it to another e.g. “*baba*” in Kenya is a Swahili word in reference to a *father* but in Kenyan context it is a political reference to leading figure in Kenyan politics.

Conversion: Involves the transformation of a word from one class to another in terms of meaning and function.

Eponyms: words named created in reference to the name of a person or a place.

Abbreviations: This is inclusive of clippings, acronyms and initialism.

Loan word: Involves the borrowing of words from one language to another, such borrowed words are put into regular use within the borrowing language.

Onomatopoeia: The creation of words in relation to the sound associated with the meaning created by the new word, for example the word *shizzle* in English is onomatopoeic.

Reduplication: refers to the repetition or the near repetition of a word or a sound. This is seen in the English words such as *love-dovey* or *flip flop*.

Coinage: This pure creation of new words.

Loan translation: A special kind of borrowing involving the direct translation of an element into the borrowing language.

Error: used in reference to misspellings, mishearings, mispronunciations and mistranscriptions.

Blending: This involves taking the beginning of one word and joining it to the end of another word to create a new word, which shares the properties of both. Examples of such words in English include; *modem*, *infotainment*, *brunch* etc.

Some of the techniques discussed above were replicated in the creation of neologisms encountered in this study. Mworia, (2015), made a study on use of English based neologisms on social media where she did a case study of Twitter, in her study she advocates for the study of Kenyan generated neologisms in the social media, it is from this point that this study departs.

Mahianyu (2016), studied lexeme based morphological analysis of English based Facebook neologisms whereas this study looks at indigenous Kenyan neologisms encountered on Facebook.

Onyedum, (2012), did a morpho –semantic analysis of English based neologisms on Facebook. This study is therefore an advance of the above studies in that it makes an exploration of indigenous Kenyan generated neologisms in the social media and on top of that this study makes an attempt at the analysis of word formation techniques employed by Kenyans in manipulating the readily available linguistic resources to create new ways of expressing meaning in a manner very reflective of the socio-economic and political Kenyan environment.

METHODOLOGY

This study employed a qualitative research methodology and more so the descriptive research designs. According to Creswell (2013), cited in Mahianyu(2016),“Qualitative research is innovative as well as emergent and is concerned with individuals and their perceptions rather than with numbers and figures which are abstract and out of context.”

This study did a survey of the Facebook as a representative of the social media in Kenya. Facebook was chosen purposely over other media in that it has the biggest outreach among Kenyans from all cadres of life in comparison to other the social Media such as Twitter which are viewed as *classy* by the local populace. It was the presumption of this study that Facebook is a reflection of peculiarities in linguistic habits in not only social media but the general populace making up the Kenyan speech community.

The research purposely sampled 50 neologisms deemed to be of Kenyan descend from a variety of interactions on Facebook by Kenya users on a diversity of socio-economic and political discourse. For the purpose of conciseness, only 30 of the sampled neologisms were discussed in this study.

Upon sampling, a qualitative, descriptive data analysis approach was employed in determining the word formation processes used in the creation of the neologisms. This study made a tabulation of the neologisms with a Kenyan touch encountered and the respective technique employed in their creation.

DISCUSSION

Upon data collection and analysis, this study was able to document the following as neologisms with a Kenyan descend in Facebook interactions among Kenyans.

No.	Neologism	Literal English gloss	A Kenyan interpretation
1.	<i>Tibbim</i>	Tee beam/ T beam	A politician in many instances worth support. Its meaning can be extended to cover any other form of moral support.
2.	<i>Chaget</i>	Jacket	Common reference to jacket laced with ethnic reference.
3.	<i>Thitima</i>	Electricity	Anything of sensation
4.	<i>Fisi</i>	hyena	A man or woman of lax morals
5.	<i>Ficha white</i>	Hide the white ball	A concept of hiding very crucial information or items from someone.
6.	<i>Isorait</i>	It's all right	It's all right
7.	<i>Okuyus</i>	Kikuyus	A reference to the members of the Kikuyu community in Kenya
8.	<i>Kula nyama</i>	Eating meat	A Kenyan way of making reference of the benefits of being politically connected or aligned.
9.	<i>Kweraa</i>	Back off	An expression of discontent
10.	<i>Team hustlers</i>	A team of hustlers	A cadre of people who struggle to

			make ends meet or any other persons engaged in enterprise.
11.	<i>Muguka</i>	Khat/ miraa	A local stimulant chewed by some section of Kenyans.
12.	<i>Saitan / saitani</i>	Devil	A dismissive/derogatory term. Commonly used in the social media in reference to an object of irritation.
13	<i>Ulliam</i>	William	An informal reference to a top political figure in Kenyan politics.
13.	Uhunye	Uhuru Kenyatta	An informal reference to the Kenyan president
14.	Rech	Fish	Local reference to a meal of fish
15.	Ndani ndani ndani	Deep inside	An expression of unwavering political support
16.	Kaa rada	To be alert	A state of high alert
17.	Kula kwa macho	Feast with one's eyes/salivate	To lust over an object outside one's reach
18.	Brathe	brother	Informal reference to a brother
19.	Luo-pean	Dholuo speaker/ a person of Luo descend	Reference to luos and their attitude of living big
20.	Ticha	A teacher	A teacher
21.	Vindu vichenjanga	Things change	Political reference to change in political ideology.
22.	Furahiday	Friday	Concept of Friday being a fun day
23.	Momo	Plus size lady	Plus size lady
24.	Nduthi	A motor bike	A motor bike especially one on boda boda service
25.	Nganya	Passenger service vehicle	A well decorated matatu/souped up public service vehicle.
26.	Ulliam	William	A popular Kenyan Politian whose first name is William
27.	Mwaest	Superb/perfect	An exclamation acknowledging perfection especially on looks or taste
28.	Kuzo	Cousin	An informal reference to a cousin
29.	Nomaree	A tough situation	A troublesome situation
30.	Tialala	Shizzle	A reference to something dazzling/something enticing

Word formation processes employed in creation of neologisms.

This study generally made the following discoveries on common techniques employed in creation of local neologisms among Facebook users in Kenya.

NO	NEOLOGISM	WORD CREATION TECHNIQUE	EXPLANATION
1.	Chaget	Loan translation	Word loosely translated from English <i>jacket</i> to the local Kalenjin accent.
2.	Thitima	Loan translation	Word translated from Swahili word <i>stima</i> , this is the equivalent of electricity.
3.	Fisi	Conversion	Word borrowed from Swahili word <i>Fisi</i> and given a new sense
4.	Ficha white	Compounding and borrowing	A Swahili and English roots compounded
5.	Isorait	Loan translation	This is a loose translation of the English language phrase “it is all right.”
6.	Okuyus	Coinage	This is a completely new term
7.	Kula nyama	Compounding	Two Kiswahili roots <i>Kula</i> [eat] and <i>nyama</i> [meat] compounded and given a new sense.
8.	Brathe	Error	The word <i>brother</i> is misspelled and mispronounced
9.	Kweraa	Error	The Swahili word ‘ <i>kwenda</i> ,’ the equivalent of the phrase “go away” has been mispronounced and misspelled.
10.	Team hustlers	Compounding	<i>Team</i> and <i>hustlers</i> compounded and given a local flavour in meaning.
11.	Muguka	Borrowing	The word is borrowed from a native language and given national outlook in meaning.
12.	Saitan /saitani	Error	The Swahili word <i>shetani</i> ; (devil) is misspelled and mispronounced to give it a fresh and a localized outlook.
13.	Uhunye	Back formation	The first name of Uhuru and the last name Kenyatta clipped and compounded
14.	Rech	borrowing	The word is borrowed from Dholuo and put to general use commonly understood and referred to by many users of Kenyan descent in Facebook.
15.	Kaa rada	Compounding	Swahili and English roots combined. Kiswahili root <i>kaa</i> (stay) and English word, ‘radar.’
16.	Ndani ndani	reduplication	Swahili word ‘ <i>ndani</i> ’(inside), is reduplicated and lengthened for intensification
17.	Kula kwa macho	Compounding	Three Swahili words compounded and given a local meaning
18.	Brathe	Error	English Word “brother,” misspelt and mispronounced to make it look and sound local.
19.	Luoepan	Blending	The word <i>luo</i> and clipped from of European

			compounded
20.	Ticha	Error	English Word, “ <i>teacher</i> ” misspelt to give it a local touch.
21.	Vindu vichenjanga	Borrowing and compounding	The local Luhya language words: <i>vindu</i> , “ <i>things</i> ” and <i>vichenjanga</i> , “ <i>change</i> ”, compounded to make a political reference in undertones
22.	Furahiday	Loan translation	English word <i>Friday</i> loosely translated to Swahili to give it a local interpretation as a day for having fun.
23.	Momo	Borrowing	This is a word borrowed from a kikuyu language sense for a heavy truck.
24.	Nduthi	Borrowing	Borrowed from a local language to make reference to a motor bike.
25.	Nganya	borrowing	Word borrowed from Sheng variety; a marginal language in Kenya
26.	Ulliam	Error	Mispronunciation of the name William
27.	Mwaaest /Mwaest	Coinage	Purely new word without any connection to any other existent word. Mostly used as an adjective.
28.	Kuzo	Loan translation	The English word <i>cousin</i> is clipped and loosely translated with a local touch.
29.	Nomaree	Coinage	Purely new word
30.	Tialala	Onomatopoeia	Word mirrors a shizzle in reference to something dazzling in nature

RECOMMENDATION AND AREAS FOR FURTHER STUDY

The study recommends some areas that call for further research, these include:

The study of the impact of social media idiosyncrasies on the written and spoken discourse among the general Kenyan populace. This study also advocates for a research on how words and expressions from indigenous Kenyan languages are being adopted to the general discourse among the Kenyan speech community through the social media and general cross-cultural interactions.

CONCLUSION

From this study, it has been observed that language is a generally dynamic and an ever-changing phenomenon open to manipulation in order to create a fresher outlook of life and to reflect some new cultural inclinations amongst its users.

Also, of worth to be noted is the cooperative effort among Kenyans as a speech community both in the social media and outside in propagating and promoting development of new vocabulary and new senses with a local outlook.

Finally, it is evident the many linguistic word creation techniques are available to users of a language who may be in need to reflect their environment may use language to shape their experiences and thoughts.

It is also the presumption of this study that many of the neologisms encountered in this study are likely to seep into mainstream language use.

References

- Bauer, L. (1984). *English word –formation*. Cambridge, UK: Cambridge University Press.
- Boddle, A. (2016). *How New Words are Formed*. Retrieved 16 June 2017 from <https://www.theguardian.com/Blog.oxforddictionaries.com/2014/06/social-media-changing-language>. Retrieved 6/30/17
- Collaborative Discovery of Chinese neologisms in social media*. [ieeexplore.ieee.org./document/6974578](http://ieeexplore.ieee.org/document/6974578). Retrieved 27/06/2017
- Literary Terms*. (2015, June 1). Retrieved November 3, 2015, from <https://literaryterms.net/>
- How Social Media is Changing Language I Oxford Words blog. (n.d). Retrieved 20 June 2017, from <http://blog.oxforddictionaries.com/2014/06/social-media-changing,-language/>
- Mwangi. (2017). Boda boda makes it to Oxford English Dictionary, *The Star*, retrieved 25/06/2017.
- Mahianyu, T.R. (2016). *Lexeme-Based Morphological Analysis of Facebook Neologisms*. Nairobi. Kenyatta University.
- Mworia, R. M. (2015). *Use of English Neologisms in Social Media: A Case of Twitter Language in Kenya*. Nairobi: University of Nairobi.
- Kandie, V. K. (2010). *Translation of Neologisms: A Case Study of Kalenjin Radio Broadcasters* (Doctoral dissertation, Kenyatta University).
- Katamba, F. (2015). *English words: Structure, history, usage*. Routledge.
- Katamba, F. (1993). *Morphology*. London: Macmillan Press Ltd.
- Newmark, P. (1981). *Approaches to Translation*. Great Britain: A Wheaton and Co. Ltd. Exerter.
- Onyedum, A. K. U. N. N. A. (2012). *Social Media Neologisms: A Morpho-Semantic Analysis* (Doctoral dissertation, MA thesis submitted to the Department of English, University of Lagos, Akoka).
- Reed, J. (2014). How social media is changing language. *Oxford Dictionaries: language matters*.
- Schülein, V. (2017). *Neologisms in Social Media*. A Corpus-Based Study of Institutionalization.
- Wyche, S. P., Smyth, T. N., Chetty, M., Aoki, P. M., & Grinter, R. E. (2010, April). Deliberate Interactions, characterizing technology use in Nairobi, Kenya. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 2593-2602). ACM.S
- Wyche, S. (2015, May). Exploring mobile phone and social media use in a Nairobi slum: a case for alternative approaches to design in ICTD. In *Proceedings of the Seventh International Conference on Information and Communication Technologies and Development* (p. 12). ACM.
- Yule, G. (2006). *The Study of Language*. New York: Cambridge University Press.

Supervision of Postgraduate Students: A Personal Experience

Alice M. Yungungu
Moi University
aliceyungungu@yahoo.com
0718875807

ABSTRACT

Supervision can be defined as a dynamic facilitative process that encourages a set of tasks and responsibilities which are performed in different domains. In research context, supervision involves supervisors' and post graduate students 'tasks and responsibilities in the supervision process. This paper will therefore concentrate on the four pillars of strengthening post graduate supervision namely: power relations, scholarship, practices and processes involved in being a supervisor. Power relations deal with the relationship between supervisors and supervisees. It focuses on how we go about creating an inclusive and participatory learning environment that enables students to acquire and further develop knowledge, methodological skills and writing practices during the research process. Scholarship deals with the strategies used to induct students into an academic community. It also deals with supervisors' engagement with the scholarly academic community in order to develop a sense of being an effective supervisor. Practices in supervision refer to roles, responsibilities and activities of supervisors and students that enhance students' development. Supervision processes involved in being a supervisor focus on the logistics of managing supervision with institutional requirements. The supervisors' roles and students 'responsibilities and expectations will be discussed under this pillar. Couching and mentoring in supervision as well as conventional and alternative approaches to supervision will be illuminated. Challenges in supervision and possible solutions will be discussed. Recommendations on how to improve the supervision process will be provided. It is hoped that this paper will shed more light on how supervisors should go about the supervision process. As a result, it is expected that supervisors will engage in effective and meaningful supervision

Introduction

Supervision can be defined as a dynamic, facilitative process that encourages a set of tasks and responsibilities which are performed in different domains (Pearson,& Kayrooz, 2004). It involves supervisors' and postgraduate students' tasks and responsibilities in the supervision process. For the supervision process to be successful, the parties involved must cooperate and show commitment in their work. This paper will therefore concentrate on the four pillars of strengthening postgraduate supervision, namely, power relations, scholarship, practices and processes involved in being a supervisor. Challenges and possible solutions in supervision will also be discussed. Specifically, it will deal with the following key issues: context in which I supervise, strategies to achieve power relations, student engagement with academic community, and sense of myself as a supervisor. Other key issues include supervision models, how I engage with the scholarly academic community, practices involved in being a supervisor, Gatfield's and Lee's perspectives of supervision skills and application, roles of supervisors and students' responsibilities and expectation of supervision. My strengths and weaknesses in supervision will also be highlighted. Processes involved in being a supervisor and the changes I need to adopt in supervision will be considered. Challenges and possible solutions in supervision, as well as ways in which training in supervision course has transformed my supervision will be illuminated.

Finally, a conclusion on the importance of successful and meaningful supervision will be provided.

Context in Which I Supervise

My academic identity

I am a senior lecturer in the department of Curriculum instruction and Educational Media(CIEM), school of education (SOE), Moi University (MU). My area of specialization is curriculum studies. Apart from teaching, I am also involved in research work. Through teaching and research, I have gained skills that have enabled me to improve in my supervisory role. My areas of interest in research include curriculum issues, girls or women education, disability and community development issues. I am a fulltime lecturer in the CIEM department.

There are four main objectives that the department aspires to achieve (Appendix 1). One of the objectives is to promote research among lecturers and students. While the SOE organizes common oral defense sessions for all the postgraduate students in the school, the CIEM department arranges proposal defense sessions for its students. It's worth noting that before any student presents their proposal or thesis at the departmental or School levels, the documents must have been satisfactorily read, corrected and finally signed by two supervisors. Being one of the largest departments in the SOE, the CIEM department has what we refer to as course coordinators who oversee the smooth running of each discipline under the guidance of the head of department (HOD).

We admit both local and international postgraduate students under full time and part time programmes. Majority of them are high school teachers and therefore join the part time programme, which is offered in April, August and December when schools are closed. Currently, I am supervising six postgraduate students whose area of specialization is curriculum studies.

Power Relations

Definition of Power Relations

Power relations deal with the relationship between supervisors and supervisees. This theme talks about how we go about creating an inclusive and participatory learning environment that enables students to acquire and further develop knowledge, methodological skills and writing practices during the research process.

Strategies used to enhance power relations

Concerning power relations, I treat my students in a professional manner that is, with due respect. However, sometimes I get worked up and become harsh when they do not follow instructions, especially when they repeat the same mistakes two or three times. Generally, I discuss and agree with my students when and where to meet. Most of our meetings take place in hotels or in my house. This is due to lack of enough offices for lecturers in our institution. I allow students to call when they are through with corrections, though not later than 8 P.M. Depending on the magnitude of the corrections, I allow them to suggest deadlines on when to submit their work for marking. I sometimes call them when they take longer than agreed just to find out their progress. When their ideas of a topic are quite raw, I have learnt to listen to them and this gives them the courage to move on. This works positively on commitment and level of independence among students.

Biltzer and Albertyn(2011) advocate for team approach. In this case, I sometimes consult my co-supervisors to agree on an issue before sharing it with the supervisee. I rarely meet my students in groups to discuss but I intend to use this approach in the future. I resolved to do this after reading Biltzer and Albertyn (2011) who emphasize on the use of alternative approaches to supervision. Peer coaching should be encouraged to decentralize power relations and enhance commitment and independence. To enhance power relations, I try as much as possible to make polite comments in their work. I sometimes make very harsh comments especially when students copy paste information in their work. However, there is need for improvement on this issue. I have started changing after attending some training on strengthening postgraduate supervision (Appendix 2 and Appendix 3).

After reading the work of Pearson and Kayrooz (2004), I have purposed to work on my relationship with students. They contend that a firm and positive supervision relationship is essential for the students' positive experience of postgraduate research. If the student knows that the supervisor is flexible, he/she will be free to work out challenges and progress well. Personally, I avoid delaying feedback but when circumstances force me to do so, I take the responsibility of explaining to the students. However, I try to avoid serious delays. In support of good power relations, Eley and Jennings(2005) assert that a relationship characterized by mutual love, respect and obligation should be developed between the supervisor and the student.

Scholarship

Strategies used to induct students into an academic community

In order to provide a learning environment that emphasizes on the importance of scholarship, I encourage my students to engage with the academic community. To achieve this, I use strategies such as referring them to curriculum books and titles of dissertations relevant to their topics in the library. I also advise them to read my online published research articles in international journals. Sometimes I give them handouts with relevant literature and encourage them to share their materials in discussion groups especially those with related topics.

It is my responsibility to encourage students to build academic networks with students from other universities and even make a point of visiting their libraries. This gives them an opportunity to access literature that may not be available in the MU library. I advise them to make use of internet to access different websites for literature which they must acknowledge in their work in order to avoid plagiarism. I encourage them to consult widely with my co-supervisors and other experts in the curriculum discipline within and outside the CIEM department. I also request them to attend workshops and seminars related to research; to acquire more knowledge and skills on research, to attend departmental and school oral defense sessions to keep learning from students' presentations; engage with other researchers online; publish in journals and books; presenting papers in conferences where they are critiqued and improved; and encourage them to share research support services such as editorial services if aware of any, to enable them use good research language. This could even be done by a teacher/lecturer/professor of English who is also a research expert.

Pearson and Brew (2002) support the idea of introducing students to an academic community when they posit that students should be encouraged to be experts in their discipline of specialization. They should be resourceful and able to search what they need to know and use.

Eley and Jennings(2005) and Wisker(2006) also recommended networking among researchers because they often experience loneliness and isolation and need to become a part of the academic community.

Sense of myself as a supervisor (Sense of self)

Introduction

Having looked at the context in which I supervise, I now turn to discuss the sense of myself as a supervisor (sense of self) and how this impact on my supervision either positively or negatively. This will deal with issues of my own growth in supervision, that is, from being an inexperienced to a considerably qualified supervisor. As evidence of growth in supervision, alternative approaches to supervision that I have learnt in the course of my studies used and intend to frequently use in the future will be discussed.

My own academic identity and its role in my competence as a supervisor

I joined the CIEM department as a fulltime lecturer. My main responsibility was to teach both undergraduate and postgraduate students. However, for professional development and growth, I had to engage in research work as well as other academic responsibilities such as supervision of postgraduate students. Through research, I was able to acquire skills that made me more competent in my supervision work. However, being visually impaired (very blind), I found it quite difficult to balance my time between teaching, research work, supervision as well as family responsibilities. For instance, depending on a sighted reader to read as I listened and prepared lecture notes and research materials was an uphill task for me. This therefore meant that time to supervise my students was limited. Further, as a newly employed lecturer, I had very little experience, if any, on supervision yet I had to do it. As a beginner, I never enjoyed supervision. I found it quite demanding and stressful. Following an open discussion, understanding and consideration with the then CIEM department head, I was able to graduate a few students on time.

For beginners in supervision to do their work competently, higher institutions of learning like universities, schools/faculties, departments and particular disciplines should take upon themselves to induct them on supervisory issues. Through this, we will not end up producing half-baked masters and PhD holders. Additionally, universities should provide visually impaired supervisors with adaptive technology and even sponsor them for training on the same as part of professional development. This will enable them to communicate online with their supervisees just like their sighted counterparts, hence save on time. It will also reduce the supervisor's overdependence on the sighted reader and writer.

As a beginner, I did not have the necessary expertise and had challenges dealing with some of my supervisees who had high expectations. Zambo (2005) points out that supervision involves a complex and seemingly endless journey. Supervisors and postgraduate students embark on much work at the onset of research study. This results to loneliness which in turn causes supervisors and postgraduate students to often times experience alienation and frustration. This is actually what I went through as a beginner which I believe affected my supervision negatively.

In order to save myself from this ugly situation, I read books such as Mugenda and Mugenda (1999) which clearly gives and elaborates the systematic (structure) followed in developing a

proposal and finally a thesis. Reading doctoral thesis in Margret Thatcher library in MU and consulting my colleagues in the department helped improve my supervision skills. Today I feel more confident as I supervise my students and instead of being stressed, I now enjoy supervision. An effective supervisor has to supervise in a professional manner. For me, I have to work as an expert in the field of curriculum studies. For instance, while I sometimes allow students the freedom to change their topics, they should not take advantage of such opportunities and do it frequently. As an expert, I advise my students on how to come up with researchable topics. I also discourage them from taking too long to submit proposals for marking. If this is not adhered to, it impacts negatively on my supervision. Sometimes students may forget the proposal and thesis writing skills if they disappear for too long. In support of this, Leshem and Trafford (2007) assert that supervisors need to develop sensitivity for indications of unsatisfactory progress. For example, frequent change of thesis topic or planned work, side stepping communication with the supervisor, isolating them from the department and avoiding submission of work for review.

I see myself as a guide, facilitator and councilor. I therefore deal with academic as well as social issues of my students in case they arise. As a professional, I try as much as possible to be objective in my supervision, encourage creativity and originality, emphasize on strong academic arguments and a clear voice of the supervisees in their work. As a growing expert in supervision, I take the lead in imparting these skills to my students. As a result of my knowledge and skills, my students are able to analyze information and develop academic arguments and be equipped to organize their research effectively. I also encourage them to always ask questions and research for answers. Moreover, I advise them to have the right attitude to team work and their research.

Conventional and alternative approaches/styles to supervision

The supervision process requires the use of a variety of approaches. This section looks at some of the styles I have been using as well as new approaches that I intend to apply in future. I have always used the individualized traditional apprenticeship approach or one on one supervision. It argues that a supervisor is a mentor and more superior to the supervisee. However, there should be a good relationship between the two for the supervision process to succeed. Samara (2006) has criticized this approach by claiming that it results to isolation and alienation of the student. The argument goes on to say that support from group members who share the same experience is usually rated very positive by the students in terms of social and academic benefits. In agreement with Samara (2006), Biltzer and Albertyne(2011) and Kiley (2011), assert: “move away from one on one supervision in a private space between the supervisor and the student to a public space namely a panel or co-supervisory system of supervision.”

In order to strengthen postgraduate supervision, alternative approaches to post graduate supervision should be adopted (Biltzer and Albertyne, 2011). They talk advocate for group approach, which has the advantage of enabling students to produce high quality dissertations. Sometimes the approach combines group discussions with the supervisor and encourages one on one follow up sessions with the supervisor in order to deal with particular students’ needs. It encourages a participatory approach to supervision, which enhances self-esteem and confidence among students. The adoption of group supervision by individual supervisors would help to produce better PhD holders than when we mainly use one on one approach.

Team approach is another alternative approach to supervision. Here, experienced academics act as mentors to students and inexperienced academics (Biltzer, & Albertyne, 2011) and Nulty, Kiley and Meyers (2009). My comment on this is that we need to appreciate the fact that some of us are lecturers, senior lecturers and full professors. Therefore, in the postgraduate supervision process, supervisors at different levels should be ready to co-supervise, for example, a full professor co-supervising with a senior lecturer. In such cases, both of them should be ready to learn from each other. The professor should not undermine the senior lecturer and the senior lecturer should not suffer from inferiority complex. As a senior lecturer, I am sometimes afraid of making comments on students' work because I may not predict the reaction of my academic superiors on the same. However, I need to change and develop more confidence when making comments because no one is all knowing.

For the approaches to be effectively used, capacity building among supervisors is paramount otherwise, academics may revert to the known traditional apprenticeship approach which is considered "safe". Through the works of Lee (2007), I am now aware of supervision styles such as: panel supervision where each person plays a particular role; project supervision where a team of doctoral scholars and a team of supervisors work together in a related set of research problems; and cohort supervision where groups who join a programme in a particular year work through the research stages together. These three styles of supervision are not commonly used in MU. The use of these approaches should be encouraged in order to reap the benefits of using an eclectic approach in supervision.

Supervision models

Coaching

Coaching refers to the idea of training. Training can be carried out to teach someone or a group of people a new skill or to perfect a skill. The result is good application of the learned skill. A supervisor therefore acts as a coach in the supervision process. She/he trains students in the field of writing a proposal and subsequently a dissertation. A supervisor does not only teach research skills but also engages in perfecting them until the student is able skillfully apply them. Sometimes clarifications can be made towards the end of the doctoral journey. At the end of the day, the supervisee becomes competent and writes a good thesis, the same way a coach trains a football team to win a match. An illustration of my imagination of a coach-training footballer is provided in Appendix 4.

Mentoring

A mentor in supervision is someone who holds the hands of a student from the beginning to the end of a masters or a doctoral journey. There could be challenges on the way, but the supervisor is always there to assist. The supervisor may sometimes leave the student to walk alone. In my illustration, a supervisor is equated to a sighted guide helping a blind person to get used to walking alone along a path. Though there could be stones and fallen trees on the way, the sighted guide ensures that the blind person is not hurt. However, when the blind person gets used to walking alone along the pathway, he/she is able to walk alone. This means that challenges may not be many. In case of any, the sighted guide is always ready to give hand as shown in Appendix 5.

My engagement with the scholarly academic community

To develop a sense of being an effective supervisor, one needs to create and become a part of a learning environment that will ultimately engage the supervisor to the scholarly academic community (Pearson, & Brew, 2002). To improve on research on supervision skills, I attend seminars, workshops, and conferences where I sometimes present research papers, consult co-supervisors especially in the curriculum discipline, online collaboration through my sighted reader who assists me to access research materials online. In future, I intend to involve my students in my research project. I also intend to be consulting experienced supervisors in order to learn from them. Consulting the visually impaired supervisors in other universities, especially Kenyatta University where there is an established department for visually impaired students, to find out how they go about challenges in supervision would be of great help. I have always purposed to attend D.Phil. oral defense sessions even when I don't have a candidate. From this, I learn from experienced supervisors' and the students' presentations which impacts positively on my supervision.

In the absence of Braille books in our library especially in the curriculum discipline and research, I depend on my sighted reader to read downloaded materials, books and dissertations in the library. To some extent, this limits my speed of growth in my supervision skills. I intend to be more independent by purchasing adaptive computers. This will enable me to even communicate online with my supervisees.

I intend to use inter-vision method to network with my colleagues. Intermission refers to structured contacts between colleagues involving mutual support, giving feedback and learning from each other in a professional manner to network, develop and share specific competencies. The acquired competencies in this case will make me a better supervisor. This should also be encouraged at the departmental level where colleagues in the same discipline can use this method to improve on their supervisory skills.

Practices involved in being a supervisor

Definition of practices in supervision

Practices in supervision refer to roles, responsibilities and activities of both the supervisor and the student that enhance students' development.

Practices in supervision

As a supervisor, some of the supervision practices include advising and encouraging my students in their process of thesis writing. As a visually impaired person, the practice of supervision involves getting a sighted person to read students' proposal and theses as I listen and make comments in the hard copy. This is quite involving. To avoid being stressed up, I give my students appointments to meet at different times. Here we have to discuss and agree on when and where to meet and for what purpose. I encourage my students to write chapter one, which I have to look at before they make any further progress. I have to call them to inform them about any progress. It is their responsibility to call me when they are ready to submit their write up. To save on time, I sometimes ask the student to read the document while I listen and discuss the major issues with them.

In order to support and develop my student's writing, I ensure correct punctuations, teach them how to cite from books, journals, newspapers and articles. I also teach them how to reference

using the American Psychological Association (APA) style. For their documents to look professional and attractive to the reader, I advise my students to indent any directly quoted information as long as it is more than three lines. To motivate them, I use reinforcement language, for instance, using terms like good, a good attempt, well done, fair work among others. I read their work to ensure a good flow of ideas, augments as well as correct titles and subtitles. Keen reading helps me to know whether students copy paste downloaded materials which I discourage. I encourage them to subscribe in websites for Portable Documents Format (PDF) materials to enrich their work. I also encourage them to analyze the raw data for themselves. This enhances skill development and ownership of their work.

I help my supervisees to write proposals that have good titles, that is, with both independent and dependent variables (Appendix 6, part A). Objectives of the study must be stated in an open-ended style (Appendix 6, part B). Research questions which arise from research objectives should not lead to 'yes' and 'no' answers. This is because the researcher will not be able to ask any questions in the questionnaires or interview schedules since a 'yes' or 'no' answer question is an end in itself (Appendix 6, part C). However, it is worth noting that I advise my students to develop 'yes' or 'no' answer questions in the research instruments, for example, in a questionnaire which must be followed by a follow up statement (Appendix 6, part D).

When students hand in their proposals, I always request them to give me enough time to mark due to my style of marking through a sighted reader. My students have always given me enough time. However, this does not mean that there are unnecessary delays in giving them feedback. It is my responsibility to call them when I am through with their work. On corrections, the agreement with my students is that they should always submit two copies, that is, a clean corrected copy and the immediate previous copy with my comments. My sighted reader uses the clean copy to confirm minor corrections on my behalf. This may include punctuations, spellings, paragraphing, corrected figures, frequencies and percentages in tables among others. For major corrections like the statement of the problem not being clear or the theoretical framework, the sighted reader has to read the comments in the corrected copy and then again read from the clean copy to confirm corrections. This way, I am able to establish if the corrections were made. To me, one on one supervision has been the order of the day. However, having attended some training on supervision, I intend to be meeting my students in groups especially those with related issues and at the same level of thesis writing.

I help my students to identify their topics through discussions with them to ensure that their topics are researchable. I also advise them to read widely to establish gaps which may form the basis of their topics and clarify difficult areas like theoretical framework and methodology. Other practices include writing reports of the student's progress for my records which I sometimes submit to the CIEM department when requested to do so. I give students feedback as regularly as possible.

Gatfield's and Lee's perspective of supervisory skills and application

According to Gatfield (2005), there are four supervisory skills. These include: Laissez-faire style where the supervisor gives students much freedom with no clear direction. A supervisor who follows a pastoral style reflects understanding but places pure emphasis on structure. In a

contractual style, the supervisor focuses on leadership, friendly and helpful behavioral aspects whereas in a directional style, strict rules and controlling behavior are the order of the day. Looking at these skills, I realize that I use an eclectic approach. This that means that I sometimes use Laissez-faire, directional, pastoral or contractual. This depends on the students I am dealing with and their stage in writing the dissertation. In support of the directional style, Lee (2007) advocates for the use of functional domain in supervision. This domain focuses on practical aspects such as setting ground rules, managing time and monitoring progress. I always discuss with my students my roles, their responsibilities, when to do what and how. All these ensure good power relations. However, sometimes this does not work due to commitments. Here, flexibility from either side is required.

Roles of supervisors' and students' responsibilities and expectations in supervision

Networking my students to co-supervisors or linking them to supervisors in the research discipline is important. This does not happen occasionally. Lee (2007) supports networking by encouraging the use of enculturation style. Here, the supervisor guides students in becoming members of the academic discipline. The supervisor provides expertise in research resources and specialist opinions. When I refer my students to resources such as dissertations, relevant chapters in books, journals, newspapers and photocopied materials, I do check if such materials have been referred to in their write-ups. However, there is need for improvement on this, otherwise some students may ignore reading the materials. Post graduate rules and regulations is an important resource which I intend to avail to them. This will help them know their responsibilities and timelines in the thesis writing process.

Attending oral defense sessions is another resource that I encourage my students to make use of. However, many students do not attend and only appear during their day of proposal or thesis presentation. Finding out from them whether they attend or not and what they learn from such sessions helps me to ensure their good progress. Further, I encourage them to make use of the SOE Resource Centre which has both Masters and Doctorate theses.

Lee (2007) also talks about thinking critically as a domain. This is where the supervisor teaches students to develop and demonstrate strong academic arguments in their work. Further, emancipatory domain encourages students to change from being dependent to being self-directed through constructing and reframing knowledge, to move from acquiring knowledge and thinking critically to applying experience (constructivism). To develop independence and commitment among students, I encourage them to attend seminars and workshops where they present research papers and network as well as reading widely.

Students' expectations are quite high and sometimes over imagined. They expect to be spoon-fed. For instance, being given topics, reference materials all the time and being involved in plagiarism without expecting to be questioned. Other unreasonable expectations include: students expecting high grades with minimal efforts in being creative in their research work; expecting little or no pressure from the supervisors and the institution when they do not complete their programmes on time; slow in making corrections but expect immediate feedback when they submit their research work for marking; and submitting their theses late with an expectation to graduate immediately. Moreover, some of them do not adhere to the postgraduate rules and regulations, yet they expect the supervisors to understand and give them an okay to submit their

theses for marking. For instance, at times they may not wish to write a letter of intent to submit, which is a requirement. I discourage them from such over imagined expectations I also advise them to read the MU Postgraduate rules and regulations. To reduce these problems, I try to create some independence among my students by taking them through the steps followed in thesis writing, encouraging creativity and originality in their work, attending departmental, and school oral defense sessions.

Strengths in my supervision

1. I enjoy reading and discussing major corrections with my students because this way am able to clarify issues.
2. Consistency in a student's right up makes me feel that I have helped the students to acquire some of the important skills in thesis writing.
3. Hearing the writer's voice especially in the literature review chapter where gaps are identified is an indication of academic growth, which I cherish.

Weaknesses in my Supervision

1. I sometimes feel discouraged when am not able to give feedback on time because this might influence negatively on power relations.
2. I do not communicate online with my students due to lack of adaptive technology.
3. I do not call my students frequently for follow-ups due to high workload.
4. I am worked up when some students repeat the same mistakes more than two or three times.
5. I do not frequently consult my co-supervisors.

4.0 Supervision processes involved in being a supervisor

Supervision processes refer to the various tasks involved in the supervisory process including attending to institutional requirements. In other words, it involves discussing the logistics of managing supervision with institutional requirements. This section will deal with tasks involved in supervision processes including attending to institutional requirements. Supervisors' roles and students' responsibilities and expectations will also be considered.

To me, the supervision process starts when I receive official communication from the HOD CIEM department notifying me of the students to supervise. If I have their contacts, I call them but if I do not have, I always wait to hear from them. In my first meeting with the students, I usually appreciate them verbally for choosing to work with me. I always assure them that if they cooperate in the supervision process, they will be able to graduate on time. In other words, being visually impaired will not affect their learning in any way. I believe this gives them confidence to work with me. I always try to establish a rapport with my students. Usually in our first meeting, students express a lot of fear and doubt about how to get a topic and develop a proposal. They talk of inadequate time to read in the library and be able to establish gaps, which may form the basis of a topic. This is because most of the postgraduate students are in the part time programme.

As a mentor and councilor, I always encourage them to create time to read widely, discuss among them and to consult with other supervisors. I always assure them of my assistance.

Students suggest when they feel they can submit a chapter. However, during our second meeting, we usually discuss and agree on a date when the students will submit a refined copy. This time round I exert pressure on them to ensure they beat the deadlines. To avoid student-supervisor conflicts, I encourage discussions with my students about our expectations from each other in the supervision process. This enhances good power relations. However, the supervisor has to remain flexible and emotionally stable especially when things do not work as planned. For instance, when students have family commitments, commitments in their places of work, and sickness among others. I advise the students to inform the supervisor of such challenges otherwise, these challenges may lead to poor power relations and consequently leading to drop out. In support of these challenges, ASSAF 2010 states that risk factors for doctoral attrition include the age of the students at the time of enrollment coupled with professional and family commitments. This therefore means that I have to exercise emotional stability in case of social and academic challenges that may cause delays in the supervision process.

As a professional raising student in curriculum studies, I encourage academic growth among my supervisees. To achieve this, I read widely on curriculum issues. Through this I am able to advise them to read key books in curriculum written by different scholars or even refer them to my own publications in international journals (Appendix 8). If students have issues with understanding tough sections of thesis writing like theoretical framework, conceptual framework and the methodology chapter, I may refer them to read dissertations in the library. This I believe sheds more light on the same.

On steps followed in thesis writing, I advise them to ensure consistency. The topic must lead to relevant objectives and research questions, the theoretical framework must cover the full scope of the thesis. The theory must be reflected in several key areas such as objectives, research questions, literature review, research instruments, findings, conclusions and recommendations of the study. In order to develop confidence in ensuring consistency in the structure, I sometimes take them through the thesis writing steps.

There are concepts and principles in curriculum studies as a discipline that every student in this area of specialization must understand. In this case, a student with a research topic related to curriculum development or implementation of curriculum innovations would be referred to books written by theorists like Tyler (1949), Taba (1962) and Gross et al. (1971). Tyler (1949) explains the components of curriculum, that is, objectives, learning experiences, organization of learning experiences and evaluation. Gross et al. (1971) gives the factors to consider when implementing curriculum innovations. For example, availability of resources, positive attitude, and administrative support among others. These help to sharpen their skills on how curriculum is developed and innovations implemented successfully. Sometimes I refer them to reading lists that I attach to course outlines in the courses that I teach them. Part of my supervision process is to help my students write a good chapter on literature review. For instance, to identify gaps and ensure that the voice of the writer/supervisee is clear.

Another process is proposal writing. In the CIEM department, each student is allocated two supervisors who guide him/her to develop a research proposal. I guide my students on the choice and application of research designs and methodologies their write-ups. I clarify issues on the use of quantitative and qualitative methodologies. Many students are inclined to qualitative

approach, which is the use of words to thematically and descriptively analyze data. They run away from quantitative approach, which is the use of statistics for data analysis. I always try my best to help them understand how to combine the two methodologies. I sometimes advise them to consult my co-supervisors or an expert in research.

Before defending their research proposals at the departmental level, they must have been signed by two supervisors. All lecturers are invited to attend the departmental oral defense sessions. Their role is to listen and constructively criticize students work. If the proposals are approved with minor corrections, I guide the students in making corrections before they proceed to the field. During fieldwork students do most of the work with a few sessions of consultation with the supervisors. Writing chapters four and five by students is never an easy task. Some disappear for years. I sometimes make calls to find out their progress. I keep reminding them to read widely to support their discussions in chapter four with relevant ideas and to avoid referring to the same scholars referred to in the earlier chapters.

Draft reading is the next process. This starts when students submit their first document after field work and analysis. The purpose of reading the final draft two or three times before the final submission is to produce a well-refined document. I always ensure proper analysis, interpretation of data and discussion of findings in chapter four. This gives the thesis a good general structure. I advise students on the submission processes. They are required to write a letter of intent before submission to the postgraduate office under the SOE. This enables the school to formulate a board of examiners for each student. The role of the board of examiners is to listen and make constructive comments to improve the students' work during the final oral defense season. After defending, students make corrections under the guidance of the supervisor. It is a requirement by MU that before submission of any thesis to the post graduate office, two supervisors must append their signature on the document.

The thesis writing process is quite demanding. Therefore, students are advised to develop a work plan schedule as shown in Appendix 8. The work plan may change due to unforeseen circumstances. Throughout the dissertations writing process, I encourage my students to attend oral defense sessions for both masters and doctoral students, attend workshops and conferences relevant to their discipline of specialization and to consult with experts in the department.

On budgeting, my students prefer sending text messages to calling. However, less expensive, I discourage them because I may not read their texts promptly which may interfere with power relations. For effective communication, I encourage them to call me. To cut on cost, I have a specific place in town where my students leave their work instead of travelling off town to Moi University where our offices are. Further, for proposals and theses drafts, I am not very keen on double spacing and font size requirements. These cuts on costs too. However, for purposes of oral defense, postgraduate rules and regulations on proposal and thesis writing must be adhered to. I also advise them on time management for effective work progress.

To manage students' progress, I always have Braille and a printed copy of the students' records. When asked to hand in a copy to the department, I always do so though not very detailed. It indicates the following stages of thesis writing: proposal development, defended proposal, in the

field, data analysis, submitted for examination and defended thesis. I intend to adopt a more detailed progress record for my students as indicated in Appendix 9.

Changes I need to adopt

1. I need to improve on how I track students' progress in the project by recording each student's progress.
2. Throughout the supervision process, I need to improve on consultation with co-supervisors.
3. I need to have more contact sessions with my students especially after data collection and analysis in order to refine the documents.
4. I need to use new approaches such as group and team approaches for sharing and informal discussions about prevailing issues in supervision as well as frequent discussions with my students. This is supported by Samara (2006) who asserts that meeting supervisors reduces nervousness, students feel free, emancipated and hence committed to their work.
5. I intend to be reading through the MU postgraduate supervision guidelines with my students. This will enhance a smooth supervision process.
6. I intend to be meeting students with related issues in their topics at the same time for clarifications.

Challenges and Possible Solutions in Supervision

Introduction

Having discussed the four pillars of supervision, this paper will be incomplete if challenges faced by supervisors and supervisees are not illuminated, their effects highlighted and possible solutions suggested. To achieve this, I will refer to an article "picking up the pieces: supervisors and doctoral 'orphans'" by Whisker and Robinson (2009).

Challenges

'Orphaned' supervisors refer to supervisors who loose supervisees due to either positive or negative reasons. Doctoral 'orphans' on the other hand refers to supervisees who loose supervisors due to either positive or negative reasons.

Causes of Doctoral 'orphans' may include research phobia, domestic problems, anxiety, distress, lack of hope, discouragement and lack of confidence in their work due to breakdowns in their relationship with their supervisors, the loss of supervisors either through neglect and absence or through supervisors retiring, changing jobs or handing the student over to another supervisor without adequate preparation. Additionally, student transfer to another university or supervisor change of job or transfer to a different institution of learning can cause this. Further, student choice to change supervisors can be hurting.

Doctoral "orphans" go through stress, they are marginalized, silenced and ignored, anxious and sometimes get sick. These 'orphaned' circumstances if well managed, can lead to the development of emotional resilience and a new sense of ownership and empowerment, which feed into enhancement of the conceptual, critical and creative levels of their work. Students are able to once again own their work with confidence and strong hope to successfully complete it.

Sometimes, some supervisors enjoy supervising such students because of the newly established academic relationship that may attract the supervisors and the students. They may feel free with each other; thus, the student can ask questions freely as the supervisor responds with readiness to see the student progress successfully. Loss of a supervisee results to the supervisor becoming anxious and wondering what the cause may have been. One feels “drained and misused”, and if the student was problematic, the supervisor feels relieved.

Possible solutions

Some of the solutions to “loss” would be openness, clear and timely communication, and structured/official communication from the HOD. It would also be important to find out the regulations about termination of the supervisory relationship, transfer, handover and advice the student in the situation in advance and discuss it. The HOD should seek the student’s input about the way forward - stay in touch, who to work with from the department and what other support he/she might need.

Some of the solutions to gaining supervisees who had difficulties with former supervisors would include identification of key issues to address such as; establishing boundaries of work and defining the progress of work; and sensitivity about the person, his/her confusion and disappointment, well-being and need for nurturing.

In supervision transition where one loses or gains, the supervisor deals with the learning process that is the project work itself, personal/professional/self-relationship with others and Institutional/University issues (Regulations & Bureaucracies). Good planning and management as well as negotiations during supervision transition help to reduce anxiety, distress, hopelessness, irritation, loneliness, negligence and builds self-esteem, confidence and hope for success.

As a supervisor, losing supervisees out of their own choice, though hurting, I would take it easy. However, it would be prudent for me to identify the problems and solve them in order to create a conducive working environment for both of us. If lost due to the student change of department or institution, I would allow consultation and the supervisee may have to introduce me to his/her new supervisors. This will give me an opportunity to help the new supervisor understand the entry behavior of the supervisee, hence effective supervision.

Sometimes when I gain new supervisees unexpectedly and especially the slow learners, it becomes an “education / academic burden”. However, this should not be the case. It should be taken positively especially when the causes to this have been communicated and the regulations pertaining to such changes adhered to.

5.4 How training has transformed my supervision

1. I now monitor my student’s progress by ensuring that I have their contacts.
2. I have improved on setting ground rules whereby roles and responsibilities are discussed.
3. I emphasize on deadlines as agreed.
4. I have improved on power relations, for example, I am no longer the boss who always makes decisions but I always discuss with the students and consider their views concerning their deadlines and how they address academic arguments in their work. I also

make more polite comments than before I attended some training on strengthening postgraduate supervision.

5. In the course of supervision, I now spend some time to establish student background though rarely. This enhances power relations.

Conclusion

Successful and meaningful supervision will contribute largely to mutual satisfaction, pleasure and professional development. It is hoped that this paper will shed more light on how supervisors go about the supervision process. As a result, it is expected that supervisors will engage in effective and meaningful supervision

References

- ASSAF. (2010). *An Evidenced Based Study on How to Meet the Demands for Higher-Level Skills in an Emerging Economy*. London: Academy of Science Report.
- Biltzer, E., & Albertyn, R. (2011). Alternative Approaches to Postgraduate Supervision: A Planning Tool to Facilitate Supervisory Processes. *South African Journal for Higher Education*, 25(5), 874-888.
- Eley, A. R., & Jennings, R. (2005). *Effective Postgraduate Supervision and Mentorship: Improving the Student Supervision Relationship*. Maidenhead Berkshire: Open University Press.
- Gatfield, T. (2005). An Investigation into PhD Supervisory Management Styles: Development of a dynamic conceptual model and its managerial implications. *Journal of Higher Education Policy and Management*, 27(3), 311-325.
- Gross, E. A. (1971). *Implementing Organizational Innovation: Sociological Analysis of Planned Education Change*. New York: Basic Books Inc.
- Kiley, M. (2011). Developments in Research Supervisor Training: Studies in Higher Education, Causes and Responses. *South African Journal for Higher Education*, 36,(5), 585-599.
- Lee, A. (2007). Developing Effective Supervisors. *South African Journal for Higher Education*, 21,(4), 680-693.
- Leshem, S., & Trafford, V. (2007). Overlooking the Conceptual Framework: Innovations in Education and Teaching International. *South African Journal for Higher Education*, 44(4), 93-105.
- Mugenda, O., & Mugenda, A. (1999). *Research methods:Quantitive and Qualitative* . New York: New York Press.
- Nulty, D., Kelly, M., & Meyers, N. (2009). Promoting and Recognizing Excellence in the Supervision of Research Students: An Evidence Based Framework for Assesment and Evaluation in Higher Education. *South African Journal For Higher Education*, Volume 34(6), 693-707.
- Pearson, M., & Brew, A. (2002). Research Training and Supervision Development: Studies in Higher Education. *South African Journal for Higher Education*, 27(2), 135-150.
- Pearson, M., & Kayrooz, C. (2004). Enabling Critical Reflection on Research Supervisory. *South African Journal for Higher education*, 29(6), 701-715.
- Pearson, M., & Kayrooz, C. (2004). Enabling Critical Reflection on Research Supervisory Practice. *International Journal for Academic Development*, 9(1), 99-116.

- Samara, A. (2006). Group Supervision in Graduate: A Process of Supervision Skill Development and Text Improvement. *Higher Education Research and Development*, 25(2), 115-129.
- Taba, H. (1962). *Curriculum Development: Theory and Practice*. New York: Harcourt, Brace.
- Tyle, R. (1949). *Basic principles of curriculum and dimension in curriculum development*. New York: New York Press.
- Wisker, G. (2006). *The Good Supervisor*. New York: Palgrave Macmillan.
- Wisker, G., & Robinson, G. (2009). Picking up the Pieces: Supervisors and Doctoral “Orphans”. *International Journal for Researcher Development*, 3(2), 139 - 153.
- Zambo, D. (2005). The Promise of Action Research. *Academic Exchange Fall*, 203-

Technological Advances That Enabled The Tugen To Adapt To The Physical Environment; A Historical Perspective.

Sarah Kiptala
School of education, Kabarak university
P.o private bag- 20157, Kabarak
Tel. 0711733911; E-mail; skiptala@kabarak.ac.ke

ABSTRACT

Ever since man evolved, he has continuously manipulated the environment for his own survival and the society at large. The physical environment has been crucial in man's adaptation process as it dictated what man should do and how he should live. Climate change on the other hand has been a phenomena throughout history and man had to adapt to the changing climatic conditions. With a climate change, new species emerge and older species disappear necessitating man to explore and come up with new techniques to cope with the change. We cannot control the weather. In the 21st century one may ask why the past would bother them. Historically the past activities shapes the future activities. Therefore, to built up history one has to start with the past. The main purpose of this paper is to identify the historical technological advances which has enabled the Tugen of baringo county, to adapt to the physical environment and understand the importance of the indigenous technology in shaping the life of the Tugen. As the tugen were therefore manipulating the environment for their survival through agriculture, hunting and gathering, clothing etc they either encountered or created problems which also required to be solved through continuous technological innovations. The study was based on underdevelopment

theory by Walter Rodney. The environmental challenges of the 21st century arise from the interaction of many different human activities. The multiple environmental problems in specific locations such as global warming, land degradations and ozone depletion, call for new research and management approaches.

Key words; Evolution, Adaptation, Manipulation, Climate change, Physical environment, Human activities.

Introduction

Indigenous is used to describe a thing that originates or occur naturally in a country, region, etc.¹For anything to be indigenous, it must belong to the people in question rather than being alien to them. Technology describes the application of practical or mechanical sciences to industry and commerce. It is the total knowledge and skills available to any human society for industry, art, science, etc. Therefore, indigenous technology can be said to mean the application of practical or mechanical sciences based on the available local resources and skills to industry and commerce. Similarly, indigenous technology is technology employed by the native inhabitants of a country.

In the 5 million years since early man first emerged from East Africa's Rift Valley, the earth's climate has grown increasingly erratic. Over cycles lasting hundreds of thousands of years, and regions were overrun by forests, which gave way to grasslands and landscapes were fracture by deep lakes.²

It was within the context of this swiftly changing landscape that humans evolved their sizeable brains and capacity for adaptive behaviour. In such a world, the ability to think creatively, to imagine solutions to survival threats, proved to be a major asset. The evolution of the brain is the most obvious example of how man evolved to adapt. That is the means by which humans are able to adjust to new situations. This adaptive ability subsequently helped man to colonize new habitats.

With the dawn of agriculture around 10,000 years ago, man embarked on a new experiment rather than adapting to the existing environment. Man began adapting to the environment to meet their needs, slashing and burning forest to create room for agriculture. That in turn allowed more leisure time, larger societies and a freer exchange of information. As cultural and technological knowledge improved man was able to harness the energy of other animals and in time harness the dramatic power of fossil fuels as well.

Before the colonial experience in Africa, indigenous technology was well expressed in the local systems. Remarkable technological innovations were made by pre-colonial Africans in traditional iron, wood and ivory working as well as in cloth weaving, pottery and indigenous drugs development.

From historically documented accounts and oral traditions there are varying accounts that give the origins Kalenjin groups. All agree that the Kalenjin lived at *TulwobKony* near Mt Elgon before dispersing in different directions at the middle of the 17th century.³ They all dispersed forming the present day seven Kalenjin groups. From the narratives of the interviewees, they confirm that the Tugen did not enter Baringo district in single migratory file. Deducing from the

historical accounts, relevant facts and from stories it is clear that they entered the district in four groups and each was composed of several clans.

By 1903 the areas between *Kamasia* or Tugen hills, Londiani Mountains, the Nandi and UasinGishu plateau were sparsely occupied. There were a few numbers of Tugen who lived over the edge of the Tugen hills down the rivers of Lake Baringo and up the slope of the Tugen hills near Ravine station in the southern region.⁴

By 1910, Tugenwere still roaming in the district. By around 1914, overcrowding became acute here and there was a severe drought in 1918 called the drought of *Kipngosia*. The Tugen travelled across the Kerio Valley to the west and south west of Nandi in search of grains to be exchanged with whatever they had especially iron implements. Another drought of 1924 – 1927 which was referred to as *KiplelKowo* because of piles of bones of dead cattle consequently led to external trade.⁵

To the south settlement was interrupted by European settlement who took concession of land. Further migration depended largely on the fortunes of the individual member or families. A determinant factor was how they adjusted economically to the new environment⁶. The physical state of the Tugen hills determined not only the course of clan settlement but also their mode of subsistence.

Statement of the problem

It is wrongly assumed that African people are backward because the means of production known among the Europeans were not present in Africa or because our ancestors used different methods to build their houses, to farm, to dress and to cure themselves of physical or spiritual distress. To many scholars such as Okon (1991), any movement to adopt and strengthen traditional technologies is backward and primitive. He argued that the most pressing technical problems connected with man's earthly welfare have been solved through the use of techniques which are either very advanced or are related to traditional skills.

Similarly, Indigenous technology has often been ignored and minimal research has been exclusively on them. Scholars only tackle them in their research work. Others blame the underdeveloped systems on the indigenous systems. It is for this reason that the paper seeks to prove that indigenous technology is unique to specific setups and communities developed at their own phase. The Tugen community adapted to the Tugen environment and manipulated it for their survival.

Research objectives

1. To find out in ways in which the physical environment enabled the Tugen to adapt to the environment.
2. To analyse the challenges the Tugen encountered as they adapted to the environment.

The study area

The study will be carried out in Baringo County which is located in the former Rift Valley Province of Kenya. It covers some 10,627 sq. km of which 165 sq. km is water surface. The population of Baringo county was 555,561 according to 2009 Kenya population census. It has

male population of 50% and female population of 50%. It has a population density of 50 people per km². The annual growth rate is 2.6%.⁷The Tugen country is situated in the middle of the Rift Valley and sandwiched between Elgeyo Escarpment to the East forming the Eastern wall and Ngelesha hills to the West forming the Western wall. The Tugen inhabit a beautiful but rugged hill zone. The Tugen hills rise in a salient from Eldama Ravine in the south, to the Kito pass and Pokot territory in the North. From a floor of about 4,000 feet the hills peak roughly at 7,000 and 8,000 feet where most Tugen reside.⁸

The Tugen utilize the varied micro environments offered by their hilly habitat to raise cattle, sheep and goats and to grow some crops, traditionally millet and some sorghum but now mostly maize. The Tugen regions have differing climatic zones. The highlands (Mosop), the lowlands (Soin) and the intermediate (Kurget) zones. The Soin to the west of Tugen hills was called Turukwei while the Soin to the east of the Tugen hills was called Mogoswek. The lowlands and the intermediate zones are hot and dry. The Tugen people can be divide geographically into three sections; The Southern (Lembus), The Central (Somorr) and the Northern (Arror).⁹

Research Methodology

This study was conducted through a Historical Research Method. Historical Research Method is the gathering of data from situations that have already occurred and performing statistical analysis on the obtained data. The research was based on the collection of Primary and Secondary Data. Primary Data was collected through direct communication with the respondents through oral interviews and open-ended questionnaires. The major source of primary Data is Archival Sources. Archival material will be obtained from Kenya national archives and district-based archives such as Baringo County. Secondary data are records of accounts prepared by someone other than the person or persons who participated in or observed an event. They include going through Books, Journals, Thesis Reports, Dissertations and policy reports. The study targeted elderly people, leaders, farmers, blacksmiths, basket makers, beehive makers and pottery makers within the community. These are people who are believed to be having in depth understanding on issues of indigenous technology. The study was based on a sample selected from the study area that is Baringo County specifically the area occupied by the Tugen community. The sample target will depend on the number which the researcher will get using two sampling technique. These two sampling techniques will be used. One is the Purposive sampling and the Snowball Technique. Two methods will be used to analyze data that is, Qualitative analysis or thematic analysis and corroborative analysis method.

The Tugen indigenous technology

For most of his life on earth man had relied on the natural environment to provide him with his daily needs. Like other animals he ate whatever food was available. The natural environment largely decides what food is available naturally, without any deliberate effort by man to produce it. The way in which food is obtained has played a great part in shaping human social institutions and systems over the years. Technology which was invented in the initial stages of evolution depended on the type of food being sought.

The Tugens as a way of obtaining food practiced hunting. The Tugen made constant attempts to survive through exploitation of the environment for the provision of their basic needs. The Tugen

occupied varied ecological zones which provided a variety of game to be hunted. Hunting was done by boys and herdsmen as a sport and also as a way of eliminating carnivorous animals which were a threat to their livestock. Hunting of small animals such as rodents and duikers was done with the assistance of traps, snares, arrows and spears. Most of the game was also for food. Large herds of game found in Baringo such as large numbers of Antelope, Zebra, Elephants and Rhinoceros. The game was hunted for meat, sport, skin and elephant tasks for trade. By 1920, the large animals were rare having been shot out by the demands of ivory traders and European hunters.¹⁰

Gathering which was the common subsistence companion of hunting remained important. There were the edible berries of *ngosiek* tree. These fruits were gathered and boiled for several hours before the white flesh of the berry could be eaten. Other fruits were *lamayek*, *arya*, *kabiker*, *bobek* and *talamik*. These fruits and game were obtained from the forests such as *Katimok*, *Lembusand Mochongoi*. The Tugen did not grow any crops or fruits because of their shifting nature as they were looking for pasture for their livestock. The Tugen were affected by a serious period of drought and famine, around 1897 -1899 which was referred to as 'hunger of chemng'al. Many Tugen sought assistance at this time from Nandi, and they moved southwards through Lembus and into Tinderet in the hope of finding supplies of grain or other foodstuffs.¹¹ During the drought of 1924 – 1924 (*Kiplenkowo*) which was the worst drought within living memory hunting and gathering played a major role in providing alternative food from the dying animals. They were supplemented with vegetables which were collected when they were in season and dried through dehydration to be used during the dry season.¹²

Bee keeping has been an important way of obtaining food among the Tugen. The bee-keepers made bee-hives (*moingonik*) from wood which made it possible for the Tugen to collect honey. The making of beehives was done by woodcarvers who hallowed out bee-hives out of wood. They were hanged on trees where they were secure from thieves. After honey had been harvested, they were put in honey barrels called *keto*.¹³ It was a wooden barrel carved from a special wood obtained locally. Wood was cut and hallowed locally with a chisel, thronged with cowhide with a leather lid. The honey from this occupation is used as an ingredient for brewing beer, *kipketinik*, which were used in ceremonies such as marriage and circumcision. Honey was also used as medicine for abdominal pains¹⁴.

Iron smelting occupied a peripheral position among the Tugen. Specific individuals or groups with special talents performed iron making. The clans who did this were the *Kimoi* and *Tuiyoi* clans. They made their local iron from iron ore (*Ngoriemik*). They made agricultural tools, swords, spears and arrows which were sold to other Tugen groups. A knife (*rotwet*) was made of iron and had both sides sharpened for harvesting millet and slaughtering animals. They also made cowbells (*twoliot*) which were tied on the neck of the favourite bull that leads the other cows for easy tracing when they got lost. It was an item of trade between the Tugen and the Keiyo.¹⁵

The Tugen had well-established system of pottery that is making earthen ware vessels. There are certain clans who specialize in the pottery industry and for centuries the profession has been handed down from generation to generation. In the pottery industry all the work from start to finish is done by women. The process of making pots is from digging of the clay, beating and softening in the moulding and drying, the burning of pots and finally marketing. The pottery industry is carried out when it is generally dry because at this time the clay is suitable for

moulding and it will dry more hence the pots will last longer. The pots will be used for storing food, transportation of milk, food, water, cooking food and utensils. Examples include clay pot called *kessum* which was a clay pot used for keeping water cold.¹⁶

The Tugen also made baskets. Baskets are made from strings of small scrubs like bamboo. They include food baskets known as *kitas* which was woven from bamboo fibres and smeared with cow dung and was used to hold grains or flour. They also had *kiskisye* which was used to keep in and serving food¹⁷. They were beaten to soften or strengthen them. They are put in the sun to dry. The next process is to wind them together into a long string about 15 feet long. When enough strings are prepared the work of knitting the basket's is undertaken. Baskets are of different shapes and sizes according to fashion, taste and function. Basket making is looked upon as a spare time job; it is generally done during conversations or travelling. There are also some which are sewn together to make a tray (*kibis*) which is used for drying grain and winnowing of millet. A small tray called *tube* is used as a dish for serving or keeping food. They made gourd carrier called *lekwelle* which was made by small sticks tied together by use of plant fibres. It contains the water gourds used to carry or transport water by women and young girls.

Wooden implements were greatly used in cultivation. They include digging hoe *mokombo* which was used for digging in the millet fields. It had iron implement halved into it. They also had wooden hoe *ngoromb* which was a traditional wooden hoe used to till the farms before the advent of iron made hoes. The manufacturing of digging sticks required less skill, making the production a domestic affair. In most homesteads, the males made the digging sticks required by their family members hence it was uncommon to find digging sticks being marketed. Another wooden implement was a stool *ngecher* which was a three-legged wooden carved stool which used by the owner or as headrest.¹⁸

Fishing was also done in water environment such as Lake Baringo and the many rivers in the county such as Kerio river which is 400km long and has a subsidiary source at Timboroa forest. It runs through Kerio valley and forms a boundary between Baringo, Elgeyo Marakwet, West and East Pokot and Turkana counties. Another important river is the Perkerra which starts from Chemasusu forest and runs in a northerly direction for some 100km and enters into Lake Baringo in Marigat. The Molo river is also important in the county. It originates from the Mau forest and it runs through Molo and Mogotio and it flows in a Northern direction and empties into lake Baringo. Receiver starts from Katimok and Saimo forest in the Northern Tugen hills and flows in a northern, then western directions through the Kerio valley to Barwessa. Others are Endao, Waseges, Lobo, Emom etc. and provided constant supply of food for man. Fishing is not open to many people because the environment in which it is possible exist only in few areas. Technology for fishing had to be developed before fishing can supply food on a regular basis. Fishing communities developed tools such as rafts, canoes, harpoons, nets and fish traps.¹⁹

Pastoralism or nomadic herding was also practised and provided regular supply of food. As long as the environment was favourable, man had to rare animals suitable for the environment. Pastoralists had to know areas not suitable for livestock rearing, especially places with diseases such as tsetse flies were avoided. There were few human barriers to movement and so man could exploit the scattered resources of large areas of land. The most important occupation was pastoralism, which is the rearing of livestock. The livestock reared are cattle, goats and some sheep among others, and rearing is dictated by the climatic conditions of the area. Livestock have had a crucial place in the culture of the Tugen. They provided milk, blood, hides for shoes,

clothes bedding and material for making bags. It also determines man's social standings in that the larger the herd, the greater the respect a man earned. Owing to the important contribution cattle make towards the livelihood of the Tugen, they have come to be regarded as economic assets and also a source of life. Livestock was a source of wealth and measure of value of the individual and the community at large. It can be said that exclusive male ownership of livestock in pre-colonial Tugen enabled men to occupy higher positions in the accumulation cycle. The men looked after the cattle and other livestock and were responsible for all kinds of transaction related to the transfer of livestock in relationships such as marriage.

Agriculture is another area which makes the greatest demands on the environment. It requires fertile soils and reliable rainfall. Once a farmer has planted his crop, he must wait in one pace for his harvest. Farmers had to choose their crops according to the environment in which the growing crop would live. Grain crops will not do well in the rain forest and forest crops do not do well in forests. The Tugen were cultivators who cultivated land to grow crops. The crops grown were dictated by the ecological location in the Tugen area that is the lowland plains (*Soinzones*), the area between highland and the lowlands (*Kurget*) and the highlands (*Mosop*²²). The crops grown were mostly finger millet and sorghum. In the southern region cash crops such as maize, coffee, beans were introduced by the Europeans. A determinant factor was how they adjusted economically to the new environment²⁰. The physical state of the Tugen hills determined not only the course of clan settlement but also their mode of subsistence.

Challenges man encountered as he adapted to the environment

As man progressed through the centuries, he developed new ways of exploiting his environment. This was necessitated by climatic fluctuations and changes which were very complex. There were changes associated with events outside the earth, those generated within the terrestrial system and those caused by man himself²¹. Some of the changes are slow and gradual, others are sharp and marked by abrupt events. The most critical extra-terrestrial influence on climate is the sun. Variations in the energy output of the sun, caused by different types of solar disturbances, can lead to variations in global temperature levels. The transparency of the atmosphere to either the incoming solar radiation or the outgoing earth radiations may be significantly altered by volcanic dust in the atmosphere following massive volcanic eruptions. Such eruptions produce significant cooling and related effects on climate lasting several years or decades.

Human activities, particularly farming, industrialisation and urbanization, have significantly altered the terrestrial environment, which has affected climate, certainly at local and regional levels. The clearing of forests cover from vast tracts of land for agriculture and settlement has affected local patterns of rainfall and temperature. Modification of climate on local scale has also resulted from the building of cities, the creation of artificial lakes and extended areas of irrigation and the diversion of river systems.

Since the beginning of the industrial revolution the human capacity to alter or substantially affect the climate of the world as a whole has increased. The combustion of fossil fuels, such as coal, oil and gas has led to a steady rise in the quantity of carbon dioxide in the atmosphere. Now with planetary warming occurring at a breakneck pace, human adaptability is likely to face its biggest test. Man has been dealing with climate change ever since. The problem though is that it is

happening now over a short time scale. And that makes it very hard to predict whether or not man will be able to respond and at what cost.

The quantity of man-made aerosols particles has also risen. Rising concentrations of carbon dioxide and other greenhouse gases are expected to lead to an unprecedented global warming, which will change temperature and precipitation patterns with serious implications for agriculture and natural ecosystems. Depletion of the earth's protective ozone layer by chlorofluorocarbons which are used as a propellant in spray and aerosol cans and as a refrigerant in cooling devices, would allow more harmful radiation to reach the earth surface, thereby harming both human health and delicately balanced natural systems.

Successive governments in Africa on attainment of independence, have continued to encourage the decline of indigenous technology through the uninhibited importations of all forms of foreign technology. There has been the tendency towards the establishment of wholesomely imported technology which is unviable within the culture and environment of the African society. On the other hand, several factors such as local raw materials and local skills were ignored and left to idle away. The result has been a perpetuation of technological dependence.

Droughts of the nineteenth century provoked the emergence of colonial conservation ideologies whose implementation led to the gradual erosion of African control over natural resources, especially land. The intense competition between the settler and African communities over natural resources ensured that any state attempt to regulate the environment became a deeply politicized issue.

The decline of rainfall and occurrence of droughts was attributed by the colonial scientists to the removal of vegetation. In the nineteenth century it had been recognised that European agricultural methods were specifically responsible for deterioration in soils and pastures and the destruction of forests. Africans were removed from their land and taken to the reserves. Africans found themselves being denied not only of land for cultivation, but also seasonal grazing and hunting. Hunting was restricted to the settler elite and imperial adventurers who were seeking sporting pleasure.... the idea of forest reserves soon gave way to that of native reserves which provided both the means and justification for settler seizure of African lands.

On the part of Africans, the general feeling of inferiority (generated by this massive importation syndrome) has given rise to negative ideas about products of indigenous technology while foreign products are seen as superior. The transfer of supposedly sophisticated international technology, has resulted in a dualistic situation whereby growth is concentrated in a relatively small modern sector but does not percolate through to the rest of the economy to any significant extent. This has had the harmful effects of displacing previously existing and still very relevant forms of technology without serving as an adequate cultural substitute.

Since the colonial era, many African countries, have been saddled with inappropriate systems of technology arising from the fact that the relative scare factors of production like foreign exchange, were intensively dissipated. An appropriate technology for Africa is one which takes into account our society's particular stage of economic growth, social development, development goals and resource endowments.

The large quantity of discarded machinery which litters maintenance yards all over Africa and the huge array of inefficiently operated plants in factories and workshops, copied to the finest details from advanced countries, cannot solve all or even most of our technological problems. Naturally, this situation has made enormous demand on the environment. In fact, man has had to help nature in many ways. This literature shows that the Tugen used a wide variety of strategies to prevent, adjust to, recover from the changes. The preventive strategies include the diversification of cultivation the rotation of fields, crops and pastures, intercropping and planting of drought resistant crops, grazing herds on different locations etc. Adjustment to actual food shortages also takes various forms, such as increasing trade, substituting staple foods with irregular and gathered foods, reducing sizes of communities, households and herds etc.

Conclusion

The main thrust of this article is that we need to work out a technological system that is economically efficient as well as appropriate to our resources. Such a system would require an African scientific system which is directly applicable to our changing societies. To do this appropriately, we have to digest the facts of our histories properly and then use these facts to offer suggestions for the moulding of our collective future. Researchers and other technical experts in Africa must find time to develop research proposals that seek to up-grade our indigenous skills. By so doing, we will be stimulating growth in areas of chronic stagnation as well as bringing strength and utility to cultures at the verge of extinction. And more importantly rededicate ourselves and pursue vigorously and more realistically, the processes of technology synthesis and hybridization of the host technology and the guest technology.

END NOTES

Andah, B. W. (1988) *African Anthropology*. Shaneson C.I. limited, Ibadan.

The World Book Encyclopedia E. Vol 16: Field Enterprises Educational Corporation USA. 1968.

Brooks, H. (1980): *Technology; Evolution and Purpose: Modern Technology, Problem or Opportunity?* Academy of arts and Science, 190(10): 65-81.

Huntingford, G.W.B.(1953). *The Nandi of Kenya; Tribal control in a pastoral society*. London.pp15.

Peristany, J.K. (1939). *The Social Institutions of the Kipsigis*. London. Routledge and sons press. pp12.

<http://www.nation.co.ke/counties> 17th February 2012

Goldschmidt, W.(1967). *Sebei Law*, University of California.

Tuitoek, R.K. (2010). *The Tugen community*. Nakuru. St. Mary's Publishers.pp54.

Kipkorir, B. E., & Welbourne F.B.(1973). *The Marakwet of Kenya*. Nairobi. East African Literature Bureau.pp62.

Kandagor, D.R.(2010). *Rethinking British Rule and 'Native' Economies in Kenya*, Pangolin Publishers LTD. Kenya. PP3.

Tuitoek, R.K.(2010). *The Tugen community*. St Mary's publishers. Kenya. PP27.

- Kandagor, D.R. (2010). *Rethinking British Rule and 'Native' Economies in Kenya*, Pangolin Publishers LTD. Kenya. PP3.
- Huntingford, G.W.B. (1953). *The Nandi of Kenya; Tribal control in a pastoral society*. London. pp 61.
- Anderson, D. (2002). *Eroding the Commons, The Politics of Ecology in Baringo*. Kenya. 1890-1963. East African Education Publishers. Nairobi. pp 26.
- Ibid pp 26.
16. Kwonyike, J.K. (2001). *Legal Pluralism in Kenya; A study of Tugen Aror customary law*. University of West England. Bristol.
- Okon, E.E. (1991). *Traditional Skills and Techniques as Primary Assets for the Development of Modern Sciences and Technology*. In: *Culture, Economy and National Development*. Bello, S. and Nasidi, Y. (eds). Tolalu and Associates, Lagos.
- Tuitoek, R.K. (2010). *The Tugen community*. St Mary's publishers. Kenya. Pp, 27
- Onwuejeogwu, M.A. (1999): *The Place of Technology in Present Day Africa*. In: *African. S Indigenous Technology: With Particular Reference to Nigeria*. Okpoko, A.I. (ed). Wisdom Publishers Limited, Ibadan.

BIBLIOGRAPHY

- Andah, B. W. (1988). *African Anthropology*. Shaneson C.I. limited, Ibadan.
- Anderson, D. (2002). *Eroding the Commons, The Politics of Ecology in Baringo*. Kenya. 1890-1963. East African Education Publishers. Nairobi.
- Brooks, H. (1980). *Technology; Evolution and Purpose: Modern Technology, Problem or Opportunity?* Academy of arts and Science, 190(10), 65-81.
- Goldschmidt, W.B. (1953). *The Nandi of Kenya; Tribal control in a pastoral society*. London.
- Kandagor, D.R. (2010). *Rethinking British Rule and 'Native' Economies in Kenya*, Pangolin Publishers LTD. Kenya.
- Kipkorir, B.E., & Welbourne F. B. (1973). *The Marakwet of Kenya*. Nairobi. East African Literature Bureau.
- Okon, E. E. (1991). *Traditional Skills and Techniques as Primary Assets for the Development of Modern Sciences and Technology*. In: *Culture, Economy and National Development*. Bello, S. and Nasidi, Y. (eds). Tolalu and Associates, Lagos
- Onwuejeogwu, M. A. (1999). *The Place of Technology in Present Day Africa*. In: *African. S Indigenous Technology: With Particular Reference to Nigeria*. Okpoko, A.I. (ed). Wisdom Publishers Limited, Ibadan.
- Rodney, W. (1972) *How Europe Underdeveloped Africa*. Nairobi. Heinemann.
- Tuitoek, R.K. (2009). *The Tugen Community*. Nakuru. Kenya. St. Mary's publishers.
- Van, Z., & King, A. *An economic history of Kenya and Uganda, 1870-1970*. Macmillan Nairobi
- Zezeza, T.A. (1974). *Modern Economic History of Africa*. The Nineteenth Century. Dakar. Codesria.

Birthing Fake Journalism: Problematizing Online Fake Political Analyses during 2017 Electoral Period in Kenya

Michael M. Ndonye
Department of Mass Communication; Kabarak University
Private Bag 20157, Kabarak
Ndonye2010@gmail.com

Pauline Ndro
Department of literary and communication; Laikipia University
P.O.Box 1100, Nyahururu-KENYA
Contact: +254 721664039; polly_ndoro@yahoo.co.uk

Felicia Yieke
Department of literary and communication
Laikipia University
fyieke@yahoo.com
P.O.Box 1100, Nyahururu-KENYA
Contact: +254 733538046 +254 729848033

Abstract

In order to predict the future of African political environment, it is significant that we make meaning of the fake journalism that disseminates propaganda that shapes the continent political contours. Since in Africa, political trajectories determine the social and economic system, it is arguably significant to pay attention to such functional political discourses. The study objective was to examine the value of fake journalism exemplified by the fake political analyses experienced in Kenya during the 2017 electoral process. Paying attention to the 2017 general elections in Kenya, the research analyzes political propaganda from fake analysts targeting the Jubilee party (for the incumbent regime) and National super alliance (NASA); (a coalition of parties forming the country's opposition). The study adopted the propaganda theory in understanding the functions of the phenomenon. The researchers sampled 14 propaganda videos uploaded on YouTube by fake analysts before, and after 2017 elections in Kenya. The videos were transcribed and then analysed using critical interpretative approach where the literature, theory, and propaganda video analyses experienced were compared and inferences drawn to make meaning of the past, present and future implications for media, politics, and society. The findings of the study indicate that fake analyses played a critical role in shaping the political contours in Kenya as they disseminated ethno-politics and all its forms and manifestations such as ethnic blocking, ethnic profiling, ethnic agenda setting, and hatred, just to mention a few. These findings are significant to the government and alternative media regulators. The study largely benefits the mainstream media who are supposed to be a voice to counter alternative media propaganda with objective journalism.

Key Terms: Fake Journalism, Fake analyses, Political Propaganda, ethno-politics

Introduction

In Kenya, ethnicity has proved to be a resource for political domination, consolidation, and manipulation thus a recipe for ethnic tensions, competition for resources and conflicts. Most parts of Kenya are dotted with ethnic conflict especially after every general election, a situation that was not there before 1991 (Yieke, 2011). Ethnicity in Kenya is highly institutionalized and has been termed by many scholars as a curse. In Yieke's (2011) analysis of the 2007 post-election violence, ethnic tensions build up when senior politicians, in their political rallies towards elections, "issue inflammatory statements and utterances, asking for people to go back to their ancestral lands or they be forced out" (p.9). Munene (2013) argues in the same line that post-colonial leaders in Kenya such as Jomo Kenyatta, Tom Mboya and Oginga Odinga consolidated their followers by retreating to their ethnicities whenever they wanted political influence and security and by doing this, they normalized ethnic politics in Kenya.

The normalized ethnic politics in Kenya has been passed on to the current political generation because five decades later, political dominance in one's community defines a politician's negotiation power in the national politics. In the era of political coalitions, no one can manage a top position in a coalition unless they have a substantive following from their ethnicity, which they can bring on the table. How did this come to be? According to Munene (2013), president Moi created ethnic consolidation logic by fronting political lords where for example all Luhya who opposed Musalia Mudavadi such as Kijana Wamalwawere branded the enemies of Luhya community. Those who opposed Katana Ngala in the Coastal region, Uhuru Kenyatta in central, Kalonzo Musyoka from in lower Eastern region, William Ruto in Rift Valley, just to mention a few were termed as enemies of their communities and that was made public through public media which had dominance of broadcasting political information at the time.

Over 50 years after independence, and close to two decades of multipartyism the institutionalization of ethnicity in Kenyan politics is unmistakably done through ethnic discourse, which is majorly produced by politicians and largely disseminated through the mass media. In the run up to general elections, the media is always in search for political news. Given that this is found around political circles, their catch is mostly ethnic discourse and political rhetoric, which the audiences are in search corridor for during such a time. During this period, the political players realize that the only way to get free coverage by media is by engaging in sensational ethnic talk, name-calling, and chest thumping. Like any other sensational content, ethnic discourse has utility value; the media transforms it into high demand news items (Peters, 2016). Moreover, the audience is in search corridor for information from and about their prospective leaders and ethnic content works well for their gratification. The media, being the most reliable institution at this time for informing the people uses this content to consolidate their audience base, which they so much need for their economic purposes. The more the audience a media has, the higher the value for their promotional airtime and space to the advertiser. This brings onboard the political economy of ethnic discourse production, dissemination, and consumption to the media during electioneering process.

In 2017, Kenya was preparing to go to polls for their general elections scheduled for 8th August. The run up to the general elections was dominated by political propaganda, which were supposedly geared, to create voting block loyalty. However, a closer relook at the propaganda

reveals that the propaganda were meant to radicalize the citizens with a consciousness of absolute loyalty through fake analyses. The propaganda from the opposition side ranged from those against the incumbent government's projects, the articulation of corruption scandals the citizens suffered under the incumbent government, the human rights violation by the incumbent government, the vision, and mission of the alternative government. Propaganda from the incumbent affiliates included: propaganda of perennial losers, those of recycled leadership, propaganda of hunger for power, and those of fake Joshua (Raila Odinga – opposition leader) and Canaan (the promised Kenya under Raila Leadership). Moreover, there were more glaring propaganda of the expected elections outcome such as the incumbent government can only win through rigging, that the incumbent had set ready all infrastructure for rigging elections through the electoral body, courts and armed forces. Most of the propaganda circulated had radical messages informing citizens to be extra vigilant and guard their votes from being stolen for the incumbent government was good at rigging. These propagandas, among the many this study will analyze were consumed by the masses as gospel truth. The concern of the study is not whether they were true or false, but how they shape post-election Kenya and the future of African democracies.

It is significantly hardy to realize that if we understand the current political status of Africa, we can accurately predict the futures of African political governance. Thus, by unpacking the political propaganda we come across every time there are elections campaigns in our countries, can diagnose the needed social and economic policies for African transformative agenda (Wilson, 2001). Kenya is a significant site to make meaning of the future of African politics due to the importance attached to politics and efforts put in place to achieve ever-elusive trust and credibility of elections. For instance, in 2017, Kenya held one of the most expensive elections in the continent, hitting a high of KSH 100 billion (USD 1 billion) but still, the ideals of free, fair, and credible elections were not felt; at least making it plausible that such concepts are functions of the mind. More visible in the 2017 elections were the mediated political propaganda that split Kenya into almost diametrically opposed sides whose expectations were too high to perceive any election outcome free, fair and credible unless the electoral commission applied the golden mean rule. This study will bring to light the future of Africa under such politically radicalizing propaganda by first analyzing the political propaganda by NASA coalition and Jubilee party during and after the 2017 elections in Kenya.

Theoretical Framework

In this research, the propaganda theory was used to understand how the masses are manipulated and their political attitudes are shaped through political propaganda to an extent of radicalizing them into extremist social and economic attitudes toward an opposing side. In their book *Manufacturing Consent*, Herman and Chomsky argue that propaganda model investigates how inequality of wealth and power are used to filter out news for broadcast and print which shape the reality on the minds of the populace. In this study, propaganda model will be used to analyze political propaganda used to promote a collective political mood, attitude, action, and expectations of the political outcome toward the 2017 general elections in Kenya. Just the way Herman and Chomsky showed how the government and dominant private interests get their messages across to the public through media, the study will seek to show how dominant political sides (created through two horse-journalism) use political propaganda to consolidate powerful unbreakable blocks leading to a political radicalism. Thereafter, the six filters of propaganda

model applied to mass media will be subsequently applied in political communication process and messaging for the utility purposes of this study. It is hoped that this study will have found a new direction and application of propaganda theory in interpreting a not so far away phenomena of political communication from the conventional application in mass media research.

METHODS

Sampling Propaganda Video Clips

The researcher used purposive sampling of propaganda videos circulated as political analyses. The videos were classified into two—Pro-NASA propaganda and Pro-Jubilee Propaganda. All the videos were downloaded from YouTube and classified into those done before elections and those done after elections. The researcher sampled six (6) Pro-Jubilee propaganda videos and eight (8) Pro-NASA propaganda videos. Table 1 is a summary of the sampling of propaganda videos.

Table 1 Sampling Propaganda Video Clips

		<u>Online Content/Show</u>	<u>Pre-election (before 8th August)</u>	<u>Post-Election (After 8th August)</u>	<u>Total</u>
1	Pro- JUBILEE	The Fifth Estate	1	5	6
2		Kenya News Alert	1	3	4
3	Pro-NASA	Chris Kumekucha BlogSpot	0	4	4
			2	12	14

Observation Schedule

The researcher did observation before and after elections earmarked propaganda videos uploaded on YouTube. For the video to pass the criteria for selection, they were to contain content and implications for ethno-political journalism. For propaganda videos, they were supposed to contain ethnic overtones and undertones directed to opponent political party of candidate for the party. Out of this observation schedule, the researcher selected 14 videos.

Mainstream and Alternative Media Synergy in Fake Journalism

Mainstream media refers to various mass media that influence large masses and shape the prevailing issues in the society (Chomsky, 1997). These are large news conglomerates, which produce newspapers, own broadcast media and they have elite audience and thus power to set tone for other small news organisations with little resources. According to Chomsky, an elite mainstream media sets the agenda and the other media follows it loyally. Alternative media differ from large established conglomerates in terms of their content, production and distribution (Downing, 2001). Alternative media takes the forms of print, audio, video, and internet among others as could be exemplified by YouTube, WhatsApp message, twitter, Facebook, and other media, which are hosted in the internet, and internet enabled gadgets like telephony. Whereas the mainstream media functions largely for “government and corporate interests” (Herman, & Chomsky, 1988; Lievrouw, 2011), alternative media exists for the interests of the political and ethnic minorities, and tend to be conservative and liberal in their worldviews (Atton, 2002). Alternative media has been seen to challenge the dominant beliefs and values prescribed by the

mainstream media in a counter hegemonic manner (Carpentiere, 2011). However, the current trends do not have mainstream media and alternative media pull in different directions. In a more synergized matter, alternative media, and mainstream media work together especially during elections period by providing information at different levels and at different ecologies. For example, while mainstream media may be highly controlled and has legally established gatekeepers, the alternative media is less regulated and has freedom to broadcast the fears of the mainstream media for the good of the society – sometimes.

The way the mainstream media and the alternative media relate symbiotically is of relevance to this study. Undoubtedly, both set agenda for each other, it does not matter who gives the shot first but the underlying factor is each prophesy to the other about the most suitable mood of the audience and society in general. If there are divided interests and preferences, they ensure each segment is served to their satisfaction with their preference as well as being made aware of the other side's preference so they can have the spirit of consumption competition.

The mainstream media and the alternative media are of the same kingdom, their spirit is the same, but their manifestation is different. The mainstream media is controlled by their policies not to be explicit but that does not mean they cannot juggle as much implicature as their audience cannot handle. The alternative media take the implicature to another extreme level of explicitly telling the implied and showing the picture in three-dimensional descriptions.

When the mainstream media brings onboard analysts and panelists, they want to produce a live show of reporting the opinions of the elites who represent the society. The media has no control of what the elite says but there is always the consideration of their political interest to ensure whatever extreme a panelist could go in exposing the opposite political side is neutralized forthwith. The media then turns to the audience to decide based on the discussions or what can be called political opinion contestations some which leave the studio table banging as red eye ball to eyeball altercations are involved.

These shows, tagged as analyses are breeding grounds for opinions and mood setters in the country. For those in alternative media and live in the villages, shopping centres and market places. The altercations then go live on social media and YouTube as the bloggers knows what the audience wants. They depending on the side they have interest in Marshall their efforts to outdo the rivals. If you want to do business, align it with your hobby. If you want to blog about politics and succeed blog for the party, you prefer and against the side, you prefer. You will do it from your hear and you will have more emotions than you can handle. You will have unlimited access to the bad and the ugly side of the rival and if you can blog it, you will attract both hatred attacks and praise in equal measure both of which play part to consolidate audience base whom you can claim ads.

DATA PRESENTATION

Data presented in this section was obtained as transcripts of the YouTube propaganda videos made by Kenyan fake analysts for Kenya audience during the 2017 electioneering period. The data was grouped into two: those, which by nature of their perspective are pro-Jubilee (The Fifth Estate), and those, which are by nature of their perspective, are pro-Nasa (Kenya News Alert and Chris Kumekucha).

Ethno-politics Production by Propagandist Analysts

The political analyses from the two sides are deemed both professional and sometimes guttering by listeners and viewers. What is so conspicuous in these analyses is the reflection of what is in the minds of the ethnicized Kenyans and are ready to celebrate by supporting whoever has the bravery to say it and what is in the mind of the balkanized mainstream media and given a chance would broadcast it. In these videos, released biweekly or weekly, the creators said what the mainstream media could not say. The fanfare video clips, spread through other social media such as WhatsApp messenger, Facebook among others, carried messages meant for ethnic groups in either of the two political sides, NASA or Jubilee. Like the mainstream media, these analyses deliberately leave out other presidential contestants and concentrate with Uhuru Kenyatta (Jubilee) and Raila Odinga (NASA) – The so-called two horses in the race.

Mutahi Ngunyi and the Fort Hall School of Government

The fifth estate is a digital media for political analyses made and produced by a renowned political analyst Mutahi Ngunyi. Mutahi Ngunyi is well known by Kenyans for his popular theorizing of ‘tyranny of numbers’ during the 2013 electoral period and even before then, the media created him as a person whose analyses could be reckoned with because he analysed politics and offered predictions with accuracy, intelligence and all his analyses were deemed balanced, unbiased and plausible. It is the trust that Kenyans placed on him that before 2013 elections and after he decided to exploit, becoming a declared supporter of jubilee and one time their political adviser.

During the 2017 electioneering period, he was openly drumming up for Uhuru Kenyatta and spoiling for Raila Odinga. In one of the videos entitled “From Hero to Zero_ Raila will have a Bitter Christmas” of December 23, 2017, he confesses, “the fifth estate was started to expose Raila’s lies.” Mutahi does his analyses with what he calls ‘young African scholars’ whom he has trained to be vicious and articulate in their presentation of selected issues. In their introduction, the video starts, “This is the fifth estate, a conversation between young African scholars from fort hall school of government and Professor Mutahi Ngunyi.”

What is more conspicuous in the analyses of the fifth estate is the lamping of Raila Odinga with his ethnic group, the so called the ‘Luo Nation’ or the people from Luo Nyanza or from Kisumu; Kisumu being the capital city of the former Nyanza province where Raila Odinga hails from and where since independence, the opposition has been strong. Majority of his analyses, which he releases every Saturday are directed to the opposition and must mention opposition and or Raila Odinga by name or sometimes the principals in the opposition coalition or grouping. On the other side, he called the other part of the ruling coalition with such names as Uthamaki (the kingdom), the GEMA, and the house of Mumbi, the Kikuyu Nation and so on.

Video 1: Tyranny of lies: why Uhuru will defeat Raila August 5, 2017

In a video entitled *Tyranny of lies: why Uhuru will defeat Raila* released on 5 August 2017, exactly three days to elections Mutahi Ngunyi uses ethnic approach of tyranny of numbers to predict elections outcome giving Jubilee government a plus in their expectations. Mutahi argues that it is not possible for incumbent presidents in Africa to lose elections “unless they are

incompetent”. The video gives the following breakdown of 2017 elections prediction based on pure ethnic analysis: According to Mutahi Ngunyi, Jubilee and NASA starting point votes are different and shows that NASA will lose to Jubilee. He summarised that Gikuyu, Embu, Meru association (GEMA) has 5.6 million and Kalenjin nation has 2.3 million votes. Based on this statistic, they hypothesised that Uhuru’s starting point would be 7.9 million votes. He further breaks down NASA votes as; the Luo nation, Kamba nation and Luhya nation votes all add up to 6.9 million and that is Raila’s starting point. Mutahi reminds Kenyans “Raila is a constant factor in violence equation” and downplays the ten million strong narrative by NASA. He advises Uhuru that NASA will bully him out of power through a ‘tyranny of lies’ and that jubilee must not allow it.

Video 2: Should Raila concede defeat?

August 11, 2017

Exactly three days after completion of August 8 elections, Mutahi Ngunyi’s Fifth Estate released a video on YouTube titled “Should Raila concede defeat?” in which he argued that after losing elections, Raila is facing the Samsonian blues; he wants to die but die with people. The analyst says his Fort Hall School of Government celebrate the victory of Uhuru Kenyatta. Mutahi paraphrased summarily Deuteronomy chapter 7 for jubilee government advising that Uhuru should “destroy your enemy, make no covenant with him, show no mercy to him for you shall receive no mercy from them”. He argues that that was the time for Uhuru to finish Raila “once and for all”. He hypothesised what would happen to the 6.7 million Kenyans who fell to Raila’s lies. He advised them that if Raila does not concede defeat, the country must show him no mercy because Raila will show country no mercy.

Video 3: Forget Supreme Court, secession is next expert

August 26, 2017

On August 26, 2017, a clip entitled “Forget supreme court, secession is next expert”. The clip attacks David Ndii and calls him a voodoo expert, an intellectual from Kiambu to preach secession. The secession project is known to breed ethnic cleansing especially now that it is meant to install emperor Odinga, the king of poverty. They termed David Ndii as “Angry and ignorant voodoo expert, a Kikuyu intellectual from Kiambu who has mortgaged his morality for Raila.” The analysis sends a message again to 6.7 million NASA voters, that they “must live with the consequences of their choice as choices have consequences”. They also argued that Raila is serving notice of possible ethnic cleansing and Uhuru should stop the secession nonsense for the last time. He finalises that Raila is dreaming because he is old; blaming his failure to thieves and a computer that breeds leaders.

Video 4: The fall and fall of Raila Odinga

Nov 18, 2017

On Nov 18, 2017 the fifth estate released a clip “The fall and fall of Raila Odinga”. It came after the Supreme Court had nullified the August 8th elections and ordered repeat elections. Mutahi in the analysis blames Supreme Court for cancelling elections arguing that the elections were over and that the Maraga court will be blamed forever. The analysts in Mutahi’s school posit that Raila is condemned to roll the stone of president up the hill like Sisyphus, the founder king of Corinth, forever with no success. They also argued that the West have rejected Raila as he is a warlord whose only currency of political transaction is violence. They add that the people

rejected Raila; he asked 1 million people to risk their lives when he was coming back from West but received only 9000 people. The clip repeats the same advice to Jubilee that “Uhuru should show Raila no mercy, should not make any covenant with Raila, he should destroy him decisively”. They argued that Uhuru has the monopoly of power and should handle Raila like a person brandishing a sword. That if Raila swears himself in, he should be “charged with high treason and instead of country burning, Kisumu will burn and, in any case, we are used to that”.

Video 5: Not yet Uhuru for Raila and the Luo Nation

Dec 9, 2017

On Dec 9, 2017, a clip entitled “Not yet Uhuru for Raila and the Luo Nation”. This video clip was in reaction to the already announced swearing in of Raila Odinga in defiance of Jubilee's victory and the country was going through hard situations, tensions were high and country divide along ethnic lines as per the two political oligarchies. It is during this time that Mutahi and his analysts uploaded their regular clips arguing that December 12th will be Independence Day for the Luo nation because Raila will swear himself in. They argued that swearing in “Raila will energize Kisumu people to massacre”. He also attacked media and television analysts and panellists “who move from one television to another analysing Uhuru from the cleverness of their head instead of an informed undertaking”. He issued what he called a message for the Luo nation, that “on 12th December, you can bury Raila or continue carrying his York.”

Video 6: From Hero to Zero - Raila will have a Bitter Christmas

23 Des 2017

The most ethnic revealing of all Mutahi's analyses came on 23 Des 2017, entitled “From Hero to Zero_ Raila will have a Bitter Christmas.” Coming as a summative issue for the year 2017, the clip was deemed a Christmas gift to our leaders and lists Chebukati as a man who deserved respect as he had a moment of doubts but kept the quest and for that he is gifted a chicken (a befitting delicacy for his tribe). The fifth estate installs Chebukati as a man of the year though they said he needed a kick like a foolish chicken, which has been taken to the market, tied but on reaching there, not able to notice it is free until it's kicked. This is symbolically used for Chebukati.

Uhuru Kenyatta is given the statement of the year award equating the Christmas with that of 2007 where people travelled home for Christmas but hell broke loose and people died. They said that 2017 people refused to fight even when Raila has provoked Kenyans using economic sabotage and swearing in threats. The credit is given to Uhuru for being a statesman. Uhuru is gifted with a machine gun and a Sheppard rod. As commander in chief, they left Uhuru to use the machine gun as he wished.

For the rod, Uhuru was to use it whenever Raila uses fake snakes from witchcraft and to divide the Red sea if caught by Pharaohs' army. William Ruto is gifted a donkey for best supporting role and advised to not listen to the people. The gift of the most cheated award of the year goes to Kalonzo, Wetangula and Mudavadi. They argued that Raila has failed twice and is still standing and is gifted for being in love of failure. He is born to run for election and fail and is gifted by the Forthall School of Government for the most heroic failure in politics as he makes failure look very good. Raila is also gifted with the mirror to talk to the man in the mirror and tell him to change his ways.

The most disastrous act of the year is gifted to Mr. Maraga who allegedly attempted a civilian coup, which failed. He is gifted a scarlet letter, a gift of stigma and a gift of shame to wear it as long as he lives. The most deluded act of the year given to Akombe the traitor and the school does not wish her well, “may she experience everything she wanted the nation to face”. Mutahi Ngunyi concludes the video by saying “we wish those who like us a prosperous new year. We wish Somalis, Kikuyus and Kalenjin and jubilee people from Mombasa a prosperous new year full of Kenyan shillings, and not happiness. For those who don’t, we wish them a happy new year. This is because NASA people like happiness and *Tibim* things, happiness is overrated. You cannot feed your children with *Tibim* and happiness.”

Samuel Okemwa in the Kenya News Alert TV

This is a media produced in form of videos posted on YouTube and the producer is called by name Samuel Okemwa. Kenyans online argue that he does his videos from Minnesota, United States. One online commentator said that Samuel “has been busy stroking the embers of ethnic hatred on social media” from wherever he produces his videos he is in touch with every political move in the country and thus making it believable that he does so from Kenya. His attacks are fierce and are directed to kikuyu community who are deemed supporters of jubilee. He is Raila Odinga and NASA extremist, reducing NASA to be a fight of Luo tribe.

Video 7: MeruRevolution_Gema has politically exploited Meru and Embu while benefiting Kikuyus. Wake up NOW!

In another video called, “MeruRevolution_Gema has politically exploited Meru and Embu while benefiting Kikuyus. Wake up now!” the speaker takes the viewer to a rally in Meru whose background music is *wamerutumeamka* (Meru people we have woken up). *Wameruwameamka! Waembuwameamka! (The Meru people have woken up)*. The writer with agility starts his clip by arguing that for long time they were put in a bag called GEMA (Gikuyu, Embu, Meru Association) and they have been used by Kikuyu as voting toys and machines. He says “Kikuyus have been telling Meru people to vote them and when they get power, they forget them”. That Meru and Embu are exploited economically and politically but when it comes to elections, they are told they are GEMA which is a fraudulent organisation because they do not find themselves in the government. The speaker urges that Meru people should not be supporting Kikuyu and then be forgotten; that Embu and Meru people should leave Jubilee which is Kikuyu and Join NASA.

**Video 8: Moses Kuria is truly a devil that kikuyu always glorify as long as he insults Luos: Moses Kuria calls a medical camp to cut Luos
Jan 22, 2018**

Jan 22, 2018 he released a video entitled “Moses Kuria is truly a devil that kikuyu always glorify as long as he insults Luos: Moses Kuria calls a medical camp to cut Luos”. Moses Kuria has been in and out of prison and has found himself in public criticism for hate speech especially against the Luo community whom he stereotypes as uncircumcised and not fit to be president. The speaker analyses a picture featuring Moses Kuria wearing doctor’s dustcoat and interprets it as meaning Moses Kuria is ready to circumcise Luo people. The speaker says the picture represent deep rooted tribal hatred and animosity. The speaker in the clip morns that some people are allowed to do this and nothing happens to them. He interprets this as “Moses Kuria is holding

scissors meaning *hii makasi ndio anataka kutumia kutahirisha wajaluo.*” The other guy alongside him has dreads and represents *mungiki.*”

Video 9: Revealed kikuyu Mungiki criminals used during elections

Jan 24, 2018

There are very many boys mugging and stealing in Nairobi. That jubilee brought Mungiki in the name of Nairobi business community from Nyeri, Thika, Murang’a and elsewhere to protect their interest and help police to attack and kill NASA supporters. Now the elections are over, the boys are looting without fear because they work with police. When you brought kikuyu youth in Nairobi, now they are stealing and maiming citizens. *Hawa vijana wakikuyu wanasubkuana kuhangaisha waturundisha nyeri, rundisha muranga na thika, rundish amahali mlitoa, hatutaki ujinga sasa (take these mungiki boys to nyeri, muranga na thika where you brought them from, they are mugging people in Nairobi)*

Video 10: Kenya is now Kikuyunized. It’s now official Uhuru want GithuMuigai to replace Maraga

February 15, 2018

In a video uploaded on 15 February 2018 entitled “Kenya is now kikuyunized. It’s now official Uhuru want GithuMuigai to replace Maraga”, the speaker analyses that our judiciary is under attack and it is now official that Maraga is to be replaced by a kikuyu called GithuMuigai. He says that Rafael Tuju, a man without a portfolio is working under the instruction of Uhuru Kenyatta to pave the way for the GithuMuigai to become Chief Justice. He intimates that “Uhuru has put all state departments under the control of Kikuyus; he has kikuyunised the statehouse, police, parliament, office of the attorney general, everything in Kenya is under kikuyus and Kalenjin are outside” he says that Kikuyus make decisions for all forty two tribes and that Kenya will be a total dictatorship under GithuMuigai while Kalenjins are duped that they are in government.

Chris Kumekucha Videos

Video 11: We Will Get out of Uthamaki and Vote Raila, Ameru Now Say

September 5, 2017

The same rally is captured and analysed September 5, 2017 by *Kumekucha* Chris in a video entitled, “We Will Get out of Uthamaki and Vote Raila, Ameru Now Say”. *Kumekucha*’s video features Munya holding hands with NASA principles and he interprets this to mean that Meru people are coming out of uthamaki (a kikuyu word for kingship). The speaker enumerates that NASA principle Raila Odinga will get between 150-200 thousand votes in Meru because they are not satisfied by Jubilee rigging claims.

Video 12: Shocking, Unexpected Reason Why Luos Are Being killed

October 14, 2017

In a video dated October 14, 2017 *Kumekucha* entitled Shocking, Unexpected Reason Why Luos Are Being killed, the speaker posits that thugs have been given police uniform, guns with instructions to harass, beat up and steal from innocent Kenyans. He says desperately “We say no! You shall not kill Luos. The struggle continues.” The video takes the reader back to claims of body bags being taken to Kisumu and not any other place in Kenya. He also analyses that there is evidence that Luos are being killed in Kisumu and bodies dumped in Lake Victoria. He also

posits that during the time of Jomo Kenyatta, there was a Jomo oath taken by Kikuyus and the oath was against the Luo community because of their intelligence and ability, education and thus was viewed as immediate threats to Kenyatta's presidency.

**Video 13: Deep inside the mind of a kikuyu voter, by a kikuyu, shocking!
October 19, 2017**

In another video dated Oct 19, 2017 *Kumekucha* Chris Deep inside the Mind of a Kikuyu Voter, By A Kikuyu. Shocking! The speaker analyses that Jubilee supporters are the quickest in accusing others of tribalism or ethnicity. He says that the behaviour from the Kikuyu community cannot be in vain and that it is a result of an oath taken by Kikuyu people against the Luo community. He analyses an article where the writer gives an incidence of a kikuyu reaction after hearing the Supreme Court had cancelled presidential results. He says according to the article, the kikuyu passenger:

Cursed Maraga, cursed Kisii people collectively, he insinuated how Maraga and Kisii community were foolish and idiots ...and blamed jubilee political barons for allowing a non-kikuyu to ascend to chief justice position.

He says that this incidence uncovers the underbelly mindset of kikuyu people. He also refers to another incidence where his Kikuyu friend is quoted saying:

Yes, the government of Uhuru has been corrupt, incompetent and messed but as a Kikuyu I cannot vote for that Luo, as Kikuyus we are called to vote for one of our own it doesn't matter if it's a drunkard, a thief of plain inept... he is ours, that is whom God has given us.

He also quotes a long-experienced lawyer from central Kenya upon hearing the supreme court judgement saying:

Where we have reached now, it matters not whether Uhuru has won or not...we must defend *uthamaki*, by all means and any means necessary that is not a point for discussion or rationalisation.

He argues that these statements are an outflow of what goes on in the mind of a kikuyu voter and that even educated people think like that because of oaths.

On September 4, 2017, *Kumekucha* uploaded another video clip with the title Why We Must Give Kikuyus a Break Part 1. In this clip, he goes back to the oaths taken by kikuyu people against the Luo community. He says the oaths were administered by Kenyatta in 1968 and were the cause of Kisumu massacre when Kenyatta visited Kisumu and no one knows how many people were killed. Seven days to elections, on August 1, 2017 *Kumekucha* released a video titled Raila Leads in Latest Poll but this is How Uhuru Can Win. In the analysis, he refers to *Infotrac* poll that put Raila ahead of Uhuru by 1%. He uses the poll statistics where Uhuru was leading in central, rift valley and north-eastern while Raila Odinga was leading in Luo Nyanza, western, coast, Nairobi and eastern regions. He concludes that Uhuru is very thin on his support.

**Video 14: Why Only the Gikuyu Can Save Kenya Now
Feb 11, 2018**

On Feb 11, 2018 *Kumekucha* uploaded another video entitled Why Only the Gikuyu Can Save Kenya Now in which he argues that kikuyu people is a blend of all other tribes. Referring to kikuyu mythology of origin, he argues that kikuyu people came into existence through nine daughters whose husbands were from other tribes because kikuyu did not have boys according to

their mythology. Given this understanding, he argues that Kikuyu people are the only people who are a representative of all communities in Kenya.

DISCUSSION

The propagandists concentrated on Jubilee or NASA and their candidates, Uhuru Kenyatta and Raila Odinga or their close principles in their analyses and ignored any other candidate, political party or alliance. This way, the fake analysts produce an ideology that governs their audience and normalises their sensational ideals. According to Adorno and Horkheimer (1979), such mass media disseminate beliefs, which represent imaginary relationship of individuals to their real conditions of existence as also demonstrated by Louis Althusser in “ideology and ideological state apparatuses” where he argues that an ideology that an individual accepts governs them.

The propagandists, at extremes resorted to referring to the presidential candidates and supporters of Jubilee or NASA by their presumed ethnic signatures, names and referents. For example, the Kikuyu nation and Jubilee, Uthamaki, *nyumbaya Mumbi* (House of Mumbi), the Luo nation and their support for Raila Odinga, the Mt. Kenya region, the Luo Nyanza, the western vote and so on. The fake analysts entrench ethnic ideology that the audience later find it hard to drop for alternatives. This is in line with the argument of Adorno and Horkheimer (1979) that mass media produce mass ideology, which masses have no choice but to accept. They contend that Mass culture ideology is not a product of consumer demand but created by the mass media (of whatever form) in order to create demand for the products of capitalism while killing independent thoughts and pluralism.

They also explicitly reduced Kenya into a battle between two tribes, the kikuyu (referring to Uhuru Kenyatta) and Luo (referring to Raila Odinga). Capitalising on ethnicity as their ideology, these fake analysts use video clips posted on YouTube and other internet sites for their own benefit such as viewership consolidation, power and influence consolidation and this forms the political economy of such productions. It is assumed that these propagandists are hired by political formations to speak to their audience on what they want to hear and spoil for the opponent. The acceptance of explicit ethnicity in these video clips a reflection of the culture of Kenyan audience.

The propagandists, knowing that the online platform is less controlled and enjoying its anonymity are free to describe their target audiences’ opponent by name and the titles of the videos bear such referents as Raila Odinga, Uhuru Kenyatta, Luo, Kikuyu, Uthamaki, and Gema. Still it is important to note that they borrow from the mainstream media and continue the propagation of already set agenda of whom the audience should think about as the most important person, political party or alliance and events. Agenda setting theory by McCombs and Donald Shaw (1972) informs that the mass media (whether mainstream or alternative in the case of this study) tells or even implies to the society what issues are important in such a way that although they may not tell their audience what to think, they set for them what to think about (Cohen, 1963).

This is later to be given another reality by Max McCombs in 2014 interview where he argues that mass media may not only influence the audience on what issues to think about, but may go further to tell the public “how to think about some issues and even what to do” (Griffin, 2014).

The propagandist analyses were meant to the end of telling people what to do with the ‘unfit’ candidate; Mutahi Ngunyi in a video entitled *Tyranny of lies: why Uhuru will defeat Raila* (August 5, 2017) advises Uhuru Kenyatta to out-bully Raila. In another video entitled *the fall and fall of Raila Odinga* (Nov 18, 2017) Mutahi Ngunyi directs that “Uhuru should show Raila no mercy, should not make any covenant with Raila, he should destroy him decisively” (Ngunyi, 2017).

Samuel Okemwa in his Kenya News Alert TV video entitled *MeruRevolution_Gema has politically exploited Meru and Embu while benefiting Kikuyus. Wake up now!* (June 19, 2017) advises that Meru people should not be supporting Kikuyu and then be forgotten - that Embu and Meru people should leave Jubilee, which is Kikuyu and Join NASA. In another video entitled *Revealed Kikuyu Mungiki criminals used during elections* (Jan 24, 2018), Samuel Okemwa orders Jubilee to “take these *Mungiki* boys to Nyeri, MuranganaThika where you brought them from, they are mugging people in Nairobi”. The voice of these propagandists is taken as the voice of their political support followers and their order of action is borrowed as an ideology to reckon with during electoral process.

The mobilization strategy through propaganda is the fifth filter in Herman and Chomsky (2002) propaganda model based on handling an external enemy or threat. The theory has it that the mass media mobilizes the society (in this case NASA or Jubilee followers) against a common enemy (which is the opponent party and their member’s ethnic group). According to Herman and Chomsky (2002), the does this by demonizing opponents of a favorable policy by manufacturing consent on behalf of a few elites who are deemed beneficial to them. As a result, any form of sponsored journalism (whether mainstream or alternative as in our suspect online propagandist fake analyses) according to the propaganda model is never objective or service to the society but to the elitist’s interest. Kimenyi (1997) and Orvis (2001) explains why this is possible in Kenya, arguing that Kenyan politics have been ethicized since independence and it has been a trend normalized by the citizen over time and taken by media for appropriation. This appropriation has, as seen in 2017, been graduated to internet audience. Given the argument that mass media producers tend to favour the demand side rather than the supply side (Fridkin, Kenney, Wintersieck, 2015), the fake analysts prey on the high demand of ethnic hatred by the supporters of the political affiliations they chose to support.

CONCLUSION

The propagandists concentrated on Jubilee or NASA and their candidates, Uhuru Kenyatta and Raila Odinga or their close principles in their analyses and ignored any other candidate, political party or alliance. The blogger propagandists, at extremes resorted to referring to the presidential candidates and supporters of Jubilee or NASA by their presumed ethnic signatures, names and referents. For example, the Kikuyu nation and jubilee, Uthamaki, *nyumbaya Mumbi* (House of Mumbi), the Luo nation and their support for Raila Odinga, the Mt. Kenya region, the Luo Nyanza, the western vote and so on. The fake analysts entrench ethnic ideology that the audience later find it hard to drop for alternatives. The propagandists, knowing that the online platform is less controlled and enjoying its anonymity are free to describe their target audiences’ opponent by name and the titles of the videos bear such referents as Raila Odinga, Uhuru Kenyatta, Luo, Kikuyu, Uthamaki, and Gema. The propagandist analyses were meant to the end of telling people what to do with the ‘unfit’ candidate; Mutahi Ngunyi in a video entitled *Tyranny of lies: why*

Uhuru will defeat Raila (August 5, 2017) advises Uhuru Kenyatta to out-bully Raila. In another video entitled *The fall and fall of Raila Odinga* (Nov 18, 2017) Mutahi Ngunyi directs that “Uhuru should show Raila no mercy, should not make any covenant with Raila, he should destroy him decisively” (Ngunyi, 2017). Samuel Okemwa in his Kenya News Alert TV video entitled *MeruRevolution_Gema has politically exploited Meru and Embu while benefiting Kikuyus. Wake up now!* (June 19, 2017) advises that Meru people should not be supporting Kikuyu and then be forgotten - that Embu and Meru people should leave Jubilee, which belongs to Kikuyu and Join NASA. In another video entitled *Revealed Kikuyu Mungiki criminals used during elections* (Jan 24, 2018), Samuel Okemwa orders Jubilee to “take these *Mungiki* boys to Nyeri, Muranga and Thika where you brought them from-- they are mugging people in Nairobi”. In summary, the political players found it useful to consider seriously ethno-politics because it had political economy benefit of wide coverage and political advertising and party brand promotion to them and to the media during the 2017 electoral process. It also reduced their cost in two ways—by ensuring free media coverage and obtaining free promotion under the cover of their political party, political party leader, and their ethnic group. The findings also indicated that propaganda videos provided fake analyses that used extreme ethno-politics and their analyses revolved around NASA and Jubilee and their ethnic groups constituting their leadership, thus normalizing ethnicity during electoral process. Through the fake analyses, the media consumers were derailed from objectivity in their way of voting and conducting other affairs related to electoral process. The mainstream media through television political analyses and the alternative media through propaganda videos were critical in setting an ethnic agenda that the audience considered extremely important for elections.

References

- Wilson, J. (2001). ‘Political discourse.’ In Schiffrin D., Tannen, D., & Hamilton, H.E. (eds). *The handbook of discourse analysis*. Oxford: Blackwell
- Atton, C. (2002). *Alternative media*. Thousand Oaks, CA: Sage Publications.
- Babe, R. E. (2011). ‘Theodore Adorno and Dallas Smythe: Culture Industry/Consciousness Industry and the Political Economy of Media and Communication.’ In *Revisiting the Frankfurt School*. Surrey: Ashgate.
- Carpentiere, N. (2011). *Media and participation: A site of ideological democratic struggle*. Chicago: Intellect Publisher Ltd.
- Chomsky, N. (1997). What makes mainstream media mainstream. *Z Magazine*. Retrieved from <https://chomsky.info/199710/>
- Downing, J. (2001). *Radical media*. Thousand Oaks, CA: Sage Publications.
- Fridkin, K., Kenney, P. J., & Wintersieck, A. (2015). Liar, liar, pants on fire: How fact-checking influences citizens’ reactions to negative advertising. *Political Communication*, 32 (1), 127-151.
- Herman, E., & Chomsky, N. (2002). *Manufacturing consent: The political economy of the mass media* (First Published in 1988). New York: Pantheon Books.
- Kimenyi, M. S. (1997). *Ethnic diversity, liberty and the state: The African dilemma*. Cheltenham, Eng: Edward Elgar.
- Kimenyi, M. S. (2003). Ethnicity, governance and the provision of public goods. *Economics Working Papers*. Retrieved from http://digitalcommons.uconn.edu/econ_wpapers/20

- Lievrouw, L. (2011). 'Breaking through the blockade.' In *Alternative and activist new media*. (119-148). Cambridge: Polity Press.
- Munene, K. (2013). *Polarization of politics in Kenya along ethnic lines*. Retrieved from <http://africanewsonline.blogspot.co.ke/2013/07/polarization-of-politics-in-kenya-along.html>
- Peters, C. (2016). 'Spaces and places of news consumption.' In: Witschge, T., Anderson, C. W., Domingo, D., & Hermida, A. (Eds.). *The Sage handbook of digital journalism*. London: Sage (pp. 354-369).
- Shaw, D. L., & McCombs, M. E. (Eds.) (1977). *The Emergence of American political issues: The agenda setting function of the press*. St. Paul, Minnesota: West Publishers.
- Yieke, F. (2010). Ethnicity and development in Kenya: Lessons from the 2007 General Elections. *Kenya Studies Review*, 3(3), 5-16.

Influence of Teacher-related Factors on Timely Coverage of KCSE Biology Syllabus in Secondary Schools in Rongai Sub-County, Kenya

Bett Benard Kiprono,
School of Education, Kabarak University

Frederick B. J. A. Ngala,
School of Education, Kabarak University

Bernard Chemwei,
School of Education, Kabarak University

Abstract

It has been noted that timely coverage of Biology syllabus is lacking in most of the secondary schools in Kenya. The need for timely coverage of secondary school syllabi is crucial in Kenya and the world at large. The study sought to determine influence of teacher related factors on timely coverage of KCSE Biology syllabus in Secondary Schools in Rongai Sub-County, Kenya. The objective of this study is to establish influence of teacher related factors on time of coverage of KCSE Biology syllabus in Secondary Schools in Rongai Sub-County, Kenya. The study adopted survey design. The study was based in Nakuru Rongai Sub-County secondary schools. The target population of this study comprised of 174 Biology teachers across 54 schools in Rongai sub County. Moreover, census method was used to select all the Biology teachers, constituting sample size of 174 teachers. Data was obtained using a questionnaire. The findings revealed that there exist a positive and statistically significant relationship between Teacher Related Factors and Timely Coverage of Biology Syllabus ($r=0.608^{**}$; $p<0.01$). It can be concluded that, teacher related factors cause a significant positive variation on timely coverage of Biology Syllabus. Therefore, these factors are central to timely coverage of Biology syllabus. They are worth considering when adequate and timely coverage of Biology syllabus is sought. From the study findings, it can be recommended that teacher related instructional administrators should put factors and specifically selection of appropriate teaching methods, teachers' workload, teacher availability and time management in place in order to ensure that timely coverage of Biology syllabus is achieved in schools.

Keywords: Timely Coverage, Biology syllabus, Teacher-related factors

INTRODUCTION

Background of the Study

Globally, science teachers have been shown to have difficulties in implementing science curriculum in secondary schools. Vasconcelos, Torres, Mountinho, Martins and Costa (2015) conducted a study on Portuguese teachers' difficulties in implementing sciences curriculum. They showed that the major difficulties experienced by science teachers when implementing the curriculum includes length of curriculum, and unsuitable laboratory facilities among others thus affecting coverage of syllabus in good time.

In Saudi Arabia, research has shown that teachers have some difficulties in addressing practical problems with covering the current Biology curriculum, using sufficient supplementation for teaching methods, and understanding validation of the evaluation process as presented by students on the teachers' achievements (Alshehry, 2014). In Nigeria, following the non-development of sound science education in schools, it was reported that some critical science education activities have suffered serious setback including non-coverage of science schemes of work. This is attributed to insufficient time allocation in school time table and persistent use of lecture method in science teaching (Ajaja, 2009).

In Kenya, a study carried by Mbalaka (2016) to establish the extent to which teachers' relational factors which includes communication, conflict resolution, coordination and attitude influence timely syllabus coverage in public secondary schools within Migwani sub-county, Kitui County. The findings revealed that teachers' relational factors have positive influence on timely syllabus coverage. However, this study never investigated on Biology syllabus which is the focus of the present study.

Lack of coverage of Biology syllabus may lead to poor academic performance. According to DQUASO report (2015-16), the Kenya Certificate of Secondary Education (KCSE) analysis report for Rongai Sub-county is disturbing. It was observed that Biology mean scores for the sub-county were 4.4291 and 2.8013 for the year 2015 and 2016 respectively. This indicates that there is a downward trend in the academic performance in Biology. This may be an indicative of lack of timely coverage of Biology syllabus in the sub-county, hence the need for this research. No study has been conducted in Nakuru to determine factors influencing time of coverage of KCSE Biology syllabus. The present study therefore focused on the influence of teacher related factors on timely coverage of KCSE Biology syllabus in Secondary Schools in Rongai Sub-County, Kenya.

Statement of the Problem

According to Kenya National Examinations Council (2011) teachers should cover the syllabus adequately to enable students to have a clear grasp of the content. However, the background to this study, timely coverage of Biology syllabus is lacking in most of the secondary schools in Kenya. Kananu (2011) also confirms that there is still inadequate syllabus coverage in Kenyan schools and that whatever was covered was not done effectively. It implies that if Biology syllabus is not covered in good time, performance in National examination could be affected as

confirmed by the Biology mean scores of 4.4291 and 2.8013 for the year 2015 and 2016 respectively in Rongai Sub-County (DQUASO, 2016). This problem therefore led the researcher to investigate factors, which influence time of coverage of Biology Syllabus in Secondary Schools in Rongai Sub-County.

Research Objective

The objective of this study was to establish the influence of teacher related factors on timely coverage of KCSE Biology syllabus in Secondary Schools in Rongai Sub-County, Kenya.

Research Hypothesis

The study was guided by the following hypothesis:

H₀₁: Teacher related factors have no significant influence on timely coverage of KCSE Biology syllabus in Secondary Schools in Rongai Sub-County, Kenya.

Scope of the Study

The study was carried in secondary schools in Rongai sub-county. Rongai sub-county is located in Nakuru County, Kenya. The study sought to look at timely syllabus coverage in relation to teacher related factors. The study was carried out between the months of February to May 2018. Finally, the study limited itself to teachers of Biology in Rongai Sub-County schools who were the source of primary data.

LITERATURE REVIEW

Timely Coverage of Biology Syllabus

Timely syllabus coverage is critical to learners as pertains to performance in end of secondary school course examinations. In West Africa, a study by Olusegun (2017) revealed that around one million students who sat for West African Examination Council (WAEC) in 2016 failed. The researcher further argues that the cause of massive failure in WAEC was attributed to inadequate coverage of syllabus and students' lack of strong reading spirit, lack of knowledge of common pitfalls, coupled with and non-familiarity with test format.

In Kenya, Okode (2013) conducted a research to determine the influence of secondary schools' strategic planning on students' academic performance in Rachuonyo North District. The finding indicated that a majority of the Head of Departments and principals specified that they set targets for syllabus coverage by mid of June. The Study further revealed that teachers use syllabus in lesson preparation and teaching. This show that time of coverage of syllabus is central to students' performance of exams. Early coverage of school syllabus allows time for working on the students' self-efficacy and mathematical self-concept which are very important in developing self-confidence and improving performance of individual students (Ferla, Valcke, & Cai, 2009).

Teacher Related Factors and Coverage of Biology Syllabus

Teachers need a wide range of different skills and attitudes if they are to assist their students achieve high outcomes. These should include relationships with students, subject matter knowledge and also an understanding of pedagogical processes to develop the understanding that is required. According to Takbir (2012), teachers need to make instructional selections from among an array of choices comprising teaching methods and models, teaching acts and

instructional strategies such as practical work, interactions through group work or pair work, presentations, whole class discussion, application of knowledge, use of creative motivational techniques, questioning and applying problem solving or inquiry-oriented instructional strategies. It can be inferred that appropriate instructional selection will promote attainment of what is to be learnt in a lesson. The study by Takbir (2012) did not show the influence of instruction selection on time of coverage of Biology syllabus necessitating the present study.

In United Kingdom, a report by Dickens (2017) revealed that teachers are working an average of 54.4 hours a week – nearly 11 hours per day, the government's first comprehensive survey into workload has revealed. Precisely, secondary school senior leaders worked 62-hour weeks – which equates to 12.4 hours a day. Dickens (Ibid) further reports that a third of part-time teachers said 40 per cent of their total hours were outside of school hours. It was further revealed that that teachers and head teachers are dealing with unsustainable workload demands on a daily basis, and much of their time is being spent on activities which are either unnecessary or which could be undertaken by staff other than teachers. It can be construed that unsustainable work load may hinder a teacher to fully cover the prescribed syllabus as nearly most of instruction time is spent on activities which are of least important. The report by Dickens (2017) did not investigate influence of teachers' work load on time of coverage of Biology syllabus, which present study endeavors to examine.

According to Kenya GPE Secretariat (2017), teacher absenteeism has been an increasing problem in Kenya and that up to 20% teacher absenteeism occur due to the fact that they miss classes because of illness, a family emergency, or for official work other than teaching. Regardless, the outcome is the same in that their students miss out on their education. Teachers will be spending more time going back to uncovered material with limited time thus affecting time of coverage of topics to be studied later in the term. Kenya GPE Secretariat (2017), did not determine the influence of teachers' absenteeism on time of coverage of Biology syllabus, which this present study strives to investigate.

Theoretical Framework

This study will be guided by the curriculum implementation theory advocated by Gross, Guacuinta and Berstein (1971). This theory posits that the implementation of any educational programme encompasses availability of facilities, teachers' capability, management support and compatibility with organizational arrangement and clarity of the implementer of what is to be done. This theory was used to guide the study, because the factors that Gross et al. (1971) propounded are also relevant in the implementation of Biology syllabus.

RESEARCH DESIGN AND METHODOLOGY

Research Design

This study adopted descriptive survey design and correlation research design. This enabled researcher to gather information concerning teacher-related factors influencing timely coverage of KCSE of Biology syllabus in Rongai Sub-County, Kenya.

Location of Study

The study was based in all Secondary Schools in Rongai Sub-County. Rongai Sub County is one of nine Sub counties in Nakuru County. It consists of five wards namely Menengai west, Soin,

Visoi, Mosop and Solai. It is estimated that the current population is 130,132 people covering and area of 1,049.10 Sq. Km (KNBS, 2010).

Population of Study

Table 1: Target Population

Zone	No of secondary schools	No. of Biology Teacher
Kampi ya Moto	12	48
Ngata	13	39
Rongai	16	48
Solai	13	39
Total	54	174

Source: TSC (2017)

Sampling Procedure and Sample Size

Sampling Procedure

This study adopted census method. This is because the number of cases per school was few to be sampled.

Sample Size

Table 2: Sample Size

Zone	No of Secondary schools	No of Biology Teachers per School	Sample Size
Kampi ya Moto	12	4	48
Ngata	13	3	39
Rongai	16	3	48
Solai	13	3	39
Total	54		174

Instrumentation

The questionnaire comprised of the Likert type with a 5-point scale which was divided into sub-sections encompassing factors influencing time of coverage KCSE of Biology syllabus in Rongai Sub-County, Kenya.

Validity of the Research Instrument.

In this study, validity of the instrument was determined by seeking assistance from the research supervisors from Kabarak University who were able to read the content, look at the items and ensure that they reflect the actual content area. Corrections were made with respect to items which are not valid.

Reliability of Research Instruments

Table 3 represents test-re-test reliability statistics

Table 3: Test-re-test reliability statistics

Variable	N	No. of Items	Pearson(r)	p-value	Decision
Teacher Related Factors	17	11	0.710**	0.001	Reliable
Timely Coverage of Biology Syllabus	17	5	0.770**	0.000	Reliable

RESULTS

Teacher Related Factors

This section presents statistics related to the respondent's opinion concerning teacher related factors. Statistics related to Percentages, Means, chi-square, t test and ANOVA are presented.

Frequencies of Teacher Related Factors

Table 5: Teacher Related Factors

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	χ^2	p-value
Use of ICT resources during Biology lesson encourages student creativity and participation	0.0	6.0	2.4	42.5	49.1	117.57	0.000
There is a lack of streamlined guide to ICT use in teaching Biology	1.2	29.9	8.4	35.3	25.1	70.87	0.000
Teachers absenteeism in lessons always hinder biology syllabus coverage	1.8	3.6	7.8	49.7	37.1	160.75	0.000
Audio-visual aids enhance teaching and learning by increasing teaching pace	1.2	4.2	3.6	74.9	16.2	325.30	0.000
I Rarely use audio-visual teaching aids in biology lesson	6.0	27.5	3.0	37.7	25.7	74.28	0.000
Biology syllabus is very wide, making it difficult to complete.	0.6	7.8	10.8	54.5	26.3	153.68	0.000
I'm well equipped with ICT skills and knowledge for biology instruction	3.6	9.6	1.2	67.7	18.0	251.11	0.000
We have few teachers in the department to assist in completing the syllabus.	6.0	21.6	4.8	57.5	10.2	161.29	0.000
I have unsustainable workload which does not allow me to complete biology syllabus	2.4	26.9	2.4	45.5	22.8	110.75	0.000
Some topics are difficult to teach due to lack of materials	12.6	16.2	6.6	40.1	24.6	56.38	0.000
Some teaching approaches for Biology require a lot of time	2.4	3.0	6.6	33.5	54.5	179.67	0.000

Key:SA=Strongly Agree; A=Agree; N=Neutral; D=Disagree; SD=Strongly Disagree; %=Percentages and χ^2 =chi-square.

According to Table 5 shows that 91.6% significantly agreed that use of ICT resources during Biology lesson encourages student creativity and participation ($\chi^2=117.57$; $p<0.05$). It was notable with 91.1% of respondents who significantly agreed that audio-visual aids enhance teaching and learning by increasing teaching pace ($\chi^2=325.30$; $p<0.05$). It can be inferred that when ICT resources are utilized during teaching, both teaching and learning will be enhanced. This finding corroborates with Bitok (2012) who argues that technology allows learning to take place anywhere at any time; not just in one particular place. Bitok further states that ICTs also provide depth of learning through interactive simulations and illustrations as they also foster collaboration; students can work collaboratively on projects with others who may not be physically close. In the same way, this finding agrees with a research by Mbugua , Gori and Tanui (2015) on integration of Information Communication Technology in Teaching in Public

Secondary Schools in Nakuru County, revealed that ICT facilities were inadequate and teachers had only basic or no ICT skills. This means that when teachers lack ICT skills may affect the manner in which syllabus is covered since use of ICT is expected to improve teaching pace and stimulate learning. Therefore, syllabus may not be adequately covered in good time.

Despite the fact that teachers assured that they were well equipped with ICT skills and knowledge for Biology instruction (85.7%), it was noted that 63.4% opined that they rarely used audio-visual teaching aids during Biology lesson. This observation was upheld by (60.4%) who aver that there was a lack of streamlined guide to ICT use in teaching Biology. It can be argued that lack of ICT resources may affect timely coverage of biology syllabus. This observation agrees with Ochieng' (2013) who opines that in Kisumu East district, majority of science teachers rarely use ICT to deliver their lessons. It can be inferred that lack of utilization of ICT by teachers may reduce their ability to integrate new dimension of concept delivery during teaching thereby affecting their timely coverage of Biology syllabus. Nevertheless, it was observed that respondents disagreed that Biology syllabus is very wide, making it difficult to be completed and that Teachers absenteeism in lessons always hinder biology syllabus coverage with 8.4% and 5.4% respectively. These observations are not significant meaning that the breadth of the syllabus and Teachers absenteeism may not be the main factors affecting syllabus coverage.

Regarding availability of teaching staff, material for teaching and time for delivery, it was overwhelmingly supported by respondents that they have few teachers in the department to assist in completing the syllabus (67.7%) consequently leading to unmanageable workload which does not allow completion biology syllabus in good time (68.3%). It was reported by 64.7% and 88% of respondents that some topics were difficult to teach due to lack of teaching materials and that teaching approaches for Biology required a lot of time. This finding shows that when there are inadequate teachers and unmanageable workload, timely coverage of the syllabus will not be achieved. This finding concurs with that of Sigilai (2013) who concluded that effective curriculum implementation factors such as adequate teachers and physical facilities aid in achieving better learning outcomes. Similarly, Mucai (2013) established that unavailability of textbooks affected learning especially in mixed day schools. Since reference material such as textbooks are important in teaching and learning, unavailability of these resources may hinder timely coverage of Biology syllabus.

Difference in Teacher Related Factors by Type of School

An independent sample t-test was run to show mean difference in Teacher related factors between public and private Schools at 0.05 level of significance. The results are presented in Table 6.

Table 6: t-test on Teacher Related Factors by type of school

Type of school	N	Mean	Std. Dev	Df	t-value	p-value
Public School	124	3.96	0.60	165	3.411	.001*
Private school	43	3.50	0.81			

*Significant at 0.05 level

The result of the independent sample t test indicates that the difference in teacher related factors between Public and Private school was statistically significant at 0.05, $t(165) = 3.411$, $p < 0.05$. This shows that since public schools had a higher mean ($M = 3.96$), teacher related factors

influencing timely coverage of Biology syllabus were seen to be prevalent in these schools as compared to private schools (M=3.50).

Correlation between Independent and Dependent Variables

In this study, Pearson Correlation was conducted in order to determine the existence and significance of the relationship between teacher-related factors and timely coverage of Biology syllabus. Table 7 shows Pearson Correlation between Independent and Dependent Variables.

Table 7: Pearson Correlation Coefficient between Teacher Related Factors and Timely Coverage of Biology Syllabus

		Timely Coverage of Biology Syllabus	Teacher Related Factors
Timely Coverage of Biology Syllabus	Pearson Correlation	1	.608**
	Sig. (2-Tailed)		.000
	N	167	167

** . Correlation Is Significant at the 0.01 Level (2-Tailed).

Table 7 shows that there exists a positive and statistically significant relationship between Teacher Related Factors and Timely Coverage of Biology Syllabus ($r=0.608^{**}$; $p<0.01$). This means that as undesirable teacher related factors under investigation become prominent, it correspondingly increases time required to cover the syllabus. However, a decrease in undesirable teacher related factors leads to timely coverage of syllabus.

Regression Analysis

The effect of independent variables on the dependent variable was presented using the regression model. The result is shown in Table 8

Table 8: Coefficients^a

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	-0.430	0.274	-1.571	.118
Teacher Related Factors	0.211	0.094	2.233	.027

a. Dependent Variable: Timely Coverage of Biology Syllabus

On the basis of unstandardized coefficients, the model indicates that Teacher Related Factors influences up to 21.1% positive variation on Timely Coverage of Biology Syllabus. This means that when these teacher-related factors increase, it causes a significant increase by 21.1% on Timely Coverage of Biology Syllabus.

Hypotheses Testing

In this study, the null hypothesis was tested as follows: Reject $H_0: \beta_x = 0$; if $p < 0.05$, Otherwise fail to reject the $H_0, \beta_x = 0$.

H_{01} : Teacher related factors have no significant influence on timely of coverage of KCSE Biology syllabus in Secondary Schools in Rongai Sub-County, Kenya.

From Table 8, the Unstandardized Beta coefficient for Teacher related factors variable has a corresponding $p=0.027$ which is less than 0.05 alpha, leading to a rejection of the null hypothesis. Accordingly, a decision is made that Teacher related factors have significant influence on timely of coverage of KCSE Biology syllabus in Secondary Schools in Rongai Sub-County, Kenya. Therefore, teacher related factors are important predictor of timely coverage of KCSE Biology syllabus in Secondary Schools.

SUMMARY, CONCLUSSIONS AND RECOMMENDATION

Summary of Key Findings

Teacher Related Factors and Timely Coverage of KCSE Biology Syllabus

Teacher related factors that may affect timely coverage of Biology syllabus spans from teaching approaches, teachers' workload, school discipline and time management among others. Regarding teaching resources and teaching time, the study found out that some teaching approaches for Biology required a lot of time. Similarly, it was noted that teachers' absenteeism in lessons always hinder biology syllabus coverage with means of 4.35, and 4.17 respectively. This is an indication that timely coverage of Biology syllabus could be disadvantaged when appropriate resources and time is lacking.

Concerning ICT utilization, it was observed that even though respondents assert that they were well equipped with ICT skills and knowledge for Biology instruction(mean \approx 4.00) as well as that use of ICT resources during biology lesson encourages student creativity and participation (mean \approx 4.00), it was noticed that they rarely use audio-visual teaching aids in biology lesson (mean \approx 4.00).This situation was multifaceted by the fact that there was lack of streamlined guide to ICT use in teaching Biology(mean \approx 4.00).

Conclusions

From the finding of the analyzed data, it can be established that there exist a positive and statistically significant relationship between Teacher Related Factors and Timely Coverage of Biology Syllabus ($r=0.608^{**}$; $p<0.01$). This means that teacher related factors being investigated affect positively timely coverage of Biology syllabus.

Recommendations

Teacher related factors and specifically, selection of appropriate teaching methods, teachers' workload, teacher availability and time management should be put in place by instructional administrators in order to ensure that timely coverage of Biology syllabus is achieved in schools.

Ajaja , P. O. (2009). Evaluation of science teaching in secondary schools in Delta State 2: Teaching of the sciences. *International Journal of Education*, 1(2), 119-129.

Alshehry, A. T. (2014). Investigating factors affecting science teachers' performance and satisfaction toward their teaching process at Najran University for Girls' Science Colleges. *International Journal of Higher Education*, 3(2), 73-82.

Amadalo , M. M., Shikuku , B. N., & Wasike , D. W. (2012). Investigation of factors that influence syllabus coverage in secondary school mathematics in Kenya. *International Journal of Humanities and Social Science*, 2(15), 51-59.

- Bitok, E. B. (2012). Availability of Information and Communication Technology resources in teaching and learning of biology by secondary schools in Uasin Gishu County, Kenya. *International Journal of Science and Research*, 2279-2285.
- Dickens, J. (2017, February 24). *Teachers work nearly 11 hours a day, landmark workload survey reveals*. Retrieved August 2, 2017, from SCHOOLS WEEK: <http://schoolsweek.co.uk/teachers-work-nearly-11-hours-a-day-landmark-workload-survey-reveals/>
- DQUASO. (2016). *KCSE 2016 Subject Grade Summaries*. Nakuru: Unpublished Report.
- Ferla, Johan, Martin Valcke, & Yonghong Cai. (2009). Academic Self-efficacy and academic self-concept: Reconsidering structural relationships. *Learning and Individual Differences*, 19 (4), 499–505.
- Gholami, J., Sarkhosh, M., & Abdi, H. (2016). An exploration of teaching practices of private, public, and public-private EFL teachers in Iran. *Journal of Teacher Education for Sustainability*, 8(1), 16-33.
- GPE Secretariat. (2017, August 8). *Transforming teaching in Kenya*. Retrieved on September 5, 2017, from Global Partnership For Education: <http://www.globalpartnership.org/blog/transforming-teaching-kenya>
- Gross, N., Guacuinta, J. B., & Berstein, M. (1971). *Implementing Organisational Innovations: A sociological analysis of planned educational change*. New York: Harper International.
- Kananu, S. B. (2011). Factors contributing to poor performance in Mathematics at KCPE in public primary schools in Isiolo District, Eastern province (Unpublished Thesis: Kenyatta University, Nairobi).
- Karim, A. (2013). *Data Collection Instruments (Questionnaire & Interview)*. Geneva: Geneva Foundation for Medical Education and Research.
- Kenya National Examinations Council. (2011). *Year 2005 K.C.S.E Examination Report*. Nairobi: Government Printer.
- Kimberlin, & Winsterstein. (2008). Validity and reliability of measurement instruments used in research. *Am J Health Syst Pharm*, 65(23), 2276-2284
- Kumar, R. (2011). *Research methodology: A step-by-step guide for beginners*. New Delhi: SAGE.
- Lavrakas, P. J. (2011, January 1). *Target population*. Retrieved on April 7, 2017, from SAGE Research Methods: <http://methods.sagepub.com/reference/encyclopedia-of-survey-research-methods/n571.xml>
- Mbalaka, P. M. (2016). *Teachers' relational factors influencing timely syllabus coverage in public secondary schools within Migwani Sub-County, Kitui County, Kenya* (Thesis: South Eastern Kenya University).
- Mbugua, S. N., Gori, J. M., & Tanui, E. (2015). Integration of Information Communication Technology in teaching in public secondary schools in Nakuru County, Kenya. *International Journal of Education and Research*, 3(8), 271-282.
- Mucaj, E. W. (2013). Availability and utilization of educational resources in influencing students performance in secondary schools in Mbeere south, Embu county (Unpublished Thesis: Kenyatta University, Kenya).
- Obasi, V. A. (2014). *Implementation: A critical variable in curriculum development*. Retrieved January 2, 2018, from Global Academic Group: <http://www.globalacademicgroup.com/journals/nact/Obasi.pdf>

- Ochieng, J. O. (2013). Determinants of Information and Communication Technology integration in the teaching of sciences in public secondary schools in Kisumu East District, Kenya (Unpublished Thesis: University of Nairobi).
- Ogula, P. A. (2005). *Research methods*. Nairobi: Catholic University of Eastern Africa Publications.
- Okode, G. O. (2013). Influence of secondary schools' strategic planning on students' academic performance in Rachuonyo North District, Kenya (Unpublished Thesis: University of Nairobi).
- Olusegun, F. (2017, September 6). *WAEC Latest Syllabus By Subject 2017*. Retrieved August 17, 2017, from Just naira blog: <http://www.justnaira.com/west-african-examination-council-waec/>
- Okuom, H., Simatwa, E., Olel, M., & Wichenje, K. (2012). Assessment of factors that contribute to repetition and dropout of pupils in primary schools in flood prone areas of Nyando District, Kenya: An analytical study. *Education Research*, 3(2), 190-201.
- Oladimeji, A. B. (2015). Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. *Nigerian Post Graduate Medical Journal*, 22(4), 195-201.
- Osuala, E. C. (1987). *Introduction to research methodology*. Nairobi: Morrison Publishers.
- Salaria, N. (2012). Meaning of the term descriptive survey research method. *International Journal of Transformations in Business Management*, 1-7.
- Sigilai, R. M. (2013). A review of curriculum-related factors influencing academic achievements among students in public secondary schools in Kenya. *International Journal of Advanced Research*, 1(3), 219-230.
- Takbir, A. (2012). A case study of the common difficulties experienced by high school students in chemistry classroom in Gilgit-Baltistan (Pakistan). *SAGE Journals*, 1-13.
- TSC. (2017). *Listing of Schools*. Retrieved on August 4, 2017, from Teachers Service Commission of Kenya Online Services: <http://www.teachersonline.go.ke/masterbasic.aspx>
- Vasconcelos, C., Torres, J., Mountinho, S., Martins, I., & Costa, N. (2015). Faculdade de Ciências, Ins. *Cogent Education*, 2(1), 1-12.

Influence of Roles Played by Student Councils on Curbing Frequency of Student Unrests in Public Boys Boarding Secondary Schools in Elgon Sub-County, Kenya

Simatwa Leslie Kimame,
School of Education, Kabarak University

Frederick B. J. A. Ngala,
School of Education, Kabarak University

Betty Tikoko,
School of Education, Kabarak University

Abstract

The government of Kenya, through the Ministry of Education, established Student Councils in Secondary Schools in 2009 to assist schools to manage student affairs. However, student unrests, which are manifested in strikes, go-slows, rioting, burning of school property and violent behaviors, still continue unabated. For instance, during the last eight years, some schools in Bungoma County, Kenya, witnessed unprecedented rise in incidences of student unrests. The purpose of this study was to assess the influence of decision-making roles played by student councils on curbing the frequency of student unrests in Public Boys Boarding Secondary Schools in Elgon Sub-county, Kenya. The study was based on Social Systems Theory. In the conceptual framework, the frequency of student unrests depends on decision-making roles played by student councils. The study adopted a descriptive survey design. Census method was used to sample the three secondary schools because these are the only Public Boys Boarding Secondary Schools. Stratified sampling technique was used to sample respondents from the categories of students and members of student councils. The target population for students was 750 while that of members of student councils was 78. The study used Students' Questionnaire and Questionnaire for members of Student Councils as research instruments. Likert type items with a 4-point response scale were used to collect information. Respondents (77.7%) maintained that student councils never participate in decision-making regarding bullying in schools (mean of 3.56 and a standard deviation of 0.86). Another 95.9% of respondents averred that student councils never participate in decision making regarding congestion in dormitories in school). Further, 77.4% of the respondents reported that student councils sometimes participate in decision making on matters regarding lack of sanitation services. It was found out that there exists a negative, strong and statistically significant relationship between decision making roles played by student councils and the frequency of student unrests ($r = -0.809^{**}$; $p < 0.01$). This implies that when student councils decision-making roles are enhanced in schools, the frequency of student unrest may decline. Based on the findings of this research it is concluded that decision making roles played by student councils influence frequency of student unrests in Public Boys Boarding Secondary Schools in Elgon Sub-county, Kenya. The study recommends that student councils should be thoroughly prepared for their roles through seminars, workshops. Student councils should have regular meetings with the principals. Student councils to strengthen capacity to make effective decisions should do benchmarking with good schools regularly.

Keywords: Student Councils, Student Unrests and roles played by student council

INTRODUCTION

Student Councils are representative bodies of students elected by students to voice their grievances to school management authorities (Wachira, 2010). In Nigeria, it is reported that student unrests were attributed to lack of effective decision making by school management. Students resorted to violence to vent their frustrations and disagreements (Arekenya, 2012). Ndung'u and Kwasira (2015) opine that Student Councils facilitate discussion of issues raised by students before they resort to violence.

The Ministry of Education, United Nations Children Education Fund and the Secondary Schools Heads Association in the year 2008 formed the Kenya Secondary Schools Student Councils (UNICEF, 2011). Its main aim was to find a long-lasting solution to unceasing student unrests in schools. Article 1 section 11 part (4) of the KSSSC constitution stipulated that students' councils should be committed to the constructive management of indiscipline by reducing student unrests (KSSSC, 2009). Yet, student unrests continue unabated. KSSSC (2009) observed that there is good evidence which exists in in-cooperating student councils in administration, improving staff and student relationship, reduction in indiscipline cases, student unrests in school and improved performance in academic and co-curricular programmes.

Table 2: The Frequency of Student Unrests in Schools in Bungoma County 2014-2017

Schools	Frequency of student unrests
Teremi high school.	4
Kimungui secondary	5
Milo secondary	7
Kaptama boys	6
Kapsokwony boys	7
Kimang'eti boys	5
Khasoko boys' high school	8

Statement of the Problem

Despite students and schools having functional student councils, many schools in Elgon Sub-county were particularly affected by the wave of student unrests which led to the loss of property. In 2016, three public schools from Elgon Sub-county went on student unrests, burnt dormitories and boycotted joint exams leading to the closure of schools (County Education Office, 2016). In particular, students of public boys' boarding schools in Elgon Sub-county burnt down their dormitories in 2016. Boys' schools in Elgon Sub-county, Bungoma County still grapple with the problem of unending student unrests even though they have put in place student councils. The problem of unceasing student unrests was confirmed by research studies conducted by Mukiti (2014), Nzioki (2015), and Kinyua (2015). This therefore raises a question on the efficacy of student councils in addressing the perennial problem of student unrests. It is therefore in light of this question that the researcher purposed to investigate the influence of roles played by student councils on curbing the frequency of student unrests in Public Boys Boarding Secondary Schools in Elgon Sub-county, Bungoma County, Kenya.

Objective of the Study

To establish the influence of decision-making roles played by student councils on curbing the frequency of student unrests in Public Boys Boarding Secondary Schools in Elgon Sub-county, Kenya.

Research Hypothesis

The study was guided by the following hypothesis:

H₀₁: There is no statistically significant influence of decision-making roles played by student councils on curbing the frequency of student unrests in Public Boys Boarding Secondary Schools in Elgon Sub-county, Kenya.

The Scope of the Study

The study was conducted in Elgon Sub-county, Bungoma County, Kenya. The study was delimited to students and student council members in Elgon Sub-county. All the 3 Public Boys Boarding Secondary Schools in Elgon Sub-county were sampled for the study. The study was limited to decision-making roles played by student councils in curbing student unrests.

LITERATURE REVIEW

The Role of Student Councils in Addressing Student Unrests

The elected student councils help to modify behavior, character and improve students discipline in school by adhering to set rules and regulations (UNICEF, 2013). According to Mutua (2014), most school administrations appoint student councils with or without student participation. Time has come for students to participate actively in electing their leaders to air their grievances to school management. This could assist in managing the frequency of student unrests in schools. School principals give Ministry directives, laws and school policies to student councils. These provide the student councils with the information required to manage the frequency of student unrests in schools (Okonji, 2016). This implies that student councils are oriented on how to conduct their roles to manage the frequency of student unrests in schools.

In Ghana, student councils ensure and safeguard the general welfare of students by acting as the voice of students, airing their grievances in order to create a conducive academic environment (Alexia, 2014). Student councils in Tanzania are charged with advisory and supervisory roles. For example, the chairperson of the student council is supposed to advise Heads of schools on matters concerning students' affairs and maintenance of discipline. They control activities such as games, clubs and societies, supervise communal work within the compound, oversee the organization and life of students in dormitories and ensure that meals are served well and on time (Kambuga, & Omollo, 2017). Research further has it that in Uganda student councils play dynamic roles where students are allowed to participate in the administration of their own affairs. They control on the punishment of students by teachers and reduce congestion of students in staffroom by representing and communicating students' needs. They also empower students to instill morals amongst themselves by arbitrating cases, in the school court before being referred to the disciplinary committee (Mukiti, 2014).

According to UNICEF and Kenya Secondary Schools Heads Association, a student Council refers to a student body appointed or elected in a school educational institution to be able to present students' interests and welfare to the school management (KESSHA, & UNICEF, 2013). Therefore, participation of students in issues that affect them like decision making roles played by student councils should be clearly defined to be able to manage indiscipline in schools (Indimuli, 2012). It is on this basis that the researcher sought to establish the influence of roles

played by student councils on curbing the frequency of student unrests in public Boys Boarding Secondary Schools in Elgon sub-county, Kenya.

Student participation in decision-making refers to the effort of student representative bodies such as school council, student parliament and prefectural body. It encompasses all aspects of student life like decision-making, communication and where students have a say, informally through personal negotiation as well as formally through purposely created structures and mechanisms (Kyalo, Konari, & Njagi, 2017). In the United Kingdom, student councils link school administration with students as they have authority over learners in decision-making (Arekenya, 2012). Wambulwa (2004) who states that the involvement of student councils in school management, through decision-making results in an improved school environment corroborates this view.

Theoretical Framework

Social System Theory

The research adopted the Social System Theory of Bertalanffy (1971). It is the interdisciplinary study of systems in general, with the objective of elucidating values that can be applied to all categories of systems at all points. Social system theory explains, predicts and describes organizational behavior in an institution, which has different units interacting and interdependent in carrying out their roles to achieve a common course. The malfunctioning of one system leads to negative effects on another system for instance if student councils can't effectively play their role on curbing student unrest, it may lead to the destruction of school property, student unrests and loss of life (Fish, 2005).

RESEARCH DESIGN AND METHODOLOGY

Research Design

This study adopted a survey research design where the researcher interacts naturally with respondents and records observation without undue influence (Kothari, 2011).

Location of the Study

The study was conducted in Elgon Sub-county, Bungoma County, Kenya. Major topographical factors making the Sub-county include rivers, valleys and arable soils with mixed farming of cash crops, subsistence farming and dairy farming. The sub-county borders Uganda in the north and west, Trans Nzoia County to the East and Bungoma town to the South.

Population of the Study

There are 30 secondary schools in Elgon Sub-county (D.E.O Statistic Department, 2017). The study targeted three Boys Secondary Schools, 750 students and 78 members of student council.

Sample Size.

Table 2 Sample Size

Population.	Target population.	Sample size.	Percentage.
Students.	750	254	34%
Student council members.	78	66	85%
TOTAL	828	320	

Table 3: Actual Proportional Allocation of Respondents

School	Students	Members of student councils
School A	85	22
School B	81	20
School C	88	24
TOTAL	254	66

Instrumentation

The study used Students' Questionnaire and Questionnaire for Members of Student Council as research instruments. Closed-ended items with Likert items of a 4-point response scale were used to collect information [in this case 4- Never, 3- Sometimes, 2- Frequently and 1- Always.].

Validity of Instrument

Experts in the area of education management subjected the items to scrutiny to eliminate items which were irrelevant to the content of education management and leadership.

Test-re-test Reliability of instruments

Table 4: Test Re-Test Reliability

Variable	N	Pearson (r)	p-value	Decision
Decision making roles played by student councils	32	0.766**	0.000	Reliable
Frequency of student unrest	32	0.796**	0.000	Reliable

RESULTS

Frequency of Student Unrests during the Last Three Years in School (2014-2017)

The study sought to get information from respondents regarding the frequency of student unrests in the three schools during the period 2014-2017. The results are presented in the Table 5.

Table 5: Frequency of Student Unrest Reported in All Schools

Variable	Frequency	Percent
1-2	42	13.2
3-4	87	27.4
5-6	114	35.8
7-8	49	15.4
9 and above	26	8.2
Total	318	100.0

From Table 5, 35.8% of the respondent reported that they have had 5-6 student unrests in their schools during the period 2014-2017. Others reported that they have had student unrests as follows: 3-4 (27.4%); 7-8 (15.4%); 1-2 (13.2%) while 9 and above were 8.2% of the respondents. The 35.8% of student unrests indicate that schools are experiencing high number of student unrests due to lack of involving students in their affairs in Elgon Sub-county. Muli (2012) further cautions that student unrests do not just happen due to a single issue which has not been solved, but because of several long-standing issues which the school authorities have either ignored or

given unsatisfactory response. This implies that inclusion of student leaders in addressing issues affecting students could be a better way of addressing the frequency of unrests in schools.

Decision Making Roles Played by Student Councils on Curbing the Frequency of Student Unrests

Analyses were conducted to determine students' perceptions of decision-making roles played by student councils in their schools. Table 6 presents the findings.

Table 6: Descriptives for Decision Making Roles played by Student Councils

Statement	A	F	S	N	Mean	SD
Student councils participate in decision making against bullying in school.	2.2%	17.6%	2.5%	77.7%	3.56	0.86
Student councils participate in decision making on matters related to too many exams administered in school.	0.6%	0.3%	1.3%	97.8%	3.96	0.23
Student councils participate in decision making on matters related to congestion in the dormitories in school.	0.3%	0.9%	2.8%	95.9%	2.94	0.30
Student councils participate in decision making regarding lateness in provision of meals in school.	1.6%	18.9%	39.0%	40.6%	3.19	0.79
Student councils participate in decision making on matters nonattendance of lessons by teachers.	2.5%	0.3%	39.0%	58.2%	3.53	0.64
Student councils participate in decision making on matters regarding excess punishment meted by teachers in school.	3.5%	0.0%	18.9%	77.7%	3.71	0.64
Student councils participate in decision making on matters regarding lack of sanitation services.	2.2%	0.3%	77.4%	20.1%	3.15	0.52
Student councils participate in decision making on matters regarding lack of water in school.	0.9%	56.9%	19.8%	22.3%	2.64	0.84
Student councils participate in decision making on matters regarding provision of textbooks in school.	0.6%	0.0%	19.5%	79.9%	3.79	0.45
Student councils participate in decision making on matters regarding poor quality of meals in school.	1.6%	0.0%	20.4%	78.0%	3.75	0.53
Decision making roles played by student councils overall index					3.42	0.34
Valid N (listwise)	318					

Key: A=Always; F=Frequently; S=Sometimes; N=Never; SD=Standard Deviation

Only 17.6% reported that student councils frequently participate in decision making on matters regarding bullying in school. It was noted that 77.7% of respondents maintained that student

councils never participated in decision-making regarding bullying in schools (mean of 3.56 and a standard deviation of 0.86). This implies that student councils have minimal participation in decision making on matters regarding bullying in schools. This could have an influence on student unrests.

Additionally, 97.8% asserted that student councils never participate in decision making regarding the number of exams administered in school with only 1.3% reporting that student councils sometimes participate in decision making on numbers of exams administered (mean of 3.96 and a standard deviation of 0.28). According to Education Act (2013), the QASO is charged with specific roles such as conducting the standard assessment in schools, oversees examination (both internal and external) syllabus coverage, curriculum development and implementation. Similarly, 95.9% of respondents averred that student councils never participate in decision making regarding congestion in dormitories in school with only 2.8% reporting that student councils sometimes participated in decision making on matters relating to congestion in dormitories (mean of 3.94 and standard deviation of 0.30). It can therefore be concluded that there is little contribution of members of student councils in decision making on matters affecting students leading to the high number of student unrests in Elgon Sub-county. This is contrary to Kamau (2017), who states that student participation in management of their affairs in school enables them to have a good experience to find a long-term solution to challenging situation in schools to be able to prosper in academics. It's important that students are involved in the decision-making process to curb the frequency of student unrests in schools.

Furthermore, 39.0% of respondents noted that student councils sometimes participated in decision making on the matter of lateness in provision of meals in school. 40.6% reported that student councils never make decisions on lateness in the provision of meals in school (mean of 3.19 and a standard deviation of 0.79). This could curtail the frequency of student unrests in schools as students are incorporated in decision making of issues affecting them. Up to 58.2% reported that student councils never participated in decision making on matters regarding nonattendance of lessons by teachers while 39.0% of student councils sometimes participated in decision making on the same matters (mean of 3.53 and standard deviation of 0.64). Lack of chance to make such decision could lead to student unrests in Elgon Sub-county. To that extent, Aggrawal (2007), found out that student councils did not participate in matters related to the conduct of examinations, evaluation of students' performance, the appointment of teachers and teacher lesson attendance, which made students to resort to unrests. This implies that students could resort to unrests in schools whenever they are not involved in the decision-making process on issues that affect.

Table 7 further shows that student councils sometimes participate in decision making on matters regarding lack of sanitation services (77.4%). Up to 20.1% of the respondents were of the opinion that student councils never participated on decision making on matters related to provision of sanitation (means of 3.15 and standard deviation of 0.52). This would make students feel that they are part of the solutions to their problems. Nzioki (2015) found out in her research that student councils should assist in the maintenance of school hygiene and sanitation.

Moreover, Table 7 clearly shows that student councils never participated in decision making on matters related to lack of water (22.3%). 19.8% of the respondents were of the view that student

councils sometimes participate regarding lack of water in school. Respondents stated that student councils never participated in decision making on matters regarding excessive punishment meted by teachers on students (77.7%). Only 18.9% of the respondent agreed that student councils sometimes participated in decision making on matters regarding excessive punishment meted by teachers (means of 3.71 and standard deviation of 0.64). Mukiti (2014) however noted that student councils’ control on the punishment of students by teachers. The study revealed that student councils never participated in decision making on matters regarding poor quality of meals in schools (78%). Only 20.4% of respondents agreed that sometimes student councils participate in decision making regarding poor quality of meals (means of 3.75 and standard deviation of 0.53). When students are not involved in the decision-making process in the school, they could resort to student unrests as their concerns are not been taken care of by the school management. This is the situation in Elgon Sub-county where students are not involved in decision making. They therefore engage in boycotting of exams, public demonstrations, and boycotting of eating meals, attending lessons and burn school property. Majority of the respondents were of the view that student councils never participated in decision making on matters regarding provision of textbooks in school (79.9%). A few respondents agreed that student councils sometimes participated in decision making on matters regarding provision of textbooks (19.5%) (Mean of 3.79 and standard deviation of 0.45).

Differences in the Means of Decision-Making Roles Played by Student Councils across Schools A, B and C

ANOVA test was conducted to investigate whether decision-making roles played by student councils across the three sampled schools differed significantly. Table 8 shows the findings.

Table 8: Decision Making Roles Played by Student Councils across Schools A, B and C

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.082	2	0.041	0.355	.701
Within Groups	36.421	315	0.116		
Total	36.503	317			

The results of the ANOVA test show that the differences in the means of decision-making roles played by student councils across school A, B and C was not statistically significant at the 0.05 level, $F(2, 315) = 0.355, p > 0.05$. This implies that students' perception of decision-making roles played by student councils did not vary significantly across the selected schools A, B and C.

Correlation between Decision Making Roles Played by Student Councils and the Frequency of Student Unrests

Correlation analysis was conducted to determine the nature of the relationship that exists between decision-making roles played by student councils and the frequency of student unrests.

Table 9: Correlation between Decision Making Roles Played by Student Councils and the Frequency of Student Unrests

	Frequency of Student Unrest
Decision Making Roles by Student Councils	Pearson Correlation -.809**

Sig. (2-tailed)	.000
N	318

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

Table 9 shows that there exists a negative strong and statistically significant relationship between decision-making roles played by student councils and the frequency of student unrest ($r = -0.809^{**}$; $p < 0.01$). This implies that when student councils decision-making roles are enhanced in schools, the frequency of student unrest may decline.

Influence of Decision-Making Roles on Frequency of Student Unrests

Table 10 shows how decision-making roles were used to predict the frequency of student unrests. To do that a regression analysis was carried out.

Table 10: Influence of Decision-Making Roles on the Frequency of Student Unrests

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
	B	Std. Error			
(Constant)	7.218	.182		39.678	.000
Decision making roles played by student councils	-.439	.092	-.261	-4.754	.000

Dependent Variable: Frequency of Student Unrest

Table 10 indicates that decision-making roles played by student councils influences 43.9 % negative variation on the frequency of student unrest. This implies that student councils play a very important role in curbing the frequency of student unrest. If student councils are not involved in decision-making roles, students could participate in unrests to show their frustration and anger in the school.

Testing the Hypothesis of no Statistically Significant Influence of Decision-Making Roles Played by Student Councils on Curbing the Frequency of Student Unrest

Table 10, shows that Decision making roles had beta coefficient of corresponding p-value less than 0.05 alpha. Therefore, the null hypothesis was rejected and a conclusion made that decision-making roles played by student councils have a significantly influenced on curbing the frequency of student unrest in public boys boarding secondary schools in Elgon Sub-county, Kenya ($p = 0.000$).

Regression analysis

The model shows summative action exerted by independent variable combined on the dependent variable. It is the extent of influence by the summary of independent variable on the dependent variable. Table 11 shows the results of the model summary for the regression.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.873 ^a	.762	.759	.27943

Predictor: (Constant), Decision making roles played by student councils.

Table 11, shows that the Adjusted R square value is 0.759. This implies that up to 75.9% variation in frequency of student unrests is due to the variation in the independent variable of the study. It implies that 75.9 of frequency of student unrests can be explained by the decision-making roles played by student councils.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary of the Findings

Decision Making Roles Played by Student Councils

the null hypothesis was rejected and a conclusion made that decision-making roles played by student councils have a significant influence on curbing the frequency of student unrest in public boys boarding secondary schools in Elgon Sub-county, Kenya($p=0.000$).

Conclusions

It can be concluded that involving the students in decision making roles influence the roles played by student councils on curbing the frequency of student unrests in schools.

Recommendations

Student councils should be more involved in decision making roles in order to curb frequency of student unrests.

Aggarwal, J. C. (2007). *Development and planning of modern education*. (8th Ed.). New Delhi: Vikas Publishing House.

Alexia, M. (2014). *The voice of the student? Student councils in state secondary schools*. Retrieved on June 4, 2017, from The University of Malta: <https://www.um.edu.mt/library/oar/handle/123456789/1941>.

Arekenya, L. (2012). *School prefects: Tomorrow's leader*. Lagos. Retrieved May 31st, 2017, from Vangaurd: <http://vangaurd.com>.

Bertalanffy, V. L. (1971). *General system theory: Foundations, development, applications*. New York: George Braziller.

Brook, S.E. (2013). Selecting a sample. *Education Research*. 250.

Bush, T. (2007). Educational leadership and management: Theory, policy, and practice. *South African Journal of Education*, 27(3), 391-406.

Chemutai, L. & Chumba, S. K. (2014). Student councils Participation in decision making in public secondary schools in Kericho West Sub-County, Kenya. *International Journal of Advanced Research*, 2(6), 850-858.

Daily Nation, (2016). *Teachers need protection from children's criminal tendencies*, 1st August.

Fitzpatrick, R. (2006). *Principle of management: The case of public secondary schools in Sub-Saharan Africa (8th Ed.)*. India: A.B.S Publishers and Distributors.

Fish, J. (2005). *Defending the Durkheimian tradition, religion, emotion and morality* Aldershot: Ashgate Publishing.

- Huddleston, T. (2007). *From student voice to shared responsibility: Effective practice in democratic school governance in European schools*. London: Citizenship Foundation.
- Indimuli, K. (2012). *Effective students' council: A tool kit for students' council leadership*. Nairobi: Track Academic Solutions.
- Jwan, J. (2010). *Conducting qualitative research: Current trends and developments*. Moi University 5th Campus Wide Research Workshop.
- Kamau, A. (2017). *Influence of students' council involvement in management students' discipline in public secondary schools in Naivasha Sub-county, Kenya* (Unpublished Thesis: University of Nairobi).
- Kambuga, Y. & Omollo, A. (2017). Understanding students' leadership role and challenges in secondary school in Tanzania. *Asian Research Journal of Arts & Social Science*, 2(3), 1-10.
- Kinyua, A. C. (2015). *Factors influencing effectiveness of student's councils in public secondary in Kirinyaga East Sub-county, Kenya* (Unpublished Thesis: Nairobi University).
- Kothari, C.R. (2011). *Research methodology methods and techniques*. New Delhi: New Age International.
- KESSHA, & UNICEF. (2013). *Secondary schools' students' councils training manual*. Nairobi: KESSHA/UNICEF.
- KESSHA/UNICEF. (2010). Report on Student Councils in Central Province.
- KSSSC. (2009). About US/Origin of KSSSC. Retrieved on 23/06/2017 from www.ksssc.ac.ke
- KSSSC. (2009b). *Report on student councils in Central Province*. Nairobi: KESSHA & UNICEF.
- Kyalo, K. D., Kanori, E. & Lucy, L. W. (2017). Influence of student councils' involvement as a link of communication between students and administration on students discipline in public secondary schools in Kathonzi Sub-County, Kenya. *Stratford Peer Reviewed Journals and Book Publishing Journal of Education*. 1(1), 47-55.
- Likert, R. (1967). *The human organization*. New York: McGraw-Hill.
- Messa, I. M. (2012). Influence of administrators' treatment of prefects on students' discipline in schools, Nairobi County, Kenya (Unpublished MED Thesis).
- Ministry of Education (2013). *Basic Education Act*. Nairobi: Government Printer.
- Ministry of Education Science and Technology. (2016). Speech by the Cabinet Secretary during the opening ceremony of the 8th Annual National Secondary Students Council Leaders Conference held at Bomas of Kenya 12th March 2016. Nairobi, Kenya.
- Mukiti, T. M. (2014). Role of student's council in secondary schools management in Mwingi Central District, Kitui County, Kenya (Unpublished Master of education Thesis: Kenyatta University).
- Muli, F. (2012). Institutional factors influencing student unrest in secondary schools in Nairobi, Kenya (Unpublished Thesis: University of Nairobi).
- Mutua, T. M. (2014). Role of student council in secondary schools management in Mwingi District, Kitui County, Kenya (Unpublished Thesis: Kenyatta University).
- Ndung'u, E. W., & Kwasira, J. (2015). Contemporary roles of elected student council on management of public secondary schools in Nakuru East Sub-County. *International Journal of Innovative Research and Development*, 4(1).
- Naidoo, J. P. (2005). Educational decentralization and school government in South Africa: From policy to practice. *Paris International Institute for Educational Planning*. Retrieved on January 26th 2017 from <http://www.unesco.org.uep/pdf/pubs/ed-sa.pdf>.

- Norman, P. (2015, June). *Statement of prefect duties, powers and responsibilities*. Retrieved on September 11, 2017 from Lincoln minister school: <http://www.lincolnminsterschool.co.uk/wp-content/uploads/2016/03/Prefects.pdf>.
- Nzioki, L. M. (2015). Influence of student councils involvement in management in public primary schools in Kangundo Sub-County, Kenya (Unpublished Thesis: Nairobi University).
- Okonji, C. A. (2016). Influence of institutional factors on students council involvement in public secondary school management in Emuhaya Sub-County, Vihiga County, Kenya (Unpublished thesis: University of Nairobi).
- Orodho, A.J. (2012). *Techniques of writing research proposals and reports in education and social science*. Nairobi: Kanenja HP Enterprises.
- Ouma, W., & Muinde, J. (2016, July 27). *List of 126 schools hit by unrest*. Retrieved July 11, 2017, from Daily Nation: <http://www.nation.co.ke/news/List-of-schools-hit-by-unrest/1056-3318282-14epye8/index.html>.
- Owino, H. (2016, October 5). *Cartels to blame for Kenya's mass school burnings, witnesses say*. Retrieved August 3, 2017, from New Internationalist: <https://newint.org/taxonomy/term/9880>.
- Simatwa, E. M. W. (2012). Management of student discipline in secondary schools in Kenya. A case study of Bungoma County. *Educational Research*, 3 (2), 172-189.
- Schimmel, D. M. (2003). Collaborative rule-making and citizenship education: An antidote to the undemocratic hidden curriculum. *American Secondary Education*, 31, 16-35.
- Teachers Service Commission, (2014). *Cleopas Tirop, a TSC commission speech on student unrest in secondary schools in Kenya*. Nairobi: Government Printer.
- Von Bertalanffy, L. (1968). *General system theory: Foundation, development, application*. New York: Goerge Braziller Press.
- UNICEF. (2013). *Evaluation of the Caribbean child research conference*. Retrieved July 12, 2017, from UNICEF Annual Report 2013 — Jamaica: https://www.unicef.org/about/annualreport/files/Jamaica_COAR_2013.pdf
- Vundi, S. K., Majanga, E. N., & Odollo, L.O. (2014). Effects of socializing student council leaders on conflict management in secondary schools within Kakamega County, Kenya. *International journal of Education and Research*, 2(7), 263-280.
- Wachira, K. (2010). *Teachers' image magazine*, Nairobi: Oakland Media Services Ltd.
- Wambulwa, E. (2004). The Role of Prefects in School Administration in Secondary Schools in Kakamega District, Kenya (Unpublished Thesis: Baraton University).

Influence of Institutional Context Factors on Female Students' Career Choice in TVET Science Programmes in Technical Training Institutes in Siaya County, Kenya

Ohanya George Ochieng,
School of Education, Kabarak University, Kenya

Henry K. Kiplangat
School of Education, Kabarak University, Kenya

Frederick B.J.A. Ngala,
School of Education, Kabarak University, Kenya

Abstract

Choice of science-based careers by female students in Technical and Vocational Education and Training (TVET) institutes and particularly Technical and Training Institutes (TTIs) has attracted a lot of attention of education planners, economists and administrators the world over. To that extent, the government of Kenya has made numerous interventions including lowering of college entry points to favor female students. In spite of such affirmative action, female students choosing careers in TVET science programmes are still few and especially in Siaya County, Kenya. The purpose of this proposed study was to determine the Influence of institutional context factors on female students' career choice in TVET science programmes in Technical Training Institutes in Siaya County, Kenya. The objective of this study is to establish the influence of institutional context factors on female students' career choice in TVET science programmes in Technical Training Institutes in Siaya County, Kenya. The study was adopted descriptive survey design. The sample size for the study was 437 female students, 121 lecturers and 327 male respondents. Census, proportionate and simple random sampling techniques was used to select respondents in different strata and TTIs. The finding of the study showed that Institutional Context Factors have a significant influence of 22.8% with negative variation on Female Students' Career Choice in Science TVET Programmes. The study recommended that institutional factors must be strengthened to enable more female students to choose careers in TVET science programmes.

Key words: Institutional Context Factors, Female Students', Career Choice, TVET Science Programmes

INTRODUCTION

Background of the Study

It is believed that TVET is the foundation of any sustainable technological development (Medugu, & Bappah, 2013). It helps in human capital development of any nation and is regarded as workforce education that facilitates the adjustment of the skills and knowledge to the changing demands of the society. United Nations Educational Scientific and Cultural Organization UNESCO (2003) recorded that in Arab states, 35% of students are women and that in India access to higher education is restricted to girls, while in Indonesia, there are fewer women in college yet there are more 19-29-year-old age group women than men in the country.

A closer look at the courses young women choose and the career opportunities these fields open up shows that a gender gap still exists in the field of technical courses such as Science, Technology, Engineering and Mathematics. Women opt for language, literature and arts when they have to choose their major. The proportion of female students in the field of engineering at universities in Germany is only 14%, and the same trend, although not as pronounced, can be identified in other countries in the EU, for example, the percentage in Poland is 24%, and in France 27%. This situation is similar in countries outside Europe (European Commission, 2009).

Kenya recognizes the role of education and training in contributing to the Gross Domestic Product (GDP) with particular emphasis on TIVET (Republic of Kenya, 2007). The subsector has been identified as one that will be able to spur economic development within the next 13 years and help achieve Vision 2030. Recently, Kenya revitalized the TVET subsector in order to locate herself strategically in the international scene (Republic of Kenya, 2012). According to Ramani (2004), a workshop organized by Kenyatta University and the World Bank on gender mainstreaming in public universities in Kenya, reported that although gender disparities in students' enrolment exist at all levels of tertiary education, they are particularly wide in sciences programs, with special reference to mathematics and technical disciplines. It was also reported that women are concentrated in what is perceived as traditional female social science and education disciplines (Sifuna, 2006). Enrolment in TVET programmes also show the same trend whereby fewer female students enroll in TVET science programmes. A typical case is that of Siaya County, Kenya. In view of the low enrolment in TVET science programmes by female students, the researcher sought to investigate the influence of institutional context factors on female students' career choice in TVET science programmes in Technical Training Institutes in Siaya County, Kenya.

Statement of the Problem

The problem which this study sought to address is that fewer female students choose careers in TVET science programmes in TTIs in Siaya County. It is clear that fewer female students than male choose careers in TVET science programmes. Kenya's Vision 2030 initiative aims at making the country a fully industrialized middle-income country providing high quality life for all its citizens (Government of Kenya, 2017). Realization of vision 2030 also calls for harnessing of technological ability of both men and women in the country. However, from the background of the study, it is clear that choice of career in science TVET programmes by female students in TTIs is not at par with their male counterparts. Low number of female students choosing careers in science TVET programmes portends a problem because it implies that more women may remain unemployed. This study sought to investigate the influence of institutional context factors on female students' career choice in TVET science programmes in Technical Training Institutes in Siaya County, Kenya.

Research Objective

The objective of this study was to assess the influence of institutional context factors on female students' career choice in TVET science programmes in Technical Training Institutes in Siaya County, Kenya.

Research Hypothesis

H₀₁: Institution context factors do not have a significant influence on female students' choice of careers in TVET science programmes in Technical Training Institutes in Siaya County, Kenya.

Scope of the Study

This study concentrated on the institution institutional context factors, which influence female students' career choice in science TVET programmes. The variables under study shall be investigated only in Technical Training Institutes in Siaya County, Kenya

LITERATURE REVIEW

Female Students' Enrolment in Science Courses in Tertiary Education

A study conducted in Nigeria found out that female participation in TVET and Science, Engineering and Technology (SET) show that females are still underrepresented and occupy the middle and lower status, in spite of the recent steady progression from this status over time (Udeani, & Ejikeme, 2011). This is confirmed by another study which reported that a large number of women are found mainly in poorly paid jobs and several others go into early marriages, prostitution and child labor (Adelakun, Oviawe, & Barfa, 2015). The matter of female students' enrolment in TVET courses is of great concern in Kenya because not only are some of the fastest growing job categories computer related and have the highest average pay rates, but also, women need to be part of an industry that is shaping their lives in profound ways (Kerre, 2001). It is therefore imperative that further research is undertaken to identify factors that influence women's choice of career in TVET courses in TTIs.

Institutional context Factors Which Influence Female Students' Career Choice in Science TVET Programmes

Lecturers' Experience

Generally speaking, most of the TTIs in Kenya have an acute shortage of qualified lecturers. This discourages students from taking such courses, in general (Kiamanesh, 2014). Lecturer style was among the top two considerations when selecting a course. Lack of qualified lecturers can contribute to the success or failure of the students at the technical and vocational institutions (Babad, & Tayeb, 2003). It is therefore necessary to look into the influence of quality of lecturers on female students' career choices in science TVET programmes.

Curriculum Based Factors

In India, girls undertaking engineering disciplines admitted that they were slightly handicapped due to less physical strength when working in some of the laboratories and workshops (Nguyen, 2000). Therefore, the curricula should be revised and developed in a way that it favors female students. Nguyen (2000) proposes therefore that there is a need to revise the curricula for engineering courses.

Classroom Environment

Classroom environment is a close second to college peer group influence, interns of overall effect upon students. Thus, the characteristics of the teaching force, in terms of gender, qualifications and competency are a major component of the classroom environment (Muhonja, 2011). Glynn et al. (2011) postulated that, individual achievement, behavior, self-esteem, and feeling of loneliness and alienation, especially women, are often the result of a mismatch between the student and the college environment.

Theoretical Framework

Social Cognitive Theory

Many studies on student motivation in science education have been conducted based on social cognitive theory (SCT) (Bandura, 1986). Based on SCT, motivation to learn is explained by the premise that a learner's thoughts, beliefs, and emotions enable his or her behavior to be energized, directed, and sustained (Glynn, Brickman, Armstrong, & Taasobshirazi, 2011; Schunk, Pintrich, & Meece, 2008). Intrinsic motivation occurs naturally in a learner's mind; thus, it is the core factor that drives a learner's self-efficacy and self-regulation (Ryan, & Deci, 2000; Ahmed et al., 2013). Value judgments have been studied based on their intrinsic interest, usefulness, and necessity for one's life (Eccles, & Wigfield, 2002). This theory is applicable to this study because female students' choice of specific TVET courses is herein assumed to be motivated by extrinsic factors (economic, institutional context and social cultural factors). Female students' choice of specific TVET courses is also herein assumed to be motivated by intrinsic factors (psychological factors such as interests).

RESEARCH DESIGN AND METHODOLOGY

Research Design

The design for this study will be descriptive survey design. Descriptive surveys are designed to obtain pertinent and precise information concerning the current status of phenomena and whenever possible to draw valid general conclusions from the facts discovered (Kothari, 2004). The design is suitable because surveys are non-experimental and that they deal with occurrences and relationships among non-manipulated variables.

Location of the Study

Siaya County is located in western part of Kenya. It consists of Bondo, Gem, Siaya, Ugenya, Ugunja and Rarieda Sub-Counties. It neighbours Busia County to the North and North West, Kakamega County to the North East, Vihiga and Kisumu Counties to the East and Lake Victoria to the South. The County has three public Technical Training Institutes namely Bondo and Nyang'oma TTIs in Bondo Sub-County and Siaya TTI in Siaya Sub-County.

Population of the Study

The study was conducted in 3 Public Technical Training Institutes in Siaya County that offer TVET science programmes. Siaya, Bondo and Nyangoma TTIs have totals of 386, 109 and 132 female students respectively who chose careers in TVET science programmes in 2016 and 2017. Therefore, the target population of female students is 627. The institutions also have 44(30 male and 14 female), 36(25 male and 9 female) and 41(35 male and 6 female) lecturers respectively making a target population of 121 for lecturers. The target population for male students who chose TVET science programmes in 2016 and 2017 is 2191: 1060 (Siaya TTI), 504 (Bondo TTI) and 627(Nyangoma TTI). These are the students who persist in the institutions given the length of the certificate and the diploma programs.

Sampling Procedure and Sampling Size

Sampling Procedures

Using census method, all female students enrolled in certificate and diploma programmes in Bondo and Nyangoma TTIs were sampled because they are few. Krejcie and Morgan Table of Sample Size Determination were used to determine the sample size from 386 female from Siaya

TTI students given that the number is large. Census method was used to sample all lecturers, male and female. Krejcie and Morgan table of sample size determination was used to sample male students who chose TVET science programmes in each TTI. Finally, simple random sampling technique was used to select female students from Siaya TTI and male students in the three TTIs who participated in the study. Census method shall was used to select all the three principals from the TTIs to participate in the study.

Sample Size

Table 1: Sample Size for Female Students and Lecturers per TTI

Siaya TTI	Bondo TTI	Nyangoma TTI	Total
Sample size allocation for female students 196(K and M table)	Sample size for female students 109(census)	Sample size allocation for female students 132(census)	437
Sample size allocation for lecturers 44	Sample size for lecturers 36	Sample size allocation for lecturers 41	121

Table 2: Sample Size for Male Students per TTI

Siaya TTI	Bondo TTI	Nyangoma TTI	Total
Sample size allocation for male students 158	Sample size for male students 75	Sample size allocation for male students 94	327

Instrumentation

This research study used an Interview Schedule for principals, Lecturers' Questionnaire, Female Students' Questionnaire and Male Students' Questionnaire. Female Students' Questionnaire sought data on institutional context factors, which influence female students' choice of careers in TVET science programmes.

Validity of Instruments

Experts in area of education management and leadership analyzed each item so as to ascertain both construct and content validity.

Reliability of Instruments

Table 3: Test retest Reliability

Variable	N	Pearson Correlation	Assessment
Institutional Context Factors	89	0.972	Reliable

Test re-test results yielded Pearson Correlation coefficient above 0.7 indicating that the questionnaire was reliable.

RESULTS AND DISCUSSIONS

Frequencies of Institutional Context Factors

Table 4 presents the frequencies of institutional context factors which influence female students' choice of career in TVET institutions

Table 4: Frequencies of Institutional Context Factors reported by Female Students

Statement	N	SD	D	A	SA
students chose careers in TVET because my TTI gives them career counseling	435	20.7%	52.2%	27.1%	0.0%
students chose careers in TVET because my TTI has well trained tutors	435	10.6%	38.6%	50.8%	0.0%
Students choose careers in TVET because my TTI has enough relevant books	435	14.7%	63.0%	22.3%	0.0%
Students choose careers in TVET because my TTI is well known for quality training in TVET programmes	435	12.6%	13.8%	36.3%	37.2%
My TTI has spacious workshops	435	12.6%	63.2%	22.5%	1.6%
My TTI has enough laboratories	435	7.6%	9.0%	31.3%	52.2%
My TTI has enough lecture halls	435	5.3%	41.8%	14.7%	38.2%
TTI Principal gives approval of students' choice of career in science TVET programmes	435	6.9%	14.7%	25.3%	53.1%
Lecturers of TVET courses motivated students to choose careers in science TVET programmes during registration	435	3.9%	10.3%	34.3%	51.5%
Students motivated one another to choose careers in science TVET programmes during registration	435	4.1%	11.5%	33.3%	51.0%
Classroom environment influences female students from choosing careers in science TVET programmes	435	5.3%	9.7%	31.7%	53.3%
Curriculum design favors male students but not female students in regard to career choice in science TVET programmes	435	5.3%	12.0%	32.2%	50.6%
Female students attain the entry requirement for pursuing the TVET courses they choose	435	9.4%	9.4%	41.4%	39.8%
Teaching methods used in TVET programmes influence female students' career choice in science TVET programmes	435	5.7%	11.3%	58.9%	24.1%

Table 4 shows that female students disagree that they chose careers in TVET because their respective TTIs provide career counseling (72.9% disagree and strongly disagree). It means that career counseling is largely lacking in TTIs. Career counseling is crucial in career choice. This could explain why many female students do not choose careers in TVET. Students chose careers in TVET because the TTI has well trained tutors (49.2% disagree and strongly disagree). This is because they are not able to tell whether tutors are well trained prior to choosing a particular TTI. However, some female students noted that they choose careers in TVET because the TTI is well known for quality training in TVET programmes (73.5% agree and strongly agree). It implies that choice of a career in a given TTI is based on its reputation. That sits well with the 50.8% who

chose careers in TVET because a TTI has well trained tutors. Quality of lecturers has been established to influence choice of a course in a specific institution.

Female students (63.2%) disagree that that they choose careers in TVET because their respective TTIs have enough relevant books. This is because they are not able to tell whether books are available prior to choosing a particular TTI. However, quality or availability of books has been established to influence choice of a career in a specific institute. About 63.2% of the respondents disagreed that female students choose careers in TVET because their respective TTIs have spacious workshops. Another 41.8% also disagreed that female students choose careers in TVET because the TTI has lecture halls. This is because either lecture halls or workshops are not available or they are not able to tell whether lecture halls or workshops are available prior to choosing a particular TTI. Both cases do not auger well for career choice in TVET. Good workshops and lecture halls influence choice of career and quality of career training. If there are no good lecture halls and workshops, few students are likely to enroll in TVET programmes. Up to 83.5% agreed that female students choose careers in TVET because their respective TTIs have enough laboratories. That TTI principal give approval of students' choice of career in science TVET programmes was agreed to by 78.4% of the female students. This makes factual sense because principals are the ones who sign admission letters. College principals seem to have an influence over what students choose as careers.

Female students (85.8%) agreed or strongly agreed that lecturers of TVET courses motivated students to choose careers in science TVET programmes during registration. Many lecturers are involved in registration exercises for college students. Similarly, students noted that they motivate one another to choose careers in science TVET programmes during registration. Classroom environment influences female students' choice of careers in science TVET programmes (85% agreed or strongly agreed). About 83% of female respondents reported that curriculum design favors male students but not female students in regard to career choice in science TVET programmes. Gender biases in curriculum design could explain why fewer female students chose careers in science TVET. Female students attain the entry requirements for pursuing chosen TVET courses (81.2% agreed or strongly disagree). It implies that those who do not enroll in the programmes may not be qualified: which could be another plausible explanation for fewer female students choosing careers in TVET.

Means of Institutional Context Factors reported by female students.

Table 10: Means of Institutional Context Factors reported by female students

Statement	N	Mean	SD
Teaching methods used in TVET programmes influence female students' career choice in science TVET programmes	435	3.01	0.76
Female students attain the entry requirement for pursuing the TVET courses they choose	435	3.11	0.93
Curriculum design favors male students but not female students in regard to career choice in science TVET programmes	435	3.28	0.87
Classroom environment influences female students from choosing careers in science TVET programmes	435	3.33	0.86
Students motivated one another to choose careers in science TVET programmes during registration	435	3.31	0.83

Lecturers of TVET courses motivated students to choose careers in science TVET programmes during registration	435	3.33	0.82
TTI Principal gives approval of students' choice of career in science TVET programmes	435	3.25	0.95
My TTI has enough lecture halls	435	2.86	0.99
My TTI has enough laboratories	435	3.28	0.92
My TTI has spacious workshops	435	2.13	0.63
Students choose careers in TVET because my TTI is well known for quality training in TVET programmes	435	2.98	1.00
Students choose careers in TVET because my TTI has enough relevant books	435	2.08	0.60
students chose careers in TVET because my TTI has well trained tutors	435	2.40	0.67
students chose careers in TVET because my TTI gives them career counseling	435	2.06	0.69
Institution Context Factors Overall Index	435	2.89	0.41

Table 5 shows that respondents agreed that institutional context factors influence female students' choice of careers in TVET. The respondents however disagreed that students chose careers in TVET because their respective TTI gave them career counseling, had well trained tutors or had enough relevant books.

Difference in Perception of Institutional Context Factors by Institute

ANOVA test was conducted to determine whether there existed a significant difference in perception female students of Institutional Context factors among X, Y and Z Technical Training Institutes at 0.05 alpha levels. Table 7 illustrates the finding of the analysis.

Table 7: Difference in Perception of Institutional Context factors by Females respondents by Institute.

	Sum Squares	ofDf	Mean Square	F	Sig.
Between Groups	3.345	2	1.673	10.518	.000
Within Groups	68.697	432	.159		
Total	72.042	434			

The finding showed that there exists a statistically significant difference in perception of Institutional Context factors across X, Y and Z Technical Training Institutes by female respondents at the 0.05 alpha level, $F(2, 432) = 10.518, p < 0.05$.

Multiple Comparisons of Institutional Context Factors among the TTIs

A post hoc test using Tukey tests were carried out for the three pairs of groups. The Tukey post hoc test is generally the preferred test for conducting post hoc tests on a one-way ANOVA. The findings are shown in Table 8.

Table 8: Multiple Comparisons of Institutional Context Factors among the TTIs

Paired Group	Mean Difference (I-J)	Std. Error	Sig.
---------------------	------------------------------	-------------------	-------------

Nyangoma TTI - Siaya TTI	-0.19264*	.045	.000
Bondo TTI - Siaya TTI	-0.14892*	.048	.006
Bondo TTI- Nyangoma TTI	.04372	.052	.676

*. The mean difference is significant at the 0.05 level.

The study shows that there was a significant difference between X TTI and Z TTI in terms of how female respondents perceive the influence of institutional context factors on female students' career choice in TVET ($p < 0.05$) in favor of Z TTI.

Further, Table 8 it shows that there was a significant difference between Y TTI and Z TTI in terms of how female respondents perceive the influence of institutional context factors on female students' career choice in TVET ($p < 0.05$) in favor of Z TTI. There was no significant difference between Y TTI and X TTI in terms of how female respondents perceive the influence of institutional context factors on female students' career choice in TVET (p is greater than 0.05) in favor of Z TTI. That could explain why Z TTI has more female students choosing careers in TVET.

Correlation between Institutional Context Factors and Female Students' Choice of Career in TVET

Table 9: Correlation between Institutional Context Factors and Female Students' Choice of Careers in TVET

	Institutional Context Factors
Female Students' Career Choice in Science TVET programmes	Pearson Correlation Coefficient
	-.511**
	Sig. (2-tailed)
	.000
	N
	555

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

The findings revealed that there exists a negative and statistically significant relationship between institutional context factors and female students' career choice in science TVET Programmes ($r = -0.511^{**}$; $p < 0.01$). This implies that the persistent lack of institutional context factors such as classroom environment, lecture halls, nature of workshops and laboratories could cause fewer female students to choose careers in science TVET programmes. It appears that lack of instructional resources can discourage students from choosing careers in science courses.

Regression Analysis

Table 10: Regression Constants

MODEL	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	3.595	.153	23.463	.000
Institutional Context Factors	-.228	.027	-8.325	.000

a: Dependent Variable: Female Students' Career Choice in Science TVET Programmes

As regards the unstandardized beta coefficients, Institutional Context Factors have a significant influence of 22.8% with negative variation on Female Students' Career Choice in Science TVET Programmes.

Hypothesis Testing

H₀₁: Institution context factors do not have a significant influence on female students' choice of careers in TVET science programmes in Technical Training Institutes in Siaya County, Kenya. From Table 9, the unstandardized Regression Beta co-efficient of Institution context factors variable is 0.228 and its p value is less than 0.05 alpha. This leads to the rejection of the null hypothesis. The decision is made that Institution context factors have a significant influence on female students' choice of careers in TVET science programmes in Technical Training Institutes in Siaya County, Kenya.

Adelakun, O., Barfa, G., & Oviawe, J. (2015). Strategies for enhancing female participation in Technical Vocational Education and Training. *Advances in Social Science Research Journal*, 2(4).

Ahmed, W., van der Werf, G., Kuyper, H., & Minnaert, A. (2013). Emotions, self-regulated learning, and achievement in mathematics: A growth curve analysis. *Journal of Educational Psychology*, 105(1), 150–161.

Babad, E. & Tayeb, A. (2003). Experimental analysis of students' course selection. *British Journal of Educational Psychology*, 73(1) 373-393.

Ballara, M. (2012). *Women and literacy: Men and development series*. London: Zeal Books Ltd.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Coombs, P. (2015). *The world crisis in education: The view from the eighties*. New York: Oxford University Press.

Defranzo, S. (2012, June 29). *The 4 main reasons to conduct surveys*. Retrieved September 3, 2018, from snapsurveys: <https://www.snapsurveys.com/blog/4-main-reasons-conduct-surveys/>

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values and goals. *Annual Review of Psychology*, 53, 109-132.

Glynn, S. M., Brickman, P., Armstrong, N., & Taasobshirazi, G. (2011). Science motivation questionnaire II: Validation with science majors and nonscience majors. *Journal of Research in Science Teaching*, 48(10), 1159-1176.

Kerre, B. W. (2001). Science, technology and development. *The Third World Studies (ATWS) Kenya Chapter Conference held at Egerton University* (pp. 17-19). Nakuru, Kenya: Egerton University Press.

Kiamanesh, A. R., (2014). *Gender differences in Mathematics achievement among Iranian Eight Graders in two consecutive international studies (TIMSS 2009 & TIMSS 2013): IRC. 2006 Conference. Washington DC. November 2014.*

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational And Psychological Measurement*, 30, 607-610.

Sekiya, K., Safran, M., & Ranawat, A. S. (2011). *Techniques in Hip Arthroscopy and Joint Preservation E-Book: Expert Consult*. Philadelphia: Elsevier.

- Lara, P. F., Nix, S., & Kirby, T. (2017). Gendered pathways: How mathematics ability beliefs shape secondary and postsecondary course and degree field choices. *Frontiers in Psychology*, 1-11.
- Margolis, J., & Fisher, A. (2002). Unlocking the clubhouse: Women in computing. *SIGCSE Bulletin*, 34(2), 79-83.
- Medugu, J., & Abubakar, B. (2013). *Employers' perception of the role of technical vocational education and training in sustainable development in Nigeria*. Retrieved November 11, 2016, from Vocational and Technology Education Programme, Yola: <http://scholar.google.com>
- Muhonja, E. (2011). *Factors influencing low female students enrolment in science based courses in tertiary institutions in Western Province, Kenya*. Retrieved August 8, 2016, from University of Nairobi: <http://www.researchkenya.or.ke>.
- Mugenda, A. G., & Mugenda, O. M. (2003). *Research methods: Quantitative and qualitative approaches*. Nairobi: ACTS Press.
- Nguyen, D. (2000). The status of women in engineering education. *International Journal of Engineering Education*, 16(4), 286-291.
- Psacharapoulous, G., & Patrinos, H., (2014) *Returns to Investment in Education: A further update*. World Bank Policy Research Working Paper 2881. Washington: World Bank
- Ramani, K. (2004). "More Needed for Girl-Child" . *Daily Nation*, p. 12.
- Republic of Kenya. (2017). *Kenya Vision 2030* . Nairobi: Government Printer.
- Republic of Kenya. (2007). *Office of the Vice President and Ministry of State for Youth Affairs Strategic Plan 2007–2012*. Nairobi: Government printer.
- Ryan, R. M., & Deci, E. L. (2000) Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54–67.
- Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2008). *Motivation in education: Theory, research and applications* (3rd Ed.). Upper Saddle River, NJ: Pearson.
- Sifuna, J. (2006). *Girls and Women Education in Kenya*. Nairobi: UNESCO.
- Udeani, U. & Ejikeme, C. (2011). A decade into the 21st Century: Nigerian women scientists and engineers highly under-represented in academia. *The African Symposium*, 11(2), 99-105.
- UNESCO, (2003). *Gender and Education for All*. France, Paris: UNESCO.

The Effect of Teaching Using Preferred Learning Styles on Students' Performance, in Biology and Geography in Secondary Schools in Nairobi County, Kenya

Simon Sila Kaitho¹, Gladys Jerobon Kiptiony² and Owen Ngumi³

¹Kabarak University, P.O. Box Private Bag, Kabarak, 20157, Kenya
Tel: +254 717071745, Email: simonsila43@yahoo.com

²Kabarak University, P.O. Box Private Bag, Kabarak, 20157, Kenya
Tel: +254 722852987, Email: glandysjerobon@gmail.com

³Egerton University P. O. Box 536, 20115 Egerton, Kenya
Tel; +254722 476 640 Email: ngumiowen@yahoo.com

Abstract

In Nairobi County, students in both private and public schools have not been performing satisfactorily in sciences. A study therefore was done to establish the effect of matching of teaching styles with preferred leaning styles of students' performance in **biology and geography**. Multivariate analysis of variance in geography $F(1, 1315) = 2870.1, p = .000$ and in biology $F(1, 1315) = 2994.1, p = .000$, and linear regression in geography, $F(1, 1315) = 2870.056, p = .000$, and in biology, $F(1, 1315) = 2994.137, p = .000$ analysis showed statistically significant effect on performance of students taught using preferred learning styles. The findings lead to a conclusion that there is a need to inform teachers to identify, and teach their learners according to the learners' preferred learning styles to enhance their performance in sciences.

Key terms: Preferred Learning Styles, Biology, Geography, Teaching

Introduction

An analysis of repeated difficulty areas in performance of sciences, which refers to biology, chemistry, physics, and geography in Kenyan Education System in the last few years, indicates possible teacher-learner style mismatches in their learning process. In Biology Examination Reports of years 2006 to 2011 by Kenya National Examination Council (KNEC) on candidates' responses across the three Biology papers out of 84 difficulty items, 21 (25%) indicated common use of wrong spelling of biological terms, 14 (16.66%) incorrect use of biological terms, and 14 (16.66%) inadequate application of practical skills. A higher percentage, 35 (41.67%) indicated inadequate knowledge of the subject content (KNEC, 2007, 2008, 2010, 2011, 2012). In Chemistry and Geography, the situation was not different. An analysis of Chemistry Examination Reports of years 2006 to 2011 by KNEC on candidates' responses across the three Chemistry papers, out of 52 difficulty items 18 (34.62%), indicated inadequate exposure to practical procedures, 7 (13.46%) inability to write correct equations and symbols of reactants, and 6 (11.54%) weakness in stating accurately observation made. A higher percentage 21 (40.38 %) were on inadequate knowledge of content (KNEC, 2007, 2008, 2010, 2011, 2012).

Objective of the Study

The Objective of the Study was to determine the effect of teaching using to preferred learning styles on students' performance, in **biology and geography** in secondary schools in Nairobi County.

LITERATURE REVIEW

The Concept of Preferred Learning Styles and Creation of Mismatch among Students

The concept of preferred learning styles is the combination of characteristics of cognitive, affective, and psychological elements (Abidin, Rezaee, Abdullah & Singh, 2011). According to Bayrak (2012) learning styles are collections of personal characteristics, strengths, and preferences, describing how individuals acquire, store, and process information. The different factors that influence personal qualities include information processing modes, environmental and instructional preferences, cognitive capabilities, gender and personality features. The cognitive capabilities involve meta-learning which is the awareness of learning styles one possesses, which creates the need for high levels of meaningful learning to enhance creativity and new knowledge creation. It consists of a product (knowledge), thought process, (the routes to new learning), and a behavioural process, (the regulation of behaviours that enhance learning) (Alharbi, Paul, Henskens, & Hannaford, 2011). These elements determine the way of perceiving, interacting with, and responding to the learning environment. They determine how one particular individual will react to a specific situation and how he or she will behave in a unique or common learning situation (Abidin et al., 2011).

Most high school students are not aware of how they learn and why certain ways of learning resonate with them. Seifert (2016) noted that students do not tend to reflect on the learning processes that are most productive for them. They simply learn and produce outcomes with little thought of the process itself. However, students who are aware of their own learning styles easily adapt to varied teachers' instructions, which enhance performance in sciences. This also creates self-regulated learning, which does not completely rely on the teachers' participation. Furthermore, Hendry et al. (2005) have found that awareness of learning styles and choice of study strategy options are positively correlated to students' achievement. Hendry investigated how offering students different instructional options based on their learning styles affected learning outcomes in a positive way. It was observed that such offering had a significant effect on students' overall achievement. Conversely, Gilakjani (2012) examined how students cope with the experience of having to learn when their learning style does not match that of the teachers' style of teaching. Gilakjani (2012) found that students had lower achievement when teaching approaches did not match their learning styles and he advocated for adaptive instruction within their learning perception. Students who endure incongruent learning experiences suffer from diminished self-efficacy for tackling novel learning experiences in the future (Luedtke, 2016).

In a study in South Africa by Pather, Norodien-Fataar, Cupido, and Mkonto, (2017) to determine whether students awareness of their learning styles enhanced academic performance it was observed that students coming from the previously disadvantaged educational backgrounds were not aware of their own learning styles which could otherwise empower them to understand how to adequately be prepared for tertiary learning. In Kenya according to Musamali (2014), the

best performing schools have the practice of training their candidates on study skills, which articulate their learning styles, nevertheless, a gap remains in the literature of effect of matching of teaching styles with preferred learning styles and performance of students in biology and geography. In-depth research revealed three models that display what teachers should consider in their style of presentation of content to enhance performance of students. The three models include personality patterns model, perceptual model, and information-processing model.

Traditional Teaching Styles and Students' Performance, in Biology and Geography

Teaching at any level of education and type of school, private, or public has the sole purpose of ensuring that all learners can acquire information and apply those skills (Guirguis, & Pankowski, 2017). Therefore, it is incumbent upon all educators, to not only know their teaching style so that teaching has a two-fold purpose where teachers teach and students learn. Consequently, knowing how your students learn, and what strategies best fit your classroom and school are fundamental in the process of learning. The skill of teachers' perception in recognising and accommodating for diverse learning styles, in private and public secondary schools students need enhancement for better performance in sciences. However, just as people possess individual learning styles, teachers also have teaching styles that seem to work best for them. According to Neuro-Linguistic Programming (NLP) which is the science and art of communicating, to ourselves and others (Bandler, 2008), we communicate in almost the same way we receive, perceive and process information. Christenson (2010) defines teaching styles as a set of attitudes and actions that open a formal and informal world of learning to students. Teaching style is a pervasive quality in behaviour of an individual, way of approaching the learners, a quality that persists though the content may change and might be consistent with several methods of teaching (Felder, & Brent, 2017). These styles are founded on traditional teaching methods lectures, discussions, demonstrations, laboratories, projects, inquiry problem solving, and activities (Akhtar, & Saeed, 2017). The traditional teaching styles are either teacher centred or student centred who believe students have definite and fixed perceptions and ideas of their own roles and those of their teachers and includes the expert, formal authority and personal model styles, facilitator and delegator teaching styles (Mohanty, 2015). Mwangi and Sibanda (2017) observed that teachers used both teacher-centred and student-centred methods in teaching Biology practical lessons and various factors constrained the teaching of practical lessons in Zimbabwe. In Kenyan Secondary Schools, the prescribed traditional teaching style is ASEI-PDSI (Activity-focused Student-centred learning Experiment Improvisation - Plan, Do, See, Improve) approach in teaching which have not yielded the expected high performance in the recent past (Makewa, Role, & Beigo, 2011).

Personality Patterns Model

As stated by Keirse (2013) and Longchamp (2017), personality patterns model views learning styles as personal qualities that influence a student's ability to acquire information, to interact with peers and the teachers, and otherwise participate in learning experiences. This implies that there are personalities a teacher must demonstrate and practice during learning process in order to activate the innate qualities for learning to take place. In this sense, personality model seems to articulate aspects of learning that are motivational and critically influence learning. However, mismatch occurs in the event where teachers cannot accurately identify the preferred personality learning styles of the learners. Personality learning styles refers to distinctive behaviours, which serve as indicators of how a person learns from and adapts to his environment, and provide clues

as to how a person’s mind operates (Al-Sarem, Bellafkih, & Ramdani, 2014). This implies that to match and sustain personality learning styles of different learners in a class teachers must develop emotional intelligence.

Methodology

The study employed quasi-experimental research design, which utilised a pre-test, treatment of experimental group and a post-test to estimate impact of an intervention of mismatch due to traditional teaching styles to preferred leaning styles on target population of 69,634 in 146 secondary schools in Nairobi County. Questionnaires and pre-test and post-test were used to collect quantitative data. A full disclosure of the nature of the study was given to subjects with an extended opportunity to ask questions and get their free consent to participate. The content and face validity of the two instruments were examined by experts and which were used to improve the tools before they were used to gather data. The reliability of treatment questionnaire and achievement test in pilot study were estimated using the Pearson’s Correlation method and yielded a reliability coefficient of .723 and .955 respectively which were high enough to judge the instruments as reliable. The collected data was analysed with the aid of the Statistical Package for Social Sciences (SPSS) version 22. Data was described and summarized using, percentages, and means.

RESULTS

Determination of the Differences in Effect of Traditional Teaching and Teaching According to Preferred Learning Styles on Students’ Performance, in Biology and Geography in Secondary Schools in Nairobi County. The first objective of this study was to determine the differences in effect of traditional teaching and teaching according to preferred learning styles, on students’ performance, in biology and geography in secondary schools in Nairobi County. Determination of interaction effects of gender and school preceded the analysis of the main effect of treatment using MANOVA (multivariate analysis of variance) in SPSS windows version 22. The researcher wanted to find the differences in main effect of traditional teaching and teaching according to preferred learning styles on performance in biology and geography of students in private and public secondary schools in Nairobi County. The data used to compare, main effect traditional and preferred teaching styles was arranged in stacked format. Multivariate analysis of variance (MANOVA) of stacked data in SPSS windows was analysed using the command ‘Analyse’ > ‘General Linear Model’ > ‘Multivariate’ > ‘Model’ > ‘Custom’ > ‘Main effect’ > ‘Option’ > ‘Descriptive statistics’, > ‘Estimate of effects’ > ‘Observe power’ > Ok .

Table 1: Descriptive Statistics of Students Taught According to Traditional and Preferred Learning Styles.

Sciences	Teaching style	N	Mean	Std. Deviation
Post-test Geography	Traditional	659	52.5296	8.50926
	Preferred	658	73.9559	5.73538
	Total	1317	63.2346	12.94161
Post-test Biology	Traditional	659	52.6222	8.30268
	Preferred	658	73.6307	5.30117

Total	1317	63.1185	12.60637
-------	------	---------	----------

Descriptive statistics (Table 1) revealed that students taught according to preferred learning styles had higher means scores in geography ($M = 74.0$, $SD = 5.74$) and biology ($M = 73.6$, $SD = 5.30$) compared to students taught according to traditional teaching styles in geography ($M = 52.5$, $SD = 8.51$) and biology ($M = 52.6$, $SD = 8.30$). Using general linear model (GLM) multivariate analysis of variance (MANOVA) of performance of students that taught according to traditional and preferred learning styles (Table 1) indicated that main effect of teaching according to preferred learning style on performance on performances of sciences was significant ($p < .001$).

Table 2: Multivariate Analysis of Variance of Performance Students Taught According to Traditional and Preferred Learning Styles

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Noncent. Parameter	Observed Power ^c
Corrected Model	Post-test Geography	151154.606 ^a	1	151154.606	2870.056	.000	2870.056	1.000
	Post-test Biology	145317.345 ^b	1	145317.345	2994.137	.000	2994.137	1.000
Intercept	Post-test Geography	5267531.435	1	5267531.435	100017.534	.000	100017.534	1.000
	Post-test Biology	5248170.563	1	5248170.563	108133.954	.000	108133.954	1.000
Teaching style	Post-test Geography	151154.606	1	151154.606	2870.056	.000	2870.056	1.000
	Post-test Biology	145317.345	1	145317.345	2994.137	.000	2994.137	1.000
Error	Post-test Geography	69255.895	1315	52.666				
	Post-test Biology	63822.176	1315	48.534				
Total	Post-test Geography	5486590.000	1317					
	Post-test Biology	5455987.000	1317					
Corrected Total	Post-test Geography	220410.501	1316					
	Post-test Biology	209139.522	1316					

a. R Squared = .686 (Adjusted R Squared = .686)

b. R Squared = .695 (Adjusted R Squared = .695)

c. Computed using alpha = .05

Students taught according to preferred learning styles had significantly higher mean scores compared to students taught according traditional styles in geography $F(1, 1315) = 2870.1$, $p = .000$ and in biology $F(1, 1315) = 2994.1$, $p = .000$.

Regression analysis to determine how the teaching styles influenced performance in geography (Table 3).

Table 3: Linear Regression Model Summary for Geography

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.828 ^a	.686	.686	7.25714

a. Predictors: (Constant), Teaching styles

The adjusted r square ($r^2 = .686$) revealed that 68.6% of variation in performance in geography is determined by model. Teaching according to preferred learning styles explains 68.6% of the performance in geography. The ANOVA results (Table 3) shows that-

Table 4: ANOVA of Significance between Teaching Styles and Performance in Geography

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	151154.606	1	151154.606	2870.056	.000 ^b
	Residual	69255.895	1315	52.666		
	Total	220410.501	1316			

a. Dependent Variable: Post-test Geography

b. Predictors: (Constant), Teaching styles

The model was a significant predictor of performance in geography $F(1, 1315) = 2870.056$, $p = .000$. The unstandardized beta coefficients for the model (the β values) (Table 4) indicated the relationships between the outcome and predictor variables.

Table 5: Coefficients of Determination of Effect of Teaching Using Preferred Learning Styles on Performance in Geography.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31.103	.632		49.196	.000
	Teaching style	21.426	.400	.828	53.573	.000

a. Dependent Variable: Post-test Geography

The β coefficient (Table 5) is 21.426, which indicate there is a positive effect of teaching using preferred leaning styles. In addition, this indicated that performance of students taught using preferred learning styles is 21.426 higher among those taught using preferred leaning styles compared to those taught using traditional teaching styles. The results of the regression indicated that the model explained 68.6% of the variance and that the model was a significant predictor of performance in geography, $F(1, 1315) = 2870.056$, $p = .000$. While teaching using preferred learning styles contributed significantly to the model ($\beta = 21.426$, $p = .000$). The final predictive model was: Geography score = $31.103 + (21.426 * \text{Teaching using preferred learning styles})$. Linear regression analysis to determine how the teaching styles influenced performance in biology (Table 43) indicted that: -

Table 6: Linear Regression Model Summary for Biology

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
-------	---	----------	-------------------	----------------------------

1	.834 ^a	.695	.695	6.96663
---	-------------------	------	------	---------

a. Predictors: (Constant), Teaching style

The adjusted r square ($r^2 = .695$) revealed that 69.5% of variation in performance in biology is determined by the model (teaching according to preferred learning styles). Teaching according to preferred learning styles explains 69.5% of the performance in biology. The ANOVA results (Table 7)

Table 7: ANOVA of Significance between Teaching Styles and Performance in Biology

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	145317.345	1	145317.345	2994.137	.000 ^b
	Residual	63822.176	1315	48.534		
	Total	209139.522	1316			

a. Dependent Variable: Post-test Biology

b. Predictors: (Constant), Teaching style

The model was a significant predictor of performance in biology $F(1, 1315) = 2994.137, p = .000$. The unstandardized beta coefficients for the model (the β values) (Table 8) indicated the relationships between the outcome and predictor variables.

Table 8: Coefficients of Determination of Effect of Teaching Using Preferred Learning Styles on Performance in Biology

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31.614	.607		52.089	.000
	Teaching style	21.009	.384	.834	54.719	.000

a. Dependent Variable: Post-test Biology

The β coefficient (Table 8) is 21.009, which indicate there is a positive effect of teaching biology using preferred learning styles. In addition, this indicated that performance of students taught biology using preferred learning styles is 21.009 higher among those taught using preferred learning styles compared to those taught using traditional teaching styles. The results of the regression indicated that the model explained 69.5% of the variance and that the model was a significant predictor of performance in biology, $F(1, 1315) = 2994.137, p = .000$. While teaching using preferred learning styles contributed significantly to the model ($\beta = 21.009, p = .000$). The final predictive model was Biology score = $31.614 + (21.009 * \text{Teaching using preferred learning styles})$.

In conclusion, both multivariate analysis of variance and linear regression analysis showed statistically significant effect on performance of students taught using preferred learning styles in geography and biology. Given multivariate analysis of variance in geography $F(1, 1315) = 2870.1, p = .000$ and in biology $F(1, 1315) = 2994.1, p = .000$, and in addition linear regression analysis in geography, $F(1, 1315) = 2870.056, p = .000$, and in biology, $F(1, 1315) = 2994.137, p = .000$. Thus, the null hypotheses were rejected there are no statistically significant effects in performance in biology and geography between students taught in their preferred

learning styles and those taught using traditional teaching styles in secondary schools in Nairobi County.

This study shows that teaching students according to their preferred learning styles enhances their performance while teaching students in the traditional styles without considering their preferred learning styles creates mismatch, which lowers their performance in sciences. The finding of this study implies that when teachers establish the preferred learning styles of students and match their styles of teaching to these preferences it improves significantly the performance of their students in sciences. This study supports the findings of Akbarzadeh and Fatemipour (2014) when students' learning styles match with appropriate teaching approaches, then their motivation, performances, and achievement will increase. The study likewise was in agreement with findings of Bastable (2008) that matching teaching pedagogy with learning styles of students enhances their academic performance. On the other hand, the gap between matching students' learning styles and teachers' instructional styles lead to low retention rates and affect students' academic performance.

SUMMARY

The first objective of this study was to determine the differences in effect of traditional teaching and teaching according to preferred learning styles, on students' performance, in biology and geography in secondary schools in Nairobi County.

i) The main effect of traditional teaching and teaching using preferred learning styles on students' performance, in biology and geography in secondary schools in Nairobi County.

The finding of this study revealed that, both multivariate analysis of variance and linear regression analysis showed statistically significant effect on performance of students taught using preferred learning styles in geography and biology. Given multivariate analysis of variance in geography $F(1, 1315) = 2870.1, p = .000$) and in biology $F(1, 1315) = 2994.1, p = .000$), and in addition linear regression analysis in geography, $F(1, 1315) = 2870.056, p = .000$, and in biology, $F(1, 1315) = 2994.137, p = .000$. Thus, the null hypotheses were rejected there are no statistically significant effects in performance in biology and geography between students taught in their preferred learning styles and those taught using traditional teaching styles in secondary schools in Nairobi County.

Conclusion

In conclusion, both multivariate analysis of variance and linear regression analysis showed statistically significant effect on performance of students taught using preferred learning styles in geography and biology. Given multivariate analysis of variance in geography $F(1, 1315) = 2870.1, p = .000$) and in biology $F(1, 1315) = 2994.1, p = .000$), and in addition linear regression analysis in geography, $F(1, 1315) = 2870.056, p = .000$, and in biology, $F(1, 1315) = 2994.137, p = .000$. The students taught according to their preferred learning styles performed statistically higher compared to the students taught according to traditional teaching styles without considering their preferred learning styles. This implies mismatch of teaching styles to preferred learning styles, affects negatively performance of students in biology and geography in secondary schools in Nairobi County. Based on the findings and conclusions of this study, the following recommendation is made. Every teacher and instructor should endeavour

to assess and identify the preferred learning styles their learners before commencement of instructions and teach their learners according to their preferred learning styles in order to enhance their academic performance in biology and geography. In the course of this study, the researcher realized that many learners were insensitive of their own learning styles and suggests further research on sensitisation of the learners to exploit the hidden treasure, which could otherwise empower them to understand how to adequately be prepared for continuous learning.

References

- Abidin, M., Rezaee, A., Abdullah, H., & Singh, K. (2011). Learning styles and overall academic achievement in a specific educational system. *International Journal of Humanities and Social Science*, 1(10).
- Akbarzadeh, M., & Fatemipour, H. (2014). Examining the match or mismatch between teaching style preferences and upper-intermediate EFL learners' learning style preferences. *Procedia - Social and Behavioral Sciences*, 98, 137–142.
- Akhtar, M., & Saeed, M. (2017). Applying activity-based learning (ABL) in improving quality of teaching at secondary school level, *PJERE*, 2(2), 37-47.
- Alharbi, A., Paul, D., Henskens, F., & Hannaford, M. (2011). 'An investigation into the learning styles and self-regulated learning strategies for computer science students.' In Williams, G., Statham, P., Brown, N., & Cleland B. (Eds.) *Changing Demands, Changing Directions. Proceedings ascilite Hobart*. (pp. 36-46).
- Al-Sarem, M., Bellafkih, M. & Ramdani, M. (2014). *Adaptation Patterns with respect to Learning Styles*. Conference Paper · May 2014
- Bandler, R. (2008 A). *The secrets to quick & lasting life change*. London: HarperCollins Publishers.
- Bastable, S. B. (2008). *Nurse as educator: Principles of teaching and learning for nursing practice* (3rd Ed.). Boston: Jones and Bartlett Publishers.
- Bayrak, B. K. (2012). A study on learning styles of secondary school students according to gender and class level a study on learning styles of according to gender and class level. *Procedia - Social and Behavioural Sciences*. 46, 843 – 847.
- Christenson, R. S. (2010). The spectrum of teaching styles: Style F–Guided-Discovery. *OAHPERD Journal*, XLVI, (2), 14-16.
- Felder, R. M., & Brent, R. (2017). *Effective teaching: A workshop*. Department of Chemical & Biomolecular Engineering North Carolina State University. Retrieved from <https://engineering.purdue.edu/Engr/AboutUs/Administration/AcademicAffairs/Resources/Teaching/effective-teaching.pdf>
- Gilakjani, A. P. (2012). A match or mismatch between learning styles of the learners and teaching styles of the teachers. *International Journal of Modern Education and Computer Science*, 11, 51-60.
- Guirguis, R., Pankowski, J. (2017). Potential effects of teaching strategies on students' academic performance under a Trump administration. *Journal of Education and Training Studies* 5(4), 2324-8068.
- Hendry, G. D., Heinrich, P., Lyon, P. M., Barratt, A. L., Simpson, J. M., Hyde, S. J., Gonsalkorale, S., Hyde, M., & Mgaith, S. (2005). Helping students understand their learning styles: Effects on study self-efficacy, preference for group work, and group climate. *Educational Psychology*, 25(4), 395-407.

- Keirse, D. (2013). *Keirse types and learning styles*. Retrieve from http://iws.collin.edu/mbrooks/learning_styles/keirse_types.pdf
- Longchamp, J. C. (2017). The effect of student learning objectives on teachers and teaching as part of the teacher evaluation process: A grounded theory study. *Graduate College Dissertations and Theses*. 734. Retrieved from <http://scholarworks.uvm.edu/graddis/734>
- Luedtke, T. (2016). Undergraduate nursing student perceptions of developing confidence through clinical learning experiences (Master's Thesis: University of Manitoba, Winnipeg). Retrieved from https://mpace.lib.umanitoba.ca/bitstream/handle/1993/31824/luedtke_tracy.pdf?sequence=3 Accessed
- Makewa, L. N., Role, E., & Beigo, S. (2011). Teachers' attitude towards strengthening mathematics and science in secondary education through in-service education and training (SMASSE-INSET) Project in Nandi Central District, Kenya. *International Journal of Education and Social Sciences (IJESS)*, 1(4).
- Mohanty, A. (2015). Information processing and creative thinking abilities of residential and non-residential school children: A pilot study. Sage Open October-December 2015: 1– 12. Retrieved from <http://journals.sagepub.com/doi/pdf/10.1177/2158244015611452>
- Musamali, O. W. (2014, April). *Adventist education in Kenya: The Segero model*. Paper presentend in East Kenya Union Coference Adventist Teachers Convention. Karura Adventist School, Nairobi.
- Mwangu, E.C., & Sibanda, L. (2017). Teaching biology practical lessons in secondary schools: A case study of five Mzilikazi District Secondary Schools in Bulawayo Metropolitan Province, Zimbabwe. *Academic Journal of Interdisciplinary Studies*, 6(3), 2281-3993.
- Pather, S. Norodien-Fataar, N. Cupido, X., & Mkonto, N. (2017). First year students' experience of access and engagement at a University of Technology. *Journal of Education*, Issue 69, Retrieved on 11/04/2018 21:18 from <http://www.scielo.org.za/pdf/jed/n69/08.pdf>
- Seifert, H. E. (2016). Gender differences, learning styles, and participation in higher mathematics (Doctoral thesis: Walden University). Retrieved from <http://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=3337&context=dissertation> Accessed

Antecedents and Consequences of Work Engagement among Professional Counsellors in Kenyan Institutions of Higher Learning

James Kay and Gladys Kiptiony
Kabarak University

Corresponding author: kaykaytar@gmail.com

Abstract

Positive occupational health psychology research is rapidly taking center stage in the field of work and wellness in the 21st century. Consequently, researchers and practitioners are increasingly gravitating towards positive psychology research. However, person specific work-related variables such as work engagement and fulfillment have not received adequate attention in research within Kenya among professional counselors in the university setting. This paper explores the antecedents and consequences of work engagement among professional counselors in Kenyan higher learning. The study utilized cross-sectional survey design with a target population of 193 mental health providers in 75 higher education institutions in Kenya. Saturated sampling techniques were used to conduct a census of all respondents. Quantitative data was obtained using self-response questionnaire. Data analysis utilized both descriptive and inferential statistics. The study tested all posited hypotheses at 0.05 significant level and analyzed data using statistical tools with the aid of SPSS - 24. The response rate was 180 (94%). Work engagement among professional counselors was high (UWES = 4.23; sd = 1.48) and correlated positively with job satisfaction and fulfillment in life. Engagement was found to predict higher existential fulfillment ($-0.084(p = 0.26 > 0.05)$) and low job burnout ($-0.327(p = 0.00 < 0.05)$). Based on these findings, the study recommended that Kenyan institutions of higher learning should strengthen established antecedents of work engagement to militate against adverse consequences at the workplace. These results have significant implications for workplace psychological health and functioning of professional mental health providers as well as other staff.

Keywords: Antecedents; work engagement; consequences; mental wellness; professional counselors

Introduction

A global study that was carried out in 142 countries by Gallup (2013) on the state of work engagement in the workplace indicates that only 13.6% of employees worldwide are engaged at work, 61.7% disengaged and 23.3% actively disengaged. However, a report on trends in global work engagement by Aon-Hewitt (2014) indicates that 22% of workers globally are engaged, 39% moderately absorbed, 23% passive and 16% as actively disengaged. Gallup (2013) survey indicates that work engagement levels among employees vary across different global regions and among countries within those regions. Globally, Northern America has the highest proportion of engaged workers, at 29%, followed by Australia and New Zealand, at 24%. Research across 19 Western European countries observed that 14% of employees engaged, while a significantly higher 20% are actively disengaged. Aon-Hewitt (2014) report similar trends with Latin America

leading at 31% followed by North America (27%), Africa/Middle East 23% and the least work engagement levels reported in Europe (19%).

According to Gallup (2013), the Middle East and North Africa (MENA) presents the highest proportions of actively disengaged workers at 35% followed by sub-Saharan Africa regions at 33%. Aon-Hewitt (2014) indicates highest active disengagement in Europe and Africa/Middle East, at 19% and 16% respectively. Kenya was among the countries sampled in both global studies. Therefore, this study inferred that the bulk of employees in Kenya, as is elsewhere, are not engaged. Actively disengaged workers are unhappy, unproductive at work, and liable to spread negativity to coworkers. If the low level of engagement among workers continues, there is a threat to the achievement of millennium development goals as well as economic growth targets.

Makhanya (2012) contends that current socioeconomic and sociopolitical strategies inherent in our systems of government increasingly pose a deleterious impact on the availability of talent in Higher Education. The rapid expansion of institutions of higher learning that is being witnessed in Kenya today has grave implications for organizational loyalty and occupational wellbeing of university employees including counselors. However, much of the research on positive occupational health psychology in Kenya has mainly focused on High School set up (Kinga, Kariuki, & Njonge, 2012; Makewa, Elizabeth, Too, & Kiplagat, 2012; Sichambo, Marangia, & Simiyu, 2012). As indicated by van den Berg, Manias and Burger (2008), Higher Education all over the world is pivotal in the generation and dissemination of knowledge that is instrumental in perpetuation and sustainability of future talent and socioeconomic development. Studies conducted in higher learning tend to focus on the psychological well-being of the other staff and have not published much on professional counselors. There is a knowledge gap about work and wellbeing of the employees charged with the responsibility of occupational mental health through psychological interventions. This paper explores the antecedents and consequences of work engagement among professional counselors in universities in Kenya.

Literature Review

Ardichivili and Kuchinke (2009) observe that work is central to human existence since it provides life necessities, sources of identity, opportunities for achievement, and determines social standing within the larger community. Unaldi and others (2013) support this argument by intimating that as an existential concern, work offers the possibility for a full range of human experiences, not only exhilaration, exuberance, satisfaction, and joy but also disappointment, regret, grief, and despair. Therefore, just as Jeung (2011) further indicates, it is the recognition of this fact that has led to the increasing interest in research on psychological wellbeing in the workplace. At least, as Bakker and Demerouti (2008) argue, part of this growth stems from a belief that positive mental health in organizations translates to the motivation of individuals and groups to perform better, which eventually lead to improvement in individual and organizational performance. Watkins and Stavros (2010) align this with the positive psychology paradigm that focuses on a strength-based rather than a deficit-based approach to solving problems by studying what is working well in organizations.

Altunel, Kocak, Cankir (2015) observe that research on positive psychology, focuses on the adaptive and efficient aspects of employees' feelings and features, is nowhere near at par with have with the literature on employees' adverse situations at workplace. However, there is rapid

growth in research in positive occupational health psychology. Albrecht, Bakker, Gruman, Macey and Saks (2015) observe that employee engagement has attracted enormous interest over the past decade or two. Macey, Schneider, Barbera, and Young (2009) commented that rarely has a term resonated as strongly with business executives as employee engagement has in recent years. Writers such as Bakker and colleagues (2014) have presented extensive meta-analyses and reviews on positive health psychology with particular reference to work engagement.

Macey and Schneider (2008) claim that antecedents of work engagement derive from both personal and environmental sources. However, theory and research on job characteristics as the primary precursor, consequently ignoring intrapersonal variables such as existential fulfillment. Shirom (2010) investigated key occupational variables such as autonomy, demands, conflicts and good relations with other people. Rich, Lepine, and Crawford (2010) added on the research by developing and testing a model incorporating organizational support.

Tomic and Tomic (2011) established a positive correlation between existential fulfillment work engagement and a negative relationship the two variables and job burnout. In their research on the relationship between existential fulfillment and job burnout (the opposite of work engagement) Hunnibell (2006) and Hunnibell, Reed, Quinn and Fitzpatrick (2008) found a significant negative correlation between self-transcendence and all three dimensions of job burnout. Research conducted by Palmer and colleagues (2010) showed that the higher the workers' scores are on existential fulfillment, the more energy they have towards their work and the higher their scores on work engagement dimensions. Existential fulfillment helps employees derive positive meaning from their job experiences and fosters work engagement. Therefore, theoretically as existential satisfaction increases, work engagement is predicted to increase and job burnout symptoms decrease.

Bakker and Leiter (2010) observe that the service economy of the 21st century has led to increasing importance of employees' psychological connection with their work. Sichambo, Marangia, and Simiyu (2012) observed that what people do (their job), how they do it (their behavior), and what they achieve (results) is all related to work engagement. Engaged workers, therefore feel positive about their job, but beyond mere satisfaction, they are motivated to expend energy on a task (Ndetei, Pizzo, Maru, Ongecha, Khasakhala, Mutiso & Kokonya, 2008). Bakker, Albrecht, and Leiter (2011) identified a growing consensus that defines work engagement as high levels of energy and elevated levels of involvement in work.

Bakker, Schaufeli, Leiter and Taris (2008) view work commitment as a theoretical concept that has recently emerged in the field of Psychology. Takawira, Coetzee, and Schreuder (2014) support this notion by arguing that positive aspects of the workplace have been the focus of research for the past decade. Work engagement is an element that helps to facilitate change that leads to improvement of their performances (Kim, Kolb, & Kim, 2012). In a research by Saks (2006), work engagement is associated with an individual's attitudes, intentions, and behaviors while the study by Du Plooy and Roodt (2010) established work commitment is negatively related to turnover intention.

Consequences of Work Engagement

Consequences of can be conceptualized in terms of erosion as well as flooding of work engagement. Erosion of work engagement leads to job burnout, which Maslach (2011) argues is the negative antipode of work engagement, which is conceptualised in theory as the incapacity to work (exhaustion) and the unwillingness to work (cynicism, disengagement). This forms, in part, the underpinning theoretical rationale and dimensionality of work engagement (Schaufeli, & Salanova, 2011; Maslach, 2011). However, Parker and Griffin (2011) propose the use of a wider nomological net to establish a clear conceptualization of work engagement as an active psychological state. To this effect, Bakker, Albreit and Leiter (2011) positioned work engagement in the circumplex model of affective wellbeing. This model views work engagement as combination of capability to work (energy, vigour) and the willingness to work (involvement, dedication).

On the other hand, although work engagement is a matter of concern in organizations across the globe as a vital element affecting organizational effectiveness, innovation and competitiveness (Welch, 2011), flooding can be a consequence too. George (2011) postulates that work engagement has a dark side when skewed more toward a managerial focus than an employee well-being focus. According to Gorgievski, Bakker and Schaufeli (2010), research has shown that engaged employees work hard, but they are not workaholics. This means that in the evenings they will likely prefer to do other things than working. Whereas George (2011), Maslach (2011), and Schaufeli and Salanova (2011) point at possible conflicting interests between employers and employees, it is believed that employees need actively try to keep the exchange relationship equitable. Employees contribute valuable time and effort and in return they receive important outcomes such as pay, but also opportunities to learn and meaningful work. It is known that Work engagement may foster work - family conflict (Halbesleben, 2011), and may even lead to more demands (Sonnetag, Binnewies, & Mojza, 2010). Sonnetag (2011) called on researchers to further explore the conditions under which negative outcomes of work engagement occur.

Sonnetag, Mojza, Binnewies and Scholl (2008) showed that high state work engagement was only related to reduce positive affect when employees did not detach psychologically from their work. Parker and Griffin (2011) suggested that work engagement may only be related to innovation if there are no constraints in the work environment that may inhibit innovative behaviours. Maslach (2011) proposed it is important to assess critical levels of work engagement to determine when employees show too little or too much work engagement.

3.0 Methods

This study was quantitative in nature, and therefore quantitative methods were utilized. The study was *ex-post facto* and was conducted on a cross-section of 193 professional counselors in chartered public and private universities in Kenya. A total of 180 respondents returned their data collection tool, and this resulted in a response rate of 94%. Work engagement data was collected using the Utrecht Work Engagement Scale (UWES-17) while fulfillment was conceptualized using the Existential Fulfilment Scale. Burnout was measured using the Maslach Burnout Inventory – Human Services Survey (MBI-HSS). Since the same respondents responded to each of the data collection tools, all the items of each tool were consolidated into one structured questionnaire for ease of administration.

Reliability

The Existential Fulfilment Scale (EFS), composed of the three dimensions of self-acceptance, self-actualization, and self-transcendence consists of 15 items (five items for each dimension). The internal consistency coefficients for this study were 0.76, 0.74 and 0.74, for self-acceptance, self-actualization, and self-transcendence respectively and an overall coherence of 0.81. Work engagement was made operational by the Utrecht Work Engagement Scale - UWES – 17 which contains three dimensions - vigor, dedication, and absorption. In this study, the vigor dimension yielded a reliability coefficient of 0.76, the Dedication dimension yielded 0.80 and the absorption dimension 0.76 respectively with overall reliability alpha of 0.91. Maslach Burnout Inventory which consists of 3 subscales: emotional exhaustion; depersonalization; and self-efficacy yielded reliability coefficients of 0.83, 0.94 and 0.71 respectively. The overall Cronbach's alpha reliability coefficient for this study was 0.83.

Data Analysis

This research collected quantitative data and used descriptive and inferential statistics in the analysis. Initially, the analyses conducted descriptive statistics (means, standard deviation, cross-tabulations and internal reliability scores) as well as correlations for all targeted variables. A series of non-parametric equations (Kendall's tau_b, Spearman's Rho and Chi Square) were calculated to test the assumed prediction of the counselors' existential fulfillment, work engagement on job burnout. The research generated a series of correlation matrices to explore potential relationships across personal attributes, and university category. The researcher used non-parametric data analysis procedures in considerations that this study produced data that did not follow a normal distribution curve and therefore standard parametric calculations would not present true picture for inferential statics to minimize the statistical error when making research inferences. The study analyzed data by use of statistical tools with the aid of computer software, SPSS - 24.0 and tested all hypotheses at 0.05 significant level.

Results

Demographic Characteristic

The modal age group of participant respondents was 41 – 45 years which accounted for 25% of the sample followed by 46 – 50 years who represented 18.9% while the least age group was over 60 years which accounted for 0.6%. Married respondents accounted for 78%, 17% were single, 3% separated and 2% widowed. This study established that 63.9% had Master's Degree, 7.2% of the respondents have a doctorate and 15% possessed a Bachelor's degree in counseling psychology. Public universities accounted for 60.6% of respondents while private institutions accounted for 39.4% of the total sample. This study established that 52.2% of respondents had been working at their station for a maximum of 5 years, 25% had for 6 -10 years and those who had been working in their university for more than a decade by the time of study accounted for 11.4%.

Existential Fulfilment as an Antecedent of Work Engagement

Existential fulfillment was conceptualized as an antecedent of work engagement. The three dimensions of existential fulfillment were correlated with the three dimensions of work engagement to establish the contribution of existential satisfaction to work engagement, before correlating overall existential fulfillment with overall work engagement. A null hypothesis H_0 : there is no statistically significant relationship between existential fulfillment and work engagement with related hypotheses that related the dimensions of existential fulfillment with

work engagement components as well as the overall relationship between the two most important variables. The research calculated Spearman's Rank order correlation coefficients and a correlation matrix generated to show how the variables and their components interact and the findings presented in Table 1.

Table 1: Correlation Coefficient between Existential Fulfilment and Work Engagement

	Correlation coefficient (p-value)			
	1	2	3	4
Self-acceptance				
Self-actualization	-0.035(0.646)			
Self-transcendence	-0.068(.364)	0.449**(0.00)		
Existential fulfilment	0.208**(0.005)	0.454**(0.000)	0.450**(0.000)	
Vigour	0.115(0.124)	0.063(0.404)	0.117(0.116)	0.168*(0.024)
Dedication	0.046(0.536)	0.089(0.235)	0.234**(0.002)	0.142(0.057)
Absorption	0.111(0.139)	0.118(0.114)	0.099(0.185)	0.069(0.358)
Work engagement	0.149*(0.046)	0.030(0.688)	0.225**(0.002)	0.173*(0.020)

* $p < 0.05$; $p < ** 0.01$ (2-tailed).

There was an observed correlation coefficient of 0.149 ($p = 0.05 \leq 0.05$) between self-acceptance and overall work engagement. A weak positive correlation coefficient of 0.234 ($p = 0.00 < 0.05$) between self-transcendence and dedication. There was a weak positive correlation coefficient of 0.225 ($p = 0.00 < 0.05$) between self-transcendence and overall work engagement. At the fourth level, overall existential fulfillment presented a weak positive correlation coefficient of 0.168 ($p = 0.02 < 0.05$) with vigor. A weak correlation coefficient of 0.173 ($p = 0.02 < 0.05$) between existential fulfillment and overall work. All existential fulfillment dimensions presented significant positive correlations with all existential fulfillment except for self-actualization. Work engagement was also significantly and positively correlated to existential fulfillment. This observation confirmed the study assumption that existential fulfillment and work engagement mutually reinforced each other among Kenya Universities' professional counselors. The findings are in agreement with the assertion by Tomic and Tomic (2011) where conceptualization of work engagement as an active work-related state of well-being or existential fulfillment implies a positive correlation between the two variables. Palmer, Quinn, Reed and Fitzpatrick (2010) showed that the higher the workers' scores are on existential satisfaction, the more energy they have towards their work and the higher their scores on work engagement dimensions.

Job Burnout as a Consequence of Low Work Engagement

A null hypothesis H_02 which stated that at 0.05 significance level, there is no significant relationship between work engagement and job burnout among Kenya Universities' professional counselors was posited. Since Schaufeli and Salanova (2011) view work participation as the positive antipode of job burnout, the study expected that all work engagement and job burnout dimensions were negatively correlated except with professional efficacy. Negative correlations were mainly expected between emotional exhaustion and vigor as well as between depersonalization and dedication since they present of the activation and identification dimensions of the job wellness continuum respectively. Spearman's rho correlation coefficients and a correlation matrix generated to show how the variables and their components correlate and presented in Table 2.

Table 2: Correlation Coefficient between Work Engagement and Job Burnout Dimensions

	Correlation coefficient (p-values)			
	1	2	3	4
Vigour	-			
Dedication	0.644** (0.000)	-		
Absorption	0.690** (0.000)	0.649** (0.000)	-	
Work engagement	0.881** (0.000)	0.840** (0.000)	0.899** (0.000)	-
Emotional exhaustion	-0.224** (0.002)	-0.207** (0.005)	-0.145* (0.05)	-0.083 (0.266)
Professional in-efficacy	-0.473** (0.000)	-0.251** (0.001)	-0.168* (0.024)	-0.327** (0.000)
Depersonalization	-0.146* (0.05)	-0.137 (0.068)	-0.125 (0.095)	-0.154* (0.039)
Job burnout	-0.197** (0.008)	-0.018 (.816)	-0.135 (0.071)	-0.129 (0.085)

* $p < 0.05$; ** $p < 0.01$ (2-tailed).

It was observed that there was a weak negative correlation coefficient of -0.224 which was statistically significant ($p = 0.00$). It was inferred that higher levels of work engagement dimension vigor predicted lower levels of job burnout dimension emotional exhaustion among Kenya Universities' professional counselors. This observation confirms the findings of the study by Bakker, Demerouti and Schaufeli (2005) on cross-over job burnout and engagement among working couples ($n = 323$) where there was a weak negative correlation coefficient of -0.36 which was statistically significant at $p < 0.01$. The findings are also in agreement with the observations in a study on burnout and work engagement by Langelaan, Bakker, van Doornen and Schaufeli (2006) on a sample ($n = 572$) employees from three different samples where there was a weak negative correlation coefficient of -0.37 which was statistically significant at $p < 0.01$. The observed negative correlation coefficient of -0.473 between work engagement dimension vigor and job burnout dimension reduced professional efficacy was statistically significant ($p = 0.00$). It was inferred higher levels of work engagement dimension vigor predicted and higher levels of job burnout dimension professional efficacy (lower levels of reduced professional efficacy) among Kenya Universities' professional counselors. This finding confirms the assertion by Schaufeli and Salanova (2011) that vigor is characterized by high levels of energy, resilience and the mental flexibility while working.

An observed negative correlation coefficient of -0.146 ($p = 0.05$) between work engagement dimension vigor and job burnout dimension depersonalisation which was statistically significant and ensured that the null hypothesis was rejected. It was inferred that higher levels of work engagement dimension vigor predicted lower levels of job burnout dimension emotional exhaustion among Kenya University professional counselors. These findings are in agreement with the observations of the study by Bakker, Demerouti and Schaufeli (2005) on cross-over job burnout and engagement among working couples ($n = 323$) where there was a weak negative correlation coefficient of -0.43 which was statistically significant at $p < 0.01$. The findings are also in agreement with the observations in a study on burnout and work engagement by Langelaan, Bakker, van Doornen and Schaufeli (2006) on a sample ($n = 572$) employees from three different samples where there was a weak negative correlation coefficient of -0.41 which was statistically significant at $p < 0.01$. The statistical test yielded a weak significant negative correlation coefficient of -0.197 ($p = 0.00 < 0.05$) between work engagement dimension vigor

and overall job burnout which led to the decision to reject the null hypothesis. It was inferred that work engagement dimension vigor predicted lower job burnout levels among Kenya Universities' professional counselors.

Similarly, the second tier analysed correlations between work engagement and job burnout dimensions were based on four hypotheses. It was observed that the weak negative correlation coefficient of $-0.207(p = 0.01 < 0.05)$ which was greater than 0.05 and therefore statistically significant. Accordingly, it was inferred that higher levels of work engagement dimension dedication predicted lower levels of job burnout dimension emotional exhaustion among Kenya University professional counselors. These findings are in agreement with the observations of the study by Bakker, Demerouti and Sanz-Vergel (2014) on cross-over job burnout and engagement among working couples ($n = 323$) where there was a weak negative correlation coefficient of -0.33 which was statistically significant at $p < 0.01$. The findings are also in agreement with the observations in a study on burnout and work engagement by Langelaan, Bakker, van Doornen and Schaufeli (2006) on a sample ($n = 572$) employees from three different samples where there was a weak negative correlation coefficient of -0.29 which was statistically significant at $p < 0.01$. The observed significant negative correlation coefficient of $-0.251(p = 0.00 < 0.05)$ between dedication and professional efficacy. Schaufeli and Salanova (2011) define dedication as the commitment to work that is characterized by a sense of significance. Xanthopoulou, Bakker, Kantas and Demerouti (2012) also views dedication as a useful and meaningful experience, inspiring and challenging and that it invokes feelings of pride and enthusiasm. It, therefore, could be regarded as a means of strengthening professional efficacy among Kenya Universities' professional counselors.

There was an observed weak negative correlation coefficient of $-0.145(p = 0.05 \leq 0.05)$ between absorption and emotional exhaustion which was statistically significant. According to Schaufeli and Bakker (2010) absorption could be viewed as a state of flow that leads to full concentration on and deep engrossment on the task in disregard of time. In other words, when a counsellor exhibits absorption in their role, they attain a sense of flow and this could a cushion from emotional exhaustion. The observed significant negative correlation coefficient of $-0.168(p = 0.02 < 0.05)$. It was inferred higher levels of work engagement dimension absorption predicted and higher levels of job burnout dimension professional efficacy (lower reduced professional efficacy) among Kenya Universities' professional counselors.

The fourth level analysed correlations between overall work engagement and job burnout dimensions (emotional exhaustion, depersonalization and reduced professional efficacy) were based on four hypotheses. The observed significant negative correlation coefficient of $-0.327(p = 0.00 < 0.05)$ between overall work engagement and reduced professional efficacy meant higher work engagement predicted and lower levels of reduced professional efficacy among Kenya Universities' professional counselors. There was an observed negative correlation coefficient $-0.154(p = 0.04 < 0.05)$ between overall work engagement and depersonalization. It was inferred that at 95% confidence level, higher levels of work engagement predicted lower levels of job burnout dimension depersonalization among Kenya Universities' professional counselors. Finally, a weak negative correlation coefficient of $-0.129(p = 0.09 < 0.05)$ which implied that work engagement could not be used to statistically predict lower job burnout levels.

The findings in this section were found to support the expectations of the study. Schaufeli and Bakker (2007) argues that highly engaged employees work particularly hard and diligently because they enjoy their job, and not because of a strong, compelling inner motivation alone. Macey and Schneider (2008) also concurs that employees who are highly engaged might be expected to work harder and smarter because they have high levels of energy, are enthusiastic regarding their jobs, and often involve themselves deeply in their work. When they experience fatigue Schaufeli and Salanova (2008) indicates that they perceive the feeling as quite pleasant because of its association with positive achievements rather than failures. Therefore, the outcome as Schaufeli and Bakker (2004) propose is that such workers develop positive attitudes towards their work and organization; they experience job satisfaction, commitment to the organization and a lack of desire to turnover. Likewise, Sonnentag (2011) and Salanova and colleagues (2003) argue that work engagement leads to positive organizational behavior, such as displaying personal initiative, a high motivation to learn and proactive conduct.

5.0 Suggestions for Further Research

Although this research established that high work engagement levels predicted low job burnout rates, it did not prove if the reverse was true for the variables under research. The direction of causation calls for further investigation. The study recommends a longitudinal survey that evaluates the possibility of causal relationships between existential fulfillment, work engagement and job burnout among university counselors. Applying this model would also reduce possible common method bias as observed by Doty and Glick (1998) and Podsakoff and colleagues (2003). Data in this study was collected using self-response scores. It is therefore not known to what extent these self-reported scores accurately reflect existential fulfillment, work engagement, and job burnout. Naturally, the results of the current study for the relationship between the variables should be interpreted with, caution but there are no indications that these findings solely reflect biased respondent reporting. Combining self-report data with data obtained in a more objective manner is recommended for further research that applies powerful statistical techniques for hypothesis testing.

Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage. *Journal of Organizational Effectiveness: People and Performance*, 2(1), 7-35.

Altunel, C. M., Kocak, O. E., & Cankir, B. (2015). The effect of job resources on work engagement: A study on academicians in Turkey. *Educational Sciences: Theory and Practice*, 15(2), 409-417.

Aon-Hewitt, (2014). *Trends in Global Employee Work Engagement*. Retrieved from www.aonhewitt.com.

Ardichivili, A. & Kuchinke, K. P. (2009). International perspectives on the meanings of work and working: Current research and theory. *Advances in Developing Human Resources*, 11 (2), 155-167.

Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2005). The crossover of burnout and work engagement among working couples. *Human Relations*, 58(5), 661–689.

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223.

- Bakker, A. B., & Leiter, M. P. (2010). Where to go from here? Integration and future research on work engagement. In Bakker, A. B., & Leiter, M. P. (Eds.). *Work engagement: A handbook of essential theory and research*. New York: Psychology Press.
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 4-28.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD-R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 389-411.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P. & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.
- Du Plooy, J., & Roodt, G. (2010). Work engagement, job burnout and related constructs as predictors of turnover intention. *South African Journal of Industrial Psychology*, 36(1), 1-13.
- GALLUP (2013). *The state of the global workplace: Employee work engagement insights for business leaders worldwide*. Washington DC: GALLUP.
- George, J. M. (2011). The wider context, costs, and benefits of work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 53–59.
- Gorgievski, M. J., Bakker, A. B., & Schaufeli, W. B. (2010). Work engagement and workaholism: Comparing the self-employed and salaried employees. *Journal of Positive Psychology*, 5(1), 83-96.
- Halbesleben, J. R. B. (2011). The consequences of work engagement: The good, the bad, and the ugly. *European Journal of Work and Organizational Psychology*, 20(1), 68–73.
- Hunnibell, L. S. (2006). Self-transcendence and the three aspects of job burnout syndrome in hospice and oncology nurses (Unpublished Doctoral Dissertation: Case Western Reserve University, Cleveland, OH).
- Hunnibell, L. S., Reed, P., Quinn G. M., & Fitzpatrick, J. (2008). Self-transcendence and job burnout in hospice and oncology nurses. *Journal of Hospice and Palliative Nursing*, 10, 172-179.
- Jeung, C. W. (2011). The concept of employee work engagement: A comprehensive review from a positive organisational behaviour perspective. *Performance Improvement Quarterly*, 24, 49-69.
- Kim, W., Kolb, J. A., & Kim, T. (2012). The relationship between work engagement and performance: A review of empirical literature and proposed research agenda. *Human Resource Development Review*, 20(10), 1-29.
- Kinga, T. N., Kariuki, M. W., & Njunge, T. W. (2012). Role of counsellor supervision in management of job burnout among counsellors in Kenya. *International Journal of Current Research*, 4(2), 154-156.
- Langelaan, S., Bakker, A. B., van Doornen L. J. P., & Schaufeli, W. B. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and Individual Differences*, 40, 521–532.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee work engagement. *Industrial and Organizational Psychology*, 1, 3-30.
- Macey, W. H., Schneider, B., Barbera, K. M., & Young, S. A. (2009). *Employee engagement: Tools for analysis, practice, and competitive advantage*. Malden, WA: Wiley-Blackwell.
- Makewa, L. N., Elizabeth, R., Too, J. K., & Kiplagat, P. (2012). Evaluation of teacher factors associated with mathematics performance in primary schools in Kenya. *International Journal of Scientific Research in Education*, 5(1), 47-62.

- Makhanya, M. (2012). Student graduateness. In Coetzee, M., Botha, J., Eccles, N., Holtzhausen, N., & Nienaber, H. (Eds.). *Developing student graduateness and employability* (p. 29). Randburg: Knowres.
- Maslach, C. (2011). Work engagement research: Some thoughts from a job burnout perspective. *European Journal of Work and Organizational Psychology*, 20(1), 47–52.
- Ndeti, D. M., Pizzo, M., Maru, H., Ongecha, F. A., Khasakhala, L. I., Mutiso, V., & Kokonya, D. A. (2008). Job burnout in staff working at the Mathari Psychiatric Hospital. *African Journal of Psychiatry*, 11, 199-203.
- Palmer, B., Quinn G. M., Reed, P., & Fitzpatrick, J. (2010). Self-transcendence and work engagement in acute care staff registered nurses. *Critical Care Nursing Quarterly*, 33, 138-147.
- Parker, S. K., & Griffin, M. A. (2011). Understanding active psychological states: Embedding work engagement in a wider nomological net and closer attention to performance. *European Journal of Work and Organizational Psychology*, 20(1), 60–67.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job work engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53, 617-635.
- Saks, A. M. (2006). Antecedents and consequences of employee work engagement. *Journal of Managerial Psychology*, 21(7), 600-619.
- Schaufeli, W. B., & Bakker, A. B. (2007). 'Job burnout and work engagement.' In Schaufeli, W. B., & Bakker, A. B. (Eds.). *The Psychology of Work and Health*. (pp. 341-358). Houten: Bohn Stafleu van Loghum.
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In Bakker A. B., & Leiter, M. P. (Eds.). *Work engagement: A handbook of essential theory and research*. (pp. 10-24). New York, NY: Psychology Press.
- Schaufeli, W. B., & Salanova, M. (2008). Enhancing work engagement through the management of human resources. In Näswall, K., Sverke, M., & Hellgren, J. (Eds.). *The Individual in the Changing Work life*. (pp. 380-404). Cambridge: Cambridge University Press.
- Schaufeli, W. B., & Salanova, M. (2011). Work engagement: On how to better catch a slippery concept. *European Journal of Work and Organizational Psychology*, 20(1), 39–46.
- Shirom, A. (2010). Feeling energetic at work: On vigour's antecedents. In Bakker, A. B., & Leiter, M. P. (Eds.), *Work Engagement: A Handbook of Essential Theory and Practice* (pp. 69-84). London and New York: Psychology Press.
- Sichambo, M. N., Marangia, S. N., & Simiyu, A. M. (2012). Causes of job burnout among secondary school teachers: A case of Bungoma North District – Kenya. *International Journal of Academic Research in Progressive Education and Development*, 1(4), 195-202.
- Sonnentag, S. (2011). Research on work engagement is well and alive. *European Journal of Work and Organizational Psychology*, 20(1), 29–38.
- Sonnentag, S., Mojza, E. J., Binnewies, C., & Scholl, A. (2008). Being engaged at work and detached at home: A week-level study on work engagement, psychological detachment, and affect. *Work and Stress*, 22, 257–276.
- Takawira, N., Coetzee, M., & Schreuder, D. (2014). Job embeddedness, work engagement and turnover intention of staff in a higher education institution: An exploratory study. *S A Journal of Human Resource Management/SA*, 12(1), 524-534.
- Tomic, M. & Tomic, E., (2011). Existential fulfilment, workload and work engagement among nurses. *Journal of Research in Nursing*. DOI: 10.1177/1744987110383353

- Unaldi, I., Bardakci, M., Dolas, F., & Arpaci, D. (2013). Job burnout in relation to specific contributing factors and health outcomes among nurses: A systematic review. *Journal of Education and Practice*, 4(13), 86-98.
- van den Berg, H., Manias, D., & Burger, S. (2008). The influence of job-related factors on work engagement of staff at the University of the Free State. *Acta Academica*, 40(3), 85-114.
- Watkins, J. M. & Stavros, J. M. (2010). 'Appreciative inquiry: OD in the post-modern age.' In Rothwell, W. J., Stavros, J. M., Sullivan, R. L. (Eds.), *Practising Organisation Development: A Guide for Leading Change* (3rd ed.). (pp. 158-181). San Fransisco, CA: Pfeiffer.
- Welch, M. (2011). The evolution of the employee work engagement concept: Communication implications. *Corporate Communications: An International Journal*, 16(4), 328–346.
- Xanthopoulou, D., Bakker, A. B., Kantas, A., & Demerouti, E. (2012). Measuring job burnout and work engagement: Factor structure, invariance, and latent mean differences across Greece and the Netherlands. *International Journal of Business Science and Applied Management*, 7(2), 40-52.

The Relationship between Secondary School Students' Attributes and their Attitudes Towards Agriculture Subject: The Case of Migori District, Kenya

Atela Judith A. and Ogang'a Peter O.

Abstract

Students acquire attitudes within their classrooms, in their homes and within their community. The study focused on secondary school students attributes related to their attitudes towards agriculture as a subject and as career goal of students within Migori district of Kenya. Success in the subject and decision to pursue agriculture at secondary levels could be attributed to their personal attributes. Enrolment in agriculture as a subject and as a career goal in Migori depends on positive attitudes cultivated amongst the students. The study adopted a cross-sectional survey research design. The target population consisted of all the form 4 students in Migori district who had made subject choices and had enrolled for Kenya National Examinations Council while the accessible population included the form 4 students in the 6 schools purposely selected for the study. Random sampling technique was used to select 100 form 4 students both taking and those not taking agriculture subject from both rural and urban district schools. A questionnaire with reliability coefficient of 0.85 and had both closed and open-ended items was used to collect data. Data was processed and analyzed using descriptive statistics and inferential statistics to test the hypotheses. Statistical Package for Social Sciences version 17 was used for the analyses. The study found out that the attitudes of school students towards agriculture as a subject and career choice was low. It concluded that there was no evidence to show that the student attitudes were related to the attributes studied. The study recommends that parents, teachers of agriculture and universities with programs which prepare professionals for agriculture-related careers to cooperate with secondary schools to provide information about a wide variety of agricultural careers and make visits to schools and produce high quality media which positively portray the wider range of opportunities of careers in agriculture.

Key Terms: Agriculture subject; Parents' occupation; Socio-economic background; Students' Careers choice

Introduction

Success in the subject and decision by students to pursue agriculture and related courses at secondary and tertiary levels may be attributed to their personal attributes that relate to their attitudes towards the subject. In order to realize the roles played by agriculture to the national economy, a positive attitude must be cultivated among the students undertaking agriculture subject so that they enroll in the subject in large numbers at secondary school level where it is an optional subject. Kamau (2014) cited that students develop interest in different subjects because of their background, personal characteristics and others due to anticipated future career goals and this would motivate them to work hard. According to Njoroge (2014) the intention to participate in an activity could be predicted based upon knowledge, observation or other information about some issue. This suggests that a person's intent to become actively involved in an agricultural career may be predicted by analyzing his/her belief about agriculture and that, individuals with positive attitudes towards a subject tend to evaluate it positively (Kotrlik et al, 2007). In Migori District there are several agricultural based industries involved in agricultural related activities such as sugarcane growing and processing, tobacco growing, dairy keeping and subsistence

farming, fifty secondary schools within the district offer agricultural education, but despite this, the trend in performance and enrolment in agriculture subject has been declining (Migori/Kuria/Rongo District Secondary Schools Examination Council, 2006).

The Problem

Enrolment in agriculture subject in Kenya compares favourably with other subjects but the same is not with Migori District which took a declining trend in enrolment in the agriculture subject. This implies a negative attitude towards the subject, declining selection of the subject by secondary school students as an examinable subject and as a career choice. The role that students' attributes like student personal characteristics such as age, gender, students' career goals and student socio-economic background for example, family income and parents' occupation played in influencing attitudes towards agriculture was not clear. Parents of the students and their high school teachers in agriculture play an important role in students' enrolment in a subject. Students who have completed high school agriculture courses have more positive attitudes towards agricultural careers and the most influencing persons in their decision making were their high school agriculture teachers. There is a concern that the agriculture teachers' characteristics in schools are turning children off the agriculture subject and the results has been fewer students enrolling in agriculture subject in KCSE. Secondary school students have mixed attitudes towards agriculture subject and have little or no interest in pursuing agriculture and related careers. This research therefore aims at investigating "The relationship between secondary school students' gender, career goals and socio-economic background and their attitudes towards agriculture subject" the case of Migori District Kenya.

Objectives of the Study

The following objectives were formulated to guide the study:

1. To determine the relationship between students' career goals and their attitudes towards agriculture subject in Migori district, Kenya.
2. To determine the relationship between students' socio-cultural background and their attitudes towards agriculture subject in Migori district, Kenya.
3. To determine the relationship between parents' occupation and attitudes towards agriculture subject in Migori district, Kenya.

Literature Review

According to Udoukpong et al. (2012) students experience significant barriers which may restrict their preparation for and entry into professional roles. These barriers may be both cultural and institutional. He concluded that students perceive more overall barriers to participation in higher education. He noted that lack of consideration and pursuit of professional careers in agriculture among minorities may be the result of social and cultural barriers. A study of agriscience students in Texas high schools found out that minority students had more negative attitudes towards agriculture and agricultural occupations. Talbert and Larke (2004) however noted that negative attitudes toward agriculture as a source of profession is not unique among minorities. According to Ostovic et al. (2017) the students perceive agriculture as farming and ranching only and they have a pervasively negative opinion of pursuing a career in agriculture.

The variables include students' primary school experience, family background, culture and area of residence. The way a child grows to be, largely relies on his parents and relatives, the social

set-up, and his experience in early stages of formal education and the process by which the child's mind and character are developed through informal instruction he receives prior to formal instruction. According to Scofield (2007) students bring into social environment two modes of operation; the cognitive mode, which represents the pupils academic achievement and which may receive the greatest emphasis and reinforcement within school environment and the affective mode which includes attitude towards learning, in this case of agriculture subject.

According to Njoroge (2014) high school students quoted a variety of reasons for development of negative attitudes towards agriculture namely; lack of interest, failing grades, inability to get along with other students, desire to find a better career job, inability to get along with teachers, marriage, pregnancy, military enlistment and expulsion. Imitation of some influential person or groups or suggestions made by them act as source of reference to children as they consider pursuing agriculture as lifetime career, the totality of decision is reinforced by how best or how worst he attaches his past experience to the subject.

According to Baliyan (2015) parents and those who are closely related to the child have a certain amount of influence on his/her personality. On many occasions, a child's success or failure in school can be as a result of his earlier and present relationship with his parents and other family members. He also cited that in most African cultures women and children are the major sources of farm labour. In the family such activities like tilling land, weeding crops, herding livestock milking and harvesting are heavily accomplished by women and children. Work forced on children without the slightest motivation will cause the child to develop a negative attitude towards agricultural work (Baliyan, 2015). This negative attitude will count later in life in the child's behaviour, especially when it comes to the attitude of the child towards agriculture subject. Coupled with attitude development from the parents irrationality in division of labour is the mentality parents have towards agriculture education. Some parents may discourage their children from pursuing agriculture in high school level hence in a school where agriculture is a compulsory subject, a child admitted there will have already developed a negative attitude.

According to Herr and Cramer (2002) there has been an assumption that educated boys and girls would be wasted if returned to their homes to work as farmers. The implication is that training and intelligence is unnecessary to agriculture, secondly as children also cherish the success of their parents and in doing so they respect and admire what has made their parents to succeed. If it is through agriculture that their parents have grown up the wealth ladder, then children automatically develop attitudes positively inclined to agriculture subject and as a career.

According to Bennaars, et al.(1994) culture influences the whole of a community's life. Children are integrated into the society through the exposure to the actions and opinions of its older members. Accordingly, children who are born in complex societies for example in urban areas have grown a greater tendency to seek attention, recognition and dominance. On the other hand, children born in simple societies say rural areas are conditioned early in life to offer support and help in the farms and to one another. Most rural families practice agriculture in one way or another and children being members of these families are subsequently exposed to these activities on the other hand, urban children least concern themselves with agricultural activities since the society they live in urban areas do not engage in them.

According to Ostovic et al. (2017) culture is an important source of students’ strengths and resilience. It provides a means by which children learn to appreciate their developing sense of self. While undergoing agricultural education the child knows at the back of his mind what culture calls “don’ts” and what it calls “dos”. Adegoke & Osokoya (2015) concluded that some of the barriers which may restrict the preparation for and entry into professional roles may be both cultural and institutional, for example Hispanic students perceive more overall barriers to participation in higher education and that they differ particularly on barriers related to family and cultural factors. Lack of consideration and pursuit of professional careers in agriculture among minorities may be the result of social and cultural barriers (Baliyan, 2015).

According to Roberts et al. (2004), a child begins to develop attitudes in primary schools. At this level they receive correction of behaviour from teachers. The teacher therefore is entrusted to take the responsibility of the parent. It is here also that children come into contact with peers who through learning and playing share their experiences. According to Baliyan (2015) there is a relation between negative statements made by teachers about students and their scores in agriculture at primary level and that attitudes are also learned through teacher modeling which involves the acquisition of attitudes through observations and imitation of the teacher.

Methodology

The study adopted a cross-sectional survey research design involving data collection from members of population that sought to obtain information that described existing phenomena by asking individual students about their attitudes towards agriculture as a subject; as an elective and as career goals. A cross – sectional survey method of data collection was used in which case data was collected from a sample drawn from a predetermined population at one point in time (Mugenda, & Mugenda, 1999). The target population of the study consisted of all the candidates in Migori district which according to 2007 KCSE mock release were 3,027. The study targeted all the form fours from 40 secondary schools in Migori district who had already settled for their subject choices and enrolled with the Kenya National Examination Council to sit for examinations, October 2007 in six secondary schools both in rural and urban areas of Migori District. A sample of 20 students from each school was randomly selected from the 6 secondary schools within district schools of Migori District, thus giving a total of 120 students. Stratified random sampling was used to select 10 students who take agriculture subject from the agriculture class and also 10 who do not take agriculture in each school and therefore getting a total of 20 students enrolled in form 4 from each of the six schools selected for the study, however only 100 questionnaires were returned.

Table 1: Number of schools and students in the study

<i>Location of schools</i>	<i>Type of school</i>	<i>Number of Students</i>	<i>Number of responses</i>	Response rate
Urban schools	Migori Boys	20	17	13.8
	Kakrao mixed	20	17	13.8
	Moi suba Girls	20	16	13.7
Rural schools	Moi nyatike Boys	20	16	13.7
	St. Michaels	20	17	13.8

	Mixed			
	Nyabisawa Girls	20	17	13.8
Total	6	120	100	83.3

Data was collected using semi-structured questionnaires with both closed and open-ended items. The instrument was organized into sections A and B. Section A addressed demographic information such as gender, age, occupation of parents, location of residence and grade scored in science at primary school, section B covered areas on attitudes towards agriculture as an elective subject and as a career goal. These sections used a five-point Likert – type scale. (1-strongly agree, 2- Disagree, 3-Uncertain, 4-Agree, 5-Strongly Disagree). The validity of the questionnaires was determined after pilot testing in one of the schools in Migori district that had not been selected for study which was also offering agriculture subject. Responses obtained from the study were coded, entered and cleaned. Analysis was done using SPSS version 17.0 for preparation, summarizing, presentation, variable definitions and hypothesis testing. In the study the following descriptive statistics were used; means, standards deviations, frequencies and percentages. To document the attitude level of secondary school students, the overall mean of students’ responses were calculated and then ranked on an attitude scale ranging from 1-5. This was divided into three classes based on an equidistant scale ranging from low attitude (1-2:35), moderate attitude (2.36-3.66) and high attitude (3.67-5). Data visualization techniques of tables and charts were employed to present the results and ensuing discussions. To test the hypothesis, Chi- square was used in order to determine whether there was any significant relationship between the independent variables (gender, location of residence, parents occupation and students career goals) and the dependent variable (attitude towards agriculture as a subject, as an elective and as careers goal).

Results and discussion

Students’ career goals and attitudes towards agriculture subject

Figure 1 shows that 59% of the respondents opted for non-agriculture related careers. This figure also represents the number of students that did not select agriculture subject in the study. The focus on careers and career preparation has long been a major component of secondary agricultural education programs (Levon, & Blannie, 2005). Not only is the mission of agricultural education to prepared and support individuals for careers, but also to have a successful record of helping students set and achieve career and educational goals (Philips, & Osborne, 2002). Career aspirations are influenced by numerous factors including gender, academic factors including academic background, parental support and socioeconomic status (Talbert et al.,2005). The career goals of the students in this study were not inclined to agriculture.

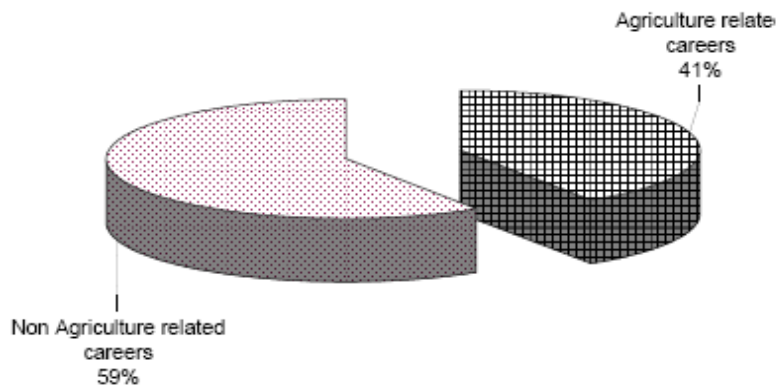


Figure 1: Career goals of the students

Area of Residence

Majority of the students in the study were from rural areas (62%) while the rest were from towns and 3.8% from cities (Figure 2). Socio economic factors such as parents' area of residence and occupation have been known to influence curriculum choice and careers aspirations by students (Talbert and Larker, 2005) hence high school agriculture curriculum development need to redesign efforts in the schools to make major changes in subjects and students enrollment in optional subjects. Area of residence was studied as most agricultural activities are carried out in the rural areas and this is known to affect the attitudes of the learners towards agriculture as they may already have formed opinions about agriculture without being aware and thus affect their attitudes as cited by Thornburg (1999).

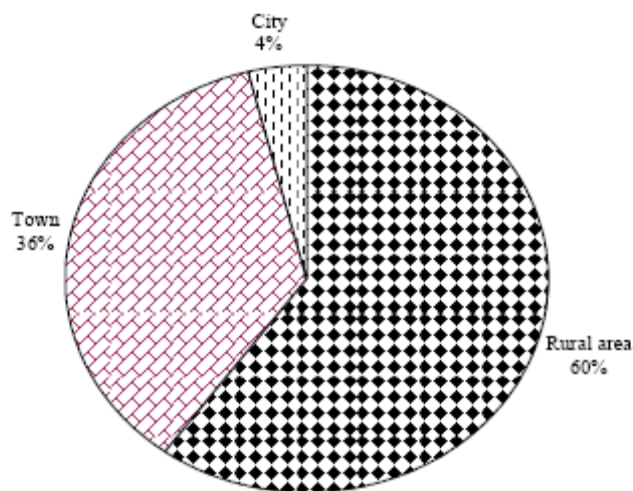


Figure 2: Area of residence

The students were asked to indicate where their parent's guardians lived most of the time. The residential areas were put into three categories that i.e. city, town and rural. It was revealed that most students resided in rural areas. Results indicate that majority of the students (91%) had low

attitude levels towards agriculture as a subject. Majority of the students residing in rural areas (97.9%) in the study area had very low opinion of agriculture as a subject and therefore would not rather study it. This is also the case with majority of students in towns and cities who also had low attitude towards the subject. There were no high attitude levels for agriculture subject by students residing in both city and rural areas. The results showed that only 7% had moderate attitude levels for agriculture subject. Most of the students chose other elective subjects in the same category as agriculture subject such as commerce, music, electronics and computer studies. Results in Table 2 show that 78% of the students had moderate attitude level towards agriculture as a career goal, 22% had low attitude levels. There were none with high attitude level towards agriculture as a career goal. Students from rural areas had the least percentage (48%) moderate attitude levels towards agriculture as a career goal compared to other students from cities and towns respectively. The results indicate that the overall attitude level towards agriculture as career goal by the students was generally low.

Parents' occupation and attitudes towards agriculture

The students were asked to indicate their parents/guardians occupation. The occupations were put in four categories and later coded into agriculture related and non-agricultural related occupations. The results from the analysis presented on Table 2 indicate that the majority of the students whose parents were peasant farmers (96.2%) had low attitude level towards agriculture as a subject, the same applied to the other students whose parents were employed in other occupations.

Table 2: Parents' occupation and students' attitudes

			Overall Attitude level		
Occupation		Count	low	moderate	Total
Peasant farmer		Count	12	14	26
		%	46.2%	53.8%	100%
Government		Count	24	25	47
		%	51.1%	48.9%	100.0%
Parastatal		Count	4	7	11
		%	36.4%	63.6%	100.0%
Private		Count	8	8	16
		%	50.0%	50.0%	100.0%
Total		Count	48	52	100
		%	48.0%	52.0%	100.0%

$$\chi^2 = 0.855; \text{ df}=3; \text{ p-value} = 0.841$$

The results show that 86% of the students had moderate attitude level towards agriculture as an elective subject while 14% had low attitude level. The results also indicate that 7.7%, 14.9%, 9.1% and 25.0% were the proportions of the respondents whose parents were peasants, government employees, parastatal workers and private workers respectively. The low attitude by students towards agriculture subject was generally observed across all the students regardless of their parents' occupation. According to Werunga et al. (2013) parents had a significant effect on students' choice of career and subjects and their characteristics played a vital role in students' choice of technical subjects. They have a crucial task of preparing the child for educational and

future life choices. These may have spillover effects on subject choice. He also affirmed that members of the family can provide guidance and information, directly or indirectly to influence a young person's career choice. Family members' choices of career influence students' career decision and form a strong belief in what kinds of career are the best for the students. This is supported by Adegoke and Osokoya (2015) who stated that knowledge about engineering was correlated to having an engineer in the family.

Conclusions and recommendations

There was no significant relationship in the attitude levels of students living in the rural areas and those living in the towns and city. It was concluded that parents' residence did not influence the attitudes of secondary school students towards agriculture as a subject and as a career goal. The overall students' attitude levels towards agriculture as a subject, as an elective and as a career goal was moderate. No significant difference in attitude levels of students' attitudes towards agriculture as a subject, as an elective and as a career goal between students whose parents engaged in agriculture related occupations and those in non-agriculture related occupations. There was also no significant relationship between students' career goals and their attitudes towards agriculture subject. The career goals had no influence on their attitudes, though their overall attitudes levels towards agriculture as a career were moderate. It is recommended that students should be taken for field trips, excursions and agricultural shows to enhance their agricultural skills and experience. This would boost their morale and attitudes towards agriculture. The agriculture teachers should demystify agriculture as a science subject to make the students acquire positive attitudes towards the subject. Students should be guided to choose their career as early as in form one and two in order to develop their positive attitude towards the subject. It is recommended that Agriculture professionals should make a concerted effort to cooperate with school officials in gaining access to provide them with information about professional careers. These professionals should portray professional careers in agriculture in a positive light. Schools should also provide written information on careers and opportunities in higher education and also arrange for visits by career professionals to their schools. It is further recommended that colleges and universities with programs which prepare professionals for agriculture careers cooperate with schools to provide information by producing high quality media which positively portray the wider range of opportunities of professional careers in agriculture and technologies. Additionally, colleges and universities should provide experiences in agriculture outside their communities such as mentoring programmes for secondary school students.

Suggestions for Further Research

A follow up study should be carried out to investigate the real effect of teachers' characteristics on the students' choice of agriculture in secondary school and as a career. Such a study would give findings on the impact of secondary school agriculture teachers on students' choice of the subject. A major focus and research should be done on the job market trends and the future career opportunities offered by agriculture as compared with other optional subjects as conceptualized by students. Further research should be done to find out the effects of curriculum review on the attitudes towards agriculture subject.

References

- Adegoke S. P., & Osokoya M. M. (2015) Socio-economic background and access to internet as correlates of students' achievement in agricultural science. *International Journal of Evaluation and Research in Education*, 4(1), 16-21.
- Baliyan, S. P. (2015). Factors underlying attitude towards agriculture as predictors of willingness to enrol in the subject by senior secondary students in Botswana. *Journal of Educational and Social Research*, 377-385.
- Baliyan, S. P. (2015b) Demographic factors influencing senior secondary school students' attitude towards agriculture in Botswana. *International Journal of Education and Research*, 3(10).
- Bennars, G.A., & Otiende, R. (1994). *Theory and practice of Education*. Nairobi; East Africa Educational Publishers Ltd.
- Council Secretary. (2007). Migori/ Kuria/Rongo/ districts secondary schools examination council, 2007 KCSE MOCK release. At St. Joseph's School Rapogi on 6th September 2007 Mock results. Kombengi press, Migori.
- Herr, E.L., & Cramer, S. H. (2002). Career guidance and counseling through the life span: Systematic approaches. New York Harper Collins Press. USA.
- Kamau T. N. & Orodho J. A. (2014). Secondary school student's perception towards agriculture subject in public secondary schools in Nairobi County, Kenya. *Journal of Humanities and Social Science*, 19, 30-36.
- Kathuri, N.J. (1990). A study of the new agricultural education curriculum in the secondary Schools of Kenya (Unpublished PhD. Dissertation: Urbana Hampaign, Illinois, University of Illinois).
- Kotrlík, J. W., Redmann, D. H., Harrison, B. C., & Handley, C.S. (2007). Information technology related to professional development needs of Louisiana agriscience teachers. *Journal of Agricultural Education*, 41(1), 25-30.
- Levon, T. E., & Blannie, E. B. (2005). Factor influencing careers choice of urban agricultural education students. *Journal of Agricultural Education*, 46(2), 26-40.
- Migori/Kuria/Rongo District Examinations Council (2006). *Migori District KCSE Results Analysis for the Year 2006*. Hatara Printing Press, Migori.
- Ministry of Education. (2005). *Secondary School Agriculture syllabus for Kenya*. Nairobi, Kenya: Institute of Education.
- Mugenda, O. M. & Mugenda, A.G. (1999). Research methods: Quantitative and qualitative approaches. Nairobi, Kenya, Acts Press.
- Njoroge, K. T. (2014). Secondary school student's perception towards agriculture subject in public secondary schools in Nairobi County, Kenya. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 30-36
- Ostovic M., Mikus, T., Pavicic, Z., Matkovic, K., & Mesic, Z. (2017). Influence of socio-demographic and experiential factors on the attitudes of Croatian veterinary students towards farm animal welfare. *Veterinarni Medicina*, 62, (8), 417-428.
- Philips, S. H., & Osborne, E.W. (2002). Students perceptions and attitude towards agricultural science education. *Journal of Agricultural Education*, 47(3), 4-7.
- Roberts, T. G. & Dyer, J. E. (2004). Characteristics of effective agriculture teachers. *Journal of Agricultural Education*, 45(4), 1-5.

Scofield, G. G. (2007). College of Agriculture New Students Profiles. Paper Presented at the Central Region 94th Annual Research Conference in Agricultural Education, St Louis, Mo Press, USA.

Talbert, B. A., & Alvin L. Jr. (2005). Factors influencing minority and non-minority students to enroll in an introductory agriscience course in Texas. *Journal of Agricultural Education*, 36(1), 1-6.

Thorburg, H.D. (1994). An investigation of dropout program among Arizona's Minority youth. *Educational Journal*, 94, 248-265.

Udoukpong, B. E., Emah, I. E., & Umoren, S. E. (2012). Student attitudes, parental influence and career aspirations in academic achievement in entrepreneurial curriculum. *Academic Research International*, 2(1).

Werunga K., Owano A., Ayodo T. M. O., & Epari E. (2013) Factors influencing choice of technical subjects among the secondary school graduates in Kenya. *International Journal of Innovative Research & Development*, 2(11).

Market Forces versus Professionalism: A Priority Dilemma Resulting in Departures from Traditional Layout of the Standard Newspaper

Benjamin Mbatia
Kabarak University

Abstract

The phenomenon of tabloidization entered the realm of journalism as an undesirable trend as early as 1833 when the “penny press” emerged in US cities. These tabloid papers wrote for semiliterate industrial workers who preferred heavily illustrated news stories that concentrated on sensation and not objectivity; the personal as opposed to the public, as well as scandal, lifestyle and human suffering in place of economic and political news. These tabloids built up a mass market that those in the elitist market started to eye with envy. The result was that mainstream spreadsheets started sneaking in a few tabloid elements, so as to get a bigger share of the readership, that had got addicted to the entertaining style and layout of the tabloid papers. This study aimed at assessing the extent to which *The Standard* newspaper, a traditional spreadsheet, has tabloidised its layout due to market pressure. The Standard is the second largest daily in Kenya in terms of circulation. Many elitist dailies have embraced elements of tabloidization in their layout, in order to get an edge in the competition for market share. The study found that the layout of *The Standard* was to an extent tabloidized. Among other things, the front pages were manipulated to increase the visual effect so as to create an urge to buy among the readers. Pictures chosen to illustrate some stories were too graphic and carried emotive semiotic messages. Some pages were crowded with tiny stories that lacked depth detail and analysis. Based on the agenda setting theory and the visual semiotics theory, this study used the qualitative analysis of layouts of pages of *The Standard*, as well as photographs from the editions of the paper, selected from the years between 1995 and 2015. The study confirmed the incidence of tabloid elements in the layout of *The Standard*.

Key Words: Tabloidization, Layout, Agenda Setting, Visual Semiotics Theory

1.0 Introduction

Tabloidization is the process of watering down news, in effect replacing serious, objective journalism with a populist form which “gives the people what they want.” Tabloidized journalism focuses on entertaining rather than informing the reader, (Mooney, 2008). This approach is aimed at appealing to the mass market (Brookes, 2000). Journalists writing in traditional spreadsheets are today tempted to deviate from serious objective items considered useful in helping citizens make informed decisions. Instead they have started including “juicier” issues, like scandal, tribalism, ridicule of personalities and voyeurism which in the past were found only in tabloids (Brookes, 1991). This article examines how this phenomenon which has been dubbed infotainment has encroached into the elitist press. The emphasis of this paper is not on content of the news items but instead it focuses on the way the layout and visual presentation has been manipulated and tabloidised in *The Standard* newspaper, an established, traditional daily spreadsheet. This paper has over the years practiced traditional, objective journalism, but in the face of a competition for a share in the readership market, that is getting more and more fierce, *The Standard* like

other spreadsheets is tempted to occasionally sneak in the more popular tabloid layout because the public has come to expect it.

Today (2015) the print media in Kenya consists of 14 regular papers, including The Standard, Sunday Standard, Kenya Today, Taifa Leo, Taifa Jumapili, Business Daily, Nairobi Star, The Nairobiian, Nairobi Newspaper, The East African, Coast Week, The Financial Times, Weekly Citizen and The People. According to Ali (2010), all the Kenyan regular papers are privately owned. Except for two, Taifa Leo and Taifa Jumapili, which are written in Swahili, all the rest are published in English. While the number of dailies has remained at 6 since 1990, the number of national weeklies has shot up from 5 to 9 between 1995 and 2005, including the addition of *The Weekly Citizen*, a gossip tabloid, Maina (2006). The mainstream newspapers have also introduced weekly tabloid editions to cater for those with a taste for the lurid, sensational and gossipy. A case in point is *The Standard*'s own publication, *The Nairobiian*, a best selling tabloid that concentrates on sex scandals.

Various reasons have been put forward to explain the increase of tabloidization and its encroachment into the traditional spreadsheets. Research done in Portugal shows that younger readers are more visually oriented and enter a page by first looking at a picture, as opposed to older readers who prefer written words to images (Coelho, 2007). Kenya has a young population with over 50% of the people being under 20 years of age. The bulk of the Kenyan readers would therefore be more comfortable with the tabloid layout which is easy to read and colorfully illustrated. Another explanation may be the fact that the elitist newspaper's analytical articles cater for the highly educated readership. Less than one fifth of Kenya's population have received college education. The bulk of potential newspaper readers fall in the category of the semiliterate American readers of the 1830's who popularized the "penny press".

This paper will examine three aspects of tabloidization of layout and assess to what extent the newspaper has allowed itself to dabble with them, for the purpose of satisfying those of the baser taste, who, unfortunately for the elitist journalist community, make up the majority of the reading audience. These three aspects include the manipulation of the front page layout, use of emotive pictures and the use of a layout of print, that favours the scanner at the expense of the serious reader.

Objectives of the study

To establish if the front page layout of *The Standard* newspaper has tabloidized elements.

To assess the photographs used in *The Standard* newspaper to see if they have any tabloid elements.

To evaluate the prevalence of news items that are rendered brief and shallow due to the tabloid layout used to present them.

Theoretical Framework

Two theories guided this research. The first is the **Agenda Setting Theory** (McCombs, & Shaw, 1972) This theory states that the media has the ability and the tendency to set agenda for the reading public, in so doing influencing them on what to think about and what to treat as important. Media influence also tilts the general public's opinions about certain issues. This theory explains the thinking behind the tendency to sensationalise and

scandal monger which is the stock of trade of tabloid journalism, part of whose purpose is to sway public opinion in a certain direction, vis a vis objective presentation of facts. As the paper is dealing with the presentational and visual aspects of layout, the second theory that applies is the **Visual Semiotics Theory** which assigns paralinguistic characteristics to communication that do not involve the use of words, for example the passing of messages through pictures, which use visual grammar to make statements through the way people, places and things are depicted. Seassure (1922) believed that all ways in which human beings communicated could be analyzed as if they are languages. Seassure called the method of studying all non verbal signs (including pictures) *semiotics*. The visual semiotic theory is relevant to this study because in tabloidized journalism, pictures are used as semi veiled mechanisms to contribute to the intended meaning.

Research Methodology

The study entails the analysis of three aspects of layout of *The Standard* newspaper, studying the editions selected from the years 1995, 2005 and 2015. The three aspects are: analysis of front page arrangement, analysis of photographs used to illustrate news items and the arrangement of news items in the inner pages. Front page analysis was aimed at assessing the use of eye catching gimmicks, designed to attract the attention of potential buyers. The photographs used to illustrate the news items were analyzed to assess the extent to which the semiotic messages they put across deviate from the objective and factual and lean towards the emotive and subjective. Thirdly, the arrangement of news items in the inner page were studied so as to assess the prevalence of the tabloidization technique of presenting easy to read news items that are devoid of depth, detail and analysis. Those above elements were subjected to qualitative analysis.

Analysis

Following below is the analysis of the tabloidized layout elements in *The Standard* newspaper. The study has used a sample of three items. They include the analysis of the front page of *The Standard* of 9th March 2015. Here, the researcher looks at the use of eye catching gimmicks meant to push up sales as well as lend undue prominence to certain issues. The picture on page 8 of the *The Standard* of 10th March 2005, that illustrates a human suffering story, is analyzed for its tabloid elements; in particular the emotive semiotic messages it contains. Lastly, an inner page (page 7 of *The Standard* Friday, March 11th 2005) will be analyzed to assess the arrangement, size, alignment and crowding of news items, a tabloidization technique designed to achieve an entertaining, easy to read kaleidoscopic effect.

The front page in a traditional spreadsheet has a simple format, like a brief and concise headline. This is usually followed by a sub heading which with the heading occupy at most one tenth of the page space at the top of the page. The story is usually accompanied by one picture that will occupy not more than one quarter of the page. The picture is usually on the left side of the page, below the headline. The story appears on the right of the picture, occupying at least two columns on the front page. Whatever part of the lead story overlaps into the inner pages will be less than half of it. A minor story will be placed at the bottom of the page, arranged in short columns. The figure below shows the highly

tabloidized layout of the front page of *The Standard* of Monday, March 9th 2015 which differs from the traditional front page layout:



On the sample above the headline is long and descriptive. It reads: “ How the first lady led top team to the finish line .” This large headline creates an emphasis that is intended to create the impression that this story is of paramount importance. The sub heading is as long and descriptive, lending credence to the Agenda Setting Theory. This story concerns a personal interest, the hobbies of the first lady, Margaret Kenyatta. To justify it’s placement on the first page which should carry a story about a burning political or economic issue of national importance, the writer has to go out of the way to campaign for it, so as to make it appear important enough. The sub heading is not directly related to the front page story but invites the reader to see a related picture on page two. It reads : “ Margaret Kenyatta runs with Deputy President and a host of top athletes in historical 21 km half marathon.” This sub headline is more of a lead . It’s purpose is not to inform but it is a marketing device meant to encourage the reader to buy the paper and see the stories promised, that lie in the inner pages. Most notably, apart from the long headline and equally long but superfluous subheading accompanied by an oversized picture, there is no main story on the front page. The picture is used as an eye catcher and provides very little information that can be categorized as news, for example where the marathon was taking place, why the first lady who is not a top athlete in Kenya was taking part, who the organizers were and who won the race. The first lady is only reported to have finished the race.

A Semiotic analysis of the picture on the front page above :The use of celebrity figure This front page picture portrays prominent personalities including the first lady, Margaret Kenyatta, as well as some of the world famous Kenyan athletes. These are role models, prominent in the public eye and admired by many. Apart from using the celebrity status of the persons in the picture for competitive advantage, the image is also used to send a

semiotic message. The message is: “Running for this cause is so important. Even the most prominent personalities in the country are involved. It may make you as famous as them. Why not try it?”

Color

The picture uses a variety of warm colors. The first lady and the athletes are dressed in orange costumes. Orange is a warm color that inspires the feeling of hope and vivacity. The picture also has streaks of crimson which is the color of excitement; white, the color that is associated with purity and black, the neutral color that denotes a down to earth situation. The semiotic message here is that running for charity is a natural, exciting, necessary, and down to earth activity.

Body language

This is a still photo in which it is difficult to trace body movement and gestures. All the same, the relaxed look of the athletes and the smiles on their faces shows that they are happy and proud of their activity (running a marathon to raise funds for charitable causes). The inset photo of President Uhuru Kenyatta giving the first lady a congratulatory hug is more expressive. This inset sends the message that the first lady is engaged in a romantic, family friendly, and pleasurable activity.

Gaze

Gaze can be defined as the use of facial expressions to communicate an idea or feeling without necessarily saying a word (Kress, & van Leeuwen 1996). The gaze in this picture is manifested in the form of the eye contact and smiles directed at the reader (the targets of the gaze). The gaze is used as a communicative strategy in which facial expressions are used to invite the reader to share in the joy, excitement and sense of achievement about the activity portrayed, as well as prodding them to explore, interpret and respond to the story.

Writers of elitist spreadsheets are careful in their choice of photographs to illustrate their news items. They choose informative pictures that complement the information given in the script, but such pictures should not portray grizzly details, for example, bloody scenes in accident or violent crime situations. Critically injured, mutilated or dead persons are not directly shown. The accident is implied by showing the mangled vehicle and death by showing grieving relatives. Tabloid journalism throws all these cautions to the wind. Pictures in tabloids play with the reader's emotions by showing naked persons, dead bodies, accident victims before they are removed from the crash scene or badly injured parts of human bodies, oozing blood.

In a human suffering story entitled “Accident victim seeks help to restore his intestines,” *The Standard* of Thursday the 10th March 2005, page 8, uses such a picture.

PROVINCIAL

Accident victim seeks help to restore his intestines

■ CAROLINE MANGO

His face is a mask of pain and tears as he gasps for breath, trying to position himself on a chair. Journalists recording his ordeal stare in disbelief when the man bares his abdomen to show a wound that has made his life living hell.

Thirty-three-year-old Wambua Mutisya's case is so harrowing as it is painful. The man has an opening in his stomach that has left parts of his intestines sticking out, but one might not notice the problem inside the issue he uses to cover himself.

His middle abdomen is held together with polythene bags that he ties around the gaping wound. When he opens it to explain his ordeal that has lasted two years, anyone looking at him sees he really should be in a hospital instead of a newsroom.

Wambua turned up at *The Standard* Mombasa office yesterday morning, wobbling slowly and supporting himself with a crutch in one hand while the other held on to his stomach. He sat down and poured

PICTURED: ANDREW KIO GATO



Mr Wambua Mutisya narrates his ordeal during an interview at *The Standard* office in Mombasa. Inset, the gaping hole in Wambua's abdomen.

The composite picture above shows on the one part the pink loop of the intestines of a Mr. Mutisya, grotesquely bulging out of a gaping hole in his stomach. This picture is intended to elicit shock and sympathy for Mutisya from the readers. The other part of the composite picture shows Mutisya in a despondent and pensive mood, biting his middle finger. The use of this picture in the *Standard* may be justified by the fact that it is meant to move well wishers to donate funds to offset Mutisya's hospital bill. Otherwise its use violates traditional spreadsheet practices. induces shock. Such a picture would be expected in a tabloid paper, but not in a traditional spreadsheet like *The Standard*.

Analyzing the semiotics of this picture, the grizzly portrayal of the displaced intestine passes a hidden message: "Do not sit comfortable enjoying yourself when Mutisya is dying and needs your help." The pink colour (the colour of living tissue) of the bulging intestine evokes the feeling of shock about Mutisya, who is alive but dying. Mutisya's gaze is in the space and not making an eye contact with the reader. The message is (Mutisya is saying without saying): "Unless you act quickly, I am not with you, I am a gone case." The other aspect of the tabloidization of layout is the cramming of many tiny, unrelated articles into one page. This unconventional style was adopted by *The Standard* newspaper from around 2005, as exemplified by the example below, from page 7 of *The Standard* of March 11 which uses the kaleidoscopic approach.



The below the

table analyses

kaleidoscopic effect caused by the multiplicity of brief unrelated articles on page 7 (shown above) of the Standard of Friday 11th March 2005.

Item No.	Story Titles	Story length
1	Agony of Child wife mutilated by circumciser's knife	3 Columns
2	Town clerk accused	1/4 Columns
3	Suspect lynched	1/6 Columns
4	Traffic Offenders fined	1/10 Columns
5	Magistrate transferred	1/10 Columns
6	Council Clerk stays, government orders	1/10 Columns
7	Employees Stage Sit-in	1/10 Columns
8	Drinking Binge Ends Tragically	1/10 Columns
9	Water firms suffer loss	1/10 Columns
10	Police Bosses are defended	1/10 Columns
11	Engineer seeks police guard	1/10 Columns

The articles on the page shown above are brief and numerous. Only one of them meets the length requirement of a news item(the article titled Agony of Child wife mutilated by circumciser's knife) as it is three columns long. The rest of the news items are only a tenth

of a column each. These brief articles do not go beyond the lead. They lack a setting, detail and analysis. Such articles, resemble the brief Facebook or Twitter postings and cater for the type of reader who has no time for details, a scanner who is looking for something entertaining.

The entertainment factor is enhanced by the multiplicity of the mostly unrelated articles, like the images in the children's plaything of the sixties, called the kaleidoscope. The kaleidoscope is a stereoscopic viewing device with a slot to insert a disk containing color picture slides. The pictures can be seen by the child who changes them at will by pressing a lever. The kaleidoscopic effect here refers to the tabloidization tactic of juxtaposing many varied, unrelated news items on the same page. The reader jumps from one article to the other, sampling the kind of variety a child enjoys as they move from the picture of an elephant to that of a dragon, all in the kaleidoscope. The articles are sketchy and do not go beyond the lead, each containing thirty words or less on average. This tabloidization technique is apparently a strategy aimed at striking a balance between the declining population of older readers who loved the elite press and were interested in detailed, well researched news, with the increasing younger readers who are apolitical and are therefore not interested in national news but go straight to the sports pages and then possibly to Lifestyle and Celebrities sections. Moreover, these youthful readers are more inclined to get information from other sources apart from the print media, such as the social media, via the internet. A full, analytical news item is expected to occupy at least three vertical columns of a page while the figure and table above show that the page referred to has small news items occupying on average one tenth of a column. It is worthy noting that the kaleidoscopic technique was absent in the 1995 editions of *The Standard*, but appeared in 2005 and increased in 2015

4.0 Conclusion

This study has established that though the Standard is basically a traditional broadsheet, it employs tabloid tactics in layout. The purpose of this deviation is evidently double edged. A human suffering story is for example illustrated with a graphic grizzly picture. Such a picture will help the subject to get public sympathy and possibly financial help from members of the public, while the paper also benefits by getting more consumers from a public that is addicted to the tabloid layout. A similar symbiotic relationship also exists between the government departments and personalities whose policies benefit from the agenda setting effect of tabloidized items that favour their policies. Tabloidization of layout therefore seems to be a necessary evil that the elitist press has to occasionally engage in , so as to stay afloat in the turbulent newspaper market.

Ali, Y. M. (2010). *Globalization: It's Impact on the African Nations' Media Systems: Thecase of Kenya'*.

Brookes, R. (2000). "Tabloidization, media panics and mad cow disease." In Sparks, C., & Coelho, Z. P. (2007). *Front page layout and reading paths : Influence of Age on Newspaper Reading*. University of Munho, Portugal: Communication and Society Research Centre.

Mooney, A. M. (2008). *Tabloidization of the Irish Press Media: An analysis of how the Irish independent press reacted to the introduction of British tabloids* . University of Leeds.

- McNair, B. (2001) (2nd Ed.). *News and journalism in the UK*, London: Routledge.
- Nordin, K. D. (1979). The entertaining press: Sensationalism in the 18th Century Boston newspapers. *Communication Research*, 6(3), 295-320.
- Tullich J. (Eds.) *Tabloid Tales : Global debates over media standards*. (pp 43-62) Maryland: Rowlands and Littlefields Publishers Inc.
- Whitby, G. (1982). "The penny press and the origins of American journalistic style." In *Studies in journalism and mass communication: A review from the Texas Journalism Education Council Annual Conference*. (pp. 23-34)

Tutors' Attitudes Towards Integration Of Adaptive Technology Devices For Visually Impaired Student Teachers In Primary Teacher Training Colleges In Kenya

Hilda TUIMUR,
University of Kabianga, P.O Box 2030-20200, Kericho, Kenya. Tel No: +254(0)721875910.
Email: hiltuimur@yahoo.com

Benedicta TABOT,
University of Kabianga, P.O Box 2030-20200, Kericho, Kenya. Tel No: +254(0)723596326.
Email: baiyobei@gmail.com

Abstract

Adaptive technology devices improve the quality of education and remove learning barriers for the Visually Impaired learners. This paper is a report of a study that assessed the tutors' attitudes towards integration of adaptive technology devices for Visually Impaired (VI) student teachers in the instructional process in primary Teacher Training Colleges (TTCs) in Kenya based on the diffusion of innovation theory by Rogers. The study adopted a Mixed Methods research approach. Descriptive statistics such as frequencies and percentages were used to analyze the quantitative data. This study revealed among other things that, tutor training on integration of adaptive technology was lacking, and the tutors viewed integration of adaptive technology as valuable but lacking. The paper recommended for provision of adequate adaptive technology devices for VI student teachers by the government, parents, communities and donors. Tutors should be sensitized and trained on the use of adaptive technology devices. The study sheds light on the challenges influencing the integration of adaptive technology in instruction for VI students.

Key Words: Adaptive technology devices, Visually Impaired students, technology integration, tutor attitudes

Introduction

The goal of education is to provide equal opportunities for all persons including those with special needs (RoK, 2009). Kenya is one of the 92 nations of the world who originally signed the Salamanca statement and framework for action on special needs education (1994), where it was agreed that regular schools should admit all persons irrespective of their physical, social and mental conditions. This was in a bid to ensure that all accessed quality education. This is also echoed in the world declaration on Education For All in 1990 (UNESCO, 1990), the UN standard rules on the equalization for persons with disabilities in 1993 (UN, 1994) and the Dakar framework for action in 2000 (UNESCO, 2000). Millennium Development Goals endorsed at the UN millennium Development Summit in 2002 targeted the eradication of extreme poverty and hunger and the achievement of Universal Primary Education (UPE) as its first two goals. The education goals of the vision 2030 also consider this by providing globally competitive quality education, and among other things integrate special needs education into learning and training

institutions. Inclusive education is about both getting children into and through school by developing schools that are responsive to the actual, diverse needs of children and communities. Learners receiving special education have educational handicaps like physical, hearing, visual, mental, emotional, language, and multiple handicaps. These handicaps interfere with regular learning unless modifications and related services, equipments and specially trained teachers are provided (Republic of Kenya, 1999).

Students who are blind or visually impaired will typically need adaptations to access printed information that will allow the student to access all areas of the curriculum. According to Willings (2015), It is the role of the Teacher of Students with Visual Impairments to determine the adaptations that the student needs. Some of the adaptive technology devices include; Braille, tactile maps and diagrams, print with the use of optical devices and screen readers among others. Categories of adaptive technology include: academic and learning aids , computer access and instruction; pre-vocational and vocational and vocational aids, and visual aids.

Adaptive technology devices improve access to quality education, enable the learner to address individual and collective temporary social problems and be able to reach responsible judgment in seeking solutions to these problems. They enhance the performance of a target skill, including cognitive processes, learning, communication, and physical abilities. Adaptive technology therefore improves the functionability of learners (Republic of South Africa, 2005).

According to the national policy for persons with disabilities in Kenya, the government would facilitate the production and availability of quality, appropriate and affordable adaptive equipment and assistive devices. Retraining of teachers in regular schools would be scaled up to enable them teach children with special needs. There would be a conducive learning environment that takes care of special needs of children with disabilities in collaboration with stakeholders. Appropriate technologies, assistive devices and learning materials for persons with disabilities would be designed and developed. Special needs education in the regular teacher- training curriculum would be incorporated (RoK, 2015).

The gap in research encompasses the tutors' attitudes towards integration of adaptive technology for visually impaired student teachers in instruction. This study attempted to bridge this gap by assessing the tutors' attitudes towards integration of adaptive technology for visually impaired student teachers in instruction in primary TTCs.

Statement of the Problem

A dominant problem for the visually impaired is lack of access to education. This is due to inadequate capacity among many teachers to handle students with special needs, lack of coordinators among service providers, inadequate and expensive teaching/ learning materials among others (MOEST, 2005). In order to increase access and improve on quality, the Kenya government has integrated special education programmes in pre-service teacher training in three primary teachers training colleges, which was the focus in this study with regard to integration of adaptive technology for visually impaired (VI) student teachers in instruction.

For the VI student teachers to graduate as skilled, confident and competent primary school teachers, tutors should modify and adjust materials of learning so that they can access the

curriculum content adequately. The VI student teachers have been admitted in selected primary TTCs in Kenya and have been placed in the same classes with the sighted student teachers. They are taught by the same tutors at the same time in the same class yet they use different learning materials.

An adapted syllabus for VI student teachers has been prepared to cater for their needs. The syllabus stresses that the teaching of student teachers who are visually impaired demands that tutors should possess positive attitudes towards teaching student teachers who are visually impaired. Though a study by Tabot (2017) revealed that teacher trainers have a positive attitude towards the integration of special needs education in the PTE curriculum, the tutors' attitudes towards integration of adaptive technology for visually impaired student teachers in instruction in primary TTCs is not evident. Inclusive Education has been introduced in primary TTCs and thus there is need for research in the area to ascertain the state of affairs. Evidence is necessary because without use of adaptive technology, visually impaired student teachers will not be adequately prepared as primary school teachers. It is against this backdrop that the study was carried out on the tutors' attitudes towards integration of adaptive technology for visually impaired student teachers in instruction in primary TTCs.

Research Objective

The objective of this study was to examine the tutors' attitudes towards integration of adaptive technology for visually impaired student teachers in instruction in primary TTCs.

Literature review

According to the adapted syllabus for the VI student teachers, tutors are expected to have positive attitudes to student teachers who are visually impaired (KIE, 2005). This has also been stated by other researchers. Attitudes formation is influenced by perception with regard to a particular object or action (Serem, 2008). Cope and Ward (2002) in a research on teacher perceptions on the integration of learning technology in the classroom concluded that teacher perceptions of learning technologies are likely to be key factors in the successful integration of learning technologies. Attitude refers to 'a psychological tendency that is expressed by evaluating a particular entity with some favour or disfavor'. There is a link between attitude and one's evaluation of a given object or state of being. Visually impaired students have the internal self-construct, which makes them have a certain psychological tendency of what other peoples' attitude is towards their state of being visually impaired. (Eagly, & Chaiken, 1993). Teachers' attitudes toward inclusion is critical in implementing the goal of inclusive schools and availability of support and perceived competence are important factors. Without the correct attitudes in the regular classrooms, inclusion of pupils in regular classroom becomes impossible (Zindi, 2004).

Teacher education is pivotal in developing the affirmative attitudes and skills required for successful inclusion. Bortoli (2011) asserts that the high level of education and training in special education resulted in a more positive attitude in teachers toward inclusion. Positive attitude towards inclusion of disabled students is one of the requirements of the success of Inclusive Education. Not only is the positive attitude of the teacher important, but the positive trend of the society towards inclusion of disabled people is necessary to achieve the desired success and the aim of Inclusive Education. The teacher is the most influential person in the process of education therefore when the attitudes and perceptions of the teacher need changing, the process needs to

begin early in the process at the foundation of skill development. Formal educational training and inclusion of a compulsory module on diversity in a post-graduate degree have been identified as factors that promote an inclusive attitude. According to Mataruse (2002), the teacher's type of training influences his/her attitude towards children with disabilities. The attitude of specially trained teachers is more positive to special class /unit placement than that of teachers without specialist training. The success of inclusive education depends on teachers' attitudes. This implies that for inclusion to be successful then teachers need to be trained on integration of adaptive technology.

According to Agbenyega (2006), teachers who feel unprepared and fearful to work with learners with disabilities in regular classes, display; frustration, anger and negative attitude towards inclusive education due to the belief that it could lead to lower academic standards. Access to resources and specialist support affects teacher confidence and attitudes toward inclusive education for students with disabilities. Teachers develop and establish various attitudes towards their students, which have a significant effect on their educational attainment. Students' academic performance was negatively affected by the teachers' attitudes during learning processes. Teachers' lack of confidence due to poor conceptual and phenomenological subject foundations may negatively influence academic performance (Barros, & Ellia, 2000). The willingness of teachers is also a prerequisite for successful implementation (Pijl, & Van Den Bos 2001, p. 113).

Therefore, teachers need the self-confidence to carry out their duties in demanding unique situations. Peoples attitude tend to evolve as they become more familiar with change. Studies by researchers (Floyd, Smith, Canter, Jeffs, & Judge, 2008) indicate that in order for teachers to use adaptive technology in a manner that brings forth a strong, positive impact, they must be confident and well- trained to do so. According to (Sharmila et al., 2015), attitudes are conceptualized as constructs comprising cognitive, affective and behavioral components.

They also influence professional practice, and thus are crucial factors in the implementation of new technologies (Haney, & Lumpe, 1995). Further, teachers' attitudes towards a certain strategy affects their efficiency in teaching (Wanjala, 2005). Kennedy and Deshler (2010) opine that many teachers often reject new tools that may not easily fit within their current approaches to teaching and learning while technology is rapidly changing and evolving. If technology in inclusive classrooms is to be optimized, Teachers should be informed of technological advances for instruction. Teacher training fosters positive attitudes toward Inclusive Education practices. Many teachers are willing to receive training to improve their knowledge and skills, in order to help children with special needs (Rakap, & Kaczmarek, 2010). With regard to the perception of teachers, Korir (2015) in a focused group discussion found out that, the teachers' initial perception about students with visual impairment and the program was negative and full of prejudices. After interacting with the visually impaired students, most of the sighted students and their teachers found them to be like any other students. They were as brilliant as the sighted students were. Because of this mixing the visually impaired students with the sighted ones has improved the public image about visually impaired children in the society.

Tutors in primary TTCs need to have positive attitudes towards the teaching of VI student teachers, which was the focus for this study. To implement technology successfully in their

classroom, teachers must develop positive attitudes and feel comfortable using them as instructional tools (Rakes, & Casey, 2002). Teachers consider that educational technologies can enhance the learning experience of students in the special education classroom. Teacher training session can modestly improve regular and special education teachers and administrators' knowledge on special education (Woodbury, 2015; Maida, 2015).

According to Tabot (2017) and Nyoni (2011), general education teachers should have both appropriate skills and attitudes in order to adequately and meaningfully assist students with visual impairments in general education settings. Teachers should be trained to implement various strategies to facilitate students' assimilation into the classroom, school, community and work setting. Experts contend that students with visual impairments need instruction by a teacher with expertise in the areas of visual disorders, and sufficient training in effective use of strategies. This is because the visually impaired student not only required to master the same educational curriculum as their peers, but also the Expanded Core Curriculum (ECC) if they are to be successful (Hatlen, 2000).

According to Tuimur (2017) and Jones (2017), lack of teacher training is a barrier for students because of inadequate skills. The teachers are not aware of how to properly accommodate and modify the assignments in classroom so that the students have access to curriculum and environment. This has an effect on how much the teacher can provide support in the classroom. The lack of support provided by teachers seemed to have a lasting effect on students.

Methodology

This study adopted a mixed method strategy where both quantitative and qualitative approaches are used to test different methods of inquiry for their effectiveness in achieving the intended goal. The research design was descriptive survey. The study was carried out in three primary teachers training colleges in Kenya where VI student teachers had been integrated. The target population consisted of tutors in primary TTCs in Kenya with visually impaired student teachers making a total of 210. The sample for the study was drawn from the tutors in primary TTCs in Kenya which admitted VI student teachers. Simple random sampling was used to select 93 tutors.

The instrument used for data collection in this study was a questionnaire. The researcher developed a questionnaire which was used to get information from tutors in primary TTCs on the tutors' attitudes towards integration of adaptive technology for visually impaired student teachers in instruction in primary TTCs. The researcher visited the three primary TTCs and in each college administered the questionnaire personally to the tutors. This gave the researcher a chance to explain the importance of the study and why it was being conducted. A total of 93 questionnaires were distributed to the selected primary teachers training colleges and all were returned. This gave a return-rate of 100%.

Once developed, the questionnaires, were seen by the teaching staff of Moi University; Department of Curriculum, Instruction and Educational Media where corrections were made, suggestions and advice were used as a basis in modifying the research instruments and making them adequate to the study. This ascertained the content and construct validity of the instruments as per the suggestion by Fraenkel and Wallen (2003). The researcher also sent out the

questionnaires for pilot testing in one of the institutions with VI student teachers that was not involved in this study. The researcher subjected them to Cronbach coefficient alpha and found 0.80 coefficient thus the questionnaire was taken to be reliable and fit for use in the study since (Boudah, 2011) stresses that researchers use measures that have a reliability coefficient of 0.80 or better.

Results

An adapted syllabus for VI student teachers has been prepared to cater for their needs. The syllabus stresses that the teaching of student teachers who are visually impaired demands that tutors possess positive attitudes towards teaching student teachers who are visually impaired. Teacher attitudes and beliefs are powerful forces which significantly influence actions in the classroom. They also influence professional practice, and thus are crucial factors in the implementation of new technologies Scardamalia and Bereiter, (2003) and (Haney, & Lumpe, 1995).

The study sought to find out from the college tutors their attitude towards the integration of adaptive technology for VI student teachers in primary TTC's. They were required to tick the alternative that best expressed the extent of their agreement to the statements. The results are shown in Table 1

Tutors Attitude towards Integration of Adaptive Technology for VI Student Teachers in Primary TTCs

Statement	SA		A		UN		D		SD		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Adaptive technology is valuable when teaching	64	68.8	21	22.6	4	4.3	2	2.2	2	2.2	93	100
Adaptive technology is easy to integrate in instruction of VIS	18	19.4	39	41.9	14	15.1	17	18.3	5	5.4	93	100
Adaptive technology enhances VI student teachers understanding	56	60.2	33	35.5	3	3.2	1	1.1	0	0.0	93	100
Adaptive technology is a motivator of VI student teachers	54	58.1	33	35.5	4	4.3	2	2.2	0	0.0	93	100
I recommend tutors to be trained on integration of ATD	73	78.5	16	17.2	3	3.2	1	1.1	0	0.0	93	100
Teaching VI student teachers using ATD too demanding	13	14.0	26	28.0	25	26.9	17	18.3	12	12.9	93	100

I feel uncomfortable teaching VI student teachers using ATD	10	10.8	20	21.5	26	28.0	19	20.4	18	19.4	93	100
I am confident using ATD when teaching VI student teachers	14	15.1	24	25.8	25	26.9	15	16.1	15	16.1	93	100
Special education teachers are better placed to use ATD	34	36.6	37	39.8	4	4.3	11	11.8	7	7.5	93	100
I recommend that teaching VIS teachers using ATD to be optional	4	4.3	11	11.8	16	17.2	26	28.0	35	37.6	93	100

The respondents strongly agreed that they felt that adaptive technology was valuable when teaching VI student teachers and that a positive attitude was necessary in enhancing integration of adaptive technology for VI Student teachers in primary TTC's. This is in agreement with the adapted syllabus for the VI student teachers where tutors are expected to have positive attitudes to students who are visually impaired (KIE, 2005). This has also been stated by other researchers that attitude formation is influenced by perception with regard to a particular object or action (Serem, 2008). The also agreed that adaptive technology enhances VI student teacher's understanding of the subject content and most of them agreed that tutors should be trained on the integration of adaptive technology for VI student teachers.

They saw the need for use of adaptive technology for visually impaired student teachers but where not confident due to their incompetence. This may be because they lacked skills in preparation of tactile diagrams and had no knowledge on English Braille. As earlier noted from the theoretical framework, perceived attributes of innovations affected its adoption, Rogers (2003). This implies that the tutors had positive attitudes towards integration of adaptive technology for visually impaired during instruction. But their integration was low since they lacked expertise. Rogers (2003) explains that one of the perceived attributes which influences innovation is complexity. This is the degree to which an innovation is perceived as relatively difficult to understand and used. If the innovation is perceived to be difficult then it is avoided. This may explain the attitudes of tutors who had no confidence in the use of adaptive technology since the lacked expertise.

With regard to the perception of teachers, Korir (2015) in a focused group discussion found out that, the teachers' initial perception about students with visual impairment and the program was negative and full of prejudices. After interacting with the visually impaired students, most of the sighted students and their teachers found them to be like any other students. They were as brilliant as the sighted students were. Because of this mixing the visually impaired students with the sighted ones has improved the public image about visually impaired children in the society.

They appreciated the role of adaptive technology devices in enhancing understanding of the subject content. The heads of departments and Deans of Curriculum from the interviews felt that adaptive technology was valuable when teaching VI student teachers since instruction became effective; the students became independent when looking for information. They further added that adaptive technology made the VI student teachers easily understand concepts and be in touch with what was being taught. A lot of effort has to be put into the inclusive education process since mere familiarity with blind persons does not in itself improve attitudes. The school has to evolve through establishing and adhering to policies, which teachers, administrative staff and students have to uphold. Inclusion fosters the integration of students with disabilities into their parent societies earlier in life and ensures equal opportunities for all students to use resources available in the school and the community, if all ideal resources were put together for the benefit of all students.

The teachers' attitude towards a teaching strategy affects his efficiency in teaching (Wanjala, 2005). Without the correct attitudes in the regular classrooms, inclusion of pupils in regular classroom becomes impossible (Zindi, 2004). Teacher education is pivotal in developing the affirmative attitudes and skills required for successful inclusion. Bortoli (2011) asserts that the high level of education and training in special education resulted in a more positive attitude in teachers toward inclusion. According to Mataruse (2002), the teacher's type of training influences his/her attitude towards children with disabilities. The attitude of specially trained teachers is more positive to special class /unit placement than that of teachers without specialist training. The success of inclusive education depends on teachers' attitudes. This implies that for inclusion to be successful then teachers need to be trained on integration of adaptive technology.

According to Korir (2015), the teachers' perception towards the integrated program, whether positive or negative, was of crucial concern since the teachers formed the immediate company for the students with visual impairment in a school environment. Teachers felt that the students with visual impairment had been made to suffer more by being brought in a regular program. This was because there was little commitment from the government through the ministry of education to boost the students with visual impairment. The teachers said that there were no trained teaching staff, no special fund, teaching and learning facilities. According to Chireshe (2011), long-serving teachers in programmes related to counselling sometimes suffered from burnout and had more negative attitudes towards those programmes than new teachers. Similarly, familiarity with blind students may not necessarily produce positive attitudes towards them in inclusive schools. The most important way of translating of policies into practice always was to reallocate resources for staff training and mass procurement of material resources. It was also necessary to move on to the identification of learners who could be serviced from their least restrictive environments.

Greater integration of the visually impaired into classes with seeing children and more training about the capabilities of the visually impaired for regular classroom teachers would result in improved attitudes towards the visually impaired and more appropriate educational planning and placement (Berdin, & Blackhurst, 1985, p.257). Tuimur (2011) and Chemwei (2013) stress that; a positive attitude towards innovation generally leads to adoption. Once familiar with the adaptive technology devices and confident in their use, teachers are able to see its application within the curriculum (Bitter, & Legacy, 2009). A teacher should be able to update knowledge

on a regular basis to keep pace with the new trends in the profession (Agumba et al., 2009, p.154).

According to Gary (1997), Agbenyega (2006), Haralambos and Holborn, (2008) and Yara, (2009), teachers who feel unprepared and fearful to work with learners with disabilities in regular classes, display; frustration, anger and negative attitude towards inclusive education due to the belief that it could lead to lower academic standards. If technology in inclusive classrooms is to be optimized, Teachers should be informed of technological advances for instruction. Teacher training fosters positive attitudes toward Inclusive Education practices. Many teachers are willing to receive training to improve their knowledge and skills, in order to help children with special needs (Rakap, & Kaczmarek, 2010). According to (Sharmila et al., 2015), attitudes are conceptualized as constructs comprising cognitive, affective and behavioral components. Teachers' attitudes towards inclusion are often based on practical concerns about how inclusive education can be implemented, rather than be grounded in any particular ideology.

Conclusions

The Tutors' attitude towards integration of adaptive technology for VI student teachers in primary TTC's was positive. They acknowledged the value of adaptive technology.

Recommendations

The MOEST should develop in-service courses to train the tutors on the use of Braille and preparation of tactile diagrams so as to effectively teach VI Student teachers in primary TTCs since it is charged with the responsibility.

The primary TTC tutors should be exposed to ways of integrating adaptive technology during instruction of visually impaired student teachers so as to confidently teach and have positive attitudes.

- Boudah, J. D. (2011). *Conducting Educational Research*. London: SAGE Publications.
- Braslavsky, C. (2004). *Quality education and learning materials in the 21st Century*. Worlddidac–Basel Switzerland.
- Brownell, M. T., & Leko, M. M. (2014). Preparing special educators to teach literacy
- Caracelli, V., & Greene, J. C. (1997). Crafting mixed-method evaluation designs. *New Directions for Evaluation*, 19-32.
- Chireshe, R. (2011). School counsellors' and students' perceptions of the benefits of school guidance and counselling services in Zimbabwean Secondary Schools. *Journal of Social Science*, 29(2), 101-108.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th Ed.). London: Routledge Falmer.
- Cohen, L., & Manion, C. (2003). *Research methods in education*. London: Croom Helm Ltd.
- Cope, C., & Ward, P. (2002). Integrating learning technology into classrooms: The importance of teachers' perceptions. *Educational Technology & Society*, 5(1), 67-74.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches*. Thousand Oaks, CA: Sage Publications.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.

- Floyd, K. K., Smith C., Lora, L., Jeffs, T., & Judge, S. A. (2008). Assistive technology and emergent literacy for preschoolers: A literature review. *Assistive Technology Outcomes and Benefits*, 5(1), 92-102.
- Fraenkel, J. R., & Wallen, N. E. (2003). *How to design and evaluate research in education*. (5th Ed.). New York: McGraw-Hill Higher Education.
- Gilakjani, A. P., Leong, L. M., & Ismail, H. N. (2013). Teachers' use of technology and constructivism. *International Journal of Modern Education and Computer Science*, 5(4),49–63.
- Haney, J., & Lumpe, A. (1995). A teacher professional development inventory guided by reform policies, teachers' needs, and research. *Journal of Science Teacher Education*, 6(4), 187-196.
- Jayarathne, N. (1993). *Understanding management research: An introduction to epistemology*. London: Sage Publishers.
- Jones, K. J. (2017). *Educating students with visual impairments in the general education setting*. Retrieved on 21st July 2018 from <http://aquila.usm.edu/dissertations/1337>
- Kabue, S.N. (1984). *A study of the educational integration of the visually handicapped children at the primary school level* (Unpublished Thesis: University of Nairobi, Kenya).
- Kennedy, M. J., & Deshler, D. D. (2010). Literacy instruction, technology, and students with learning disabilities: Research we have, research we need. *Learning Disability Quarterly*, 33, 289-242.
- KIE (2005). *Social studies adapted syllabus for primary teacher education*. Ministry of Education.
- Korir, B. C. (2015). The perception of students and teachers on the integration programme of students with visual impairment in secondary schools: A case of Ainamoi Sub County, Kericho County, Kenya. *Journal of Education and Practice*.
- Kothari, C. R. (1987) *Research methodology, methods and techniques*. (3rd Ed.). New Delhi: Wiley Eastern Ltd.
- Maguvhe, M, O. (2014). Perceptions of South African teachers and students in residential secondary schools for the blind on inclusive education. *Mediterranean Journal of Social Sciences*.
- Maida, A. (2015). Special Education Teachers' Perceptions and Practices of Technology Integration for Supporting Students with Multiple Exceptionalities. (Master of teaching Thesis: University of Toronto).
- Mataruse, K. (2002) Gender race and social class on dyscalculia. *African Journal of Special Needs Education*, 7(1), 1-12.
- Mertens, D. (2005). *Research and evaluation in education and psychology*. London: SAGE Publications.
- Ministry of Education, (2005) *Kenya Education Sector Support Programme 2005-2010*. Nairobi: Government Printers.
- Mugo, B. C. (2013). *Assistive technology and access to quality instruction for blind and visually impaired students: A comparative study of Kenyatta University Kenya and Syracuse University USA* (Unpublished Ph.D thesis: Kenyatta University).
- O'Malley, P., Jenkins, S., Wesley, B., Donehower, C., Rabuck, D., & Lewis, M. E. B. (2013, April). Effectiveness of using iPads to build math fluency. Paper presented at the *Council for Exceptional Children Annual Meeting*, San Antonio, Texas.
- Pijl, S. J., & Van Den Bos, K. (2001) Redesigning regular education support in the Netherlands.

European Journal of Special Needs Education, 16(2), 111-119.

Punch, F. K. (2011) *Introduction to research methods in education*. London: SAGE publications.

Rakes, G., & Casey, H. (2002). An analysis of teacher concerns toward instructional technology. *International Journal of Educational Technology*, 3(1). Retrieved April 11, 2013, from <http://www.ed.uiuc.edu/ijet/v3n1/rakes/index.html>

Republic of Kenya (2009) *The National Special Needs Educational Policy Framework*. Nairobi: Government Printers.

Republic of Kenya (1999) *Totally Integrated Quality Education and Training. TIQET. Report of the commission's inquiry into the Education system of Kenya*. Nairobi: Government Printers.

Republic of Kenya, (2015). National policy for persons with disabilities. Nairobi: Government Printers.

Republic of South Africa, 2005. *Guidelines for Inclusive Learning Programmes*. Department of Education. Retrieved on 5/12/201 from www.education.gov.za/linkclick.aspx

Scardamalia, M., & Bereiter, C. (2003). Knowledge building. In *Encyclopedia of Education* (2nd ed.). (pp.1370-1373). New York: Macmillan Reference, USA.

Serem, J. D. (2008). The attitude of home science school teachers and students towards clothing and Textiles unit in Uasin Gishu, Nandi and Keiyo Districts. Kenya (Unpublished M. Phil Thesis: Moi University, Eldoret).

Sharmila, V., Nathan, W., Marita, F., Angela, S., Melissa, S., Reinie, C., & Torbjörn, F. (2015)

Factors associated with primary school teachers' attitudes towards the inclusion of students with disabilities.

Retrieved

from. doi: [10.1371/journal.pone.0137002](https://doi.org/10.1371/journal.pone.0137002) MCID:PMC4552744.

Tabot, B. A. (2017). Integration of special needs education in primary teacher education Curriculum and instructional efficacy among teacher trainees in Rift valley, Kenya. (Unpublished Doctoral thesis: Moi University, Kenya).

Tabot, B. A., & Too, J. K. (2017). Integration of special needs education in primary teacher education curriculum and teacher trainees' skills for instructional efficacy in Kenya. *International Journal of Education and Research*, 5(7).

Tuimur, H. N. (2011). An investigation into the teaching of the topic conflict and conflict resolution in Social Studies: A case of selected primary schools in Kosirai Division, Nandi North District (Unpublished M. Phil Thesis, Moi University, Kenya).

Tuimur H. N. (2017). Tutor training on the use of adaptive technology devices for Visually Impaired student teachers in Primary Teacher Training Colleges in Kenya. *European Journal of Education Studies*, 3(7), 431-450.

UNESCO. (2000). *The Dakar Framework for Action*. Paris, Graphoprint.

UNESCO. (1990). *World Declaration on Education for All*. Paris, UNESCO.

UN. (1994). *Standard rules on equalization of opportunities for persons with disabilities*. Resolution adopted by the General Assembly. Report of the Third Committee (A/48/627)1, UN.

Wanjala, J. (2005). Perceptions of teachers and students on the use of small group method in mathematics instruction; A cases of secondary schools in Uasin Gishu District. (Unpublished M. Phil. Thesis: Moi University).

Wiersma, W., & Jurs, S. G (2005) *Research methods in education. An introduction*. Boston: Pearson.

Willings, C. (2015). *Unique visual needs*. Retrieved on 20th July 2018 from teachingvisuallyimpaired.com.

Woodbury, R. (2015). The effects of a training session on teacher knowledge, perceptions

and implementation of assistive technology in secondary schools. *All Graduate Plan B and other Reports*. 540. Retrieved from <https://digitalcommons.usu.edu/gradreports/540>

Zimbardo, E. M. (1977). *Influencing attitudes and changing behavior: An introduction to methods, theory and application of social control and personal power*. (2nd Ed.). London: Wesley Publishing Company.

Zindi, F. (2004). Education for All: Towards inclusive education policy development in Zimbabwe. *Zimbabwe Journal of Educational*